



Guru BAIK Process Evaluation Report

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The Innovation for Indonesia's School Children (INOVASI) Program is a partnership between the governments of Australia and Indonesia. Working directly with Indonesia's Ministry of Education and Culture, INOVASI is seeking to understand how student learning outcomes in literacy and numeracy can be improved in diverse primary schools and districts across Indonesia. INOVASI is working in a range of locations across Indonesia, and uses a distinctive locally focused approach to develop pilot activities and find out what does and doesn't work to improve student learning outcomes.

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Guru BAIK Process Evaluation Report

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Acronyms and abbreviations

AUD	Australian dollars
EPD	education program development
GB	Guru BAIK
Guru BAIK	Project to improve learning outcomes in literacy and numeracy – Teachers [promoting] aspirational, inclusive and contextualised learning(Guru Belajar, Aspiratif, Inklusif, Kontekstual)
INOVASI	Innovation for Indonesia’s School Children project
LPMP	Education Quality Assurance Institute
MERL	monitoring, evaluation, research and learning
MoEC	Ministry of Education and Culture
NTB	West Nusa Tenggara province (Nusa Tenggara Barat)

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Summary

Guru BAIK(GB) which stands for Guru Belajar, Aspiratif, Inklusif, Kontekstual suggests that good teachers are those who are willing to learn and aspire to create an inclusive and contextual learning environment in their classrooms. The pilot was designed to provide teachers with the knowledge and skills to integrate action research principles as a contextual, problem-driven methodology to tackle immediate issues and challenges with literacy and numeracy in their classrooms.

Guru BAIK is based on the principles of classroom action research and includes a multi-stage, problem-driven, cyclical process of identifying problems, developing and implementing action plans, analysing data and reflecting on the learning process. The pilot started in January 2017 and was completed in May 2017, with follow-up activities based on each district plan.

This report provides an overview of Guru BAIK implementation in North Lombok and Sumbawa and process evaluation results that compare the actual and the expected outputs and outcomes of the pilot. Data analysed in this report were collected using regular monitoring instruments and performance assessments developed by the education program development (EPD) and monitoring, evaluation, research and learning (MERL) teams. The time period of data collection and analysis was from January to June 2017.

The findings indicate that, in general, the pilot was implemented as designed. The five phases of the pilot were implemented within a planned time frame with some changes in the schedules of the first two workshops. All teachers and local facilitators fully participated in all the workshops, although not all of them attended the dissemination activity, Gelar Karya. Based on the performance appraisals, in general, the local facilitators were able to support the overall implementation in North Lombok and Sumbawa.

Regarding teachers' ability to undertake action research, in each workshop more than 70 per cent of teachers completed the tasks that met the criteria set by INOVASI. However, only 56 per cent of the teachers performed well in all stages. Comparing the two districts, teachers from North Lombok appeared to perform better than those from Sumbawa. There was no significant difference between the women and men teachers in terms of their capacity to conduct action research. However, younger teachers – particularly those below 40 years old – tended to perform better than their older colleagues throughout the process.

Despite these achievements, a number of challenges arose in implementing the pilot. Teachers found it difficult to integrate research principles in developing a problem-driven method and this remained a challenge throughout the workshops. At the beginning, most teachers also struggled with the process of self-reflection on their teaching practices, particularly when they had to assess the extent of their own support for their students' learning. Consequently, in a few cases during the workshops, facilitators ended up influencing what ideas were discussed, instead of encouraging teachers to think productively and articulate their own ideas.

To overcome these challenges, INOVASI conducted a training session for facilitators prior to the second workshop to improve their facilitation skills. The training covered good facilitating techniques, including how to use probing questions during discussions. During the workshops with teachers, INOVASI observed the group discussion sessions closely to ensure that facilitators were encouraging teachers to articulate their ideas rather than imposing their own ideas. Although most teachers found the whole process quite challenging, nearly all of them acknowledged that the activities were useful for them and agreed to continue to use the approach to improve their teaching.

Although the pilot appears to have achieved its targets, other key indicators, such as improved teaching practices and student learning outcomes, have not been measured as the endline data are not yet available. To measure the achievement of Guru BAIK on improving teaching practices and student learning outcomes, INOVASI will implement an endline survey in the fourth quarter of 2017.

Chapter 1 Introduction

PURPOSE

INOVASI is a AUD49 million education program running from 2016 to 2019, funded by the Australian Government in partnership with the Indonesian Ministry of Education and Culture (MoEC). INOVASI works to understand and tackle learning challenges, particularly those related to literacy and numeracy, in classrooms and schools. The program's three areas of focus are:

1. strengthening the quality of teaching and learning in the classroom;
2. improving the support provided to teachers; and
3. enabling all children in the classroom to reach their potential in learning.

All pilots implemented by INOVASI are intended to improve literacy and numeracy. Beyond this, all pilots are expected to change mindsets and practices by empowering local stakeholders to be able to use context and problem driven processes so they can continue beyond INOVASI interventions to design and implement best-fit solutions. Pilots will be measured on whether and to what extent they achieve these two results.

Guru BAIK(GB) which stands for Guru Belajar, Aspiratif, Inklusif, Kontekstual suggests that good teachers are those who are willing to learn and aspire to design inclusive and contextual learning environments in their classrooms. The specific purpose of the pilotis to provide teachers with the knowledge and skills to integrate action research principles, as a contextual and problem driven methodology, in tackling immediate issues and challenges with literacy and numeracy in their classrooms.

The Guru BAIK pilotis central to achieving the INOVASI end-of-program outcome as its specific aim is to support practitioners in developing the skills and understanding to independently use a context-driven, problem-solving and iterative process to improve literacy and numeracy. This report is linked to the Guru BAIK monitoring, evaluation and learning (MEL) plan.

By the end of the Guru BAIK pilot, INOVASI expects to see:

1. Participating teachers with the capacity to use action research as a contextual teaching and problem-solving methodology to improve literacy and numeracy in their classrooms;
2. An improvement in the quality of teaching and learning in the classrooms of participating teachers;
3. An increase in learning outcomes in literacy and numeracy of students in the classrooms of participating teachers as a result of the actions taken;
4. A bank of locally-relevant promising practices to be shared (database);
5. A core group of local facilitators with the necessary capacity to sustain and scale out the Guru BAIK activity;
6. A core group of teachers committed to continuing to use the methodology to address new problems and challenges with literacy and numeracy as they emerge.

