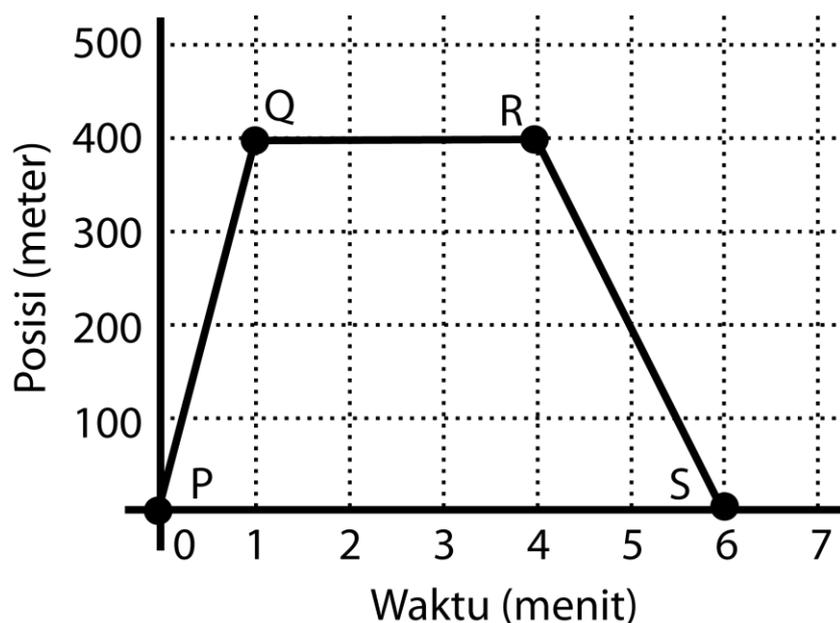




USAID Prioritizing Reform, Innovation, and Opportunities for Reaching Indonesia’s Teachers, Administrators, and Students (USAID PRIORITAS)



MIDLINE MONITORING REPORT, VOLUME 2: Assessing the Impact of the USAID PRIORITAS Program on Student Performance in Bahasa Indonesia, Mathematics and Science in Cohort I Partner Districts

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Midline Monitoring Report, Volume 2: Assessing the Impact of the USAID PRIORITAS Program on Student Performance in Bahasa Indonesia, Mathematics and Science in Cohort I Partner Districts

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List of Acronyms, Abbreviations, and Terms

CLCC	Creating Learning Communities for Children (UNESCO-UNICEF, 1999–2010)
DBE	Decentralized Basic Education (project or district)
DBE3	Decentralized Basic Education 3 Program (USAID, 2005–2011)
EGRA	Early Grade Reading Assessment
EU	European Union
Kabupaten	District or Regency
Kota	City or Municipality
Madrasah	Islamic School
MBE	Managing Basic Education (USAID, 2003–2007)
MGP-BE	Mainstreaming Good Practices in Basic Education (project) (UNICEF-EC, 2007–2010)
MI	Madrasah Ibtidaiyah (Islamic Primary School)
MIIN	Madrasah Ibtidaiyah Negeri (State Islamic Primary School)
MTs	Madrasah Tsanawiyah (Islamic Junior Secondary School)
NZAID	New Zealand Agency for International Development
PAKEM	Pembelajaran Aktif, Efektif dan Menyenangkan (Active, Effective and Enjoyable Learning)
PEQIP	Primary Education Quality Improvement Program (1992–1998)
PRIORITAS	Prioritizing Reform, Innovation, and Opportunities for Reaching Indonesia’s Teachers, Administrators, and Students Project
Puskur	Curriculum Development Center (MOEC)
RTI	RTI International (trade name for Research Triangle Institute)
SD	Sekolah Dasar (Primary School)
SDN	Sekolah Dasar Negeri (State Primary School)
SMP	Sekolah Menengah Pertama (Junior Secondary School)
TIMSS	Trends in International Mathematics and Science Study
TK	Taman Kanak-kanak (Kindergarten)
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNICEF	United Nations Children’s Fund
UNICEF-EC	United Nations Children’s Fund-European Commission
USAID	United States Agency for International Development

Introduction

The USAID PRIORITAS Program

The United States Agency for International Development (USAID) Prioritizing Reform, Innovation, and Opportunities for Reaching Indonesia's Teachers, Administrators, and Students Project (PRIORITAS) program started to work with 23 new districts (Cohort 1 districts) in seven provinces in 2012. The table below shows the names of the provinces and districts and the number of schools receiving assistance in each district.

Province	District	Primary		Junior Secondary		Total
		SD	MI	SMP	MTs	
Aceh	Bener Meriah, Kab.	10	5	5	3	23
	Aceh Jaya, Kab.	13	4	5	3	25
Sumatera Utara	Labuhan Batu, Kab.	12	4	6	2	24
	Medan, Kota	12	4	7	1	24
	Nias Selatan, Kab.	15	1	7	1	24
Banten	Serang, Kab	12	4	4	4	24
	Pandeglang, Kab	12	4	5	3	24
Jawa Barat	Bandung Barat, Kab.	12	4	6	2	24
	Cimahi, Kota	12	4	6	2	24
	Ciamis, Kab.	12	4	6	2	24
Jawa Tengah	Batang, Kab.	12	4	6	2	24
	Semarang, Kab.	11	5	6	2	24
	Purbalingga, Kab.	12	4	6	2	24
	Banjarnegara, Kab.	12	4	6	2	24
	Sragen, Kab.	15	2	6	1	24
Jawa Timur	Mojokerto, Kab.	12	4	6	2	24
	Madiun, Kab.	12	4	6	2	24
	Situbondo, Kab.	12	4	6	2	24
	Pamekasan, Kab.	12	4	6	2	24
	Blitar, Kab.	16	3	6	2	27
Sulawesi Selatan	Maros, Kab.	12	4	5	3	24
	Bantaeng, Kab.	12	4	6	2	24
	Wajo, Kab.	12	4	5	3	24
Grand Total		286	88	133	50	555

Note: SD=Sekolah Dasar (Primary School); MI=Madrasah Ibtidaiyah (Primary Islamic School); SMP=Sekolah Menengah Pertama (Junior Secondary School); MT=Madrasah Tsanawiyah (Junior Secondary Islamic School).

The program activities in the districts focus on two levels: (i) to improve the management, governance, and funding of education at the district level, and (ii) to improve the quality of education delivered at the school level by improving management, governance, the role of the community, and teaching and learning.

Project Monitoring and Evaluation

The project conducted the first monitoring activities in a sample of schools in the PRIORITAS districts listed above in 2012 in order to assess their needs at the start of the project. The second and third rounds of monitoring were conducted in 2013 and 2014 to provide evidence of whether, and to what extent, the project had brought changes to schools. The activities took place in a sample of project partner schools and a parallel sample of non-project schools, which have been called comparison schools in this document and are used as a comparison group against which to compare the impact of project activities on partner schools.

Three major monitoring and evaluation activities that have been undertaken in 2014 in the cohort I districts are as follows:

- 1. Monitoring of school management, community participation, and teaching and learning**
- 2. Student assessments in Bahasa Indonesia, Mathematics and Science** (for primary and junior secondary schools)
- 3. An Early Grades Reading Assessment (EGRA)** (for grade 3)

These three activities are reported in separate volumes. This volume concerns item 2, the student assessments in Bahasa Indonesia, Mathematics, and Science.

An Outline of the Assessment Program

The ultimate success of the USAID PRIORITAS program must be assessed in terms of the impact on students through the improved quality of teaching and learning. However, student performance and its assessment are complex, because they encompass knowledge and understanding, skills, and attitudes. The national school examination and half-yearly tests are limited in their nature, mainly to factual recall of knowledge, and in many cases, are not comparable from year to year or between different geographic areas. The program has, therefore, undertaken its own student performance assessment. The assessment was matched to the objectives of the teacher training program and the government's competency-based curriculum.

The tests, which have been conducted in a total of four partner primary schools and three partner junior secondary schools in each of the 23 districts, are as follows:

Primary Schools (SD and MI)	Junior Secondary School (SMP and MTs)
Grade 4: Bahasa Indonesia (Reading and Writing)	Grade 8: Bahasa Indonesia
Grade 4: Mathematics	Grade 8: Mathematics
Grade 5: Science	Grade 8: Science

The tests were implemented in a similar number of non-partner primary and junior secondary schools in the same districts, which are not involved in project activities. These schools act as a comparison group, to compare between schools which have and have not received project interventions.

The tests used in primary schools are based on those developed under the World Bank PEQIP¹ and Basic Education Programs, and subsequently also used in the CLCC², MBE³ and MGP-BE⁴ programs (see **Annex 2**). They have been used over a period of 20 years by these and other programs and have undergone revisions based on experience in using them. Tests for Bahasa Indonesia and Mathematics for junior secondary schools were developed by the MBE program and used in the DBE3⁵ program. The science test for junior secondary schools was developed under the PRIORITAS project. Personnel from the Curriculum Development Centre and a number of teacher training universities were involved in the development and subsequent revision of the tests.

The tests was implemented with the current cohort of students in the above classes in the same schools every other year and at the same time of the school year in order to ensure comparability. For example, the Bahasa Indonesia and Mathematics tests for primary schools were conducted in 2012 and 2014 in the same schools with the current cohort of grade 4 children at the time of testing. This report concerns the first and second round assessment of students in a sample of schools in USAID PRIORITAS partner districts and is intended to identify changes in students' performance after more than one year of project intervention at school level.

The tests also provide some evidence of the impact of the USAID PRIORITAS teacher-training program, as reflected in the development of student competencies. They measure a range of competencies and use a number of different techniques to measure these, including traditional multiple choice questions, open-ended questions and essay questions in the language tests. All the tests are compatible with the current curriculum. More details of each of the tests are shown in a matrix in **Annex 3**.

The written tests were developed to take not more than an hour each. The Bahasa Indonesia and Mathematics tests in both primary and junior secondary schools were conducted with half of the relevant class. Students were selected alternately to take the language and mathematics tests so that no two children sitting next to each other took the same test. The Science tests were conducted with a maximum of 25 randomly selected students per class. The first round of assessment took place in November and December 2012 while the second assessment took place in the same months of 2014.

When these tests have been used in previous projects, they have included word recognition and reading comprehension tests for grade 1. For USAID PRIORITAS these tests have been replaced by a more comprehensive Early Grades Reading Assessment (EGRA) consisting of five or six subtests, which has been reported separately in Volume 3 of the monitoring report: 'An Assessment of Early Grade Reading - How Well Children are Reading in Cohort I Districts'.

¹ PEQIP=Primary Education Quality Improvement Program (1992–1998)

² CLCC=Creating Learning Communities for Children (UNESCO-UNICEF, 1999–2010)

³ MBE=Managing Basic Education (USAID, 2003–2007)

⁴ MGP-BE=Mainstreaming Good Practices in Basic Education (UNICEF-EC, 2007–2010)

⁵ DBE3=Decentralized Basic Education 3 Program (USAID, 2005–2011)

This report of results of the assessment is set out in three separate parts:

- 1. Summary of the results and recommendations**
- 2. First and second round assessment of students in primary schools**
- 3. First and second round assessment of students in junior secondary schools**

Some implications and recommendations for the implementation of the USAID PRIORITAS program based on the assessment are included in the report. These have drawn on the extensive experience of the author in working with Indonesian schools and districts as well as reports from those who implemented the testing in the field. It is intended that the report will be discussed with project staff and consultants, trainers and district personnel to make them aware of the results and assess the implications for future USAID PRIORITAS activities.

Calculating Scores

The total possible number of marks in each test varies (e.g., 20 for grade 1 reading, 28 for grade 4 writing, 24 for grade 4 mathematics). However, in order to avoid confusion, **all marks have been converted to percentages.**

In calculating the scores, there are two types of question. The first is a multiple choice question, the answer of which has only two values: 1 for correct answer, and 0 for wrong answer. If five students in a class of 20 could answer a question correctly, it will be reported as “25% of students could answer the question”.

The second type of questions have multiple answers and each answer can have a different score depending on how complete the answer is. For example, the first question of the Grade 5 Science Test Section B asks students to find three signs in a picture that they are provided with that a boat is traveling in a certain direction. The student who can identify at least three signs scores 3, two signs score 2, one sign scores 1, and no signs scores zero. In a class of 10 students, the highest possible score is $10 \times 3 = 30$. Let us say the actual total score of the students is 12, the average percentage of the (correct) students' answer in this question is $(12 : 30) * 100 = 40\%$. This does not mean that 40% of the students answer correctly, rather it means that the students could achieve 40% of the highest possible score of the question. In this report, this is called “the percentage of correct answers”.

This method of scoring of the second type of question can be applied in the same way to multiple choice questions as described earlier. If five students in a class of twenty correctly answer a question, it is reported that “the question has 25% correct answers.”

Copies of the tests have not been included with this report in order to avoid their inadvertent dissemination to schools, which would make their further use unreliable. It is intended that they will be used again in the repeat testing.

Part I Introduction and Summary of the Results of the Tests

1.1 Implementation of the Tests

The first round of tests was administered between November 15 and December 5, 2012, in primary and junior secondary schools in each of the 23 PRIORITAS partner districts, which joined the USAID PRIORITAS program in 2012. These included four partner primary schools and four non-partner primary schools in each of the districts, a total of 184 schools (92 partner and 92 comparison primary schools). This assessment covered 24.6% of the project partner primary schools. The schools tested included conventional schools (SD) and religious schools (MI). The partner schools were chosen from each of two sub-districts targeted by the program. The non-partner schools were chosen to have a similar profile to the partner schools.

In addition, the tests were administered in three partner and three non-partner junior secondary schools in each of the 23 districts, a total of 138 schools (69 partner and 69 comparison junior secondary schools). This is 37.7% of the project partner junior secondary schools. The schools tested included an average of two partner conventional schools (SMP) and one partner religious school (MTs) and a similar number of non-partner schools per district. The schools were chosen from each of the sub-districts targeted by the program.

The second round of tests was administered in the same months in 2014 and also covered the same schools except three comparison schools, which withdrew from the sample schools. The analysis of the data has been adjusted to compensate for their withdrawal.

1.2 How the Results are Presented

The results of the tests in two rounds of assessment are discussed in part 2 of the report (primary schools) and part 3 (junior secondary schools) for each subject separately. The overall average score is given and comparative scores disaggregated for boys and girls. The average scores of higher and lower achieving groups of students are also presented by quartile.

The primary schools scores are also disaggregated between (i) those students who have attended pre-school/kindergarten education (Taman Kanak-kanak [TK]) and those who have not, and (ii) conventional primary schools (SD) and religious primary schools (MI), (iii) state and private schools. A breakdown of the scores on individual questions is presented on the mathematics and science tests and for each section of the science test.

The junior secondary school scores are also disaggregated between (i) conventional junior secondary schools (SMP) and religious junior secondary schools (MTs) and (ii) state and private schools. A breakdown of the scores on individual questions is presented on the mathematics and science tests and for each section of the science test.

It needs to be stressed that only eight primary schools and six junior secondary schools in each district were included in the test. Results of the tests from individual schools in two rounds of assessment are included in **Annex I**, but should not be viewed as being a representative sample of the districts' schools.

I.3 Summary of Results in Primary Schools (SD and MI)

The schools tested in the 23 districts included 68 partner conventional primary schools (SD) and 24 partner religious primary schools (MI). The comparison group of schools included 69 conventional primary schools (SD) and 23 religious primary schools (MI). A total of approximately 1,400 students in 2012 were involved in each test for each of the partner and comparison schools. The number of students taking the Science test was considerably higher in 2014 (1,863 in partner schools and 1,688 in comparison schools) because some provinces preferred to administer the test to all the students in a class rather than limit to 25 students. Table I gives a summary of the results of each test.

Table I: Summary of Test Results for All Tests in Primary Schools

		Year	Grade 4		Grade 4		Grade 4		Grade 5	
			Reading Comp Test (%)		Writing Test (%)		Mathematics Test (%)		Science Test (%)	
			P	C	P	C	P	C	P	C
N Student Tested		2012	1,440	1,416	1,440	1,416	1,429	1,407	1,421	1,438
		2014	1,347	1,261	1,347	1,261	1,351	1,274	1,863	1,688
Gender	Boys	2012	41.2	38.4	37.5	36.6	40.7	38.9	35.2	32.4
		2014	42.4	42.1	39.0	36.3	43.2	41.2	42.4	39.5
	Girls	2012	45.0	43.8	45.6	42.7	41.1	41.6	36.3	33.6
		2014	51.7	45.4	49.6	44.6	45.7	44.6	43.9	40.5
Attend Pre-School - TK	Attend	2012	45.9	42.9	44.2	41.6	43.2	43.0	37.6	35.6
		2014	48.4	45.8	45.9	42.5	46.5	45.3	44.6	42.1
	Not Attend	2012	33.1	34.2	32.6	31.9	32.9	30.1	29.1	24.9
		2014	42.2	33.2	38.6	29.1	33.9	31.9	33.3	28.6
School Type	Secular	2012	44.5	41.7	43.3	41.1	43.8	41.3	37.8	34.2
		2014	47.2	43.6	44.6	40.8	46.1	43.3	44.4	40.0
	Religious	2012	39.0	38.9	37.1	34.5	31.5	36.9	29.5	29.2
		2014	47.7	44.0	44.7	38.6	39.7	41.3	39.0	40.0
School Status	Public	2012	44.4	40.7	42.4	40.1	42.6	40.1	36.5	33.5
		2014	46.8	43.3	43.7	40.2	44.8	42.7	43.2	39.6
	Private	2012	36.9	42.5	38.3	37.8	32.2	40.8	32.0	30.9
		2014	49.7	45.7	49.0	40.8	42.6	43.5	42.5	42.1
Average		2012	43.2	41.1	41.8	39.6	40.9	40.3	35.8	33.0
		2014	47.3	43.7	44.6	40.3	44.5	42.9	43.1	40.0
% increase in scores 2012-14			9.5 ⁶	6.4	6.7	1.7	8.8	6.5	20.5	21.3

P=Prioritas Partner School, C=Comparison School

The summary of results in Table I shows that average scores in both partner and comparison school increased on all the tests. They further show that the scores in the

⁶ The increase in scores is calculated by dividing the percentage increase in score between 2012 and 2014 by the original score in 2012. For example an increase in score from 40% to 44% would be shown as a 10% increase. The scores in the table are rounded to the nearest whole number, but the increases have been calculated based on the unrounded scores.

partner schools increased by a greater percentage than in the comparison schools on all the tests, except the science test.

Grade 4 Bahasa Indonesia Test: Scores in partner schools increased by 9.5% and 6.7% respectively on the reading and writing tests, while comparison schools' scores increased by only 6.5% and 1.7% respectively between 2012 and 2014.

The analysis of the writing test shows that many grade 4 children in USAID PRIORITAS schools still have difficulty in communicating ideas in a coherent and legible manner, since only 24% of students wrote more than half a page and only 39% presented their ideas coherently. 13% of children in partner schools and 15% of children in comparison schools wrote nothing. The children who wrote nothing in 2014 declined to 7% in both partner and comparison schools.

Grade 4 Mathematics Test: Scores in partner schools increased by 8.8% in partner schools and 6.5% in comparison schools between 2012 and 2014. Areas in which students had particular difficulties did not change from 2012 to 2014. These included recognizing the value of both decimal and simple fractions and operations with decimal fractions. Students also scored very low on questions that required problem solving and creativity in their answers.

Grade 5 Science Test: Scores in partner schools increased by 20.5% in partner schools and 21.3% in comparison schools between 2012 and 2014. Children found the traditional format of questioning (with multiple choice answers) in Section A easier than in Section B, which required them to make deductions and apply concepts which they have learned.

Comparisons Between Different Groups: In both 2012 and 2014, on all tests, girls scored higher than boys, considerably so in all tests except mathematics, where scores were much closer. Scores of children who attended TK (pre-school) were substantially higher than those who had not. From observations at school level it appears that many children who have attended TK enter primary school already having mastered some of the basics of literacy and numeracy, which gives them a significant advantage over the length of their school career. Average scores at SD were considerably higher than at MI in all tests in 2012. However in 2014 the MI have largely caught up with the SD on the reading and writing tests.

While state schools (secular and madrasah) scored better on nearly all the tests in 2012, the scores of private schools were higher than the scores of public schools in reading and writing in 2014.

Differences Between Schools and Districts: There were large differences in scores between schools. For example, on the reading test the highest average score was 76% and the lowest 11%, in mathematics the highest school average score was 72% and the lowest 8%. While some differences can be explained by different student intakes, the largest reason for the differences must lie with the quality of teaching.

During the second assessment in 2014 the differences in reading scores became smaller with the highest having an average of 80% and the lowest 15%. In the writing test, the highest score was 74% and the lowest was 6%. In mathematics, the highest school average score was 80% and the lowest was 9%.

A table comparing the results from the USAID PRIORITAS, MGMP-BE, and MBE programs is presented in **Annex 2**.

1.4 Summary of Results in Junior Secondary Schools (SMP and MTs)

IN 2012, the student assessments took place between November 15 and December 5, 2012, in 69 partner schools (50 SMP and 19 MTs) and 69 comparison schools (45 SMP and 24 MTs) in the 23 PRIORITAS partner districts. That was 3 partner and 3 comparison schools in each district. Over 1,100 students were tested overall in each group for each subject. Table 2 gives a summary of the results of each test. The results for each school can be found in **Annex 1**.

Table 2: Summary of Test Results for All Tests in Junior Secondary Schools

	Year	Grade 8		Grade 8		Grade 8		Grade 8		
		Reading Comp Test (%)		Writing Test (%)		Mathematics Test (%)		Science Test (%)		
		P	C	P	C	P	C	P	C	
N Student Tested	2012	1,193	1,144	1,193	1,144	1,380	1,380	1,153	1,134	
	2014	1,088	1,064	1,088	1,064	1,061	1,050	1,323	1,324	
Gender	Boys	2012	61.3	64.0	44.8	42.5	33.1	31.9	41.5	40.4
		2014	68.3	64.6	46.7	43.6	34.2	34.1	43.5	44.0
	Girls	2012	66.2	67.8	54.4	50.9	26.2	24.1	40.8	39.0
		2014	71.4	70.2	56.8	49.5	38.6	34.1	44.3	41.5
School Type	Secular	2012	64.8	67.8	51.1	46.3	31.2	28.7	42.6	41.0
		2014	69.1	68.1	49.9	47.6	36.4	34.5	44.5	42.2
	Religious	2012	62.1	61.4	47.7	48.6	24.8	23.0	38.3	36.0
		2014	72.0	66.4	57.3	44.5	37.6	33.2	42.7	43.6
School Status	Public	2012	64.7	67.5	51.7	47.7	30.4	28.8	41.5	40.2
		2014	70.8	68.3	53.1	47.0	38.6	34.9	44.8	42.7
	Private	2012	59.3	59.5	40.1	43.6	22.0	19.7	39.3	37.1
		2014	65.5	64.5	47.5	45.2	25.9	30.6	38.3	42.6
Average	2012	64.0	66.0	50.0	47.0	28.9	27.1	41.1	39.6	
	2014	70.0	67.6	52.3	46.7	36.8	34.1	43.9	42.6	
% increase in scores 2012-14		9.5 ⁷	2.3	4.5	-0.6	27.1	25.8	6.7	7.6	

P=PRIORITAS Partner School, C=Comparison School

The summary of results in Table 2 shows that average scores in both partner and comparison school increased on all the tests. They further show that the scores in the partner schools increased by a greater percentage than in the comparison schools on all the tests.

