Impact, Results & Progress DBE 2 FY 2009 Annual Report Summary



Making Meaning of Data

USAID's Decentralized Basic Education Program-Objective 2 (DBE 2) seeks to improve the quality of teaching and learning in Indonesia's primary schools through new attention to strengthening teacher training and improving the school learning environment. The project has established a comprehensive Monitoring and Evaluation (M&E) system to collect and report data on a full range of indicators in order to track project inputs, activities, products, and outputs. This Annual Report Summary highlights findings from the third Annual M&E Report issued by DBE 2, which provides a review of project progress and impact for Fiscal Year 2009. The results to follow incorporate data collected across seven provinces and from two cohorts of project participants comprised of 1,075 schools and principals, 14,484 teachers, and 231,123 students.

DBE 2 evaluates several key areas to determine whether students, teachers, principals, and schools fall below, meet, or exceed projectestablished performance standards:

- Improvements in primary school learning
- Improvements in school readiness among children completing kindergarten
- Improvements in teacher practice
- Improvements in principal practice
- Improvements in school learning environments
- Stakeholder perceptions and satisfaction

These types of information not only present a measure of progress within DBE 2 schools from year to year, but also provide valuable, independent insight into primary education in Indonesia as a whole. Additionally, the comparison of performance results between DBE 2 and control schools provide a method of assessing the impact of DBE 2 interventions in target schools in isolation.

To add context to the data presented in this summary, a series of profiles have been included to highlight the successes of individual teachers, principals and schools that are working in partnership with DBE 2.







FY 2009 Annual Report Summary Student Learning Outcomes

Analysis & Findings General Findings from DBE 2 & Control Schools

In both Grade 3 and Grade 6, three-quarters or more of all Cohort I students assessed (DBE 2 and non-DBE 2) meet or exceed minimum standards in Language and Science by the end of the school year.

In both Grades 3 and 6, however, barely one-third of all students assessed meet or exceed minimum standards in Mathematics by the end of the school year, highlighting the greatest room for improvement in student performance.

Comparison of Grade 3 and Grade 6 Students Below and Exceeding Competency in Language



Percentage of All Students That Meet or Exceed Competency by Subject (Grades 3 & 6)



While performance in Language is high relative to other subject areas tested, the percentage of students exceeding minimum competency falls dramatically from 69.4% in Grade 3 to 7.1% in Grade 6.

Additionally, the proportion of Cohort 1 students falling below minimum competency in Language greatly increases from 5.4% in Grade 3 to 21.5% in Grade 6.



Narrowing the Gender Gap

2008/09 results suggest DBE 2 programming contributes to the narrowing of differences in student performance by gender, and particularly in Math.

In 2006/07, 21% fewer boys than girls met or exceeded competency in Grade 3, while 21% fewer girls than boys met or exceeded competency in Grade 6. In 2008/09, these gender differences were greatly reduced. In Grade 3, the gender gap decreased to 3% (still in favor of girls), and in Grade 6 trends reversed, with the percentage of girls meeting or exceeding competency in Math surpassing that of boys by 8%. In comparison, gender gaps in control schools remained relatively unchanged from year to year in both grades.

Notable DBE 2 Achievements: Impact of DBE 2 Programming

Average achievement in Math is low in both DBE 2 and Control schools and presents the greatest room for improvement in student performance relative to other subject areas tested. This year, important gains have been made in Math in DBE 2 schools and represent DBE 2's greatest area of impact in student achievement.

In Grade 6, for example, the percentage of DBE 2 students that meet or exceed competency in Math fell below that of Control students in the 2006/07 pre-test by 8% and in the post-test by 14%. However, in 2008/09, the percentage of DBE 2 students meeting or exceeding competency in Math has surged ahead that of their Control peers by 25%, evidencing steep improvements in Math performance. Although not shown here, similar trends were observed in Grade 3 Math.

% of Students by Competency Level Grade 6 Math



Teaching & Learning Profile

Fun with Mathematics

Many students in Aceh find math to be a terrifying subject. Primary school teachers' use of abstract and often confusing formulas has made the subject difficult to understand, reflected in Acehnese students' comparatively low math scores on the national exam. Ms. Raudhatul Jannah, a Grade 6 teacher at SDN I Indrapuri in Aceh Besar, is striving to change her students' perception of the subject by making math fun and applying mathematical concepts to her students' everyday environment.