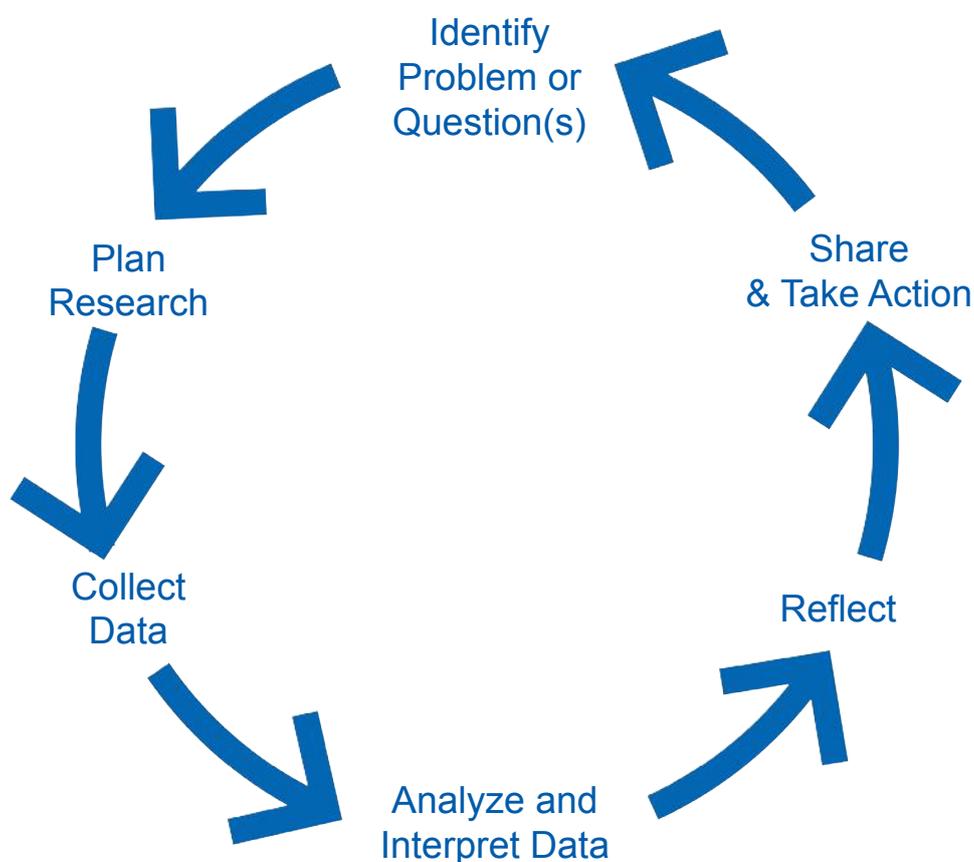
The monitoring and evaluation process around Guru BAIK was designed to measure whether and to what extent these expected results are achieved. This report provides the monitoring results of Guru BAIK activities from January to May 2017. The two objectives (e and f) that relate to sustainability of the pilot activities will be monitored in the first semester of the 2017/2018 academic year to see whether the trained teachers continue to implement the methodology in their classrooms.

The outline of this report is as follows. The first chapter introduces the Guru BAIK pilot and the process evaluation plan. The second chapter provides an overview of the implementation of the pilot. The third chapter discusses the results of the process evaluation and the final, fourth chapter concludes the report.

IMPLEMENTATION DESIGN

Guru BAIK is based on the principles of classroom action research and includes a multi-stage, problem-driven, cyclical process of identifying problems, planning action to address the problems, taking action and collecting data, analysing the results of the action, reflecting and re-planning the action. The pilot started in January 2017 and was completed in May 2017, with follow-up activities continuing until October 2017.

Figure 1.1 Cycle of Guru BAIK pilot activities



INOVASI implements this cycle through a series of four workshops with connected and mentored follow-on activities.

1. Workshop One and follow-on activities (identify problems or questions): During the first workshop, the facilitators help teachers identify a problem, challenge or research question they have with regard to literacy and numeracy in their own classrooms. After the workshop, teachers apply the problem identification process in their own classrooms.
2. Workshop Two and follow-on activities (plan research): In the second workshop teachers start to plan out how they will try to solve the problem or challenge or answer their research questions. With guidance, they conduct a literature review, discuss possible solutions with their peers and identify existing promising practices. Following the workshop, the teachers continue to develop their action plans.
3. Workshop Three and follow-on activities (plan research and collect data): In the third workshop, teachers develop a suitable methodology (and accompanying instruments) to collect and organise the data they will need to measure whether and to what extent their action plan has succeeded. The workshop emphasises the importance of formative assessment. After this workshop, teachers carry out their research according to their plan and collect the necessary data.
4. Workshop Four and follow-on activities (analyse and interpret data, and reflect): The final workshop helps teachers to analyse and interpret the data they have collected to see whether and to what extent their actions succeeded. As a follow up to this workshop, all participants are expected to repeat the cycle or start again with new questions or problems found in their research.
5. Dissemination (share findings and take action): At the dissemination event, participating teachers are asked to document (in their own way) and share their findings and experience with teachers in their own schools, in other schools in their clusters and finally across the district.

Evidence suggests that the action research process works best through collaboration and cooperation so the Guru BAIK pilot was implemented by 50 research teams in 50 primary schools across two districts – North Lombok and Sumbawa – in West Nusa Tenggara (Nusa Tenggara Barat –NTB). Research teams were comprised of three members as follows:

1. One lead teacher who conducted the research in her or his classroom;
2. One teacher from the same school, acting as a critical friend;
3. One educationalist from a local higher education institute, providing oversight on research methods.

Each research team was mentored and supported by a group of national facilitators, experienced in conducting an action research approach in the classroom and a group of relatively inexperienced local facilitators. Through the pilot, INOVASI and the national facilitators train and mentor the local facilitators to fully implement the Guru BAIK program. They can then become resource persons in their districts so the Guru BAIK pilot can be rolled out to other teachers and schools.

EVALUATION PURPOSE AND QUESTIONS

Guru BAIK is evaluated through both process and outcome evaluations. The purpose of having two evaluations is to ensure that INOVASI has two different types of data:

1. the quick data and feedback loops that support strategic day-to-day management and timely decision making and help to answer important questions, such as whether the program is making a difference, if it is achieving the intended results and what can be done differently to better meet goals and objectives; and
2. the more systematised data, findings and lessons needed to promote greater partnership building, advocacy and inform educational policy making.

This report focuses on the process evaluation to achieve the first purpose.

The process evaluation starts at the same time as the pilot activity commences and it evaluates Guru BAIK only up to the end of the implementation phase (June 2017). The evaluation adopts a pre-test/post-test methodology looking at changes in practices and mindsets as well as in learning outcomes in the target group only. This helps INOVASI understand the value added by the program to that particular group. The process evaluation aims to answer the following key questions:

1. How well is Guru BAIK working?
2. To what extent is Guru BAIK being implemented as designed?
3. What was the quality of the Guru BAIK activities?
4. How relevant is the Guru BAIK program to beneficiaries and stakeholders?
5. What changes and benefits are being experienced by participants as a result of Guru BAIK activities?
6. Is INOVASI delivering on key outputs for Guru BAIK?
7. Did the Guru BAIK pilot meet its targets?
8. To what degree has the Guru BAIK program reached its intended outcomes?

To answer these questions, INOVASI collected monitoring data on Guru BAIK activities on an on-going basis throughout the whole intervention. The following areas were monitored:

- Program activities and implementation: For example, INOVASI monitors the inputs provided by the program, the quality of the activities, the staff that have provided the services, the 'treatments' that have been provided and the costs involved.
- Progress towards the output and outcome indicators in the results framework: For example, the program monitors the performance of both national and local facilitators, and whether the teachers have successfully implemented what they have learned.

DATA COLLECTION

To monitor the implementation of Guru BAIK, the MERL team used various regular monitoring instruments, such as attendance records, activity reports and evaluations of each activity. The MERL

team also conducted in-depth interviews and participatory action research to obtain more information on the pilot implementation.

In analysing the results, the MERL team collaborated with the EPD team to assess particular intermediate outcomes using certain criteria discussed further in Chapter 3. The data was collected between January and June 2017. Table 1.1 provides the instruments used to measure each indicator covered in this report as well as the target and the timing of data collection.