⁷ The increase in scores is calculated by dividing the percentage increase in score between 2012 and 2014 by the original score in 2012. For example an increase in score from 40% to 44% would be shown as a 10% increase. The scores in the table are rounded to the nearest whole number, but the increases have been calculated based on the unrounded scores

Bahasa Indonesia Test: Scores in partner schools increased by 9.5% and 4.5% respectively on the reading and writing tests, while comparison schools' scores increased by only 2.3% in reading and decreased by 0.6% in writing respectively between 2012 and 2014. Approximately 20% of students scored poorly or very poorly in the writing test in terms of the ability to write in paragraphs and sentences, the quality of ideas, spelling and punctuation and handwriting.

Mathematics Test: Scores in partner schools increased by 27.1% in partner schools and 25.8% in comparison schools between 2012 and 2014. Students found considerable difficulty with questions which involved problem solving and had to be worked in two or more stages (i.e. solving one part of the problem first and then using the answer from that part of the problem to solve the whole problem).

Science Test: Scores in partner schools increased by 6.7% in partner schools and 7.6% in comparison schools between 2012 and 2014. Students remained relatively weak in areas where they had to reason or make deductions from data. They also seem not to have acquired measuring skills through practical work. For example, they had difficulty in reading measurements off a ruler and reading weighing scales and measuring cylinders. They also had a weak knowledge of technical terms and difficulty in applying concepts to everyday situations.

Comparisons Between Different Groups: Girls performed considerably better than boys in the Bahasa Indonesia reading and writing tests and slightly better in the mathematics test. In partner schools they also overtook boys on the science test in 2014. There was no great difference in performance between students from SMP and MTs in 2014, except in writing in MTs, where scores showed a marked increase over 2012 and were considerably higher than in SMP. It should be remarked that most of the MTs in the project are state (MTs, which are relatively well resourced).

Differences Between Schools: There were wide differences in average scores between schools in every subject, indicating that students are learning much better in some schools than in others. In some cases there will be mitigating social and economic circumstances. However, it is noticeable that within many schools, some rate relatively well in one subject and poorly or very poorly in another (see **Annex I** for a complete list of school scores). This suggests variable quality in the teaching within the same school.

1.5 Implications and Recommendations for USAID PRIORITAS

A. General

The implications and recommendations from the baseline student assessment are being addressed through USAID PRIORITAS teacher training, but still remain valid and worth repeating in this midline report. These are:

- The better scores achieved by children who have attended kindergarten (TK) suggest that district should prioritize the provision of pre-school education., It is important, however, for districts to make sure that teachers are well trained to help children make the best of their TK opportunity.

B. Bahasa Indonesia

- A problem reported from a number of primary schools was a lack of mastery of Bahasa Indonesia. Schools which appear to have similar backgrounds show different levels of success in helping their students to master the language. Previous experience has shown that this is often dependent on the will and commitment of teachers and that local government and especially school supervisors and principals can do much to promote the use of Bahasa Indonesia in their schools.
- It is evident that many grade 4 children in USAID PRIORITAS schools have difficulty in comprehending meaning in what they read and in communicating ideas in a coherent and legible manner. From observations in many schools around the country language teaching focuses too narrowly on the mechanics of reading (often barking at print) and writing is confined largely to copying words and sentences or filling in words in sentences from the text book or presented by the teacher.
- In line with the competency-based curriculum, Bahasa Indonesia training should focus on developing students' language skills. Teachers should be trained to give their students opportunities to write for a variety of purposes including reporting facts and events, writing instructions and expressing their feelings and opinions. Children also need to be given the opportunity and taught to read for different purposes including for enjoyment, finding information, and to reflect on and report back on what they have read.
- Teachers need to give their students the opportunity to develop their speaking and listening skills by giving them the opportunity to discuss a variety of issues and problems. Speaking and listening can and should often be linked to reading and writing activities, with students being invited to discuss and comment on what they read and to discuss ideas before they begin to write. They should also be given the opportunity to read and give feedback on each other's work.
- Teaching should pay attention to handwriting, spelling and punctuation, which need to be taught regularly and systematically and appear to have been neglected in many schools. While punctuation and spelling should be introduced through special lessons, they need to be reinforced through the children's own writing. Children need to be encouraged to get into the habit of re-reading their own writing and correcting spelling, punctuation and other errors.
- *USAID PRIORITAS is addressing the issues of reading comprehension by training teachers of all grades to develop student comprehension skills and to do so across all subjects.*
- *USAID PRIORITAS is addressing these issues of student writing by training teachers of all grades to teach students to write expressing their own thoughts and opinions in a variety of ways and for a variety of purposes.*

C. Mathematics

- Experience in Indonesia has shown that mathematics is generally poorly taught. Many teachers have a poor understanding of the concepts they are teaching and tend to teach rules and procedures for doing mathematical operations rather than cultivating an understanding of the concepts. As a result students have difficulty applying the concepts and using mathematics as a tool for solving problems.
- Training for teachers should focus on helping both teachers and students to gain an understanding of mathematical concepts, especially by relating them to real situations in areas such as number, measurement, geometry and graphical representation.
- Teachers should be encouraged to adopt “problem solving” approaches to teaching mathematics, which also encourage creativity and develop understanding. This can include children being asked to think of a variety of answers to open-ended problems, being asked to make up their own questions for other children to answer, and being asked to make up a variety of questions which will result in the same answer (e.g., How many questions can you make with the answer “20”? How many different shapes can you make with an area of 24cm^2 ?).
- *USAID PRIORITAS is training teachers to use more problem solving and open-ended approaches to teaching mathematics in order develop concepts more fully and help students apply these concepts in real life situations.*

D. Science

- Science teaching focuses too much on the memorization of rules and concepts and too little on developing understanding and applying concepts. Too little practical work takes place to support science teaching. Students spend much of their time memorizing information from books rather than developing scientific skills such as measuring, observing real phenomena, data analysis, making hypotheses and drawing conclusions.
- Teacher training should focus on developing students’ scientific skills based on the observation of the real environment and doing experiments to investigate natural phenomena. Training should include helping students to make systematic reports on the experimental and observational work they undertake. Simple technology activities should be promoted to encourage students to apply scientific concepts in real situations.
- *USAID PRIORITAS is training teachers to teach students using observation and experiments and to focus of developing scientific skills of observation, data collection analysis and reporting.*

Part 2 First and Second Rounds of Assessment of Students in Primary Schools

The first students' assessment took place between November 15 and December 5, 2012, in 92 USAID PRIORITAS and 92 comparison schools. Details of the schools are set out on Table 3. The second assessment took place two years later (November – December 2014) in the same schools minus three comparison and one partner schools that withdrew from the sample.

Table 3: Details of Schools Tested

Province	SD				MI				Total	
	Public		Private		Public		Private			
	P	C	P	C	P	C	P	C	P	C
Aceh	4	5	-	-	4	3	-	-	8	8
North Sumatra	9	10	-	-	3	-	-	2	12	12
Banten	5	6	1	-	-	-	2	2	8	8
West Java	9	8	-	1	-	-	3	3	12	12
Central Java	15	15	1	-	-	1	4	4	20	20
East Java	15	15	-	-	1	-	4	5	20	20
South Sulawesi	9	9	-	-	1	1	2	2	12	12
Grand Total	66	68	2	1	9	5	15	18	92	92

P=PRIORITAS partner school, C=Comparison School

The results are reported below by subject, together with the implications and recommendations for USAID PRIORITAS.

2.1 Bahasa Indonesia Grade 4

2.1.1 Introduction

Traditional Bahasa Indonesia tests assess knowledge of the Indonesian language rather than children's functional language skills although the new curriculum emphasizes the development of all four language skills. This particular test focused on skills and was divided into two parts. The first part, reading comprehension, tests children's ability to read an extended piece of writing with understanding. The second part, story writing, tests children's ability to extract ideas from a picture and, using their imagination, to produce a story based on that picture. The final score for writing was a composite of five scores for the different skills of handwriting, spelling, punctuation, length of the written piece and the quality of language used.

2.1.2 The Results

Table 4 (on next page) shows the average scores obtained in the two tests.

Table 4: Participant Data and Average Scores in Grade 4 Reading and Writing Tests in 2012 and 2014

		Year	Partner School				Comparison School			
			Student Tested		Grade 4		Student Tested		Grade 4	
			n	%	Reading	Writing	n	%	Reading	Writing
Gender (%)	Boys	2012	681	47.3	41.2	37.5	722	51.0	38.6	36.6
		2014	637	47.3	42.4	39.0	662	52.5	42.1	36.4
	Girls	2012	759	52.7	45.0	45.6	694	49.0	43.7	42.5
		2014	710	52.7	51.7	49.6	599	47.5	45.4	44.6
Pre School (TK)	Attended	2012	1,137	79.0	45.9	44.2	1,125	79.4	42.9	41.6
		2014	1,114	82.7	48.4	45.9	1,049	83.2	45.8	42.5
	Did Not Attend	2012	303	21.0	33.1	32.6	291	20.6	34.2	31.9
		2014	233	17.3	42.2	38.6	212	16.8	33.2	29.1
School Type	Secular	2012	1,095	76.0	44.5	43.3	1,087	76.8	41.7	41.1
		2014	997	74.0	47.2	44.6	969	76.8	43.6	40.8
	Religious	2012	345	24.0	39.0	37.1	329	23.2	38.9	34.5
		2014	350	26.0	47.7	44.7	292	23.2	44.0	38.6
School Status	Public	2012	1,210	84.0	44.4	42.4	1,134	80.1	40.7	40.1
		2014	1,123	83.4	46.8	43.7	1,032	81.8	43.3	40.2
	Private	2012	230	16.0	36.9	38.3	282	19.9	42.5	37.8
		2014	224	16.6	49.7	49.0	229	18.2	45.7	40.8
Average		2012	1,440	100.0	43.2	41.8	1,416	100.0	41.1	39.6
		2014	1,347	100.0	47.3	44.6	1,261	100.0	43.7	40.3
% increase in scores 2012/2014					9.5	6.7			6.3	1.8

Scores in partner schools increased by 9.5% and 6.7% respectively on the reading and writing tests, while comparison schools' scores increased by 6.3% and 1.8% respectively between 2012 and 2014. (See the last row of Table 4).

During the first assessment there were large differences between individual schools with the highest having an average student score of 76% and the lowest 11% on the reading test and the highest 86% on the writing test compared to 8% for the lowest. Four schools had average scores below 10% on the writing test. During the second assessment, the differences in reading scores became smaller with the highest having an average of 80% and the lowest 15%. In the writing test, the highest score was 73% and the lowest was 6%.

2.1.3 Reading

The results disaggregated by various grouping are shown in Charts 1 and 2 (next pages). All groups in the partner schools showed increased scores in the second round of testing. Girls continued to score considerably higher than boys in the reading test and children who had attended TK (pre-school) scored substantially higher than those who had not. Students in MI (religious primary schools) overtook SD (secular primary schools) in the second round of assessment and students in private schools scored higher than state schools.

Chart 1: Reading Comprehension by Gender and Pre-School

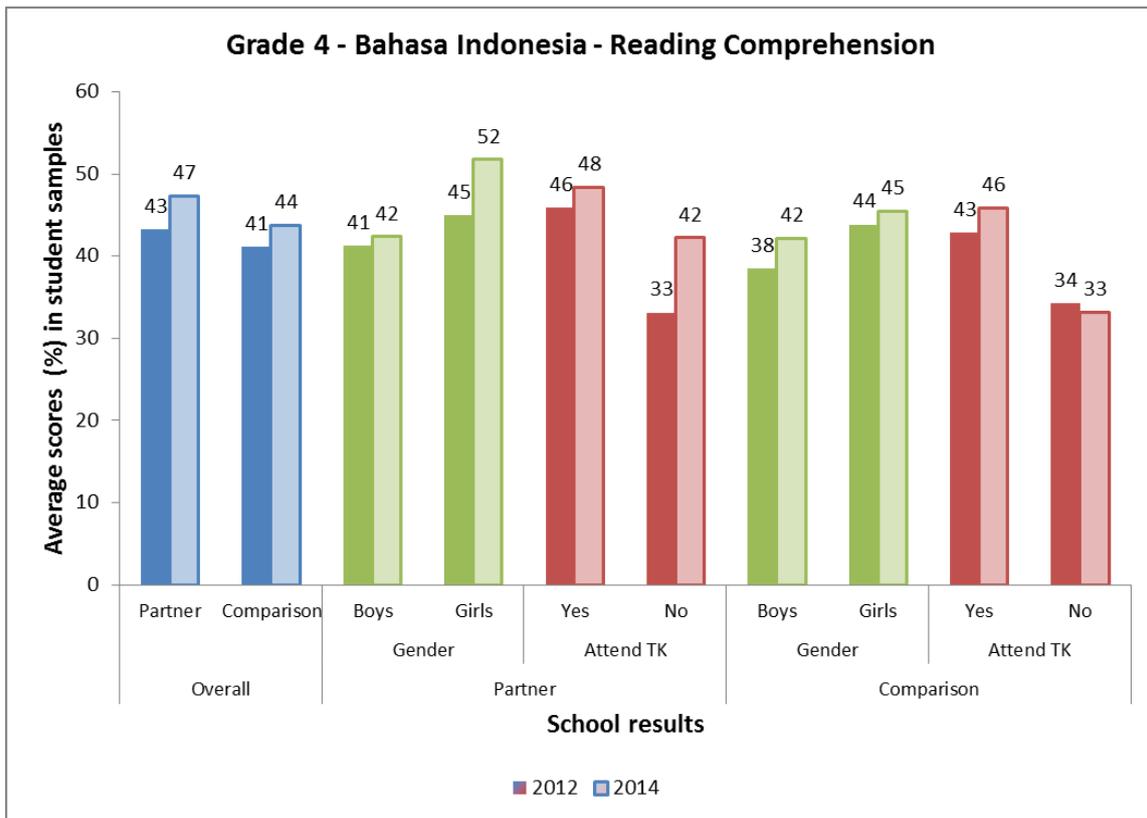


Chart 2: Reading Comprehension by School Type and School Status

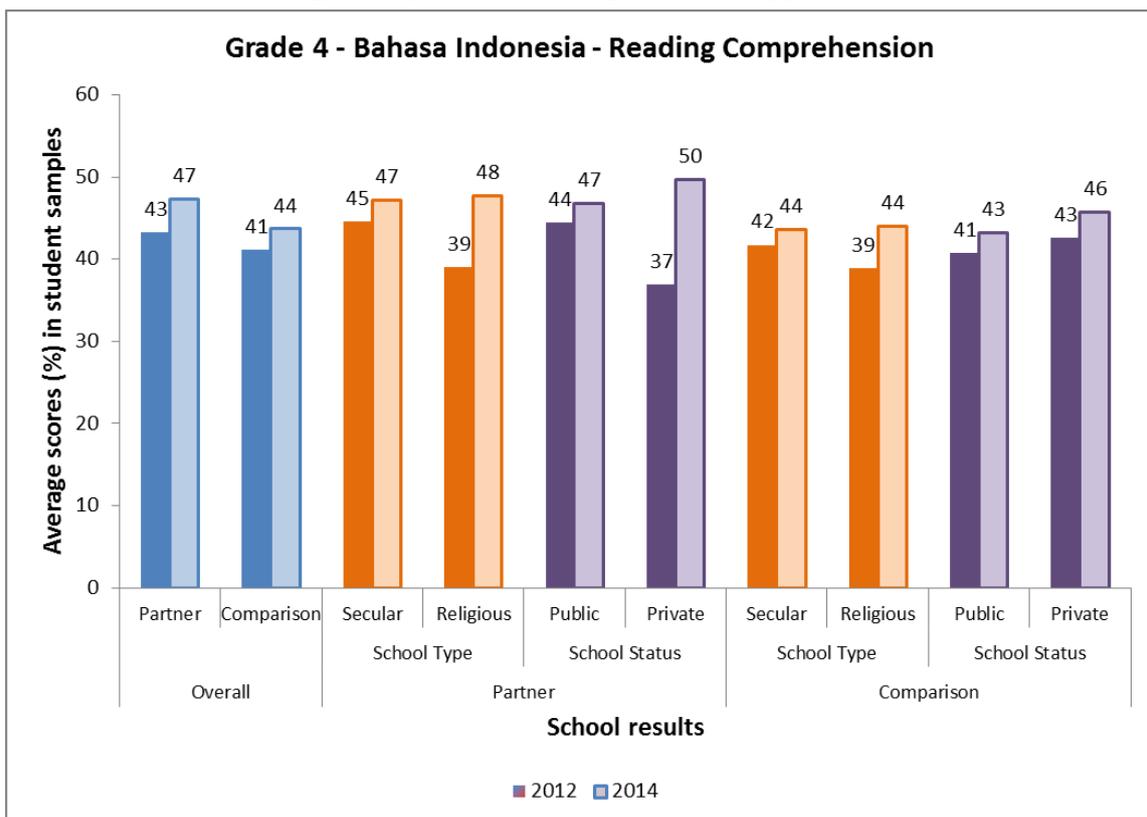
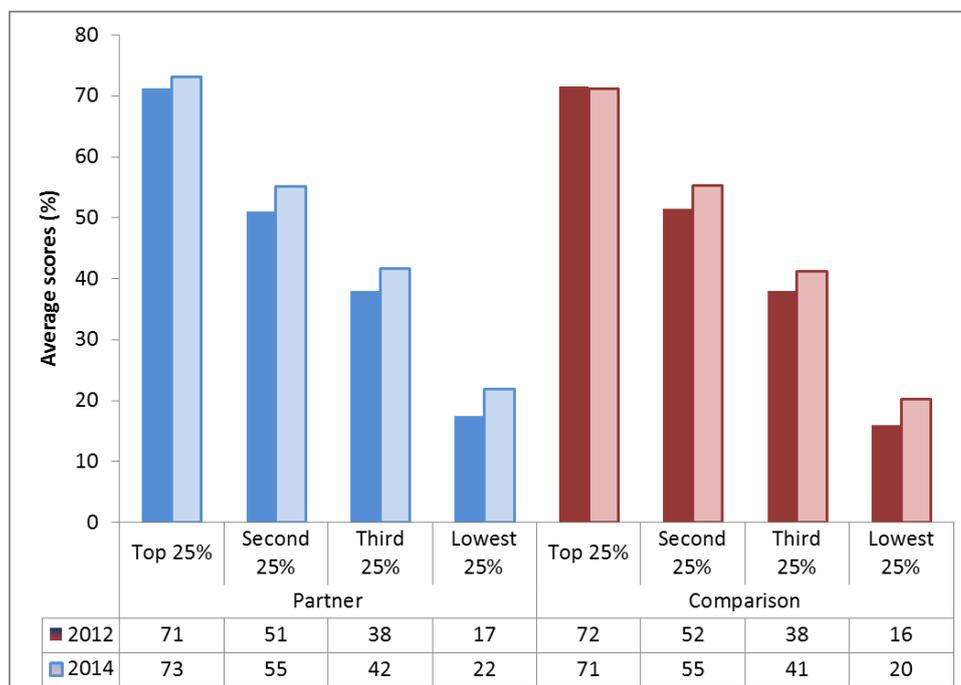


Chart 3 shows the average score per quartile. During the first assessment, the top 25% of students in partner schools scored, on average, 71%, and comparison schools scored 72%; whereas the lowest 25% of students in partner schools scored, on average, 17%, and comparison schools scored 16%. Data from second assessment indicated increases in all four quartiles with the highest increase in the lowest quartile of both partner and comparison schools. This indicates that the improvement of test scores took place in all four quartiles and the biggest improvement took place in the lowest quartile.

Chart 3: Average Scores (in Percentages) by Quartile in Reading Comprehension Test



The test was divided into three sections. Section A gave multiple choices of words to complete sentences about a reading passage. Section B required the students to evaluate whether statements about the passage were true or false, while Section C required students to deduce information from or attempt to explain what they had read. As can be seen from Table 5 below, the students found Section C most difficult with an average of 25% of questions answered correctly compared to around 60% for the other sections.

Data from second assessment indicate that there had been an increase of percentages in all three sections of the tests and Section C remains the most difficult.

Table 5: Scores by Section

Section	% Correct			
	2012		2014	
	P	C	P	C
Section A	58	58	63	61
Section B	64	62	68	65
Section C	26	24	31	27
Total	52	51	54	51

2.1.4 Writing

The results disaggregated by various grouping are shown in Charts 4 and 5. All groups in the partner schools showed increased scores in the second round of testing, while in the comparison schools scores were higher in all groups except boys and children who had not attended kindergarten, both of which fell slightly.

In the writing test girls continued to achieve considerably higher scores than boys. Children who had attended kindergarten scored much higher than those who had not. Students in partner MI and private schools showed especially large increases in average scores and outscored their secular and state counterparts in the second round of testing.