Ms. Raudha often takes her students outside of the classroom to play educational games she has designed to teach a variety of math lessons. A favorite geometry game of her students' deals with calculating circumference and diameter by measuring circular objects



found in the schoolyard. Students calculate the circumference of objects they have identified by first tracing their outline with a piece of string and then measuring the length of the string to find the circumference, diameter and radius. She has her students calculate pi using the measurements they have found and reinforces the formula for circumference by having students multiply the diameter by pi. Ms. Raudah believes that, "The method of calculating the circumference by applying it to real object helps to increase students' understanding. This pragmatic approach is much better than one that is merely based on memorizing the formula."

Ms. Raudah admits that the instructional methods introduced by DBE 2 are completely different from how and what she was taught at university. "When I was at university, the approach focused on theoretical concepts rather than concrete applications. From DBE 2 active learning and mathematics training, I have learned more creative and fun learning approaches for my students, like taking my class outside to learn from the environment."

Ms. Raudah sees the positive impact of her new teaching style on her students, "my students are starting to enjoy learning mathematics and the use of math formulas is becoming easier for them to understand."

Since she started to apply this creative and hands on approach to math instruction in 2006, Ms. Raudah's students are performing better on both their class assessments and the national exam. The score of the average Grade 6 student from Ms. Raudah's school on the national final examination (UAN) in academic year 2008/2009 was 7 on a scale of 10, compared to 6.5 the previous year. Ms. Raudah believes that this new style of teaching is directly related to the boost in exam results, "Now that mathematics has become a fun and an enjoyable subject to learn, my students pay attention in class and are much happier to study math."

Impact of Interactive Audio Instruction

% of Kindergarten Children Below School Readiness in Language



Studies have shown that students who fall below standards of school readiness in Language are more likely to have reading difficulty in later years. Indonesian kindergartens are preparing learners well in this area, and especially those participating in DBE 2.

In Cohorts I and 2, the proportion of DBE 2 children falling below school readiness standards in Language by the time of the post-test is approximately one-third of the proportion in control kindergartens. Additionally, the percentage of DBE 2 kindergartners below Language standards decreased from pre-test to posttest by 21.4 percentage points in Cohort I and by 16.2 percentage points in Cohort 2, while reductions in Cohort I and 2 control kindergartens were slightly smaller in magnitude, decreasing by 12.8 and 13.9 percentage points, respectively.

Kindergarten Profile

The Transformation of Aisyiyah Kindergarten



"When I came to this kindergarten as the new principal in September 2007, I was shocked because it felt like an abandoned school. We had very few students and they would sit in a classroom that was arranged as if in a conventional primary school," reflects Ms. Nurhayati, the principal of Aisyiyah Kindergarten (TK) in Sidrap, South Sulawesi.

Ms. Nurhayati continues to recall that the teachers in her new school did not create interesting activities for students. Instead they stood in front of the class lecturing the four, five and six year olds. Classroom management was a challenge; on a given day, it was not unusual to find one or two students running around the room, disrupting their teacher and classmates.

Ms. Nurhayati was determined to make a difference. A year into her tenure, help arrived in the form of a simple teacher professional development program that relies on an instructional methodology known as interactive audio instruction (IAI). "DBE 2's IAI program has improved this school's performance. Students are now enjoying classroom activities and, surprisingly, their Indonesian ability is improving. Now, the conversation among our students is mostly in Indonesian instead of Bugis, their first language," she explains, acknowledging the positive impacts of the IAI program introduced by DBE 2 to her kindergarten in 2008.

The teachers and students at TK Aisyiyah engage in their audio-based lessons, all of which are based on the national TK curriculum, at least three times a week. Now when Ms. Nurhayati visits a classroom she observes her teachers and students singing, dancing and playing educational games. By listening and responding to instructions and questions from the audio characters, TK Aisyiyah students are developing their listening comprehension and speaking skills.

In addition to improving her students' language skills, the IAI program has strengthened the capacity of the teachers at Ms. Nurhayati's school. They have become more creative and frequently make low cost materials and the environment outside their classroom to support their lessons.

"Aisyiyah is now known as a good kindergarten where teachers apply different instructional methods compared to other kindergartens in our community. Parents and community members have even told me that finally, after 22 years, Aisyiyah is functioning like a real kindergarten," Ms. Nurhayati proudly smiles. This change in community perception is reflected by the doubling of TK Aisyiyah's enrollment and a twenty percent increase in student attendance over the past two years.