Table 1.1 Targets, instruments and timing of data collection¹

Key Performance Indicator	Precise Indicator	Targets	Instruments	Timing of Data Collection
INTERMEDIATE OUTCOMES				
3.1 Teachers have the knowledge and skills to use classroom action research as a contextual teaching and problem-solving methodology	3.1.1 Percentage of teachers who identify problems/research questions which met the agreed criteria* (R)	65%	Assessment of problems identified by teachers	February 2017
			Activity report Activity evaluation	North Lombok: 21 Jan 2017; Sumbawa: 24 Jan 2017
	3.1.2 Percentage of teachers who develop action plans to address identified problems/research questions which met the agreed criteria (R)	65%	Assessment of action plan developed by teachers	March – April 2017
			Activity report Activity evaluation	North Lombok: 3 Mar 2017; Sumbawa: 28 Feb 2017
	3.1.3 Percentage of teachers who successfully implement their action plans (R) (carry out their action research)	70%	Assessment of action plan implementation	April 2017
			Activity report Activity evaluation	North Lombok: 21 Mar 2017; Sumbawa: 24 Mar 2017
	3.1.4 Percentage of teachers who successfully analyse collected data	70%	Assessment of data analysis done by teachers	May – June 2017
			Activity report Activity evaluation	North Lombok: 22 May 2017; Sumbawa: 24 May 2017

¹ The indicator will be measured after the learning platform is finalised.

Key Performance Indicator	Precise Indicator	Targets	Instruments	Timing of Data Collection
3.2 The potential for sustainability and scale-out has been maximised	3.2.1 Percentage of local facilitators who demonstrate knowledge and skills needed to implement the Guru BAIK action research program	80%	Facilitator performance appraisal	During all workshops
			Facilitator reports	North Lombok and Sumbawa: 19 Feb 2017
	3.2.2 Number of dissemination activities carried out on the process and findings of Guru BAIK	50	Attendance records	North Lombok: 22 May 2017; Sumbawa: 24 May 2017
	3.2.3 Number of participants in Guru BAIK dissemination activities	300	Attendance records	North Lombok: 22 May 2017; Sumbawa: 24 May 2017
3.3 Teachers view classroom action research as a valuable teaching and problem-solving methodology	3.3.1 Percentage of teachers who agree that Guru BAIK has been a valuable activity	80%	Activity evaluation	North Lombok: 22 May 2017; Sumbawa: 24 May 2017
	3.3.2 Number of teachers who agree they will continue to use the action research methodology to improve their work	80%	Activity evaluation	North Lombok: 22 May 2017; Sumbawa: 24 May 2017
OUTPUTS				
4.1 Local facilitators able to support the implementation of the Guru BAIK program	4.1.1 Number of local facilitators who successfully complete all activities in the Guru BAIK process from beginning to end (A)	10	Attendance records	During all workshops and Gelar Karya
4.2 Teachers trained to use classroom action research principles	4.2.1 Number of teachers who successfully complete all activities in the Guru BAIK process from beginning to end (A)	90	Attendance records	During all workshops and Gelar Karya
4.3 Teachers demonstrate improved practices in teaching and learning identified skills in the classrooms	4.3.1 Percentage of teachers who demonstrate improved practice in teaching and learning in the classroom (R)	80%	Teaching observation instrument	September – November 2017
4.4 Students in classroom of participating teachers improve performance in identified skills in literacy and numeracy	4.4.1 Overall average percentage increase in students' learning outcomes as a result of action plans (R)	5%	Student learning assessments	September – November 2017
	4.4.2 Percentage of research teams that achieve their targets in increasing students' learning outcomes in literacy and numeracy	70%	Reviews of data collected by teachers	May – June 2017

Key Performance Indicator	Precise Indicator	Targets	Instruments	Timing of Data Collection
4.5 Experiences and findings have been documented and shared	4.5.1 Percentage of promising practices emerging from the Guru BAIK program shared locally (A)	100%	Activity report	North Lombok: 22 May 2017; Sumbawa: 24 May 2017
	4.5.2 Percentage of promising practices emerging from the Guru BAIK on the INOVASI learning platform	100%	Review of research project results	

Chapter 2

Overview of Guru BAIK implementation

This chapter provides an overview of the implementation of the Guru BAIK pilot. It covers the following phases of the pilot: problem identification; development and implementation of action plans; data analysis and reflection; and dissemination of experiences and findings. Each section covers a brief overview of the implementation of each phase, including the challenges encountered and the strategies used to address them.

PHASE 1: PROBLEM IDENTIFICATION

Participants learned how to identify problems through two workshops that were held over the weeks of 20 to 24 January 2017 in North Lombok and 27 February to 3 March 2017 in Sumbawa. Each workshop was followed by an on-the-job process where facilitators assisted participants in identifying the actual problems in their classrooms.

The first workshop introduced the concept of Guru BAIK. Through the sessions, participants learned the importance of the bottom-up and iterative process and how the process can be applied in a classroom setting. The workshop was delivered in a participant-centred manner where the participating teachers became the centre of the discussions. The participants were highly enthusiastic in giving their opinions and contributing to the discussions. By the end of the workshop, participants had gained an insight into how teachers can identify student learning problems not only by examining the students' school work but also by talking to them about their classroom experiences and their learning aspirations. They can also identify the issues through their own classroom observations.

Several challenges were encountered during the first workshop. Facilitators tended to dominate the discussions instead of giving teachers opportunities to share their knowledge and experiences. The EPD team subsequently conducted additional training to improve their facilitation skills before moving onto the second workshop. We found that grasping the learning points was quite challenging for some teachers. To make the process easier, the lead facilitators emphasised the objective of each particular session before it started.

After the first workshop, participants went back to their classrooms and started to apply the problem identification skills that they had learned to understand the problems in their classrooms. They brought all the findings they collected to the second workshop. In this workshop, the teachers were asked to analyse the root causes of their problems. Most of the problems that teachers had identified seemed too general and referred to students' 'symptoms'. Moreover, some teachers tended to focus on students' competencies as the only cause of the problem, rather than considering other aspects, such as the learning environment or their teaching practices.

Teachers then discussed the identified root causes based on their own analysis and consequently, came up with a deeper analysis of the root causes. In general, teachers identified root causes relating

to teaching skills, resources, student motivation, students' Indonesian language proficiency, and the lack of learning feedback. At the end of the problem identification process, teachers assessed the urgency of the problems and prioritised one problem to be solved within the following five months.

PHASE 2: DEVELOPMENT OF ACTION PLANS

Teachers started to develop their action plans during the second workshops which were conducted on 27–28 February 2017 in Sumbawa and on 2–3 March 2017 in North Lombok. Based on the problems analysed in the previous stage, participants discussed the possible best-fit learning scenario they could use to solve the problem. Participants were encouraged to explore their ideas through brainstorming with other teachers and searching the literature available.

After teachers synthesised their references and ideas into teaching scenarios, they appraised each other's teaching scenarios in terms on how suitable and feasible the solutions would be in addressing the identified problems. Teachers found it challenging to propose solutions in line with the problems they aimed to solve. It was not easy for them to synthesise the ideas gathered from the literature with the problems that they had. However, the appraisal process helped teachers to come up with more aligned solutions. Figures 2.1 and 2.2 summarise the possible solutions designed and implemented by teachers in Sumbawa and North Lombok respectively.