Chart 4: Writing Test by Gender and Pre-School

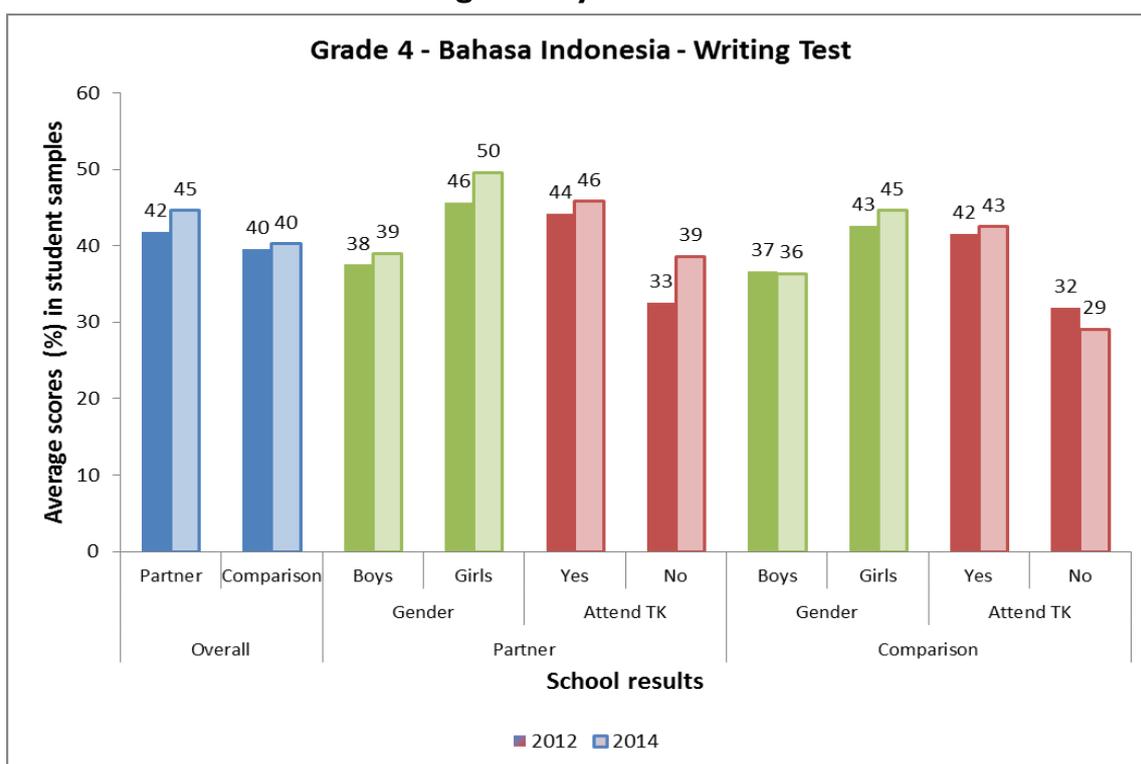
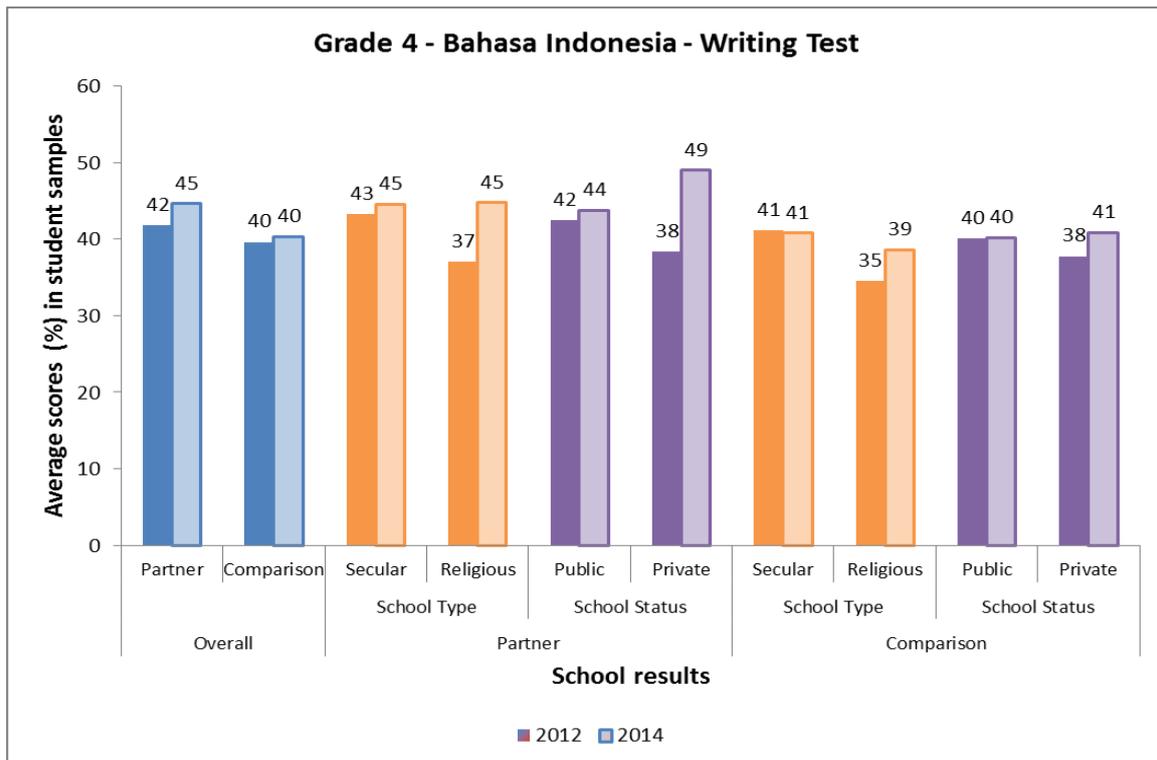


Chart 5: Writing Test by School Type and School Status



The writing test was assessed according to five elements: handwriting, spelling, punctuation, length, and the quality of the writing. The weighting in the overall score was for handwriting (15%), spelling (15%), punctuation (15%), length (20%), and quality of the writing (35%).

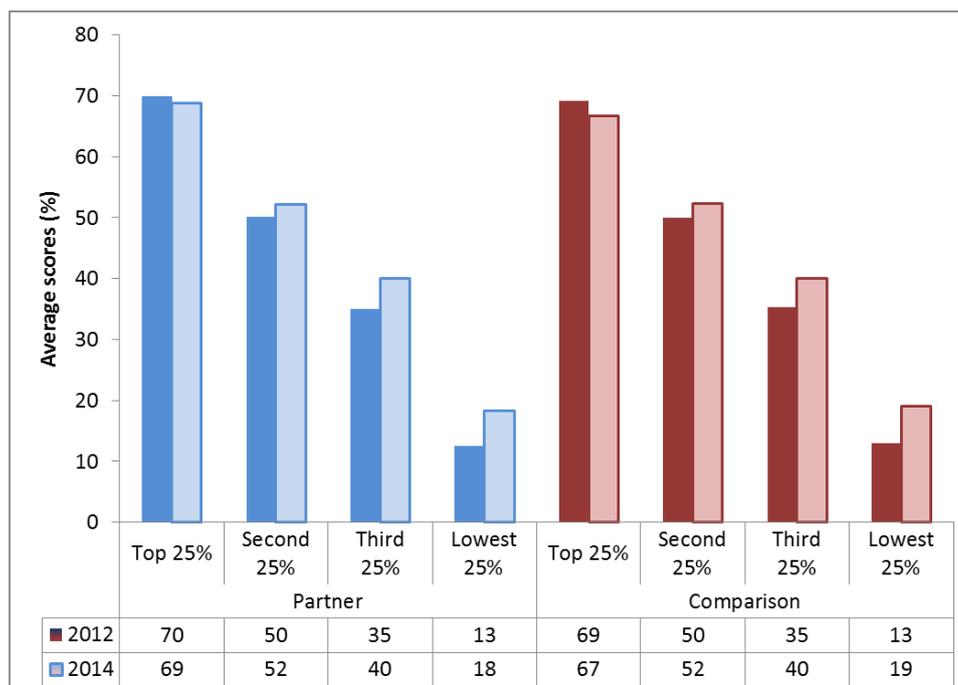
Table 6 also presents the results of the second assessment. If we combine the percentages of the first two categories of the five elements (e.g. ‘good joined’ and ‘good printed’ in Handwriting; ‘perfect’ and ‘good’ in Spelling), it is very clear that the results of student writing assessment in the second assessment was better than the first assessment in all five elements. The percentage of students with ‘no score’ also dropped considerably in the second round of assessment.

Table 6: Percentage Scores for Elements of Written Work in Writing Test

Handwriting						
Treatment	Year	Good Joined	Good Printed	Poor		No Score
Partner	2012	15	46	26		13
	2014	10	54	28		8
Comparison	2012	13	45	27		15
	2014	6	52	33		8
Spelling						
Treatment	Year	Perfect	Good	Poor		No Score
Partner	2012	6	36	43		16
	2014	5	42	44		9
Comparison	2012	8	29	47		17
	2014	4	36	49		11
Punctuation						
Treatment	Year	Perfect	Good	Poor		No Score
Partner	2012	4	26	44		26
	2014	5	31	49		14
Comparison	2012	7	20	44		29
	2014	5	24	49		22
Length of Written Work						
Treatment	Year	> 1 Page	>Half Page	>2 Sentences	<2 Sentences	No Writing
Partner	2012	4	21	45	17	13
	2014	7	23	42	20	7
Comparison	2012	4	20	43	19	15
	2014	3	18	45	26	7
Quality of the Written Work						
Treatment	Year	Very Good	Good	Fair	Poor	No Writing
Partner	2012	2	12	29	43	13
	2014	7	23	42	20	7
Comparison	2012	0	11	28	46	15
	2014	3	18	45	26	7

Chart 6 shows the average score per quartile. During the baseline, the top 25% of students in partner schools scored, on average, 70%, and comparison schools scored 69%; whereas the lowest 25% of students in both partner and comparison schools scored, on average, 13%. During the second assessment, there was a slight decline in the first quartile. The other three quartiles show some improvement with the lowest had the biggest improvement, both in partner and comparison schools. It means that the three quarters contributed to the changes that took place in writing test during the second assessment, and the lower performing students have shown more improvement relative to the higher performing students.

Chart 6: Average Scores (%) by Quartile in Writing Test.



2.1.6 Implications and Recommendations for USAID PRIORITAS

- It is evident that many grade 4 children in the schools tested have difficulty in comprehending meaning in what they read and in communicating ideas in a coherent and legible manner. Mastery of language is the key to success across the curriculum and, in many cases, in later life. This highlights the importance of training in the teaching of Bahasa Indonesia. From observations in many schools around the country language teaching focuses too narrowly on the mechanics of reading (often barking at print) and writing is confined largely to copying words and sentences.
- Language teaching should pay attention to handwriting, spelling and punctuation, which need to be taught regularly and systematically. This approach appears to have been neglected in many schools. While punctuation and spelling should be introduced through special lessons, they need to be reinforced through the children’s own writing. Children need to be encouraged to get into the habit of re-reading their own writing and correct spelling, punctuation and other errors.
- *The emphasis in USAID PRIORITAS teacher training is on improving students’ communication skills, including the ability to get meaning from what they hear and read and to communicate their own ideas better in both spoken and written form. This includes the ability to communicate for different purposes to different audiences by the introduction of appropriate text types.*

2.2 Mathematics Test Grade 4

2.2.1 Introduction

The mathematics test was revised substantially in 2004 compared to the original test used in PEQIP and the World Basic Education Projects in order to give a greater emphasis on testing children's understanding and their problem solving capabilities.

2.2.2 The Results

Table 7 below shows that during the baseline assessment, average scores on the mathematics test was 40.9% for partner schools and 40.3% for comparison schools. Boys scored slightly lower than girls on the test. Children who attended kindergarten (TK) scored substantially higher than those who had not. Students attending SD also scored considerably higher than those attending MI. State schools scored considerably higher than private schools in partner districts and slightly lower in comparison districts. There were large differences between individual schools with the highest having an average student score of 73% and the lowest 8%. Three schools had average scores below 10%.

Table 7: Participant Data and Average Scores in Mathematics Test

		Year	Partner School			Comparison School		
			Student Tested		Average Score	Student Tested		Average Score
			n	%		n	%	
Gender (%)	Boys	2012	724	50.7	40.7	697	49.5	38.9
		2014	674	49.9	43.2	655	51.4	41.2
	Girls	2012	705	49.3	41.1	710	50.5	41.6
		2014	677	50.1	45.7	619	48.6	44.6
Pre School (TK)	Attended	2012	1,110	77.7	43.2	1,110	78.9	43.0
		2014	1,132	83.8	46.5	1,044	81.9	45.3
	Did Not Attend	2012	319	22.3	32.9	297	21.1	30.1
		2014	219	16.2	33.9	230	18.1	31.9
School Type	Secular	2012	1,085	75.9	43.8	1,080	76.8	41.3
		2014	1,008	74.6	46.1	974	76.5	43.3
	Religious	2012	344	24.1	31.5	327	23.2	36.9
		2014	343	25.4	39.7	300	23.5	41.3
School Status	Public	2012	1,199	83.9	42.6	1,129	80.2	40.1
		2014	1,138	84.2	44.8	1,036	81.3	42.7
	Private	2012	230	16.1	32.2	278	19.8	40.8
		2014	213	15.8	42.6	238	18.7	43.5
Average		2012	1,429	100.0	40.9	1,407	100.0	40.3
		2014	1,351	100.0	44.5	1,274	100.0	42.9
% increase in scores 2012/2014					8.8			6.5

During the second assessment, there were significant increases of percentages in all categories of the three disaggregating variables (gender, pre-school attendance, and school type). The trends are similar as in the first assessment: Girls, children attending kindergarten, students in secular schools, and in private schools had higher scores than

boys, children not attending kindergarten, and students in religious schools. Just as in the baseline assessment, the public partner schools had higher scores than private schools, while in the comparison schools, it is the opposite. Charts 7 and 8 shows the results in graphical form.

Chart 7: Mathematics by Gender and Pre-School

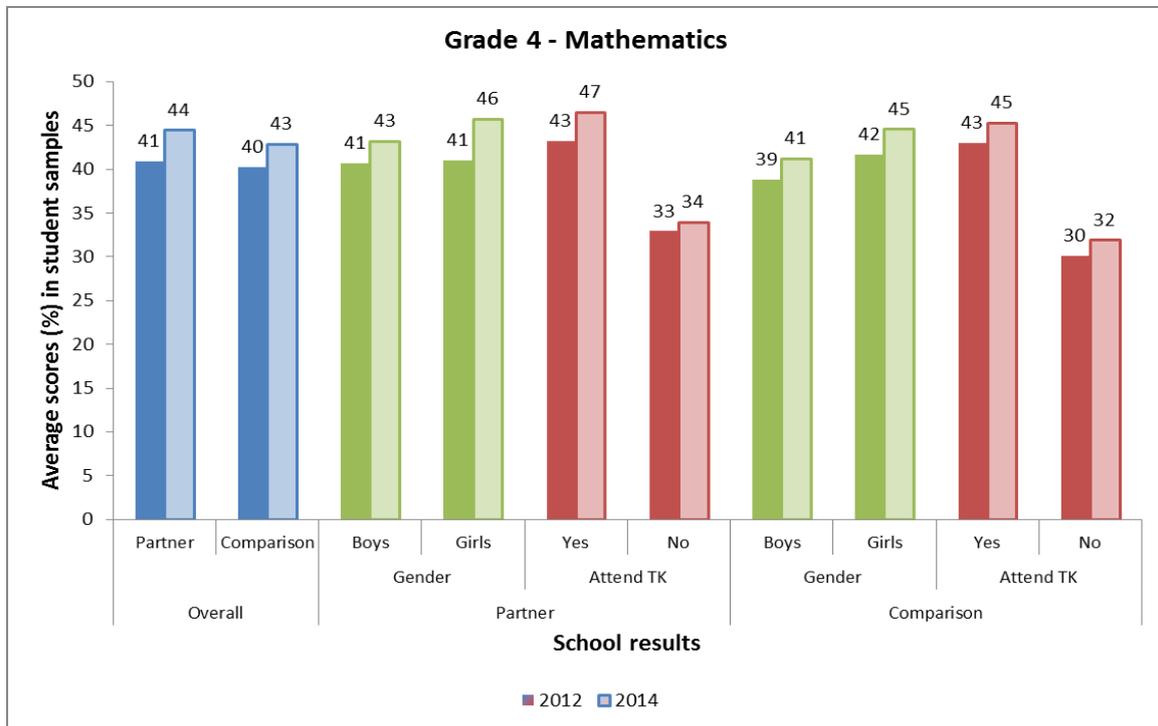


Chart 8: Mathematics by School Type and School Status

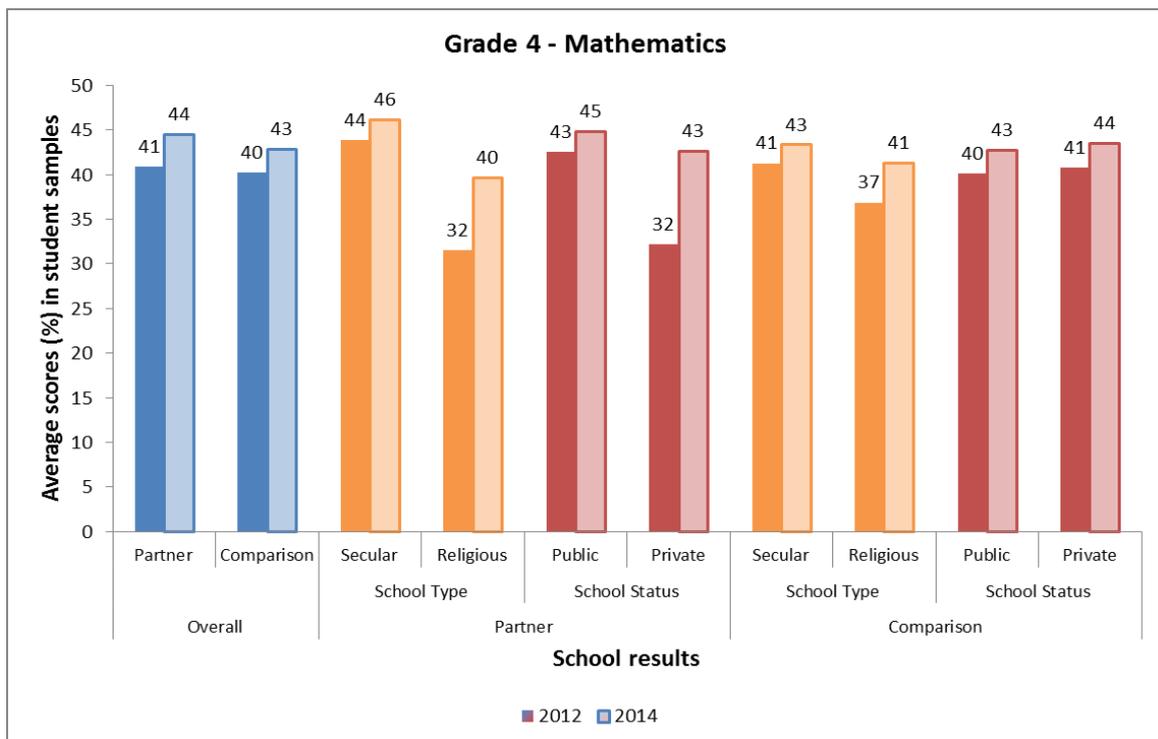
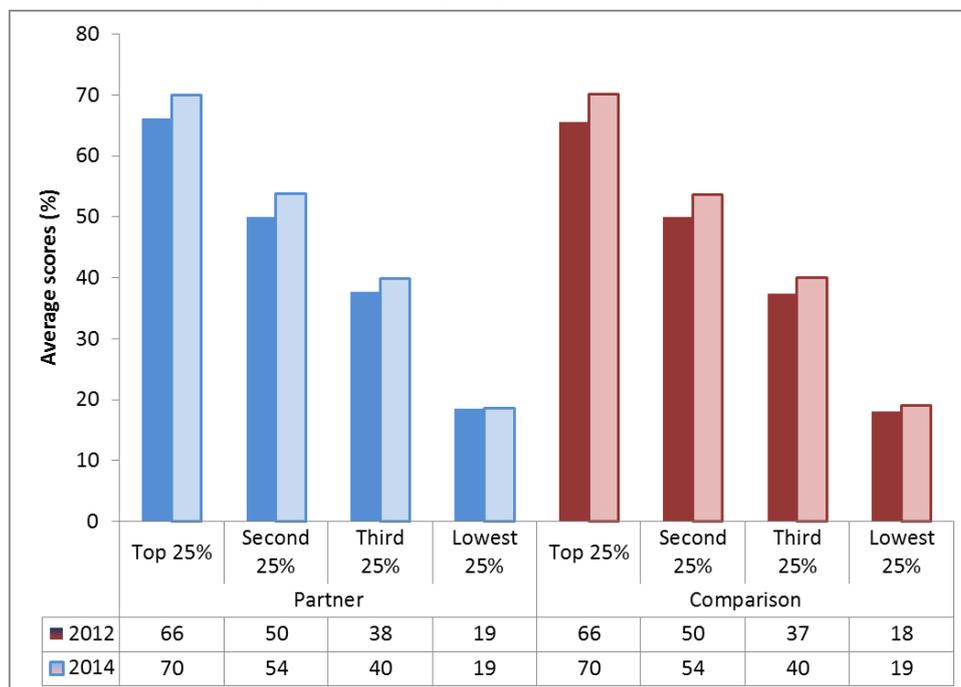


Chart 9 shows the average score per quartile. The top 25 of students in both partner and comparison schools scored, on average, 66%; whereas the lowest 25 of students in partner schools scored, on average, 19%, and in comparison schools also scored 19%.

During the second assessment, the averages of almost all quartiles (except in the partner lowest) are higher than the first assessment both in partner and in comparison schools. It means that the improvements took place in all of the quartiles except in the partner school lowest quartile, where there was no change.

Chart 9: Average Percentage by Quartile in Mathematics Test



During the baseline assessment, the questions that the children found most difficult to answer are shown in Error! Reference source not found.. Results from questions 2, 12, and 19 show that students had difficulties in recognizing the value of both decimal and simple fractions, as well as had difficulties with operations with decimal fractions. Students scored very low on questions that required problem solving creativity in working out their answers (questions 13, 17, 18, and 20).

During the second assessment, these nine questions still remain the most difficult but the percentages of students that could answer them increased significantly in almost all of the nine questions. The first on the list (ordering decimal fractions) still remain the most difficult with only one percent increase in partner schools.

Table 8: Most Difficult Questions: The Percentages of Correct Answers in Selected Questions

Number and Description of Questions	Year	% Correct	
		P	C
12. Ordering decimal fractions	2012	8	4
	2014	11	9
20. Money problem	2012	12	11
	2014	20	17
2. Addition of decimals	2012	12	13
	2014	22	18
17. Configuring shapes	2012	12	17
	2014	37	31
13. Completing a number series	2012	19	18
	2014	31	30
18. Number series problem	2012	14	14
	2014	24	28
13. Completing a number series	2012	16	15
	2014	30	31
19. Recognising simple fractions ($\frac{1}{2}$. $\frac{1}{4}$ etc.)	2012	22	17
	2014	34	38
15. Counting the area of shapes	2012	28	30
	2014	36	33

Table 9 shows the percentage of children scoring correct in each of the 20 questions in the test.

Table 9: Analysis of Scores by Question in Mathematics Tests

Number and Description of questions	Partner (% correct)		Comparison (% correct)	
	2012	2014	2012	2014
1. Addition, tens, and units	78	81	75	79
2. Addition of decimals	12	22	13	18
3. Subtraction, tens and units	54	54	54	60
4. Subtraction, hundreds, tens	44	45	44	45
5. Multiplication, tens, and units	54	52	51	54
6. Simple Division	32	33	28	33
7. Inserting number operators	60	68	55	65
8. Inserting number operators	78	84	75	82
9. Inserting missing number in	77	80	76	80
10. Inserting missing number	29	44	30	37
11. Ordering whole numbers	65	64	58	59
12. Ordering decimal fractions	8	11	4	9
13. Completing a number series	19	31	18	30
14. Making number sentences	66	85	66	85
15. Counting the area of shape	28	36	30	33
16. Estimating Length	53	64	53	59

Number and Description of questions	Partner (% correct)		Comparison (% correct)	
	2012	2014	2012	2014
17. Configuring shapes	12	37	17	31
18. Number series problem	18	28	18	24
19. Recognizing simple fractions	19	38	18	34
20. Money problem	12	20	11	17

2.2.3 Implications and Recommendations for USAID PRIORITAS

- Experience in Indonesia has shown that mathematics is poorly taught in many classes. Many teachers have a poor understanding of the concepts they are teaching and tend to teach rules and procedures for doing mathematical operations rather than cultivating an understanding of the concepts. As a result students have difficulty applying the concepts in real life and using mathematics as a tool for solving problems.
- Training for teachers should focus on the development of students' conceptual thinking and the systematic teaching of number concepts from the physical to the verbal to the symbolic. It should focus on helping both teachers and students to gain an understanding of mathematical concepts by relating them to real situations in areas such as number, money, measurement, geometry and graphical representation.
- USAID PRIORITAS is training teachers to adopt “problem solving” approaches to teaching mathematics, which also encourage creativity and develop understanding. This includes children being asked to think of a variety of answers to an more open ended problem, being asked to make up their own questions for other children to answer and being asked to make up a variety of questions that will result in the same answer (e.g., How many questions can you make with the answer “20”? How many different shapes can you make with an area of 24cm^2 ?).