General Findings from DBE 2 & Control Schools

Areas of Strength in DBE 2 and Control Schools:

- The majority of teachers observed display learning aids in their classrooms that are age appropriate
- The majority of teachers observed use interactive teaching methods and encourage students to answer questions
- The majority of teachers observed meet in-class student assessment standards and question students during lessons to check their understanding

Areas of Weakness in DBE 2 and Control Schools:

 Approximately one-third of lessons observed in both DBE 2 and Control schools continue to be dominated by lecture

by Skill Area

Percentage of Teachers Competent

Teacher Profile

From Computer Zero to Technology Hero

Sundari, S.Pd had no desire to use a computer, even though she has one at home. "I was never interested in using a computer before, because I didn't know how to use it. I was afraid that it would give me an electric shock or that I would break it," admits Ms. Sundari, a Grade 6 teacher at primary school SDN Kemantren I, in Sidoarjo, East Java.

But these thoughts have all but disappeared since she started participating in DBE 2's Information and Communication Technology (ICT) training program for teachers in 2008. "DBE 2 training gave me hands-on experience on the use of ICT and it prompted me to explore more. I feel challenged to use ICT in my classroom to make students enjoy the learning process."

With DBE 2, Ms. Sundari learned to use multimedia applications such as PowerPoint and Movie Maker to make presentations by taking pictures, editing them, and adding captions and background music and sounds. After she completed her first round of ICT workshops, she continued on her own to explore developing instructional videos for her students and soon produced her first multimedia presentation using PowerPoint—"My Village Buried under the Mud"— which was made to support an Indonesian lesson. "My students were so excited with the video I presented. The pictures and sounds helped my students understand the lesson more easily and enjoy the learning process," she proudly explains.

Encouraged to continue challenging herself and her students, Ms. Sunardi produced several more instructional videos, on the Americas and Australia for social studies, and simple machines for science. She now uses her instructional videos to set up group work and presentations, assigning each student in a group a different role to ensure active participation. Ms. Sunardi has recently started to incorporate a new ICT activity into her lessons: mind-mapping for short story analysis. Using templates she received from DBE 2, she asks her students to add pictures according to the worksheet's instructions. Students work in groups and practice using both the Internet and a digital camera. Once the pictures are in place, groups must write text to describe what is happening in each picture. Groups then present their stories to the class.



"I can see my students becoming more comfortable making and giving presentations. The mind-mapping activities also help my students to prepare for the illustrated story questions on the national exam. I am confident my class's average score will increase this year, as reflected in their practice test results." Concurring with Ms. Sundari's optimism, her principal Mr. Samso Hadi S.Pd, adds, "Grade 6 students' average score in the Indonesian final exam is already increasing. It was 7.91 out of 10 in 2008 and 8.00 in 2009. I am confident that the average score for this year will be more than 8.2."

Notable DBE 2 Achievements

The percentage of DBE 2 teachers meeting or exceeding competency across all evaluated skill areas remains notably higher than that of control teachers, where 84% of Cohort 1 and 85% of Cohort 2 DBE 2 teachers meet or exceed competency, compared with 53% of their control school peers in Cohort 1 and 54% in Cohort 2.





% of Teachers Exhibiting Use of Interactive Learning Methods

In Cohort 1,7% more DBE 2 teachers have been observed using interactive learning methods in their lessons in 2008/09 since

joining the project in 2006/07, while the percentage of Cohort I Control teachers exhibiting this skill has declined by 9% over the same time period. In Cohort 2, the proportion of DBE 2 teachers using interactive learning methods surpassing that of control teachers has increased from 8% in 2007/08 to 25% in 2008/09.





In 2008/09, 67% of both Cohort I and 2 teachers in DBE 2 classrooms are able to present a copy of their prepared lesson plan in comparison to about 7% of control

teachers. The percentage of DBE 2 teachers meeting this skill requirement has remained significantly higher than that of control teachers in successive years of observation, indicating that participation in DBE 2 programming has resulted in sustained changes in teacher behavior in lesson planning.