Figure 2.1 Identified problems and possible solutions in Sumbawa

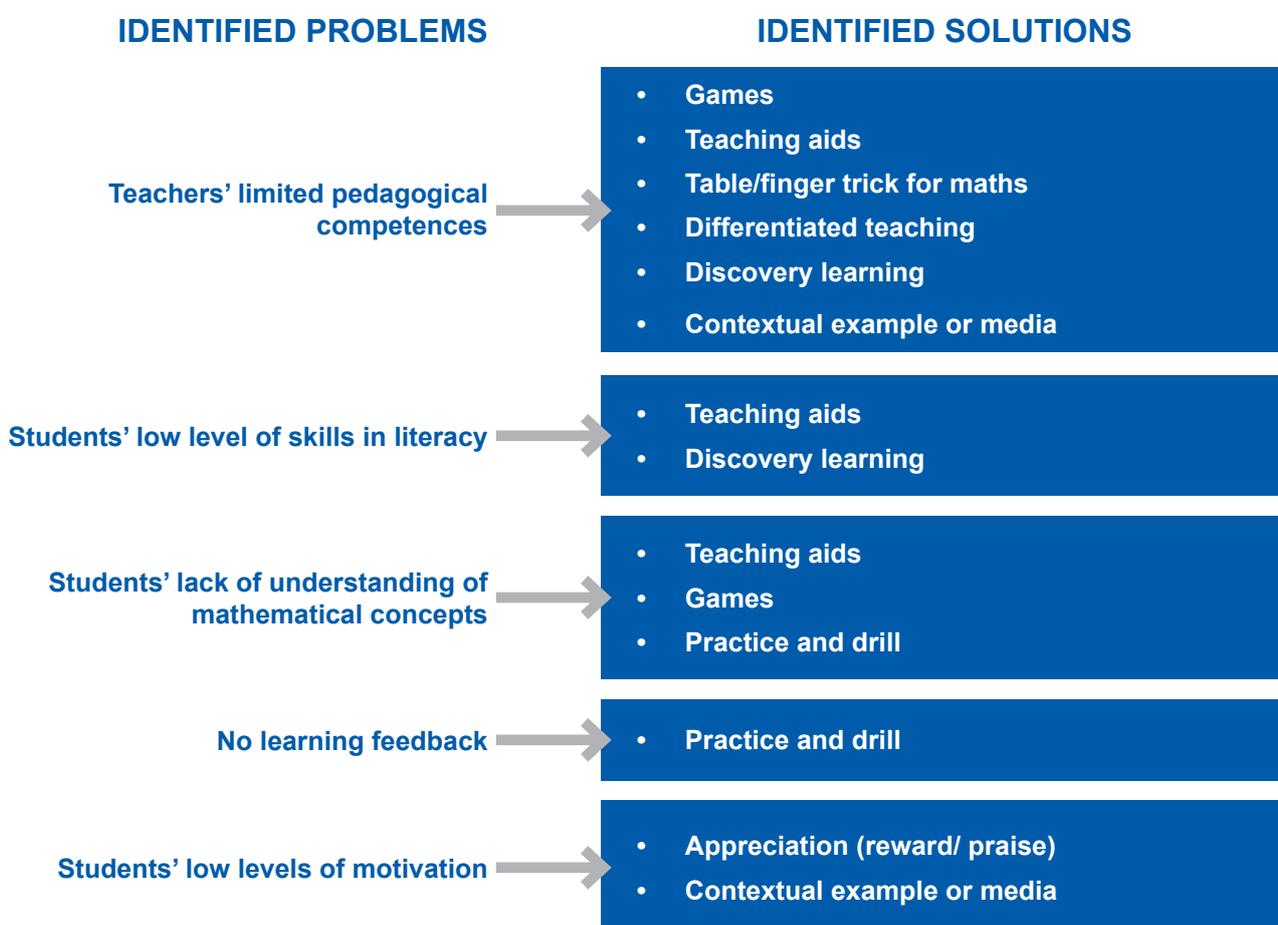
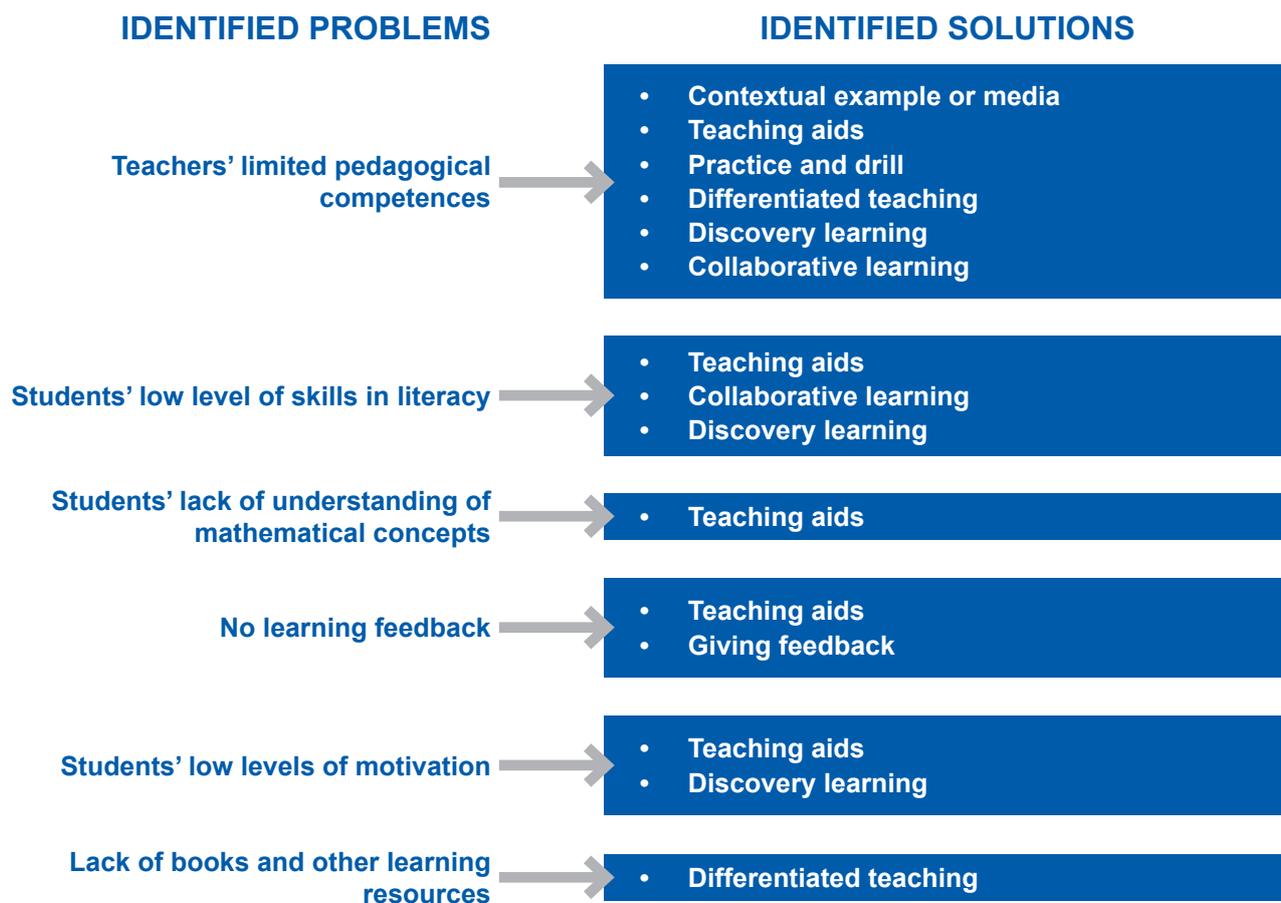


Figure 2.2 Identified problems and solutions in North Lombok



We encountered challenges at this stage. Facilitators still tended to impose their ideas instead of stimulating the teachers with inquiries and facilitating the process of thinking in a problem-driven way. Based on observations during the workshop, the facilitators' suggestions did not help teachers to formulate solutions but took their focus away from the problem at hand. The facilitators admitted that it was challenging for them to facilitate the process of self-reflection on learning problems in their classrooms as teachers were not used to this process.