2.3 Science Test Grade 5

2.3.1 Introduction

This test was divided into two sections. Section A used the familiar format of multiple-choice questioning to assess students' understanding of concepts they have already learnt. Section B assessed their process skills such as the ability to observe, interpret and hypothesize (i.e. providing tentative answers based on previous knowledge and experience). Some of the test items also assessed the ability to apply basic science concepts to everyday situations.

2.3.2 The Results

Table 10 shows that during the baseline, the overall average score on the test was 35.8% for partner schools and 33.0% for comparison schools. Boys scored slightly lower than girls on the test. As in the other tests, children who attended kindergarten (TK) scored substantially higher than those who had not. Students attending SD also scored considerably higher than those attending MI and public schools scored higher both among partner schools and comparison schools.

During the midline, the average score on the test was 43.1% for partner schools and 40.0% for comparison schools (an increase of about 20.5% for partner schools and 21.3% for comparison schools). The results of disaggregation by gender, pre-school attendance, type, and status of schools produced similar pattern as in the baseline.

Table 10: Participant Data and Average Scores in Science Test

		Year	Partner School			Comparison School		
			Student Tested		Average Score	Student Tested		Average Score
			n	%		n	%	
Gender (%)	Boys	2012	706	49.7	35.2	713	49.6	32.4
		2014	962	51.6	42.4	810	48.0	39.5
	Girls	2012	715	50.3	36.3	725	50.4	33.6
		2014	901	48.4	43.9	878	52.0	40.5
Pre School (TK)	Attended	2012	1,113	78.3	37.6	1,082	75.2	35.6
		2014	1,612	86.5	44.6	1,429	84.7	42.1
	Did Not Attend	2012	308	21.7	29.1	356	24.8	24.9
		2014	251	13.5	33.3	259	15.3	28.6
School Type	Secular	2012	1,074	75.6	37.8	1,085	75.5	34.2
		2014	1,429	76.7	44.4	1,329	78.7	40.0
	Religious	2012	347	24.4	29.5	353	24.5	29.2
		2014	434	23.3	39.0	359	21.3	40.0
School Status	Public	2012	1,197	84.2	36.5	1,164	80.9	33.5
		2014	1,596	85.7	43.2	1,399	82.9	39.6
	Private	2012	224	15.8	32.0	274	19.1	30.9
		2014	267	14.3	42.5	289	17.1	42.1
Average		2012	1,421	100.0	35.8	1,438	100.0	33.0
		2014	1,863	100.0	43.1	1,688	100.0	40.0
% increase in scores 2012/2014					20.5			21.3

Both partner and comparison schools showed big increases in scores. While the increase in comparison schools was slightly larger than in partner schools, the scores in partner schools were still on average higher than in comparison schools. The reasons for the large increases are not clear, but possibly reflect USAID PRIORITAS training, which has also been disseminated to many comparison schools. The reason project mid-term evaluation noted the number of good science lessons that they observed during their time in the field.

The results disaggregated by the various groupings are shown in Chart 10 and 11.

Chart 10: Science by Gender and Pre-School Attendance

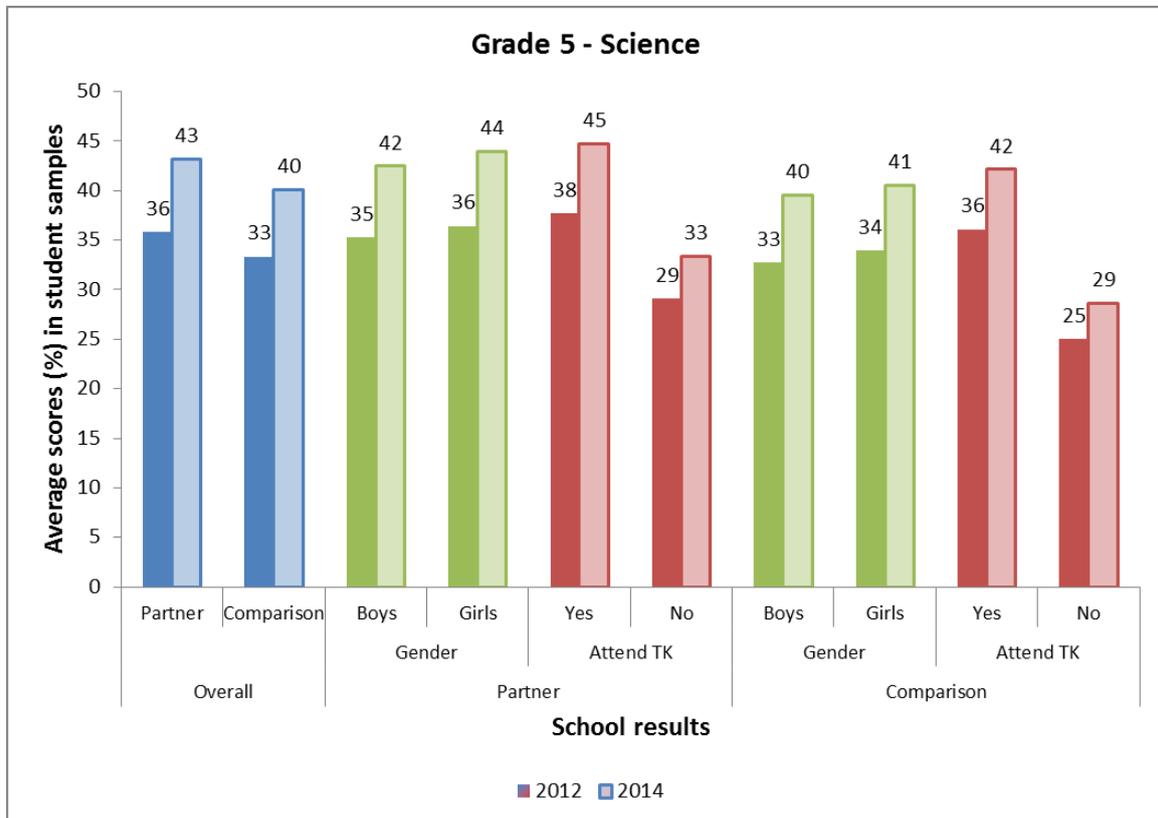
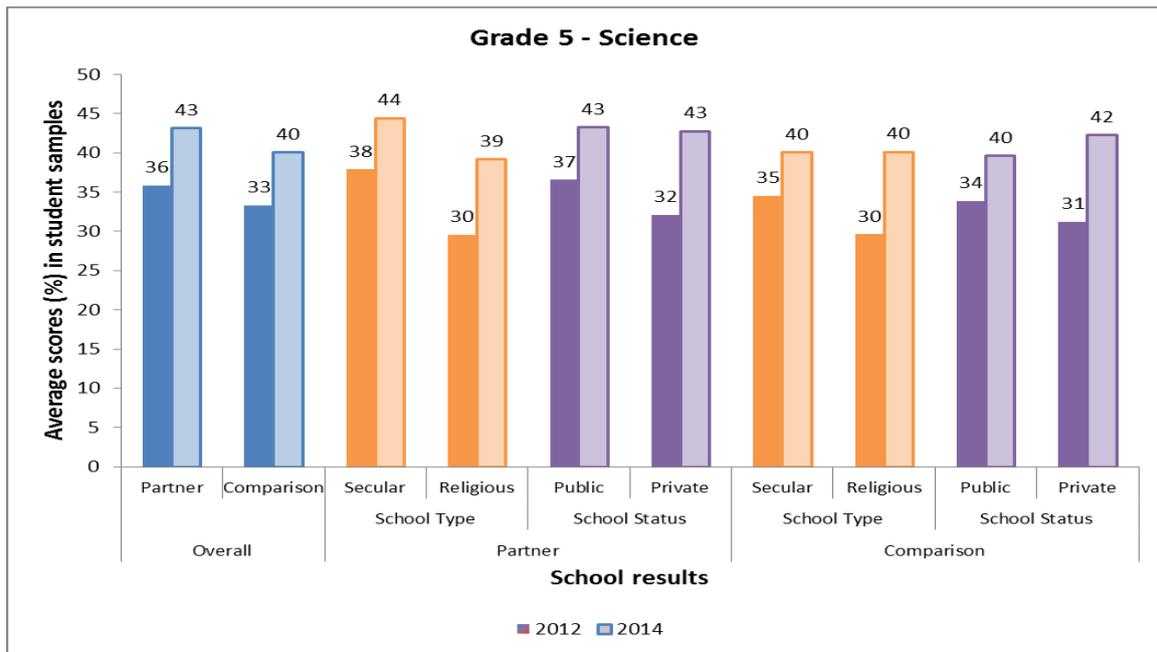


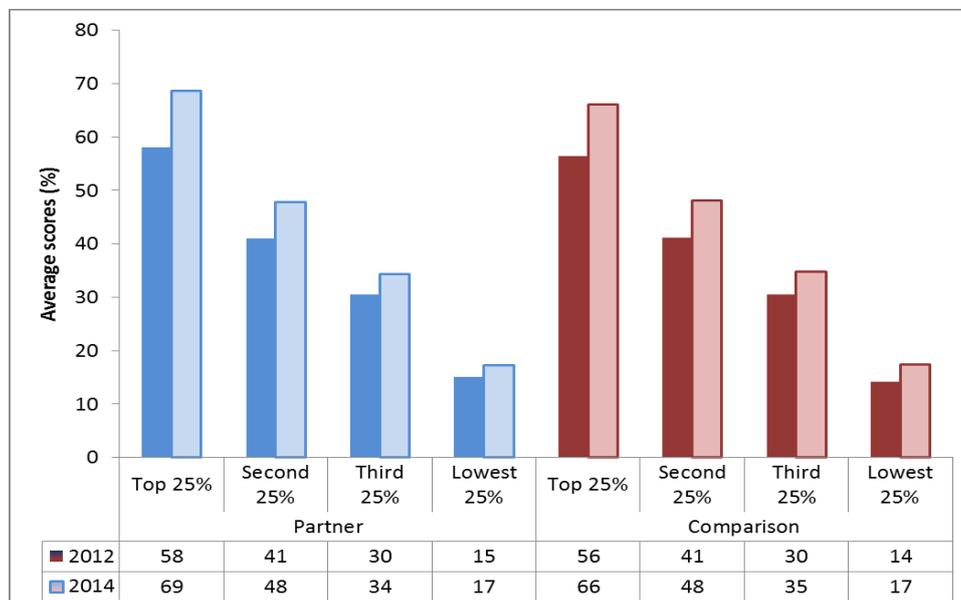
Chart 11: Science by School Type and School Status



There were large differences between individual schools in the baseline with the highest having an average student score of 64% and the lowest 9%. Three schools had average scores below 10. During the midline, the differences were still large but the highest and lowest scores increased quite significantly (88% and 7%) and two schools had an average score below 10.

Chart 12 shows that the increases of average of scores took place in all four quartiles, both in partner and comparison schools and the highest increase took place in the top quartiles. It means, that all four quartiles contributed to the overall increase of the average score of science test during the midline and the top quartile made the biggest contribution to the increase.

Chart 12: The Average Percentages of Scores by Quartile in Science Test



As can be seen from Table II below, during the baseline, children found the traditional format of questioning (with multiple choice answers) in Section A much easier than Section B. In Section A, they answered an average of 44% (partner schools) and 45% (comparison schools) correctly. In Section B, where they were required to make deductions and apply concepts that they had learned, they correctly answered an average of 32% and 28% respectively.

During the midline, the students made some improvements in both sections. In Section A, they answered an average of 48% (partner schools) and 45% (comparison schools) correctly and in Section B an average of 41% (partner schools) and 40% (comparison schools) correctly.

Table II: Average Scores by Section in the Science Test (%)

Section	Partner Schools		Comparison Schools	
	2012	2014	2012	2014
Section A	44	48	45	45
Section B	32	41	28	40
Total	38	43	37	42

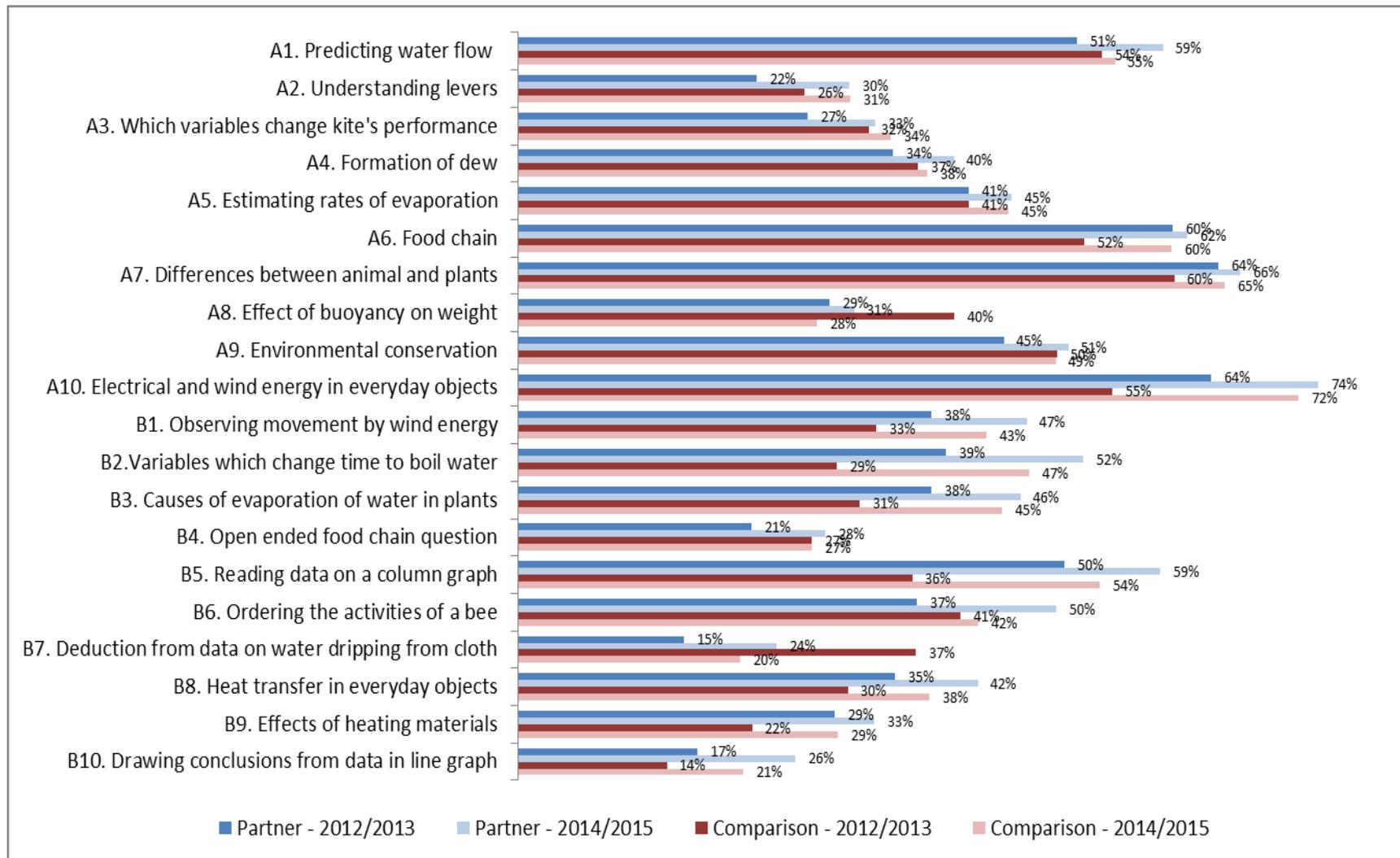
Table 12 shows the questions for which scores were the lowest. The questions with which students had the most difficulty were those where they had to interpret data and where they had to give open-ended answers, i.e., there were no multiple choice answers from which to select. This result suggests that students are more confident in selecting right answers when they are given a choice, but they lack the confidence or skills to construct an answer themselves.

Table 12: Most Difficult Questions:

Number and Description of Questions	Year	% Correct	
		P	C
B10. Drawing conclusions from data in line graph	2012	17	14
	2014	26	21
B7. Deduction from data on water dripping from cloth	2012	15	26
	2014	23	20
A7. Understanding levers	2012	22	26
	2014	30	31
B4. Open ended food chain question	2012	21	27
	2014	28	27
B9. Open ended question on effects of heat on iron	2012	29	22
	2014	33	29
A3. Which variables change kite's performance	2012	27	32
	2014	33	34

Chart 13 on the next page shows the percentage of correct answers to individual questions.

Chart I3: Analysis of Scores by Question in Primary Science Test



2.3.3 Implications and Recommendations for USAID PRIORITAS

- Science teaching focuses too much on the memorization of rules and concepts and too little on developing understanding of and applying concepts. Too little practical work takes place to support student learning. Students spend much of their time memorizing information from books rather than developing scientific skills such as observation of real phenomena, data analysis, making hypotheses and drawing conclusions.
- *USAID PRIORITAS teacher training is focusing on developing students' scientific skills based on the observation of the real environment and doing experiments to investigate natural phenomena. Training includes helping students to make systematic reports and draw their own conclusions on the experimental and observational work they undertake.*

Part 3 First and Second Rounds of Testing of Junior Secondary Schools

During the baseline, the student assessment took place between November 15 and December 5, 2012, in 69 partner schools (50 SMP and 19 MTs) and 69 comparison schools (45 SMP and 24 MTs) in the 23 PRIORITAS partner districts. That was 3 partner and 3 comparison schools in each district. Data on the schools tested is set out in Table 13.

In the second monitoring (midline survey), the student assessment took place in the same schools as in the baseline minus two comparison schools that withdrew from the sample of the midline survey.

Table 13: Data on Schools Tested in 2012 and 2014

	SMP				MTs				Total	
	Public		Private		Public		Private			
	P	C	P	C	P	C	P	C	P	C
Aceh	4	4	-	-	2	2	-	-	6	6
North Sumatera	7	5	-	1	-	2	2	1	9	9
Banten	4	4	-	-	-	-	2	2	6	6
West Java	6	6	-	-	2	2	1	1	9	9
Central Java	9	9	1	-	1	3	4	3	15	15
East Java	10	10	-	-	2	3	3	2	15	15
South Sulawesi	9	6	-	-	-	1	-	2	9	9
Grand Total	49	44	1	1	7	13	12	11	69	69

Note: P=PRIORITAS school, C=Comparison School

The results are reported below by subject, followed by the implications and recommendations for USAID PRIORITAS.

3.1 Bahasa Indonesia Grade 8

3.1.1 Introduction

Traditional Bahasa Indonesia tests assess knowledge of the Indonesian language rather than children's functional language skills, although the new curriculum emphasizes the development of all four language skills (speaking, listening, reading and writing). This particular test focused on skills and was divided into two parts. The first part — reading comprehension — tests children's ability to read an extended piece of writing with understanding, including their ability to deduce meaning from a text. The second part — the writing test — assesses children's ability to extract ideas from a picture and, using their imagination, to produce a logical and well-ordered piece of writing based on the picture. The final score for writing consists of a composite of five scores for the different components of (i) paragraphing and (ii) sentencing, (iii) the quality of the ideas expressed, (iv) spelling and punctuation, and (v) handwriting.

3.1.2 The Results

Table 14 shows the average scores obtained in the two tests. In 2012 baseline, the average score was 64.0% for reading and 50.0% for writing in partner schools and 66% for reading and 46.9 for writing in comparison schools. Girls scored somewhat higher than boys in reading and considerably so in writing. SMP students scored higher than MTs students on both tests. Students from state schools scored higher than those in private schools on both tests.

In 2014, the average scores in the partner schools for reading increased by 9% (from 64.0% to 70.0%) and 2% (from 50.0% to 52.3%) in writing. The results of disaggregation in 2014 are mostly similar with baseline, except religious schools in comparison group scored higher in reading and writing. The changes for the comparison schools were smaller, up 4.5% for reading and 0.6% lower for writing.

In 2012, there were large differences between individual schools with the highest having an average student score of 90% and the lowest 35% on the reading test and the highest 74% on the writing test compared to 19% for the lowest.

In 2014, the highest score was 97% and the lowest was 41%. In writing, the highest score was 84% and the lowest 17%.

Table 14: Participant Data and Average Scores in Grade 8 Reading and Writing Tests

		Year	Partner School				Comparison School			
			Student Tested		Grade 8		Student Tested		Grade 8	
			n	%	Reading (%)	Writing (%)	n	%	Reading (%)	Writing (%)
Gender (%)	Boys	2012	548	45.9	61.3	44.8	532	46.5	64.0	42.5
		2014	486	44.7	68.3	46.7	500	47.0	64.6	43.6
	Girls	2012	645	54.1	66.2	54.4	612	53.5	67.8	50.9
		2014	602	55.3	71.4	56.8	564	53.0	70.2	49.5
School Type	Secular	2012	811	68.0	64.8	51.1	828	72.4	67.8	46.3
		2014	736	67.6	69.1	49.9	755	71.0	68.1	47.6
	Religious	2012	382	32.0	62.1	47.7	316	27.6	61.4	48.6
		2014	352	32.4	72.0	57.3	309	29.0	66.4	44.5
School Status	Public	2012	1,024	85.8	64.7	51.7	936	81.8	67.5	47.7
		2014	925	85.0	70.8	53.1	857	80.5	68.3	47.0
	Private	2012	169	14.2	59.3	40.1	208	18.2	59.5	43.6
		2014	163	15.0	65.5	47.5	207	19.5	64.5	45.2
Average	2012	1,193	100.0	64.0	50.0	1,144	100.0	66.0	47.0	
	2014	1,088	100.0	70.0	52.3	1,064	100.0	67.6	46.7	
% increase in scores 2012/2014				9.5	4.5			2.3	-0.6	

The results disaggregated by the various groupings are shown in Charts 14 and 15 below.