General Findings from DBE 2 & Control Schools

Areas of Strength and Weakness in DBE 2 and control Schools:

- Principals continue to be very strong in Planning and in Instructional Support
- Although some improvements have been noted this year, the percentage of principals regularly observing teachers in their class-rooms remains low



% of Principals Competent by Skill Area

Notable DBE 2 Achievements

About 79% of Cohort I DBE 2 principals meet II or more of I4 evaluation criteria--a proportion 33% greater than the 53% of control principals meeting the same requirements. In Cohort 2, 63% of DBE 2 principals meet II or more evaluation criteria, representing a 26% advantage over control principals (less than half of who meet the same performance standards).

Since 2006/07, a consistently greater percentage of DBE 2 principals than control principals:

- Can provide a copy of their current school improvement plan,
- Hold staff meetings with their teachers at least once per month, and
- Have purchased classroom learning aids for their school within the current academic year.



% of Principals Meeting 11 or more of 14 Evaluation Criteria

Principal Profile

From Desperately Seeking New Students to Regretfully Refusing Them



Rita Astuti had been the principal of primary school SDN 03 Karanganom in Klaten, Central Java since 2001. When she began her tenure at SDN 03, the enrollment rate was at less than half the school's capacity – below 20 students. Ms. Astuti quickly learned that parents avoided the school because of the perceived poor quality of the teachers.

In 2006, in addition to her role as principal, Ms. Astuti took on the position of DBE 2 Master Teacher Trainer (MTT) in Klaten Utara. She participated in all trainings provided to improve teachers' skills and encouraged reluctant teachers to actively participate in these activities. She continued her tireless efforts as a DBE 2 MTT by bringing parents and school committee members together and forming a parents association for each grade level. Parents quickly responded, providing books, plants, display materials, and other items needed to improve the school learning environment.

Before long, teachers at SDN 03 began to feel the positive impact of the DBE 2 project in their school, and of Ms. Astuti's relentless advocacy and support. Ms. Astuti's teachers started to actively participate in DBE 2 professional development workshops, regularly making creative lesson plans, and applying the active learning method in their classrooms. As a result of these efforts, student performance is improving, final exam scores have drastically increased and SDN 03 is now one of the best five schools in its sub-district. "Student enrollment is increasing. Now we have to regretfully refuse some potential new students because we can't receive more than 40 students per year," comments Ms. Astuti, who is now a school supervisor.

FY 2009 Annual Report Summary School Learning Environments & Stakeholder Satisfaction

Analysis & Findings

School Learning Environment

The percentage of DBE 2 classrooms meeting 12 or more of 15 learning conducive criteria (eg. learning aids displayed, student work displayed, learning materials made) exceeds that of control classrooms in each year observed, and this advantage has increased by 26% from 2006/07 (where DBE 2 classrooms held a 21 percentage point lead) to 2008/09 (where DBE 2 classrooms now have a 26 percentage point lead).

In Cohort 2, the percentage of DBE 2 classrooms meeting learning conducive criteria exceeds that of control classrooms by 34 percentage points in 2008/09--an increase of 13% since 2007/08. In contrast, the percentage of control classrooms meeting these criteria has never risen above 50%.



Tasya Pruwita Chandra Dewi Grade 6 Student

"Our teacher uses low-cost learning materials almost in every science subject. For me, this has made science fun to learn."





Ariana Friska Nugrahheni Grade 3 Student

"I love our classroom because I can display my work on the wall and show it to my classmates everyday"

Stakeholder Perceptions

- 84% or more of parents, teachers, principals, school committee members, school supervisors, and sub-district officials believe DBE 2 has improved the quality of teaching and learning within their school or district.
- Stakeholders cohesively, and strongly agree classroom environments are more stimulating and that teachers have increased their ability to actively engage their students in learning as a result of DBE 2 participation.



Janny Mudjijanto, S.Pd. Primary School Teacher

"Before I was not able to operate a computer, but since I followed the DBE 2 ICT training, I have developed an educational blog that I can share it to my fellow teachers."



Luluk Anifah Kindergarten Teacher

"Since I started implementing the IAI program, my students are more excited to come to class. IAI has become their favorite part of the school day because all of the lessons are fun to learn."

Niran, S.Pd. Primary School Principal

"The DBE 2 project really relates to teachers" actual experience in the school. After DBE 2 training teachers are more innovative in instructional activities, for example, I found more low-cost learning, materials are being produced by teachers. And because the teachers are creative, their students are more creative."