PHASE 3: IMPLEMENTING THE ACTION PLANS

After the second workshop, teacher implemented their action plans in their classrooms as an on-the-job learning process. Prior to the implementation, teachers were trained on developing formative assessments. The workshops were conducted on 20–21 March 2017 in North Lombok and 23–24 March 2017 in Sumbawa. The workshops aimed to ensure teachers understood the importance of formative assessments so they could align their learning assessment instruments with the learning scenarios they had developed. The workshop emphasised the value of formative assessments as a basis for teachers' reflections on the success of the lesson.

Although teachers were familiar with the concept of formative and summative assessments before the workshop, they were still confused about the differences between these two types of assessment

and the workshop aimed to make these clearer. Teachers learned about various techniques in designing formative assessments and were given the opportunity to design an assessment to track their students' progress after implementing their action plan.

Some teachers faced some challenges during this on-the-job process, firstly because they still did not have a clear understanding of the formative assessment concept. For example, they thought that the assessments all had to be in written form. In response to this issue, INOVASI staff discussed the process of implementing formative assessments with the individual teachers and assigned local lecturers and district education officers to work closely with the local facilitators during the on-the-job process. On the other hand, other teachers grasped the idea of formative assessment easily and reported that they used this kind of assessment intensively in their regular teaching.

The other problem encountered related to aligning the instruments with students' learning needs. Some teachers still preferred the instruments that they usually use that do not consider the specific learning needs. As a result, the designed learning instruments did not reveal information to help teachers assess whether the tested strategy worked to solve the learning problem. Moreover, most of the criteria teachers used to measure the effectiveness of their learning scenarios were already determined by the school for each subject. For example, the minimum targeted average score for mathematics was at least 70. Hence, there was little information on which competencies their students were lacking.

In addition to the assessment and learning instruments, teachers also cited several external factors that hindered implementation of the Guru BAIK approach in their schools. Although some principals believed that the approach could be effective in improving the quality of learning, they emphasised that curriculum-based lesson plans should be the priority as teachers need to cover all materials listed in the curriculum. In response to this issue, INOVASI collaborated with local facilitators and local lecturers to convince teachers that a problem-driven action plan approach could also be applied when they were developing any lesson plans without having to disregard the requirements of the curriculum.

PHASE 4: DATA ANALYSIS AND REFLECTION

After teachers had implemented their action plans, they needed to analyse the data they had collected in their classrooms. The fourth workshops were held on 2–3 May 2017 in Sumbawa and on 5–6 May 2017 in North Lombok and aimed to improve teachers' skills in analysing data. The workshop also raised their awareness of the importance of creating an evidence base for designing or redesigning classroom learning.

The two main challenges at this stage were teachers' basic skills in data analysis and their misconceptions about formative assessments. Most teachers were not used to analysing improvements in students' average scores. They usually only focus on the average scores of each assessment. Analysing students' responses by gender was also a new approach for most teachers. Another issue was that although teachers had already learned about and developed relevant

formative assessments, some of them still applied the assessments as summative assessments which did not provide any feedback to help them improve their teaching practices.

Based on the data teachers collected, almost all teams or schools found improvements in the average scores after they implemented their action plans. Only one school in Sumbawa reported that there was no change in learning outcomes after implementing the new teaching scenario. Two teachers at this school had developed an action plan to improve students' focus during mathematics lessons. The average post-test score was 77 which was lower than that the average pre-test score of 84. However, the percentage of students who scored higher than the targeted minimum score of 75 was higher in the post-test. The decrease in the average score might be related to the relevancy and effectiveness of the action plan in addressing the learning problem. Another possible reason could be the effectiveness of the assessment tools in detecting which competencies students were still lacking.

PHASE 5: DISSEMINATION OF EXPERIENCES AND FINDINGS

After completing the four workshops, teachers presented their action research experiences using various media at the dissemination event called Gelar Karya. This event was held on 22 May 2017 in North Lombok and on 24 May 2017 in Sumbawa. In North Lombok there were 176 participants in this event and in Sumbawa there were 161 participants. The participants included the Guru BAIK teachers, facilitators, local lecturers, school supervisors, district officials, as well as school principals and teachers from other schools.

The purpose of the activity was to share the experiences and results of the Guru BAIK activities (the learning strategies, materials and students' learning outcomes) with other teachers, school principals, school supervisors and district officials. The event was also to show how problem-based teaching and learning could potentially improve the quality of classroom learning and students' learning outcomes. INOVASI prepared information booths for the event and held a series of discussion sessions for teachers to share their experiences, their work and the results with the audiences.

During the discussion sessions (named Inspirasi dari Guru – teachers' inspiration), some teachers reported that they became more aware of students' learning problems in the process of designing their teaching strategies. Audiences from other schools also reported that the Guru BAIK action research approach had inspired them to replicate the process, including the dissemination activity itself. For example, one school principal in Sumbawa had the idea of creating an INOVASI corner in his school, similar to the setting of Gelar Karya, so that teachers could share their innovative teaching practices regularly.

Chapter 3

Guru BAIK process evaluation results

This chapter assesses to what extent Guru BAIK achieved its intended outputs and intermediate outcomes.² The first section discusses teachers' participation in all the Guru BAIK activities and the next section examines to what extent teachers are able to apply their knowledge of classroom action research methodology. The final section of this chapter discusses teachers' perceptions of the Guru BAIK activities as well as the facilitators' performance and the potential for the sustainability of the pilot.

TEACHERS' PARTICIPATION IN GURU BAIK ACTIVITIES

The Guru BAIK pilot activities comprised four workshops with on-the-job processes in classrooms after each workshop and a dissemination activity, Gelar Karya. The number of teachers who successfully completed all activities is presented in Table 3.1 and Table 3.2. These tables show that 93 teachers completed all activities, including Gelar Karya, or 93 per cent, given that 100 teachers took part altogether. All teachers fully participated in the four workshops and, while not all teachers attended the dissemination activity, at least one teacher from each school participated in this activity and presented their action plans.

There was no notable difference between the women and men teachers in terms of their participation. However, with regard to location, Sumbawa's teacher participation rates were higher than those in North Lombok. Nearly all the teachers (98 per cent) in Sumbawa attended all activities compared to 88 percent of teachers in North Lombok.