Chart 14: Reading Comprehension Comparison between Different Groups

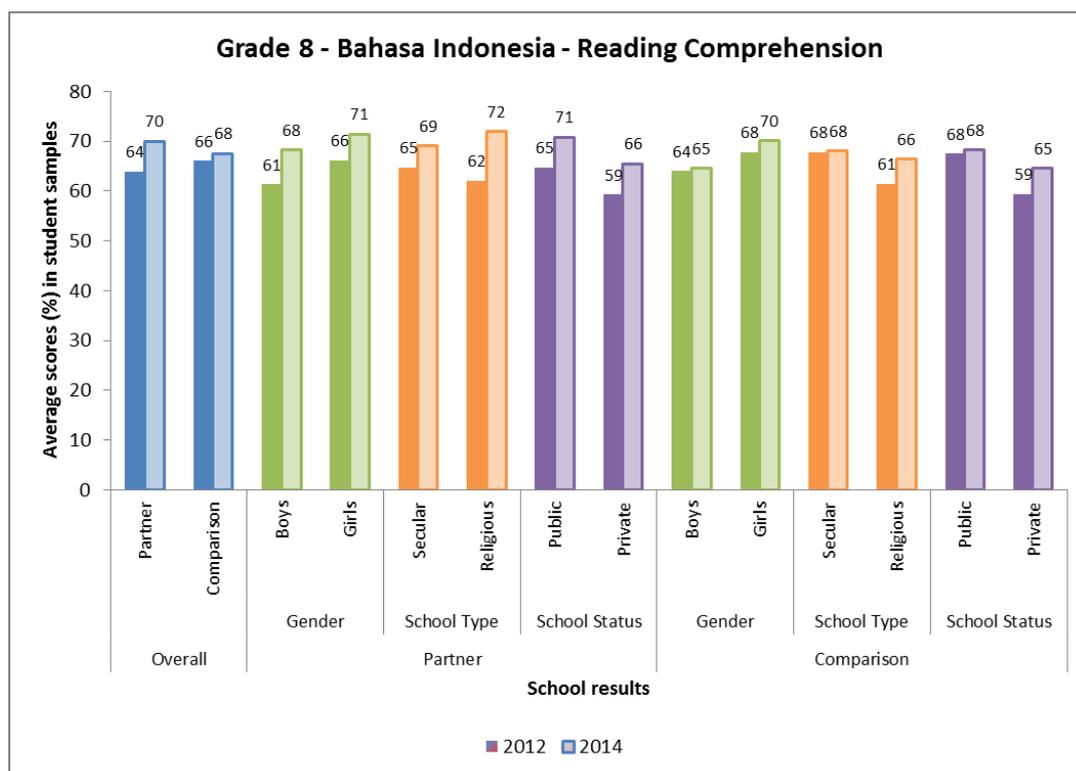
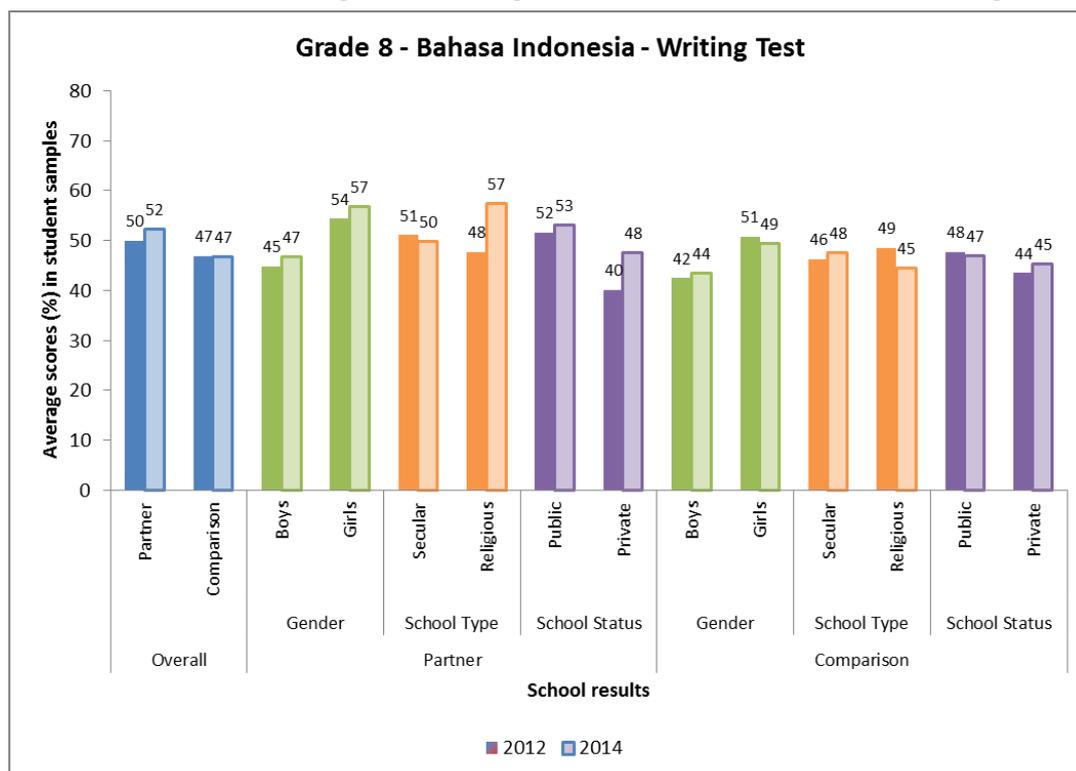


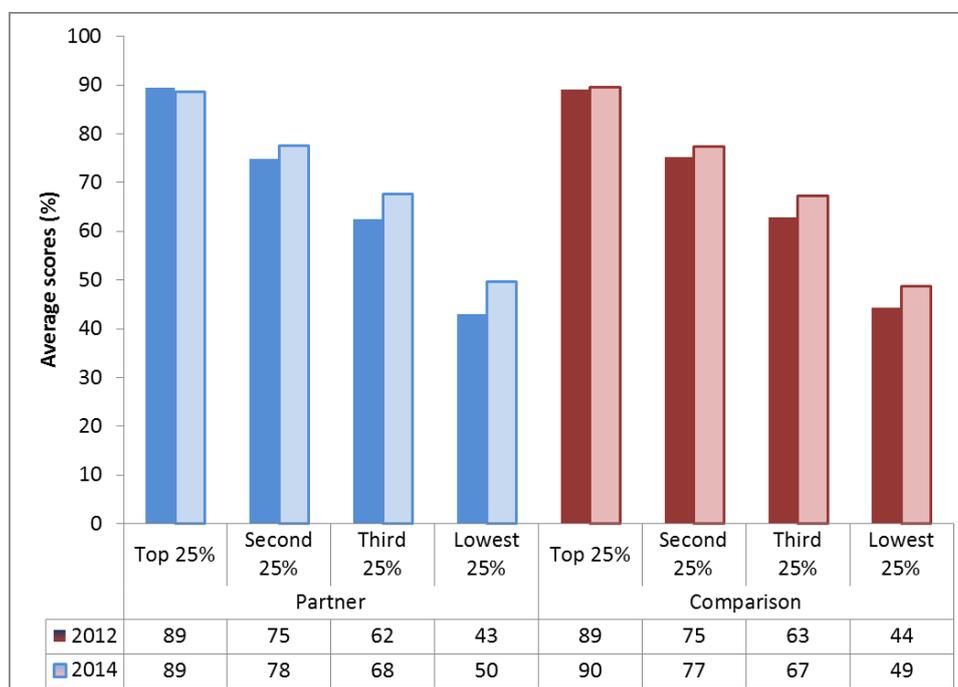
Chart 15: Writing Test Comparison between Different Groups



3.1.3 Reading

Chart 16 shows that in partner schools, no improvement took place in the top quartile while the lower three quarters made significant improvements. It means that students with lower scores appear to have benefited more from project interventions.

Chart 16: The Average of Student Scores (in %) by Quartile in the Grade 8 Reading Comprehension Test



No students failed to score on the test, and 28% of students scored over 80 during the first assessment. During the second assessment, two students failed to score on the test but less than 2% had a perfect score (100%).

The test was divided into three sections. Section A gave multiple choices of words to complete the sentences about a reading passage. Section B required the students to evaluate whether statements about the passage were true or false, while Section C required students to deduce information from, or attempt to explain, what they had read.

As can be seen from Table 15 below, during the baseline, the students found section B the easiest, with an average score of 70% (partner) 72% (comparison). However, they did not find much greater difficulty with the other sections. This appears to show that many had reasonable facility in understanding both overt and hidden meaning in the reading passage. The condition was similar during the midline.

Table 15: Scores by Section

Section	% Correct			
	Partner		Comparison	
	2012	2014	2012	2014
Section A	64	66	65	64
Section B	70	73	72	72
Section C	61	70	63	67
Total	64	70	67	68

3.1.4 Writing

Table 16 shows data for each of the components of the writing test: (i) paragraphing (ii) sentencings, (iii) quality of the ideas expressed, (iv) spelling and punctuation, and (v) handwriting. During the baseline and midline, few students scored perfectly in these components (7 or less on any component).

Lumping the first three categories (“excellent”, “very good”, and “good”), it was evident that some improvements took place in four components of writing between baseline and midline in partner schools: paragraphing (from 57% to 59%), sentencings (from 71% to 76%), quality of ideas (from 76% to 78%), and spelling & punctuation (from 63% to 72%). The scores on handwriting however slightly decreased (from 81% to 80%).

Table 16: Percentage Scores for Elements of Written Work in Grade 8 Writing Test

Paragraph						
		Excellent (%)	Very Good (%)	Good (%)	Poor (%)	Very Poor (%)
Partner	2012	5	19	33	38	5
	2014	7	19	33	37	3
Comparison	2012	3	13	32	46	5
	2014	4	17	32	43	3
Sentences						
		Excellent (%)	Very Good (%)	Good (%)	Poor (%)	Very Poor (%)
Partner	2012	5	23	43	24	5
	2014	5	28	43	21	3
Comparison	2012	4	19	42	30	5
	2014	2	20	47	26	4
Quality of Ideas						
		Excellent (%)	Very Good (%)	Good (%)	Poor (%)	Very Poor (%)
Partner	2012	6	25	45	20	5
	2014	6	31	41	18	3
Comparison	2012	3	22	42	28	5
	2014	3	22	47	22	4
Spelling and Punctuation						
		Excellent (%)	Very Good (%)	Good (%)	Poor (%)	Very Poor (%)
Partner	2012	3	23	40	30	5
	2014	3	26	43	24	3
Comparison	2012	2	20	37	35	5
	2014	2	18	44	31	4

Handwriting						
		Excellent (%)	Very Good (%)	Good (%)	Poor (%)	Very Poor (%)
Partner	2012	6	34	41	14	4
	2014	5	33	42	16	3
Comparison	2012	7	33	35	19	5
	2014	2	25	46	21	4

Chart 17: Average Percentages of Student Scores by Quartile in Writing Test

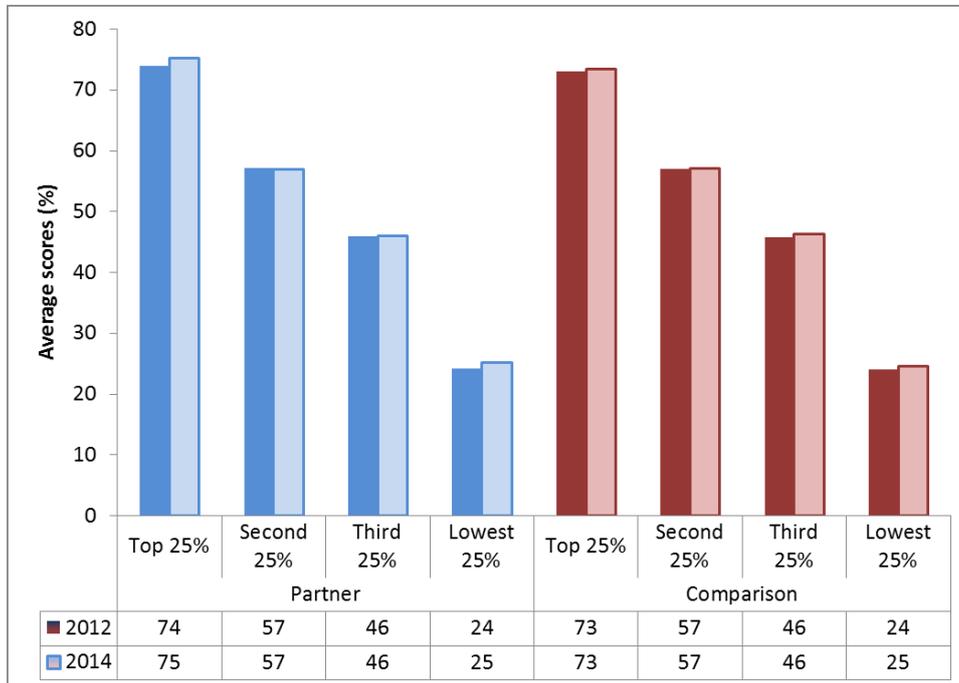


Chart 17 shows the scores per quartile of students in the writing test from the highest to the lowest 25% during the baseline and mid-line. The chart indicates that in partner schools, the increases of only one percent took place in the highest and lowest quartile. It means that very limited changes took place in the highest and lowest quartile while in the mid two quartiles, no changes at all.

3.1.5 Implications and Recommendations for USAID PRIORITAS

- As in primary schools, much of the emphasis in language teaching has been on teaching about language rather than developing students' skills in using language. Where students get to write it is often only by inserting words in sentences provided by the teacher or the textbook. There are few opportunities for students to express their own thoughts by, for example, making reports or expressing their feelings or opinions. Reading comprehension also tends to be confined to repeating facts set out in the text. There are few opportunities research information or to read "behind the text."
- Teachers also need to give their students the opportunity to develop their speaking and listening skills by giving them the opportunity to discuss a variety of issues and problems. Speaking and listening can and should often be linked to reading and writing activities with students being invited to discuss what they read and discuss ideas before they begin

to write. They should also be given the opportunity to read and give feedback on each other's work.

- *USAID PRIORITAS Bahasa Indonesia training is focusing on developing students' skills in reading and writing. Teachers are trained to give their students opportunities to write for a variety of purposes including reporting facts and events, write instructions and express their feelings and opinions. They are also trained to give students the opportunity and develop their skills to read for different purposes, including for enjoyment and finding information, as well as to reflect on and report back on what they have read.*

3.2 Mathematics Test Grade 8

3.2.1 Introduction

The mathematics test was designed to lay emphasis on testing children's understanding of mathematical concepts and their ability to apply these concepts in solving problems. The test was revised and some of the questions simplified, following their use between 2005 and 2007 in the assessment of the MBE program in Central and East Java.

3.2.2 The Results

Table 17 shows that during the baseline, the overall average score on the test was 28.9% for partner schools and 27.1% for comparison schools. Boys scored slightly lower than girls on the test. SMP and state schools scored considerable higher, respectively, than MTs and private schools.

There was an increase in partner schools of about 27.1% (from 28.9% to 36.8%) in the midline. The patterns found during the baseline from disaggregating by gender, school type, and school status were unchanged during the midline, except the partner religious schools had slightly higher score than secular schools (37.6% in religious and 24.8% in secular schools). There was also a large increase in the average score in comparison schools Of 25.8%. The reasons for these large increases are not clear, but, as pointed out earlier, the project mid-term evaluation team visiting schools in early 2015 observed a considerable number of good mathematics and science lessons.

There were large differences between individual schools with the highest having an average student score of 82% and the lowest 12% during the baseline. The differences changed only slightly during the midline with the highest having an average of 84% and the lowest 13%.

Table 17: Participant Data and Average Scores in Grade 8 Mathematics Test

		Year	Partner School			Comparison School		
			Student Tested		Average Score	Student Tested		Average Score
			n	%		n	%	
Gender (%)	Boys	2012	724	50.7	33.1	697	49.5	31.9
		2014	674	49.9	34.2	655	51.4	34.1
	Girls	2012	705	49.3	26.2	710	50.5	24.1
		2014	677	50.1	38.6	619	48.6	34.1
School Type	Secular	2012	1,085	75.9	31.2	1,080	76.8	28.7
		2014	1,008	74.6	36.4	974	76.5	34.5
	Religious	2012	344	24.1	24.8	327	23.2	23.0
		2014	343	25.4	37.6	300	23.5	33.2
School Status	Public	2012	1,199	83.9	30.4	1,129	80.2	28.8
		2014	1,138	84.2	38.6	1,036	81.3	34.9
	Private	2012	230	16.1	22.0	278	19.8	19.7
		2014	213	15.8	25.9	238	18.7	30.6
Average		2012	1,429	100.0	28.9	1,407	100.0	27.1
		2014	1,351	100.0	36.8	1,274	100.0	34.1
% increase in scores 2012/2014					27.1			25.8

The results disaggregated by the various groupings are shown in Chart 18.

Chart 18: Comparison between Different Groups

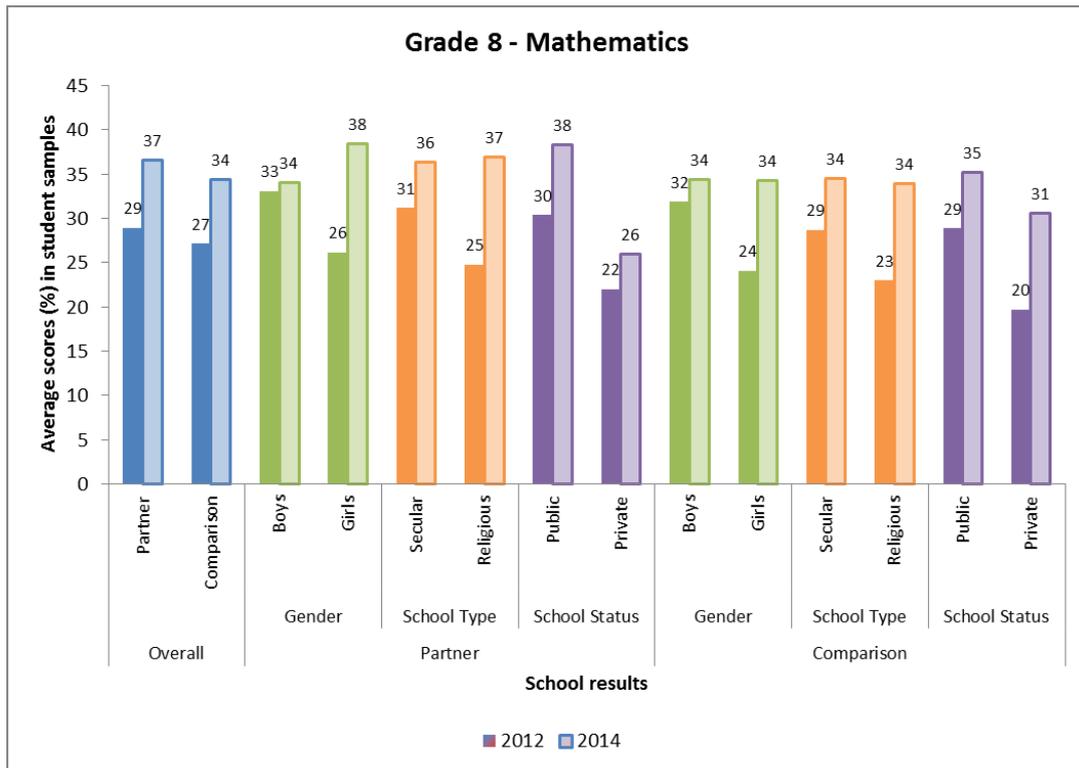


Chart 19 shows the average scores per quartile of students from the highest to the lowest 25%. All four quartiles had increases of average percentages during the midline and the first quartile had the highest increase (from 58% to 63%). It indicates that all four quartiles contributed to the increase of overall average of mathematic test and the highest quartile gave the biggest contribution.

Chart 19: Average Scores (in Percentage) by Quartile in Grade 8 Mathematics Test in 2012 and 2014

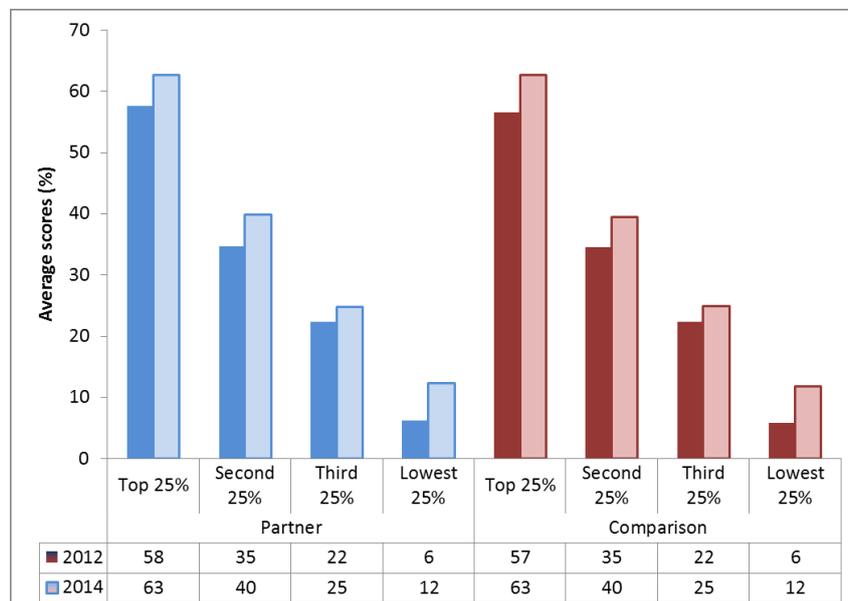


Table 18 shows the questions that the students found most difficult (less than 30 of students able to answer correctly). Many of the questions that involved problem solving had to be worked in two or more stages (i.e. solving one part of the problem first and then using the answer from that part of the problem to solve the whole problem). Students found this especially difficult. During the midline, the schools made significant improvements in four (questions no. 13, 12, 11, 14). While in three questions (no. 9, 10, and 2), the changes are quite small.

Table 18: Most Difficult Questions for Students to Answer

Number and Description of Questions	Year	% Correct		
		P	C	All
9. Finding the number of squares within a large square	2012	9	6	8
	2014	8	11	9
13. Ordering decimals and fractions	2012	19	17	18
	2014	32	31	31
10. Working out angles in a circle	2012	19	23	21
	2014	22	19	21
12. Area problem	2012	22	20	21
	2014	33	31	32
2. Multiplication and approximation	2012	19	23	21
	2014	21	17	19
11. Open ended number problem	2012	26	25	26
	2014	48	39	43
14. Logic problem	2012	29	28	28
	2014	40	33	36

Table 18 shows the percentage of children scoring correct in each of the 15 questions in the test. Questions 11 to 15 were more complex and given a weighting of two points in the marking. During the baseline, the average percentages in these five questions were relatively low. During the midline, the increases of percentages of these five questions were among the highest (increases of more than 10 percentage points).

Table 18. Analysis of Scores by Question in Grade 8 Mathematics Test

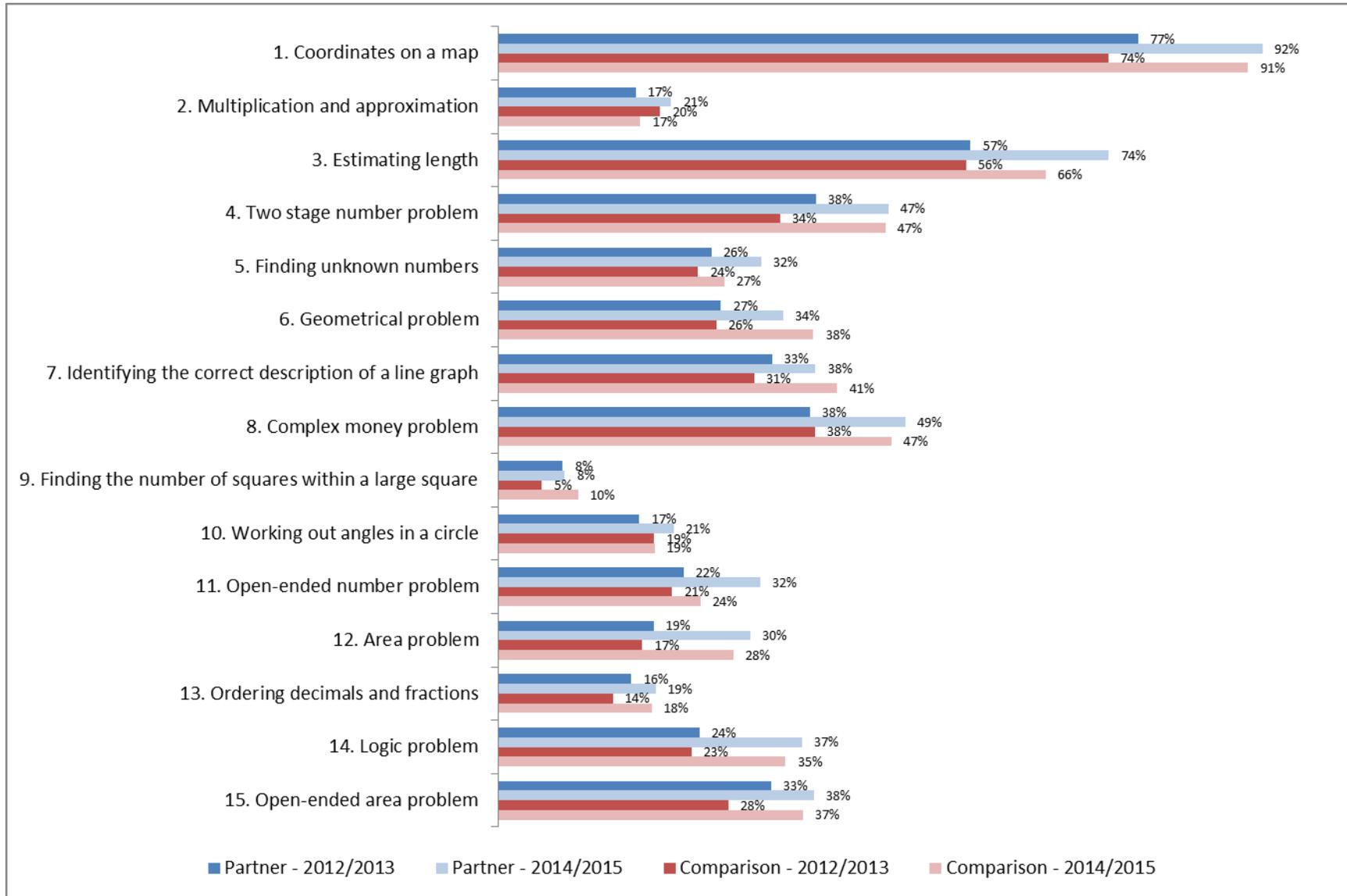
Number and Description of questions	Partner (% correct)		Comparison (% correct)	
	2012	2014	2012	2014
1. Coordinates on a map	90	94	89	91
2. Multiplication and approximation	19	21	23	17
3. Estimating length	67	72	68	65
4. Two stage number problem	45	47	41	48
5. Finding unknown number	30	35	29	30
6. Geometrical problem	32	35	32	39
7. Identifying the correct description of a line graph	39	40	37	43
8. Complex money problem	44	52	46	50
9. Finding the number of squares	9	8	6	11
10. Working out angles in a circle	19	22	23	19
11. Open ended number problem	26	48	25	39
12. Area problem	22	33	20	31

Number and Description of questions	Partner (% correct)		Comparison (% correct)	
13. Ordering decimals and fractions	19	32	17	31
14. Logic problem	29	40	28	33
15. Open ended area problem	39	56	33	59

3.2.3 Implications and Recommendations for USAID PRIORITAS

- As in primary schools, mathematics is poorly taught in many secondary school classes. Many teachers have a poor understanding on the concepts they are teaching and tend to teach rules and procedures for doing mathematical operations rather than cultivating an understanding of the concepts. As a result students have difficulty applying the concepts in real life and using mathematics as a tool for solving problems.
- Training for teachers should focus on helping both teachers and students to gain an understanding of mathematical concepts, especially by relating them to real situations in areas such as number, money, measurement, geometry and graphical representation.
- *USAID PRIORITAS is training teachers to adopt “problem solving” approaches to teaching mathematics, which also encourage creativity and develop understanding. This includes children being asked to think of a variety of answers to a more open-ended problem.*

Chart 20: Analysis of Scores by Question in Math Test



3.3 Science Test Grade 8

3.3.1 Introduction

This science test was developed especially for use with PRIORITAS, as science education is one of the focuses of the project. The test was piloted in non-project schools in Central Java. It is divided into two sections. Section A has ten questions using the familiar format of multiple-choice questioning to assess children's understanding of concepts they have already learned. Section B consisted of six questions and assessed children's process skills, such as the ability to observe, interpret, and hypothesize (i.e., providing tentative answers based on previous knowledge and experience). Some of the test items also assessed the ability to apply basic science concepts to everyday situations. A number of the test items were adapted from TIMSS⁸ test items.

3.3.2 The Results

Table 19 shows that in 2012, the overall average score on the test was 41.1% for partner schools and 39.6% comparison schools. This was the only test on which boys scored higher than girls in both partner and comparison schools, although their scores were only slightly higher. Students attending SMP scored higher than those attending MTs. State schools scored higher than private schools.

There were large differences between individual schools with the highest having an average student score of 61% and the lowest 16%.

In 2014, there was an increase of 6.7% in the average score of partner schools (from 41.1% to 43.9%) and about 7.6% (from 39.6% to 42.6%) in comparison schools. The scores of the girls overtook those of boys in the partner schools.

The difference between the average scores in schools of 79% (highest) and 14% (lowest) was bigger than in the 2012 baseline.

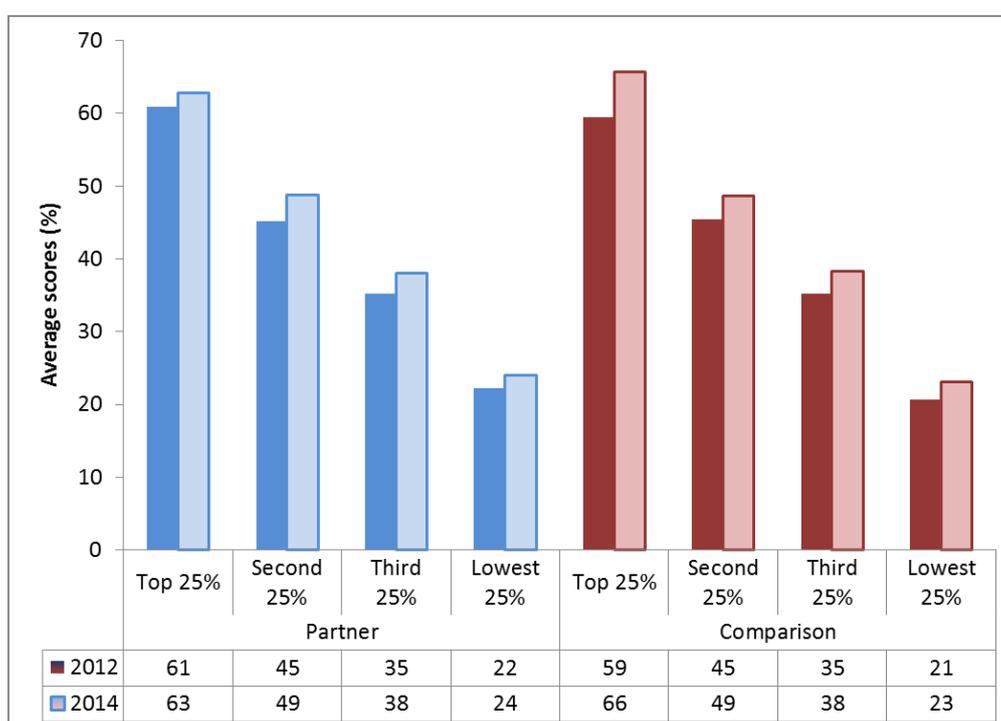
⁸ The Trends in International Mathematics and Science Study, which is implemented in many countries with grade 4 and grade 6 students every four years.

Table 19: Participant Data and Average Scores in Science Test

		Year	Partner School			Comparison School		
			Student Tested		Average Score	Student Tested		Average Score
			n	%		n	%	
Gender (%)	Boys	2012	706	49.7	41.5	713	49.6	40.4
		2014	962	51.6	43.5	810	48.0	44.0
	Girls	2012	715	50.3	40.8	725	50.4	39.0
		2014	901	48.4	44.3	878	52.0	41.5
School Type	Secular	2012	1,074	75.6	42.6	1,085	75.5	41.0
		2014	1,429	76.7	44.5	1329	78.7	42.2
	Religious	2012	347	24.4	38.3	353	24.5	36.0
		2014	434	23.3	42.7	359	21.3	43.6
School Status	Public	2012	1,197	84.2	41.5	1,164	80.9	40.2
		2014	1,596	85.7	44.8	1,399	82.9	42.7
	Private	2012	224	15.8	39.3	274	19.1	37.1
		2014	267	14.3	38.3	289	17.1	42.6
Average		2012	1,421	100.0	41.1	1,438	100.0	39.6
		2014	1,863	100.0	43.9	1,688	100.0	42.6
% increase in scores 2012/2014						6.7		7.6

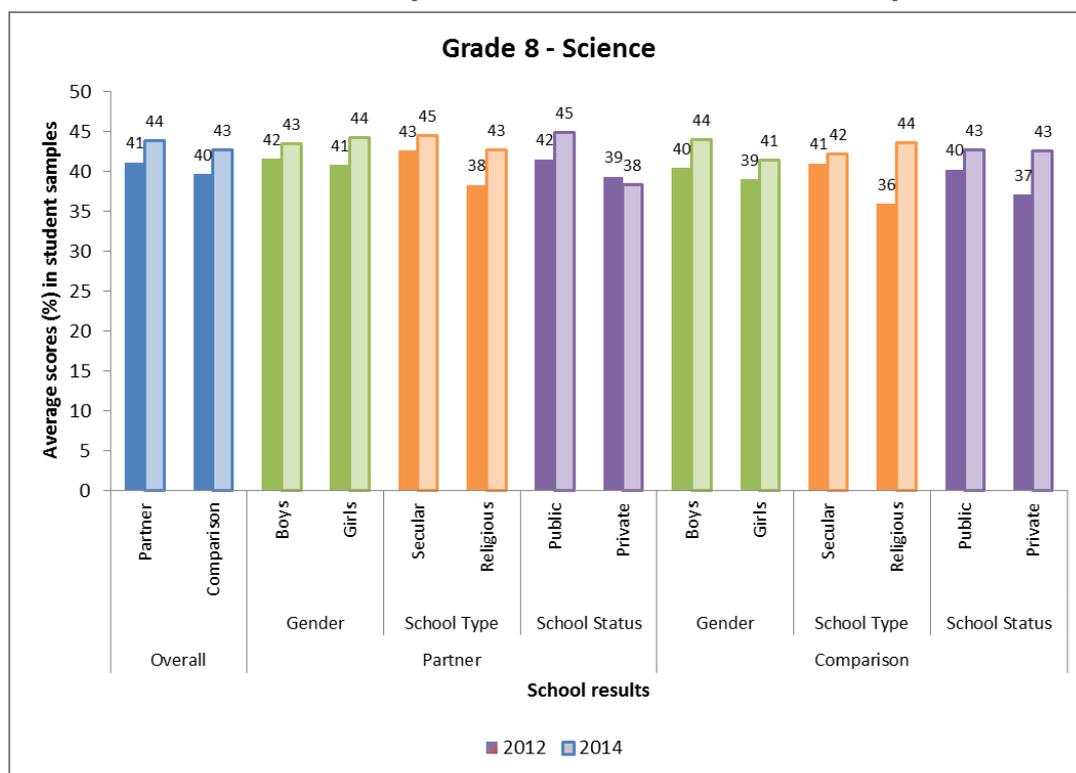
Chart 21 shows the average scores per quartile of students in 2014 were higher than in 2012 in all four quartile both in partner and comparison schools. This indicates that the progress is more or less evenly spread across all learners. The biggest improvement was in the highest quartile of comparison schools.

Chart 21: Average Percentages of Student Scores by Quartile in Science Test



The results from Table 19, above, are disaggregated by the various groupings, and shown in Chart 22 below.

Chart 22: Comparison between Different Groups



As can be seen from Table 20 below, during the baseline (2012), students were able to answer questions in the traditional format of questioning (with multiple choice answers) in Section A just as easily those in Section B, which required written answers. During the midline (2014), the average scores clearly indicate that multiple choice questions are easier than those tests that require written answers.

Table 20: Average Scores by Section in the Science Test

Section	Partner		Comparison	
	2012	2014	2012	2014
Section A	45	49	45	48
Section B	39	42	37	40
Total	41	44	40	43

Table 21 shows the questions that students had the most difficulty answering correctly. The students were relatively weak in all areas, but were especially so where they had to reason or make deductions from data. They also seem not to have acquired measuring skills through practical work. For example, they had difficulty in reading measurements from a ruler and reading weighing scales and measuring cylinders. They also had a weak knowledge of technical terms and had difficulty in applying concepts to everyday situations.

Table 21: Most Difficult Questions for Students to Answer

Number and Description of Questions	Year	% Correct	
		P	C
A4. Understanding buoyancy in water	2012	20	17
	2014	17	17
B2. Explaining cause of condensation of water	2012	26	36
	2014	36	27
B3. Drawing conclusions from an experiment in a fish tank	2012	29	36
	2014	36	30
B4. Measuring weight, volume and calculating density	2012	29	32
	2014	32	28
A1. Reading measurements on a ruler	2012	30	31
	2014	31	29
A9. Classifying living things	2012	32	37
	2014	37	32

Table 22 shows the percentage of correct answers in each of the 15 questions on the test.

Table 22: Analysis of Scores by Question in Grade 8 Science Test

Number and Description of questions	Partner (% correct)		Comparison (% correct)	
	2012	2014	2012	2014
A1. Reading measurement on a ruler	30	31	29	30
A2. Separating mixtures of liquid and solids	51	56	52	52
A3. Identifying animal from description	74	77	73	74
A4. Understanding buoyancy in water	20	17	17	18
A5. Understanding the effect of heat and cooling on iron	41	48	39	45
A6. Knowing names of structures of organs	33	37	34	42
A7. Shape of vessel related to evaporation speeds of water	69	76	70	74
A8. Predicting patterns from a graph	61	65	59	65
A9. Classifying living things	32	37	32	36
A10. Safety and heat	41	49	47	48
B1. Reading data from a line graph	35	34	33	33
B2. Explaining cause of condensation of water	26	36	27	31
B3. Drawing conclusions from an experiment in a fish tank	29	36	30	32
B4. Measuring weight, volume and calculating density	29	32	28	32
B5. Predicting the name of a plant from its characteristics	66	65	59	65
B6. Drawing conclusions from an experiments on growing seeds	59	54	53	56

3.3.3 Implications and Recommendations for USAID PRIORITAS

- The results of the junior secondary school science test reinforce those of the primary schools test. Science teaching focuses too much on the memorization of rules and concepts and too little on developing understanding of and applying concepts. Too little practical work takes place to support science teaching. Students spend much of their time memorizing information from books rather than developing scientific skills such as observation of real phenomena, data analysis, making hypotheses and drawing conclusions.
- *USAID PRIORITAS teacher training is focusing on practical activities to develop students' scientific skills. This includes the observation of the real environment and doing experiments to investigate natural phenomena. Teachers are trained to teach students to make systematic reports and draw their own conclusions on the experimental and observational work they undertake.*

Annex I. Average Test Scores by School

Average Primary School Scores by School (%)

Province	District	Sample	School Name	Year	Grade 4		Grade 4 Math (%)	Grade 5 Science (%)	
					Bahasa Indonesia				
					Reading (%)	Writing (%)			
Aceh	Aceh Jaya	Partner	MIN Dayah Baro	2012	34	40	29	32	
				2014	56	45	38	20	
			SDN 2 Calang	2012	26	30	51	27	
				2014	51	20	29	30	
			Comparison	MIN Teunom	2012	35	38	26	23
				2014	27	39	24	26	
		SDN 2 Teunom		2012	33	24	24	31	
				2014	55	36	32	28	
			Comparison	MIN Krueng Sabee**	2012	24	24	17	16
				2014	-	-	-	-	
		SDN 2 Krueng Sabee**		2012	21	4	20	22	
				2014	-	-	-	-	
			Comparison	MIN Kampung Baro	2012	23	20	16	30
				2014	56	25	40	42	
	SDN 3 Teunom	2012		25	20	17	15		
		2014		51	22	41	41		
	Bener Meriah	Partner	MIN Lewajadi	2012	18	12	8	12	
				2014	36	28	9	7	
			SDN Pondok Gajah	2012	29	29	23	25	
				2014	44	44	38	34	
			MIN Sukadamai	2012	31	39	18	27	
				2014	47	34	28	14	
			SDN 2 Lampahan	2012	41	31	35	34	
				2014	41	26	27	30	
		Comparison	MIN Janarata	2012	19	19	16	19	
				2014	38	33	25	19	
			SDN Behgie Bertona	2012	15	2	11	18	
				2014	30	28	10	6	
SD Negeri Blok C			2012	35	17	20	23		
			2014	34	40	42	27		
	Comparison	SDN Karang Jadi	2012	21	38	26	23		
		2014	38	33	36	27			
North Sumatra	Labuhan Batu	Partner	SDN 114377 Bilah Hulu	2012	33	27	35	29	
				2014	53	51	44	19	
			SDN 118252 Bilah Hulu	2012	46	32	38	30	
				2014	40	39	38	35	
			Comparison	MIN Padang Bulan Rantau Utara	2012	49	25	37	27
				2014	58	42	47	32	
		SDN 112134 Rantau Utara		2012	36	32	38	29	
				2014	37	31	55	26	
		SDN 112145 Bilah Barat		2012	47	31	39	38	
				2014	35	33	45	26	
		Comparison	SDN 114381 Bilah Barat	2012	34	47	41	24	
			2014	42	52	37	13		
	MIS Perdamaian Rantau Selatan		2012	48	25	43	27		
			2014	19	23	26	31		
		Comparison	SDN 112147 Rantau Selatan	2012	26	43	38	18	
			2014	47	53	43	25		
	Medan	Partner	SDN 060843 Medan Barat	2012	48	40	46	42	
				2014	32	28	36	35	
			SDN 060849 Medan Barat	2012	65	63	55	32	
				2014	53	37	51	23	
MIN Medan Tembung			2012	57	53	46	35		
			2014	52	51	63	53		
SDN 067240 Medan Tembung			2012	50	35	45	33		
			2014	39	26	42	35		

Province	District	Sample	School Name	Year	Grade 4		Grade 4	Grade 5
					Bahasa Indonesia			
					Reading (%)	Writing (%)	Math (%)	Science (%)
Nias Selatan	Comparison	SDN 064983 Medan Helvetia	2012	28	42	40	41	
		SDN 066045 Medan Helvetia	2014	36	33	47	45	
		SDN 066045 Medan Helvetia	2012	64	66	53	44	
		SDN 066045 Medan Helvetia	2014	34	45	40	36	
		MIS Al Hasanah Medan Marelan	2012	17	36	29	17	
		MIS Al Hasanah Medan Marelan	2014	15	14	28	24	
		SDN 064999 Medan Marelan	2012	49	28	43	35	
		SDN 064999 Medan Marelan	2014	40	53	49	34	
	Partner	SDN 071212 Sifaoroasi Gomo	2012	39	19	9	21	
		SDN 071212 Sifaoroasi Gomo	2014	20	23	28	22	
		SDN 071223 Orahili Gomo	2012	31	19	38	12	
		SDN 071223 Orahili Gomo	2014	15	6	14	28	
		MIN Teluk Dalam	2012	43	35	30	23	
		MIN Teluk Dalam	2014	30	23	29	36	
		SDN 078356 Hllitobara Teluk Dalam	2012	57	59	43	34	
		SDN 078356 Hllitobara Teluk Dalam	2014	29	24	27	22	
	Comparison	SDN 071202 Helezalulu Lahusa	2012	41	46	41	25	
		SDN 071202 Helezalulu Lahusa	2014	46	26	27	17	
		SDN 071211 Helezalulu Lahusa	2012	18	24	21	13	
		SDN 071211 Helezalulu Lahusa	2014	25	26	20	29	
SDN 071099 Maneamolo		2012	17	37	-	-		
SDN 071099 Maneamolo		2014	23	15	21	16		
SDN 071105 Maneamolo		2012	58	25	30	15		
SDN 071105 Maneamolo		2014	24	11	29	25		
Banten	Partner	MI MA Dahu Mekarsari	2012	14	37	22	27	
		MI MA Dahu Mekarsari	2014	54	55	35	43	
		SDN Bojong 4	2012	39	56	38	33	
		SDN Bojong 4	2014	50	37	57	24	
		SDN Gunungsari 1	2012	24	45	25	14	
		SDN Gunungsari 1	2014	44	55	34	26	
		SDN Gunungsari 2	2012	30	36	44	31	
		SDN Gunungsari 2	2014	49	48	56	29	
	Comparison	SDN Kadu Hejo	2012	17	35	21	11	
		SDN Kadu Hejo	2014	29	34	27	31	
		SDN Kuranji 1	2012	20	30	21	27	
		SDN Kuranji 1	2014	40	43	40	29	
		MIN Langensari	2012	30	16	37	19	
		MIN Langensari	2014	36	36	51	33	
		SDN Talagasari 2	2012	28	34	30	31	
		SDN Talagasari 2	2014	42	49	54	29	
	Partner	SDN Ciruas 2	2012	47	51	54	36	
		SDN Ciruas 2	2014	51	63	48	32	
		SDN Kadikaran	2012	33	34	21	39	
		SDN Kadikaran	2014	49	43	31	34	
MI Nurul Falah Kubang		2012	37	51	28	37		
MI Nurul Falah Kubang		2014	36	37	29	37		
SDN Cilengsir		2012	34	46	26	38		
SDN Cilengsir		2014	34	50	24	35		
Comparison	MI Jamiyatul Husbu'iyah	2012	33	39	39	25		
	MI Jamiyatul Husbu'iyah	2014	49	45	41	25		
	SDN Sukacai 2	2012	37	46	29	18		
	SDN Sukacai 2	2014	34	29	43	21		
	SDN Pontang 2	2012	35	29	26	24		
	SDN Pontang 2	2014	30	38	34	34		
	SDN Singarajan	2012	44	40	34	32		
	SDN Singarajan	2014	44	43	38	23		

Province	District	Sample	School Name	Year	Grade 4		Grade 4	Grade 5	
					Bahasa Indonesia				
					Reading (%)	Writing (%)	Math (%)	Science (%)	
West Java	Bandung Barat	Partner	SDN Maroko	2012	21	8	32	32	
				2014	59	43	59	50	
			SDN Mekarasih	2012	29	25	33	30	
				2014	53	28	45	35	
			MI Syamsudin Cipatat	2012	28	22	26	13	
				2014	57	35	22	36	
		SDN 2 Rajamandala		2012	63	41	55	45	
				2014	59	53	58	64	
			Comparison	MI Cisasawi	2012	20	25	34	24
					2014	56	42	39	24
		SD Kartika X-3		2012	61	48	49	34	
				2014	59	39	57	56	
			SDN Cicangkang Girang	2012	40	39	35	25	
				2014	53	21	40	43	
	SDN Sukamanah	2012		19	8	31	16		
		2014		39	51	24	42		
	Ciamis	Partner	SDN 1 Sindangsari	2012	45	51	34	29	
				2014	39	49	61	69	
			SDN 2 Sukasari	2012	17	16	42	40	
				2014	47	44	47	45	
			MI Gunung Cupu	2012	17	25	37	20	
				2014	49	38	49	48	
		SDN 3 Sukamanah		2012	43	44	45	27	
				2014	34	47	49	68	
			Comparison	MI Sumber Jaya	2012	46	42	32	35
					2014	29	43	45	70
		SDN 2 Pamokolan		2012	27	23	31	42	
				2014	57	35	41	45	
			SDN 1 Pamarican	2012	37	15	44	41	
				2014	55	40	64	50	
	SDN 5 Kertahayu	2012		46	45	29	26		
		2014		18	17	30	39		
Cimahi	Partner	SDN Utama Mandiri I	2012	37	38	46	39		
			2014	47	60	51	58		
		SDN Sosial I	2012	58	43	48	52		
			2014	48	46	60	76		
		MI Asih Putra	2012	73	49	52	41		
			2014	60	62	58	54		
	SDN Cibabat Mandiri 2		2012	53	53	54	43		
			2014	62	68	59	76		
		Comparison	MI Sadarmanah	2012	51	48	44	29	
				2014	57	48	50	66	
	SDN Harapan 2		2012	55	36	37	39		
			2014	56	46	57	49		
		SDN Karang Mekar Mandiri 2	2012	57	51	60	47		
			2014	66	40	68	80		
SDN Setiamanah Mandiri I	2012		41	44	60	38			
	2014		64	47	51	55			