Table 3.1 Number of teachers who attended Guru BAIK activities, by location

No.	Location	Workshop 1	Workshop 2	Workshop 3	Workshop 4	Gelar Karya	All activities
1	North Lombok	50	50	50	50	44	44
2	Sumbawa	50	50	50	50	49	49
Total		100	100	100	100	93	93

Table 3.2 Number of teachers attended Guru BAIK activities by gender

No.	Gender	Workshop 1	Workshop 2	Workshop 3	Workshop 4	Gelar Karya	All activities
1	Female	54	54	54	54	50	50
2	Male	46	46	46	46	43	43
Total		100	100	100	100	93	93

² The end of pilot outcome and student learning outcomes information will only be completed in the fourth quarter of 2017.

In addition to monitoring data, INOVASI also interviewed 84 of the 100 participants during the baseline survey. More detailed analysis of the demographic characteristics and employment status of the participants in this chapter is based on the baseline survey data. Among the 84 participating teachers, around 80 per cent (67 teachers) are public servants, while 20 per cent (17 teachers) are non-permanent teachers. In terms of education qualification, 91 per cent of the teachers had obtained at least a university degree.

The average age of the participating teachers was 39 years old, with the youngest being 25 years old and the oldest being 53 years old. Around one-fifth of the teachers were below 32 years old and around 27 per cent were over 50. Furthermore, 78 per cent of the young teachers (below 32 years old) were from North Lombok, while only around 22 per cent were from Sumbawa. Regarding their employment status, 60 per cent of these young teachers had permanent teacher status.

TEACHERS' KNOWLEDGE AND SKILLS

We also needed to assess how the participating teachers applied their knowledge on classroom action research methodology. We used sets of criteria developed by the EPD team to assess whether they successfully implemented each stage in the action research program.

Problem identification

To determine whether teachers successfully identified problems at the first stage, we used the following criteria to assess the problems that participants identified:

1. The identified problem is relevant – it is related to students' understanding and abilities in literacy (Bahasa Indonesia) and numeracy (mathematics);
2. The identified problem is important – it has a large impact on students' understanding and abilities in literacy and numeracy;
3. The identified problem occurs often during the learning process;
4. Most of the students experience the identified problem;
5. The identified problem can be solved in around one month (in April 2017);
6. The required learning media and resources to solve the identified problem are affordable;
7. The potential solutions are doable and within teachers' working scope.

Using these criteria,³ the average score for all teachers was 88.83 with the highest score of 100 and the lowest of 13.33. Seventy-six teachers were able to identify problems that met the criteria⁴ which was higher than the target of 65 percent set in the precise indicator 3.1.1. The team of teachers who scored the lowest was from Sumbawa. Among the 19 teachers who performed below the minimum targeted score,⁵ around 89 per cent were permanent teachers and 75 per cent were over 37 years

³ Prior to scoring, each criterion was weighted. The weighting for the first and second criteria were 20 per cent and 30 per cent respectively. The other criteria's weighting was 10 per cent for each of them.

⁴ Teachers had to achieve at least 80 to be considered as being able to identify problems that met the agreed criteria.

⁵ We did not have detailed data on the characteristics of all the 24 teachers who failed to meet the criteria – only data on 19 teachers were obtained from the Guru BAIK baseline survey.

old. All teachers under the age of 32 managed to identify problems that met the criteria and achieved the minimum targeted score.

Table 3.3 Summary: Teachers who are able to identify problems and research questions, percentage

No.	Data	
1	Average score	88.83
2	The highest score	100.00
3	The lowest score	13.33
4	Minimum targeted score (out of 100)	80.00
5	Number of teachers (participants) who scored at least 80	76
6	Percentage of teachers (participants) who scored at least 80	76%
Target		65% - achieved

Looking at the two districts, the percentage of teachers who identified problems that met the agreed criteria in North Lombok was 84 per cent, around 16 percentage points higher than that of teachers in Sumbawa. There was also a difference in the percentage of younger teachers (below 32 years old) in the two districts with more young teachers in North Lombok than in Sumbawa. The younger teachers achieved higher average scores than their older colleagues. In terms of gender, however, there was no notable difference between the women and men teachers. Table 3.4 and Table 3.5 show the achievements of teachers by location and gender respectively.

Table 3.4 Number of teachers who identified problems which met the agreed criteria, by location

No.	Location	Number of teachers who identified problems that met the agreed criteria	Percentage of teachers who identified problems that met the agreed criteria
1	North Lombok	42 out of 50	84%
2	Sumbawa	34 out of 50	68%
Average		76 out of 100	76%

Table 3.5 Number of teachers who identified problems which met the agreed criteria, by gender

No.	Gender	Number of teachers who identified problems that met the agreed criteria	Percentage of teachers who identified problems that met the agreed criteria
1	Female	41 out of 54	76%
2	Male	35 out of 46	76%
Average		76 out of 100	76%

Regarding the difference by employment status,⁶ non-permanent teachers had an average score of 91, slightly higher than the permanent teachers who scored 88. Around 88 per cent of non-permanent teachers (17 out of 19) were able to identify problems that met the criteria, while around 75 per cent of permanent teachers (50 out of 65) were able to do so.

Looking at the differences by age in more detail, teachers aged under 40 also had a higher average score than those over 40. The average score of the teachers below 40 years old was 93, around 11 points higher than their older colleagues. The percentage of young teachers who could identify problems that met the criteria was around 88 per cent, significantly higher than for their older colleagues (64 per cent).

Developing action plans

After teachers identified the problems, they were trained to develop action plans or potential solutions to address the problems. We assessed the plans based on the following criteria:

1. The action plan is aligned with the problems they are focusing on;
2. The success indicator of the action plan is measurable;
3. The action plan can be carried out by the teachers themselves;
4. The action plan is within teachers' working scope;
5. The action plan can be done in a month (in April 2017);
6. The required learning media and resources are affordable for teachers, both technically and financially.

The average score⁷ of the teachers in developing action plans was around 79, with the highest and lowest scores of 100 and 0 respectively. The scores are based on an assessment of the potential solutions identified by teachers. The lowest scores were from a team from Sumbawa. Most of the potential solutions that teachers from this school identified did not meet the criteria. However, in the next workshop, teachers and facilitators discussed and elaborated on the solutions they had identified and then asked the team members to prioritise one potential solution to be developed as an action plan. Therefore, the team with the lowest score still managed to revise and develop the action plan that they could implement in the subsequent session. This process also applied to other teams.

Out of all the teachers involved, 78 per cent were able to develop action plans that met the criteria⁸ so the target in precise indicator 3.1.2 was achieved. Out of the 18 teachers who failed to meet the criteria, 83 per cent were permanent teachers and 75 per cent were over 32 years old. Only one in seven teachers under 30 years old did not meet the minimum targeted score of 80.

⁶ The employment status of teachers was also obtained from the Guru BAIK baseline survey that interviewed 84 teachers who participated in the pilot activities.

⁷ To calculate the scores, we use the following weights: 25 per cent, 20 per cent, 15 per cent, 15 per cent, 10 per cent and 15 per cent, for the first to the sixth criteria.

⁸ Teachers have to achieve at least 80 to be considered as those who were able to develop an action plan that met the criteria.