Province	District	Sample	School Name	Year	Grade 4		Grade 4	Grade 5	
					Bahasa Indonesia				
					Reading (%)	Writing (%)	Math (%)	Science (%)	
Central Java	Banjar-negara	Partner	SDN 1 Kutabanjarnegara	2012	56	75	70	50	
				2014	49	62	64	46	
			SDN 3 Kutabanjarnegara	2012	72	43	48	44	
				2014	40	55	65	43	
			MI Al Ma'arif 01 Kertayasa	2012	42	47	39	31	
				2014	30	38	43	31	
		SDN 1 Kertayasa	2012	63	74	50	45		
			2014	45	46	64	47		
			Comparison	SD Negeri 1 Kendaga	2012	61	37	44	30
					2014	35	48	58	36
		MI Negeri Madukara		2012	45	31	41	28	
				2014	37	25	58	45	
		SD Negeri Kutayasa	2012	63	68	56	39		
			2014	49	70	76	47		
	SD Negeri 1 Sigaluh	2012	50	67	60	41			
		2014	35	42	59	53			
	Batang	Partner	SD Negeri Karangasem 07	2012	37	43	47	33	
				2014	70	63	41	40	
			SD Negeri Karangasem 12	2012	68	86	41	27	
				2014	69	64	46	45	
			MI Islamiyah Sojomerto	2012	21	31	19	39	
				2014	49	40	19	50	
		SD Negeri 1 Sojomerto	2012	59	64	54	50		
			2014	51	51	46	47		
			Comparison	MI Rifaiyah Limpung	2012	53	56	62	43
					2014	55	55	37	43
		SD Negeri Limpung 1		2012	40	66	63	43	
				2014	65	59	47	57	
		SD Negeri 2 Tulis	2012	34	47	52	36		
			2014	46	61	45	46		
	SD Negeri Kaliboyo 01	2012	57	59	63	43			
		2014	60	32	54	40			
	Purbalingga	Partner	MI Muhammadiyah Toyareka	2012	46	47	41	32	
				2014	35	60	43	31	
			SDN 1 Bakulan	2012	58	68	48	42	
				2014	27	49	41	35	
			SDN 1 Cipaku	2012	40	58	63	35	
				2014	33	38	45	45	
		SDN 1 Mangunegara	2012	60	46	57	50		
			2014	51	54	47	61		
Comparison			MI Muhammadiyah Gumiwang	2012	45	42	55	38	
				2014	71	41	35	47	
		SDN 1 Kejobong	2012	59	64	52	36		
			2014	23	41	44	51		
SDN 1 Padamara		2012	43	56	54	37			
		2014	28	51	55	37			
SDN 1 Prigi	2012	59	43	50	35				
	2014	31	48	54	27				
Semarang	Partner	SDN Jubelan 01	2012	55	47	48	56		
			2014	54	64	64	53		
		SDN Sumowono 02	2012	49	48	66	61		
			2014	64	67	64	58		
		MI Klero	2012	39	58	50	40		
			2014	58	62	44	60		
	SDN 1 Tengaran	2012	76	78	66	60			
		2014	50	33	68	69			
		Comparison	SDN Bandungan 3	2012	55	54	47	32	
				2014	50	41	49	57	

Province	District	Sample	School Name	Year	Grade 4		Grade 4	Grade 5	
					Bahasa Indonesia				
					Reading (%)	Writing (%)	Math (%)	Science (%)	
East Java	Sragen		SDN Kenteng 1	2012	41	48	53	36	
			2014	45	47	51	47		
				MI Darul Hikmah Cukilan 1	2012	43	37	38	26
				2014	42	26	55	63	
				SD Negeri 3 Tuntang	2012	78	75	63	43
				2014	51	46	51	53	
		Partner		MI Muhammadiyah Karanganyar	2012	60	53	47	48
				2014	39	53	38	-	
				SD Negeri Gringsing 3	2012	31	49	39	52
				2014	45	48	45	42	
			SD Negeri Karangtengah 3	2012	53	49	51	41	
			2014	33	55	29	39		
			SD Negeri Tangkil 3	2012	43	60	57	40	
			2014	52	43	43	44		
	Comparison		MI Muhammadiyah Pilang	2012	50	46	49	33	
			2014	43	47	32	33		
			SDN Pilang 1**	2012	49	48	47	32	
			2014	-	-	-	-		
			SDN Patihan 2	2012	32	46	46	32	
			2014	36	49	44	27		
	SD Negeri Purwosuman 1	2012	45	57	55	37			
	2014	42	42	37	38				
East Java	Blitar	Partner	SDN Kebonduren 01	2012	46	38	53	64	
			2014	68	45	42	40		
			SDN Kebonduren 03	2012	40	39	36	40	
			2014	66	46	52	55		
			MI Miftahul Huda Kedung Bunder	2012	63	53	50	58	
			2014	66	74	47	53		
			SDN Kalipang 03	2012	60	62	57	53	
			2014	71	54	65	74		
		Comparison		MI Jauharotut Tholibin	2012	33	41	39	40
				2014	52	63	49	41	
			SD Negeri Tuliskriyo 2	2012	48	40	50	44	
			2014	59	53	69	63		
			SDN Bagelenan 03	2012	40	36	59	51	
			2014	55	29	35	60		
		SDN BAGELENAN 2	2012	37	59	56	44		
		2014	65	44	46	56			
	Madiun	Partner	MI Sailul Ulum Pagotan	2012	47	56	30	45	
			2014	51	50	34	42		
			SDN Purworejo 03	2012	73	54	60	36	
			2014	61	58	61	34		
		SDN Krajan 02	2012	51	44	52	60		
		2014	77	58	57	56			
		SDN Ngampel 01	2012	56	49	50	55		
		2014	78	51	57	72			
Comparison		MI Salafiah Barek	2012	53	38	57	39		
		2014	61	49	58	52			
	SDN BALEREJO I	2012	35	60	54	44			
	2014	41	51	44	45				
	SDN I SUGIHWARAS	2012	36	56	58	56			
	2014	64	51	38	66				
	SDN Sugihwaras 06	2012	40	43	64	54			
	2014	80	60	63	54				

Province	District	Sample	School Name	Year	Grade 4		Grade 4	Grade 5	
					Bahasa Indonesia				
					Reading (%)	Writing (%)	Math (%)	Science (%)	
	Mojokerto	Partner	MI Miftahul Ulum Mojokarang	2012	45	36	43	38	
				2014	38	46	80	52	
			SDN Segunung I	2012	54	63	72	45	
				2014	40	67	67	68	
			SDN Mojodowo	2012	46	40	34	49	
				2014	45	36	33	43	
			SDN Mojowono	2012	51	43	42	25	
				2014	35	62	59	67	
			Comparison	MI Nailul Ulum	2012	42	28	40	28
					2014	48	61	83	66
				SDN Kembangringgit II	2012	40	55	48	41
					2014	36	41	39	43
				SDN Lebaksono	2012	67	65	54	54
					2014	50	56	43	55
			SDN Trowulan I	2012	63	44	51	45	
				2014	52	65	67	67	
		Pamekasan	Partner	MIN Konang	2012	59	53	47	28
					2014	43	41	44	62
				SDN Konang II	2012	62	31	43	29
					2014	34	48	37	21
				SDN Pademawu Barat II*	2012	44	41	54	46
					2014	-	-	-	-
				SDN Pademawu Timur II	2012	46	38	60	46
					2014	37	47	65	74
			Comparison	MI Nurul Ulum 2	2012	58	38	31	36
					2014	34	43	41	23
				SDN Jalmak I	2012	54	50	40	35
					2014	34	40	39	32
				SDN Kangenan I	2012	62	52	43	45
					2014	51	59	50	60
			SDN Kangenan 2	2012	48	30	33	50	
				2014	-	-	-	-	
	Situbondo	Partner	MI Al Hikmatul Islamiyah	2012	23	23	25	9	
				2014	56	38	49	56	
			SDN 7 BESUKI	2012	22	30	39	24	
				2014	51	45	62	50	
			SDN 3 Kilensari	2012	37	63	38	34	
				2014	32	32	34	43	
			SDN 9 Kilensari	2012	27	30	18	45	
				2014	34	38	41	36	
		Comparison	SDN 02 PASIR PUTIH	2012	52	48	47	38	
				2014	40	46	57	33	
			SDN 4 Sumberkolak	2012	44	34	59	47	
				2014	37	23	45	40	
			SDN 4 MIMBAAN	2012	31	60	45	26	
				2014	42	39	41	38	
		MI Miftahul Huda	2012	38	42	36	29		
			2014	45	41	60	22		
South Sulawesi	Bantaeng	Partner	SDN 9 Lembang	2012	35	46	48	29	
					2014	46	28	34	33
			SDN 7 Letta	2012	27	30	35	37	
				2014	42	23	39	35	
			MIS Nurul Azma	2012	11	11	18	10	
				2014	56	54	54	20	
			SD Inpres Pullauweng	2012	33	27	36	26	
				2014	40	28	27	18	
			Comparison	MIS Ma'arif Cedo	2012	22	11	9	8
					2014	45	23	16	53

Province	District	Sample	School Name	Year	Grade 4		Grade 4	Grade 5
					Bahasa Indonesia			
					Reading (%)	Writing (%)	Math (%)	Science (%)
			SD Inpres Kaili	2012	35	32	27	29
				2014	24	8	22	48
			SD No. 22 Beloparang	2012	22	39	29	22
				2014	41	30	35	19
			SDN 26 Tino Toa	2012	33	39	37	36
				2014	44	37	33	31
	Maros	Partner	SDN 1 Pakalu I	2012	60	48	38	30
				2014	51	31	37	29
			SDN 12 Pakalli I	2012	29	12	33	37
				2014	31	33	32	29
			MIIN Maros Baru	2012	50	44	41	31
				2014	37	31	21	42
			SDN 39 Kassi	2012	45	42	34	25
				2014	40	46	31	28
		Comparison	MIS DDI Cambalagi	2012	56	45	31	39
				2014	36	15	8	31
			SDN 233 Bontomaero	2012	30	18	26	21
				2014	32	31	22	38
			SDN 48 Bonto Kapetta	2012	40	51	32	45
				2014	44	39	22	27
	SDN 103 Hasanuddin	2012	42	43	35	66		
		2014	54	34	29	33		
	Wajo	Partner	SDN 190 Ballere	2012	33	47	25	45
				2014	58	43	40	60
			SDN 234 Inrello	2012	52	59	38	33
				2014	45	39	54	46
			MIS As'adiyah 3 Sengkang	2012	45	22	14	20
				2014	52	35	23	38
SDN 213 Lapongkoda		2012	51	61	59	42		
		2014	57	54	28	55		
Comparison		SDN 168 Rumpia	2012	50	24	43	45	
			2014	53	35	51	48	
		MIIN Lauwa	2012	41	30	28	42	
			2014	50	38	14	43	
	SDN 266 Pakkana	2012	49	34	53	62		
		2014	62	35	60	49		
SDN No. 265 Assorajang	2012	54	55	57	43			
	2014	64	55	48	51			

** Three comparison schools declined to take part in the mid-term student assessment

* One partner school went out of existence because it was merged with another project partner school

The results of the baseline assessment have been adjusted accordingly to ensure comparability with the mid-line assessment.

Average Junior Secondary School Scores by School (%)

Province	District	Sample	School Name	Year	Grade 8		Grade 8	Grade 8		
					Bahasa Indonesia					
					Reading	Writing	Math	Science		
Aceh	Aceh Jaya	Partner	SMPN 1 Krueng Sabee	2012	48	38	19	28		
				2014	52	47	24	26		
			SMPN 1 Jaya	2012	53	67	20	21		
				2014	70	74	54	44		
		MTsN Lamno	2012	42	19	12	27			
			2014	58	67	33	40			
		Comparison	SMPN 1 Panga	2012	56	52	11	16		
				2014	55	-	35	26		
			MTsN Panga	2012	39	50	20	26		
				2014	61	41	17	33		
			SMPN 2 Jaya	2012	46	23	19	22		
				2014	55	45	27	34		
	Bener Meriah	Partner	SMPN 2 Timang Gajah	2012	71	72	16	37		
				2014	77	38	15	31		
			MTsN Lampahan	2012	43	68	18	33		
				2014	79	75	53	45		
			SMPN 2 Bandar	2012	51	64	14	37		
				2014	46	22	21	23		
		Comparison	SMPN 1 Bukit	2012	65	63	12	24		
				2014	53	43	21	23		
			SMP Negeri 3 Bukit	2012	54	33	11	44		
				2014	59	48	28	27		
			MTsN SIMPANG TIGA	2012	62	54	14	34		
				2014	77	58	27	41		
		North Sumatra	Labuhan Batu	Partner	SMPN 1 Rantau Utara	2012	79	49	40	38
						2014	63	55	19	37
					SMP Muhammadiyah - 25 Rantau Utara	2012	57	35	15	32
						2014	60	42	24	35
MTs Al-Ittihad Bilah Hulu	2012			45	31	19	31			
	2014			64	39	25	31			
Comparison	SMPN 2 Rantau Selatan			2012	63	43	22	30		
				2014	66	49	25	32		
	SMPN 1 Rantau Selatan			2012	70	38	30	42		
				2014	67	48	31	45		
	MTs Swasta Al-Azis Bilah Barat			2012	58	50	18	36		
				2014	67	37	18	37		
Medan	Partner		SMPN 17 Medan	2012	63	41	38	31		
				2014	72	46	22	40		
			MTsN 2 Medan	2012	54	56	49	46		
				2014	79	54	31	48		
			SMPN 16 Medan	2012	68	56	41	61		
				2014	75	48	36	47		
	Comparison		SMPN 20 Medan Marelan	2012	85	59	48	42		
				2014	67	53	21	43		
			MTs Swasta Budi Agung Medan Marelan	2012	63	37	12	40		
				2014	46	23	13	31		
			SMPN 18 Medan Helvetia	2012	71	34	41	38		
				2014	68	44	36	41		
Nias Selatan	Partner		SMPN 5 Dharma Caraka Teluk Dalam	2012	63	47	23	35		
				2014	58	62	20	25		
			MTsN Teluk Dalam	2012	61	57	13	35		
				2014	73	58	33	29		
		SMPN 1 Gomo	2012	41	36	13	21			
			2014	58	50	16	26			
	Comparison	SMPN 3 Maneamolo	2012	63	39	11	18			
			2014	47	39	13	27			
		SMPN 1 Maneamolo	2012	52	41	36	23			
			2014	60	68	19	28			
		SMPN 2 Lahusa	2012	40	33	15	18			

Province	District	Sample	School Name	Year	Grade 8		Grade 8	Grade 8	
					Bahasa Indonesia				
					Reading	Writing	Math	Science	
Banten	Pandeglang	Partner	SMPN 1 Mandalawangi	2014	49	45	14	14	
				2012	58	0	23	27	
				2014	58	31	42	26	
				2012	66	41	21	34	
				2014	71	41	42	44	
				2012	61	40	14	25	
			2014	68	40	25	32		
			2012	64	54	32	33		
			2014	68	47	27	32		
			2012	61	52	9	27		
			2014	67	35	32	44		
			2012	67	66	26	29		
			2014	53	36	23	35		
			2012	53	57	17	30		
		2014	66	49	30	30			
		2012	49	40	26	-			
		2014	78	50	51	51			
		2012	54	50	14	30			
		2014	61	55	23	40			
		2012	58	46	11	49			
		2014	60	45	22	29			
		2012	57	31	24	34			
		2014	63	45	19	36			
		2012	65	0	23	27			
		2014	41	54	21	26			
	West Java	Bandung Barat	Partner	SMPN 1 Cipatat	2012	85	61	41	54
					2014	78	59	41	46
					2012	90	63	61	59
				2014	78	44	32	50	
				2012	59	45	20	34	
				2014	69	67	40	40	
			2012	84	63	51	57		
			2014	80	50	30	48		
			2012	75	50	30	32		
			2014	44	66	27	25		
			2012	78	63	58	58		
			2014	85	74	45	40		
		2012	60	62	47	61			
		2014	80	54	22	46			
		2012	74	48	38	51			
		2014	66	58	46	39			
		2012	84	65	82	74			
		2014	75	61	27	37			
		2012	76	64	44	51			
		2014	72	49	43	42			
		2012	77	54	38	50			
		2014	75	58	49	42			
		2012	67	47	34	45			
		2014	87	54	48	56			
		Cimah	Partner	SMPN 5 Cimahi	2012	68	48	38	49
				2014	89	64	52	55	
				2012	71	59	56	45	
				2014	86	62	67	73	
				2012	73	60	40	47	
				2014	81	60	60	60	
			Comparison	SMPN 10 Cimahi	2012	65	40	34	35
				2014	92	64	60	57	
	2012			58	41	20	30		
	2014			73	47	42	49		
			SMPN 9 Cimahi	2012	73	61	47	56	

Province	District	Sample	School Name	Year	Grade 8		Grade 8	Grade 8	
					Bahasa Indonesia				
					Reading	Writing	Math	Science	
Central Java	Banjarnegara	Partner	SMPN 1 Mandiraja	2014	97	71	52	54	
			SMP Tamansiswa Banjarnegara	2012	75	46	24	42	
				2014	77	58	39	51	
			MTsN 2 Banjarnegara	2012	52	44	17	43	
				2014	52	54	21	37	
			Comparison	SMP Muhammadiyah Purwareja **	2012	77	48	29	48
		2014			72	57	31	47	
		MTs Riyadush Sholihin		2012	71	48	19	48	
				2014	-	-	-	-	
		SMP Negeri 1 Bawang		2012	60	45	19	41	
				2014	73	56	52	39	
		Batang	Partner	SMPN 2 Subah	2012	80	48	32	52
					2014	74	53	47	49
				MTsN Subah	2012	73	60	20	56
					2014	67	57	44	45
				SMPN 9 Batang	2012	83	66	22	37
					2014	86	70	40	38
			Comparison	MTs Tholabuddin	2012	51	36	29	37
	2014				56	50	24	47	
	SMP Negeri 1 Tulis			2012	50	57	22	38	
				2014	64	51	29	39	
	SMP Negeri 2 Limpung			2012	73	57	37	56	
				2014	71	62	33	53	
	Purbalingga		Partner	SMPN 1 Mrebet	2012	77	58	36	38
					2014	76	61	30	38
				SMPN 2 Kemangkon	2012	66	58	28	34
					2014	71	69	43	49
				MTs Ma'arif NU 08 Panican	2012	70	55	13	38
					2014	79	72	50	37
		Comparison	SMPN 1 Padamara	2012	68	32	24	43	
				2014	65	46	22	45	
			SMPN 2 Kejobong	2012	81	57	28	47	
				2014	70	68	45	46	
			MTs Muhammadiyah Kejobong	2012	64	52	16	46	
				2014	67	53	41	50	
		Semarang	Partner	SMPN 3 Tengaran	2012	74	71	29	42
					2014	71	34	45	45
				MTs Al Manar Bener	2012	71	53	21	48
					2014	64	38	40	36
				SMPN 1 Sumowono	2012	79	66	48	44
					2014	69	49	70	59
	Comparison		SMP Negeri 2 Ungaran	2012	72	62	41	33	
				2014	79	48	68	73	
			MTs Tarqiyatul Himmah	2012	56	34	23	26	
				2014	83	45	61	52	
			SMP Negeri 3 Beringin	2012	84	71	22	45	
				2014	67	19	71	82	
	Sragen		Partner	MTsN Tanon	2012	77	53	39	26
					2014	79	84	56	56
				SMPN 3 Sragen	2012	60	66	29	36
2014					75	54	38	50	
SMPN 2 Sambungmacan				2012	63	63	32	35	
				2014	73	47	39	48	
Comparison		SMP Negeri 2 Sidoharjo	2012	73	61	26	38		
			2014	59	45	36	45		
		MTs Negeri Gondang	2012	59	50	22	28		
			2014	75	43	36	43		
		SMP Negeri 1 Gesi	2012	77	59	42	39		

Province	District	Sample	School Name	Year	Grade 8		Grade 8	Grade 8
					Bahasa Indonesia			
					Reading	Writing	Math	Science
East Java	Blitar	Partner	MTsN Langkapan Srengat	2014	70	45	24	54
				2012	77	61	27	39
			2014	75	48	83	67	
								SMPN 2 Ponggok
			2014	70	45	58	68	
								SMPN Kanigoro
		2014	78	41	37	58		
							Comparison	SMPN 2 TALUN
		2014	85	59	45	56		
								MTsN SUMBEREJO
		2014	73	46	65	79		
							SMPN 3 Nglegok	2012
		2014	82	43	60	55		
							Partner	MTs Al Basmalah *
		2014	-	-	-	-		
								SMPN 2 Geger
		2014	77	55	38	58		
							SMPN 2 Dagangan	2012
		2014	71	69	21	49		
							Comparison	SMP N 2 SAWAHAN
		2014	82	42	29	40		
								MTs Thoriqul Huda
		2014	76	31	26	45		
							SMPN 2 Jiwan	2012
	2014	81	55	22	36			
						Partner	SMPN 1 Kemlagi	2012
	2014	69	52	24	44			
							SMPN 2 Dlanggu	2012
	2014	79	50	46	63			
						Comparison	MTs Bustanul Ulum	2012
	2014	81	54	38	52			
							SMP Negeri 1 Trowulan	2012
	2014	77	53	39	52			
						SMPN 1 PUNGGING	2012	69
	2014	72	48	36	44			
						MTs SABILUL MUTTAQIN	2012	65
	2014	72	35	28	40			
						Partner	SMPN 1 Pademawu	2012
	2014	78	66	67	60			
							MTsN Pademawu	2012
	2014	82	80	69	45			
						SMPN 1 Larangan	2012	68
	2014	75	61	57	58			
						Comparison	SMPN 7 Pamekasan	2012
	2014	71	39	37	26			
							SMPN 5 Pamekasan	2012
	2014	56	17	27	39			
						MTsN Parteker	2012	79
	2014	57	20	41	41			
						Partner	SMPN 3 Panarukan	2012
	2014	61	54	25	40			
							SMPN 2 Panarukan	2012
	2014	56	38	31	44			
						MTs Nurul Wafa	2012	36
	2014	67	60	21	33			
						Comparison	SMP N 5 SITUBONDO	2012
	2014	61	50	21	43			
							SMPN 1 Kapongan	2012
	2014	53	55	23	44			
						MTs Miftahul Ulum	2012	50

Province	District	Sample	School Name	Year	Grade 8		Grade 8	Grade 8
					Bahasa Indonesia			
					Reading	Writing	Math	Science
				2014	73	46	17	33
South Sulawesi	Bantaeng	Partner	SMPN 1 Tompo Bulu	2012	48	33	16	49
				2014	60	47	23	30
			SMPN 3 Bissapu	2012	59	43	18	38
				2014	43	38	25	39
			MTs Ma'arif Panaikang	2012	45	31	26	37
				2014	61	49	14	30
		Comparison	SMP Negeri 2 Bissapu	2012	59	43	24	30
				2014	58	37	16	42
			SMP Negeri 2 Bantaeng	2012	55	25	22	45
				2014	63	43	30	31
			MTs. Ma'arif Tumbel Gani	2012	42	27	22	34
				2014	53	43	22	26
	Maros	Partner	SMPN 1 Turikale	2012	74	43	37	56
				2014	72	37	25	23
			MTSN Turikale	2012	68	45	30	37
				2014	78	49	20	30
			SMPN 4 Bantimurung	2012	61	38	22	57
				2014	70	35	31	34
		Comparison	SMP Negeri 5 Mandai	2012	81	59	60	52
				2014	75	46	36	34
			SMP Negeri 18 Lau	2012	60	30	17	54
				2014	75	28	43	44
			SMP Negeri 13 Bontoa	2012	69	45	21	41
				2014	62	43	32	37
	Wajo	Partner	SMPN 3 Sengkang	2012	53	34	22	45
				2014	56	42	32	32
			MTs As'adiyah Putera I	2012	84	60	27	47
				2014	78	57	35	47
			SMPN 1 Keera	2012	73	61	44	48
				2014	61	50	34	31
Comparison		SMP Negeri 2 Tanasitolo	2012	70	39	28	44	
			2014	82	57	59	45	
		SMP Negeri 3 Majauleng	2012	66	32	25	40	
			2014	70	54	26	50	
		SMP Negeri 1 Majauleng	2012	78	43	43	59	
			2014	69	49	38	37	

** One comparison school declined to take part in the mid-term student assessment

* One partner school ceased to be a partner school

The results of the baseline assessment have been adjusted accordingly to ensure comparability with the mid-line assessment.