Table 3.6 Summary: Teachers who are able to develop action plans, percentage

No.	Data	
1	Average score	79.1
2	Highest score	100
3	Lowest score	0
4	Minimum targeted score (out of 100)	80.00
5	Number of teachers (participants) who scored at least 80	78
6	Percentage of teachers (participants) who scored at least 80	78% - exceed the target
Target		65%

Looking at the differences by location, 92 per cent of teachers in North Lombok were able to develop action plans that met the criteria which is significantly higher than the percentage in Sumbawa (64 per cent). As with the findings in the first phase, the large difference by location was also related to the difference in the proportion of younger teachers in the two districts. North Lombok has a higher percentage of young teachers (under 32 years old) who performed better than their older colleagues. With regard to gender, there were no differences between the women and men teachers. Table 3.7 and Table 3.8 show the comparisons by location and gender respectively.

Table 3.7 Teachers who are able to develop action plans, by location, percentage

No.	Location	Number of teachers who developed action plans that met the criteria	Percentage of teachers who developed action plans that met the criteria
1	North Lombok	46 out of 50	92%
2	Sumbawa	32 out of 50	64%
Average		78 out of 100	78%

Table 3.8 Teachers who are able to develop action plans, by gender, percentage

No.	Gender	Number of teachers who identified potential solutions that met the agreed criteria	Percentage of teachers who identified potential solutions that met the agreed criteria
1	Female	42 out of 54	78%
2	Male	36 out of 46	78%
Average		78 out of 100	78%

Implementing the action plans

In the third stage of the Guru BAIK activities teachers implement the action plans they developed. We used the following four criteria to determine whether teachers managed to implement their action plan:

1. The teaching and learning process was implemented based on the learning scenario;
2. The learning instruments and students' survey were used during the implementation;
3. The formative assessments were conducted during the classroom learning process;
4. The students responded well to the tested strategy.

Most of the information to assess these criteria was obtained through classroom observation. When the action plans were being implemented, the facilitators observed the process to assess teachers' capacity to implement their action plans. Teachers were expected to fully implement their action plans based on their learning scenarios. Also, they were expected to use the learning instruments to conduct a student survey that would enrich their analyses in the next phase.

Facilitators also assessed the performance of teachers in undertaking formative assessments in class through classroom observation. They used an instrument developed by INOVASI to check the techniques that teachers used in their classrooms. This instrument lists nine criteria for good formative assessments. Teachers using all the techniques listed in the instrument received full marks.

Based on these criteria,⁹ almost all teachers were considered able to implement their action plans. The average score was 95.8 with the highest and the lowest at 100 and 78.83 respectively.¹⁰ There were 96 teachers who managed to implement their action plans so that they achieved the target of precise indicator 3.1.3.

Table 3.9 Summary: Teachers who successfully implemented their action plans, percentage

No.	Data	
1	Average score	95.80
2	Highest score	100.00
3	Lowest score	78.83
4	Minimum targeted score (out of 100)	80.00
5	Number of teachers (participants) who scored at least 80	96
6	Percentage of teachers (participants) who scored at least 80	96%- <i>exceed the target</i>
Target		70%

Despite this achievement, two teams of teachers from North Lombok did not achieve the minimum targeted score, as they did not fully implement the planned learning scenario.

With regard to gender, we detected no difference in men and women teachers' capacity to implement their action plans.

⁹ The weighting of the first criterion is 50 per cent. The weighting of the second criterion is 20 per cent, while the weighting for both the third and the fourth criteria is 15 per cent.

¹⁰ The EPD team did the scoring for this indicator using facilitator reports and teacher assessment as data sources. These were based on classroom observation during action plan implementation.

Table 3.10 Teachers who successfully implemented their action plans, by location, percentage

No.	Location	Number of teachers who successfully implemented their action plans	Percentage of teachers who successfully implemented their action plans
1	North Lombok	46 out of 50	92%
2	Sumbawa	50 out of 50	100%
Average		96 out of 100	96%

Table 3.11 Teachers who successfully implemented their action plans, by gender, percentage

No.	Gender	Number of teachers who successfully implemented their action plans	Percentage of teachers who successfully implemented their action plans
1	Female	52 out of 54	96%
2	Male	44 out of 46	96%
Average		96 out of 100	96%

Data analysis and reflection

At the fourth stage of Guru BAIK activities, the following criteria were used to determine whether teachers successfully analysed the data:

1. The teachers calculated the results of the learning instruments and the student surveys;
2. The teachers defined the meaning of the calculation results by linking them with the research questions;
3. The teachers analysed the results and used them to reflect on the classroom learning and design the next action plan.

Using these criteria¹¹ the average score was 93.7, with the minimum and maximum scores at 67 and 100 respectively. Out of all teachers, 92 per cent successfully analysed and used their data as part of the action research program. As with the findings in the previous stages, younger teachers of below 40 tended to perform better in analysing data. Only one out of the 41 young teachers in the group did not succeed at this task.

Table 3.12 shows the comparison between men and women teachers. The percentage of men who performed well was around 10 percentage points higher than the percentage of women who performed well. Most of the women who did not achieve the minimum targeted score were over 40 but their male counterparts over 40 all achieved the benchmark target.

Comparing the two districts, all the teachers in North Lombok successfully met the criteria for successful data analysis, compared to around 84 per cent of teachers in Sumbawa. This significant difference related to the findings that younger teachers tended to perform better. North Lombok has

¹¹ The first two criteria were weighted at 34 per cent while the last one was weighted at 32 per cent.

a higher percentage of teachers under 30 years old.

Table 3.12 Summary: Teachers who successfully analysed data collected, percentage

No.	Data	
1	Average score	93.72
2	Highest score	100
3	Lowest score	67
4	Minimum targeted score (out of 100)	80.00
5	Number of teachers (participants) who scored at least 80	92
6	Percentage of teachers (participants) who scored at least 80	92% - exceeds the target
Target		65%

Table 3.13 Teachers who successfully analysed the data, by gender, percentage

No.	Gender	Number of teachers who successfully analysed the data	Percentage of teachers who successfully analysed the data
1	Female	47 out of 54	87%
2	Male	45 out of 46	97%
Average		92 out of 100	92%

Table 3.14 Teachers who successfully analysed the data, by location, percentage

No.	Location	Number of teachers who successfully analysed the data	Percentage of teachers who successfully analysed the data
1	North Lombok	50 out of 50	100%
2	Sumbawa	42 out of 50	84%
Average		92 out of 100	92%

Overall teachers' performances in the four workshops

Although most targets in each workshop were achieved, only 56 percent of all participants reached the minimum targeted score in all stages. Based on the assessments of teachers' performance in the four workshops, these teachers successfully completed all tasks to a standard that met the INOVASI criteria, with a score of at least 80 in every workshop. Around 90 percent of the successful teachers were below 48 years old. A higher proportion of the men teachers involved were included in this group, at 59 percent, compared to 54 percent of the women teachers.

Looking more closely at the differences by age, teachers aged below 30 had the highest success rates in all stages. Six out of the seven teachers under 30 (86 per cent) managed to achieve at least 80 in each stage. Out of the teachers aged between 30 and 40, 63 percent successfully completed all tasks and met the INOVASI criteria. Lastly, around 44 per cent of the teachers aged over 40 were successful in all stages.