Annex 2. Comparison between USAID PRIORITAS and Previous Projects on these Tests

The table on the next page and the charts on the following pages summarize the results of tests used by USAID PRIORITAS when they were used under other, previous projects. The results of three other tests not used by USAID PRIORITAS are also included. These are a reading word-recognition test and a reading comprehension test for grade 1 students, which have been replaced by the EGRA and an English language test for grade 8.

The projects that have used these tests and for which results are available include:

- Creating Learning Communities for Children (CLCC), managed by the United Nations Children’s Fund (UNICEF) and the United Nations Educational, Scientific and Cultural Organization (UNESCO), and funded by the New Zealand Agency for International Development (NZAID) and others from 1999 to 2010
- Managing Basic Education (MBE), managed by RTI International and funded by USAID from 2003 to 2007
- Mainstreaming Good Practices in Basic Education (MGP-BE), managed by UNICEF and funded by the European Union (EU) from 2007 to 2010
- Decentralized Basic Education 3 (DBE3), managed by Save the Children and funded by USAID from 2005 to 2011
- USAID PRIORITAS, managed by RTI International and funded by USAID from 2012 to the present (2014)

Following are some general remarks about the results:

- The schools surveyed include only project partner schools, not comparison or control-group schools
- Where projects worked mainly or wholly in provinces in Java (such as MBE), the results are considerably higher than projects that worked mainly outside Java (CLCC and MGMP-BE).
- Students’ results in primary school across all subjects are considerably higher where large proportions of students attended pre-school (TK). It is also significant that pre-school participation is higher in Java than elsewhere, which may explain some or much of the better results from projects working in Java. Students who have attended TK appear to have largely mastered word recognition by the time they enter grade 1.

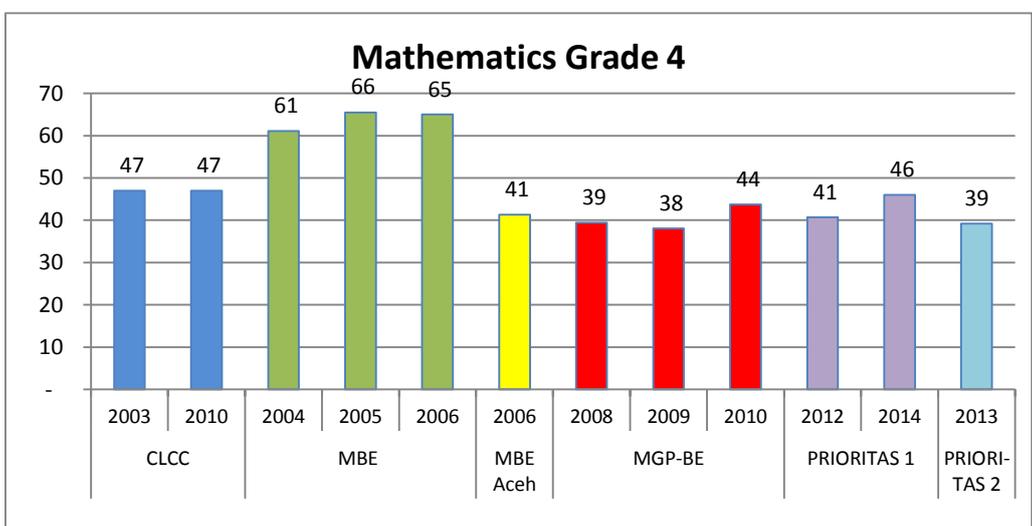
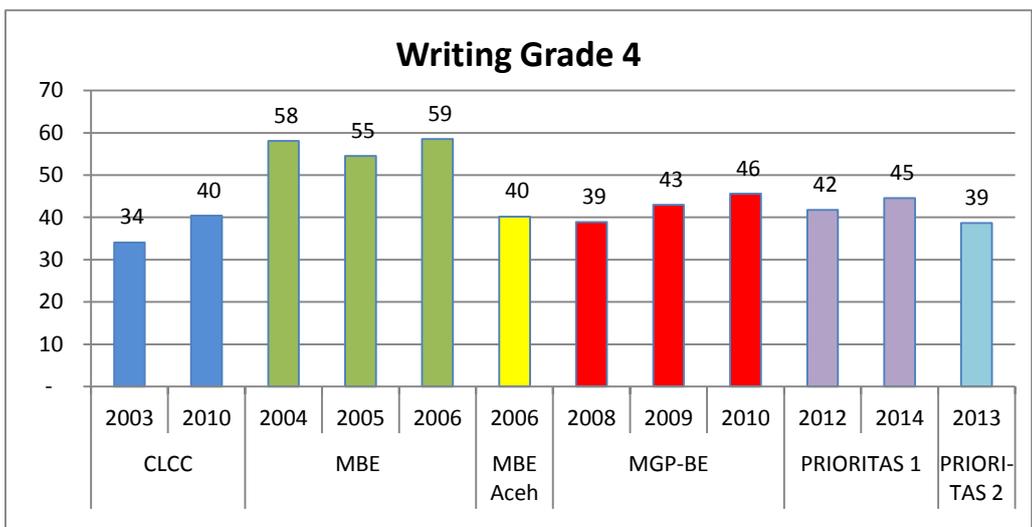
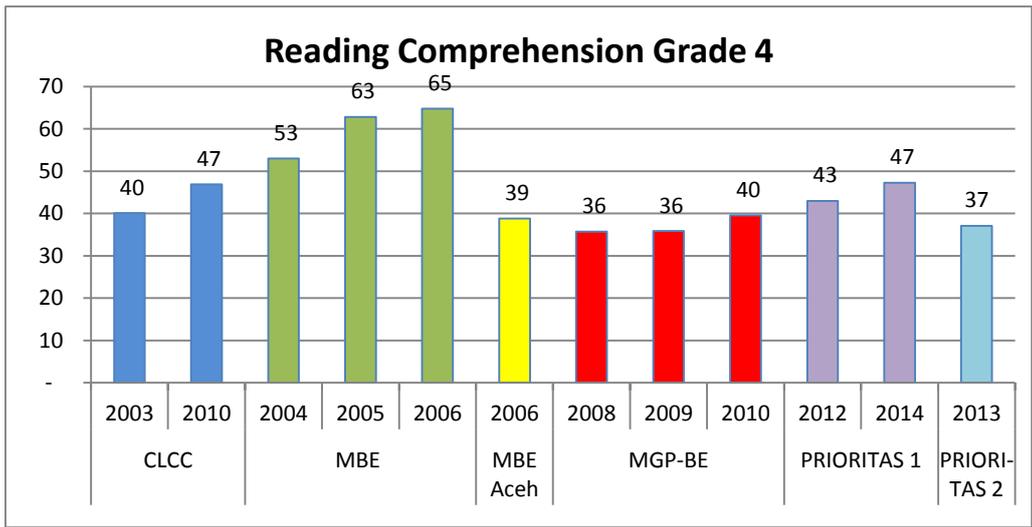
There are three factors in the various testing programs that may have influenced final scores in ways that are, at present unknown, and so comparisons must be made with caution.

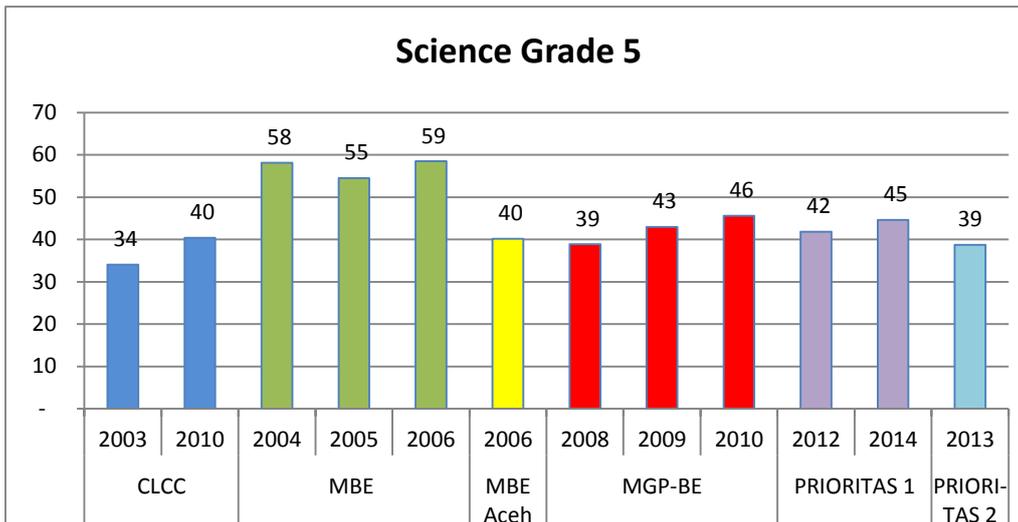
- The primary school mathematics test was partially revised in 2004 after experience of using it on CLCC.
- The grade 8 Mathematics test was somewhat simplified for the USAID PRIORITAS and MGMP-BE districts, based on experience of its use in MBE.

Average Test Scores from Various Projects

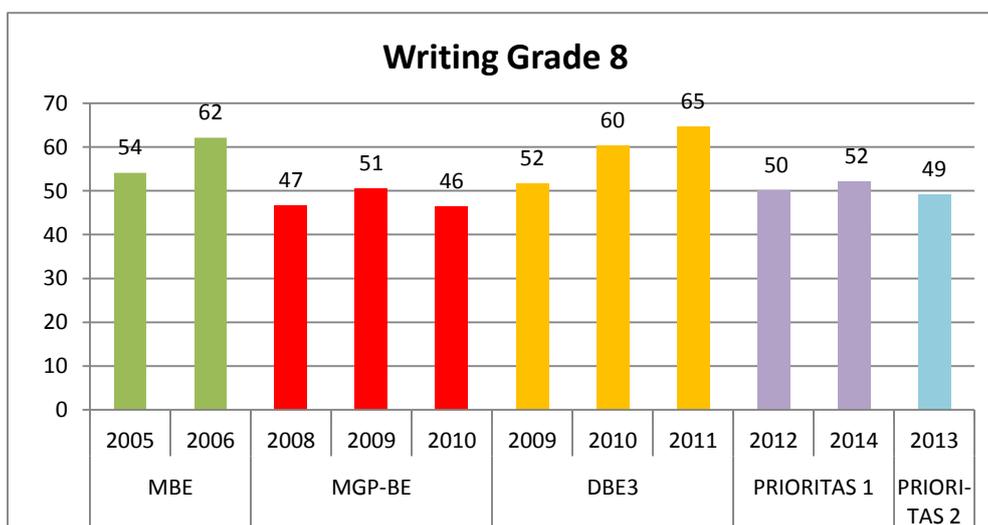
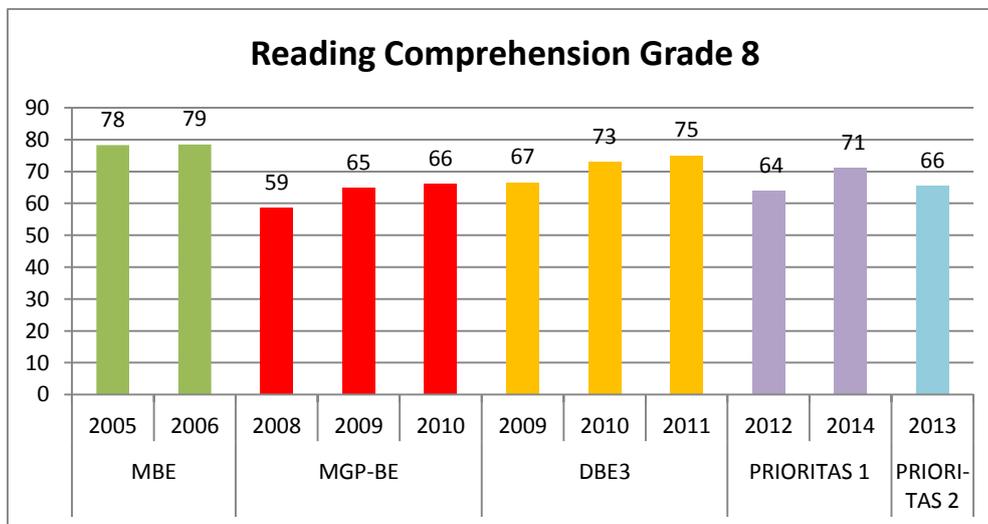
PROJECT NAME	CLCC		MBE					MGP-BE			DBE3			PRIORITAS			
			Phase 1			Phase 2		Aceh							Cohort1	Cohort 2	
Round of Testing	1	2	1	2	3	1	2	1	1	2	3	1	2	3	1	2	1
Year of Testing	2003	2010	2004	2005	2006	2005	2006	2006	2008	2009	2010	2009	2010	2011	2012	2014	2013
# of provinces (of which on Java)	6 (2)	6 (2)	2 (2)	2 (2)	2 (2)	2 (2)	2 (2)	1 (0)	6 (1)	6 (1)	6 (1)	6 (4)	6 (4)	6 (4)	7 (4)	7 (4)	7 (4)
PRIMARY SCHOOLS ASSESSMENTS																	
# of districts (of which on Java)	15 (5)	15 (5)	9 (9)	9 (9)	9 (9)	11 (11)	11 (11)	2 (0)	12 (2)	12 (2)	12 (2)	25 (15)	25 (15)	25 (15)	23 (15)	23 (15)	20 (10)
# of schools surveyed	45	45	54	54	54	66	66	20	72	72	72				92	92	80
% of Children with pre-school	42.4	66.4	90.7	92.7	92.5	91.3	95.7	81.7	55.2	57.9	71.0				78.8	78.9	80.9
Reading Word Recognition, Grade 1	47.1	71.3	87.3	91.4	94.6	87.9	91.9	50.4	56.4	61.9	70.6						
Reading Comprehension Grade 1	20.5	59.4	60.8	61.8	67.6	56.6	63.8	23.8	19.9	20.2	30.4						
Reading Comprehension Grade 4	40.1	46.9	53.0	62.8	64.8	59.9	61.4	38.8	35.7	35.9	39.6				43.0	47.3	37.1
Writing Grade 4	34.1	40.4	58.1	54.5	58.5	51.0	58.2	40.2	38.9	43.0	45.6				41.8	44.6	38.7
Mathematics Grade 4	47.0	47.0	61.1	65.5	65.0	64.7	65.0	41.3	39.4	38.1	43.7				40.7	46.0	39.2
Science Grade 5	28.8	39.8	44.3	50.4	53.4	48.8	54.5	29.0	28.1	28.9	31.9				35.8	43.2	33.8
JUNIOR SECONDARY SCHOOL ASESSEMENTS																	
# of districts (of which on Java)						20 (20)	20 (20)		12 (2)	12 (2)	12 (2)	25 (15)	25 (15)	25 (15)	23 (15)	23 (15)	20 (10)
# of schools surveyed						60	60		36	36	36	54	54	54	69	69	60
Reading Comprehension Grade 8						78.3	78.5		58.7	64.9	66.2	66.6	73.0	75.1	64.0	71.2	65.6
Writing Grade 8						54.1	62.1		46.6	50.6	46.4	51.6	60.4	64.7	50.1	52.0	49.1
Mathematics Grade 8						36.7	35.2		23.3	26.7	27.4	32.0	41.7	47.4	33.9	36.6	34.0
English Grade 8						41.4	45.7		26.0	26.4	27.4	38.4	49.7	46.8			
Science Grade 8															38.4	43.8	39.1
PROVINCES																	
	Central & East Java, South Sulawesi, NTT, NTB & Papua		Central & East Java					Aceh	Riau, Lampung, Banten, NTB, Gorontalo, Maluku			N. Sumatra, Banten, West, Central & East Java, South Sulawesi			Aceh, N. Sumatra, Banten, West, Central & East Java, South Sulawesi		

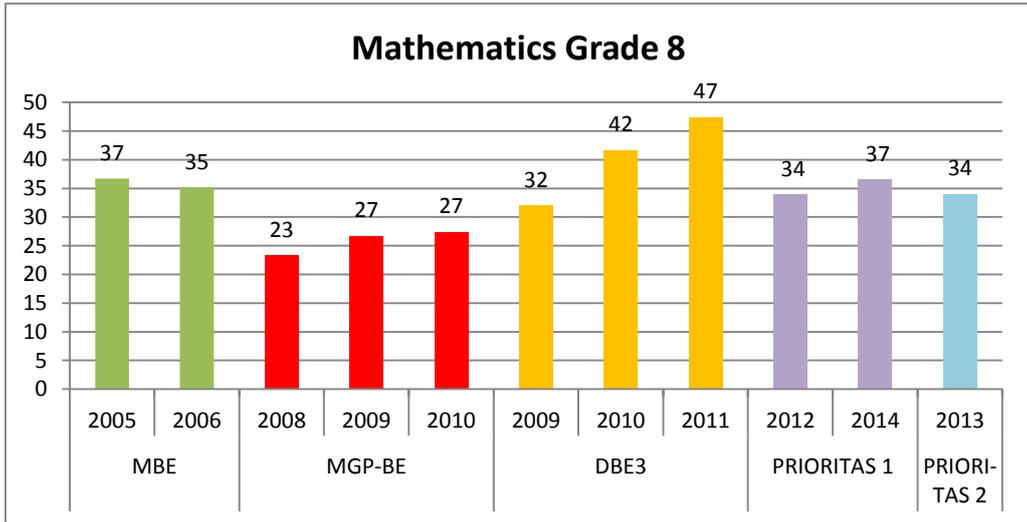
COMPARATIVE PRIMARY SCHOOL ASSESSMENT RESULTS





COMPARATIVE JUNIOR SECONDARY SCHOOL ASSESSMENT RESULTS





Annex 3. Summary of the Tests and their Development

Test	Development History	Broad Competencies Assessed	Notes on the Tests
<u>Reading Grade 1</u> Test 1 Test 2	Developed by Muhliso (Puskur), Elizabeth Sweeting and Stuart Weston in 1996	Word recognition Simple comprehension	The tests are administered orally to 12 grade 1 children in each class, chosen at random Words in the word recognition test are taken from the grade 1 reading book. Only students able to complete test 1 are asked to do test 2
<u>Bahasa Indonesia Grade 4</u> Reading	Developed by Muhliso (Puskur) and Elizabeth Sweeting and Stuart Weston in 1996.	Finding information in a passage Inferring information Predicting future events	The reading test is based around comprehension of a story. The writing test is based on an essay about a picture. The test is administered to half the class, while the other half takes part in the mathematics test (max. 20 per school)
Writing		Handwriting Spelling Punctuation Ability to express ideas logically Length of writing	
<u>Mathematics Grade 4</u>	Revised substantially in 2004 by Ujang Sukandi (Puskur) and Ar. Asari (UM)	Various of operations of whole numbers and fractions Number series Shape Length Solving problems (money, shape, number series)	The questions have a mixture of multiple choice, closed ended calculation, problem solving and open-ended problems requiring creativity The test is administered to half the class, while the other half takes part in the B. Indonesia test (max. 20 per school)
<u>Science Grade 5</u>	Designed in 1996 by Gunadi (Puskur) Minor revisions in 2002 and 2004 by Masjudi (Puskur), Sup. Koes (UM) and Andreas Priyono (UNES)	Air Water Plants and animals Food chain Force and energy Resources etc. Process skills including observing,	This test is divided into two sections. Section A used the format familiar to students of multiple choice questioning to assess children's understanding of concepts they have already learnt. Section B assesses children's active learning or process skills such as the ability to observe, interpret and hypothesize and requires the children to apply basic science concepts to

Test	Development History	Broad Competencies Assessed	Notes on the Tests
		interpreting data and hypothesizing	everyday situations.
Bahasa Indonesia Grade 8	Developed in 2004 by Wahyudi (ex-Puskur), Moh. Najid (UNESA) and Lynne Hill (MBE)	Finding information in a passage Inferring information Predicting future events	The reading test is based around comprehension of a story. It includes multiple choice, right and wrong and essay style answers.
Reading			
Writing		Paragraphs Sentencing Quality of ideas Spelling and punctuation Handwriting	The writing test is based on an essay about a picture. The test is administered to half the class, while the other half takes part in the mathematics test (max. 20 per school)
Mathematics Grade 8	Developed in 2004 by Ujang Sukandi (Puskur) and Ar. Asari (UM). Revised 2008 by Ujang Sukandi and Eddy Budiono (UM)	Number operations Graphs and maps Geometry and angles Measurement Problems solving using a variety of concepts	The test is divided into a multiple choice answer section and an open ended answer section based around problem solving. The questions have a mixture of multiple choice, closed ended calculation, problem solving and open-ended problems requiring creativity The test is administered to half the class, while the other half takes part in the B. Indonesia test (max. 20 per school)
Science Grade 8	Developed in 2012 by Ferdy Rondonuwu (Universitas Satya Wacana, Salatiga) and Hadi Suwono (Universitas Negeri, Malang)	Classifying animals and plants Buoyancy Expansion and contraction Evaporation and condensation Process skills including measurement of length, weight and volume, observing, interpreting data and hypothesizing	This test is divided into two sections. Section A used the format familiar to students of multiple-choice questioning to assess children's understanding of concepts they have already learnt. Section B assesses children's active learning or process skills such as the ability to observe, interpret and hypothesize and requires the children to apply basic science concepts to everyday

Note: UM=Universitas Negeri Malang; UNESA=Universitas Negeri Surabaya