Table 3.15 Teachers who were successful in all stages of the Guru BAIK pilot, by gender

No.	Gender	Number of teachers who were fully successful in Gur BAIK	Percentage of teachers who were fully successful in Guru BAIK
1	Female	29 out of 54	54%
2	Male	27 out of 46	59%
Average		56 out of 100	56%

Table 3.16 Teachers who were successful in all stages of Guru BAIK, by location

No.	District	Number of teachers who were fully successful in Guru BAIK	Percentage of teachers who were fully successful in Guru BAIK
1	North Lombok	40 out of 50	80%
2	Sumbawa	16 out of 50	32%
Average		56 out of 100	56%

Table 3.15 and 3.16 provide the comparisons by district and gender. Comparing the districts, the proportion of successful teachers in North Lombok (80 per cent) was significantly higher than the proportion of successful teachers in Sumbawa (32 per cent). Only 16 out of 50 teachers in Sumbawa performed well in all stages. Nearly all the teachers aged below 30 years old who were successful in all stages were from North Lombok. However, this group only counts for around 17 per cent of all teachers in North Lombok. Around half of the participants in both districts are between 30 and 40 years old.

Regarding the performance of teachers aged between 30 and 40, there was a significant difference in the proportion of successful teachers between the two districts. Around 90 per cent of teachers in this age group in North Lombok scored at least 80 in all stages, while only 35 per cent of the same age group in Sumbawa had that level of success. A similar pattern emerged in the group of teachers aged over 40 – around 71 per cent of this group in North Lombok achieved the minimum targeted score, while only 27 per cent of this age group in Sumbawa succeeded. Overall, the participants from North Lombok performed better in the Guru BAIK activities than those from Sumbawa. More than a third of the teachers in Sumbawa did not achieve the minimum targeted score in the first two workshops, identifying problems and developing action plans.

The findings on the challenges some teachers faced in identifying problems could be related to their ability to process information. Based on the reading comprehension tests for teachers during the baseline survey, only around half of the teachers in both districts were able to interpret and integrate ideas and information that were not explicitly stated. Teachers in Sumbawa scored slightly lower than those in North Lombok in processing implicit information. However, Sumbawa's teachers performed much better in data analysis in the mathematics test than the North Lombok teachers.

Other information discovered in the field was that Guru BAIK activities were implemented during harvest time in Sumbawa. Some teachers in this district are also farmers and were sometimes busy

with their side-jobs so could not put all their efforts into preparing for the workshops. Out of the 50 participants in Sumbawa, nearly one-third had side-jobs as farmers and only four out of these 14 performed well in each stage.

Dissemination of experiences and findings

After completing all tasks in the four workshops, all teachers were invited to share their experiences and findings from their action research with other teachers who had not participated. This dissemination event was called Gelar Karya. Although not all teachers attended this event, at least one team member was able to present their experiences and findings. Table 3.17 and Table 3.18 show the percentage of teachers who participated in Gelar Karya, by gender and location.

Table 3.17 Teachers who participated in Gelar Karya, by gender, percentage

No.	Gender	Number of teachers who participated in Gelar Karya	Percentage of teachers who participated in Gelar Karya
1	Female	50 out of 54	93%
2	Male	43 out of 46	93%
Average		93 out of 100	93.0%

Table 3.18 Teachers who participated in Gelar Karya, by location, percentage

No.	Location	Number of teachers who participated in Gelar Karya	Percentage of teachers who participated in Gelar Karya
1	North Lombok	49 out of 50	98%
2	Sumbawa	44 out of 50	88%
Average		93 out of 100	93%

TEACHERS PERCEPTIONS OF THE GURU BAIK ACTION RESEARCH PILOT

We measured teachers' perceptions of the Guru BAIK action research activity by its relevance to the participants' job or duties and whether the activity would improve their skills and capacity.¹²

Table 3.17 shows that generally teachers perceived that the first workshop (problem identification) and the fourth workshop (data analysis and reflection) were more valuable for them, compared to the second and the third workshops. More than 90 percent of teachers agreed that the first and the fourth workshops were relevant and would improve their capacity, while only around 68 percent agreed for the second and the third workshops. On average, around 82.5 percent of teachers perceived that Guru BAIK activities were valuable which implies that the target of 80 percent was achieved.

¹² An activity evaluation, comprising ten survey questions was used as an instrument. These questions used a Likert scale from 1 to 5. We took the average score of two questions that asked teachers whether the pilot activities were useful for them. Participants are said to perceive Guru BAIK as a valuable activity if their average score is at least 4 – which means that they agree with the statement.

Table 3.19 Summary: Teachers who agree that Guru BAIK has been a valuable activity, percentage^{13 14}

No.	Data	Workshop 1	Workshop 2	Workshop 3	Workshop 4	Average
1	Average score	4.67	3.91	4.01	4.67	
2	Highest score	5.00	5.00	5.00	5.00	
3	Lowest score	3.50	3.00	2.50	3.50	
4	Minimum targeted score (out of 5)	4.00	4.00	4.00	4.00	
5	Number of teachers (participants) who agree that Guru BAIK was a valuable activity	109 out of 116 ²	69 out of 100	68 out of 100	93 out of 94 ³	
6	Percentage of teachers (participants) who agree that Guru BAIK was a valuable activity	94.0%	69.0%	68.0%	93%	81% - exceed the target
Target						80%

The percentage of teachers who thought Guru BAIK was a valuable activity was compared by gender and location. Table 3.20 shows that the percentage of men teachers who agreed that Guru BAIK activities were valuable is slightly higher than that of the women teachers. By districts, the percentage of teachers in North Lombok who agreed with the statement is slightly higher than the percentage in Sumbawa.

Table 3.20 Teachers (participants) who thought Guru BAIK was a valuable activity by gender, percentage

No.	Location	Workshop 1	Workshop 2	Workshop 3	Workshop 4	Average
1	Female	94.55	65.45	64.15	98.11	80.57
2	Male	93.44	73.33	72.34	100.00	84.78
Average		93.97	69.00	68.00	98.94	82.48

Table 3.21 Teachers (participants) who thought Guru BAUK was a valuable activity, by location, percentage

No.	Location	Workshop 1	Workshop 2	Workshop 3	Workshop 4	Average
1	North Lombok	95.00	58.00	86.00	97.87	84.22
2	Sumbawa	92.86	80.00	50.00	100.00	80.72
Average		93.97	69.00	68.00	98.94	82.48

Table 3.21 shows that for the second workshop in North Lombok, only around 58 percent of the participants agreed that the workshop was relevant and useful. There was limited feedback but some teachers emphasised the need for facilitators to explain more clearly. Table 3.21 also shows that only half of the participants in Sumbawa agreed that the third workshop was valuable for them.

¹³ On the activity evaluation of the first workshop, we could not analyse the responses by their occupation so the 116 people who filled in the forms included the facilitators.

¹⁴ Six teachers did not fill in the activity evaluation form.

Some participants said that a one-day workshop was not long enough. They needed more explanation and discussion on the differences between formative and summative assessments. In addition, based on their feedback, some of the teachers needed more support in implementing their action plans after the workshop.

In addition to teachers' views on all the workshops, they were asked whether they would continue to use the action research methodology to improve their work. Table 3.22 shows that 86 out of the 93 teachers agreed that they would continue to use the action research methodology. This indicates that the target of 80 percent for this indicator was achieved.

Table 3.22 Summary: Teachers who agree that they will continue to use the action research methodology to improve their work, percentage

No.	Data	Average
1	Average score	4.5
2	Highest score	5
3	Lowest score	4
4	Minimum targeted score (out of 5)	4
5	Number of teachers who agreed they will continue to use action research methodology	86
6	Percentage of teachers who agreed they will continue to use action research methodology	86% - exceed the target
Target		80%

LOCAL FACILITATOR PARTICIPATION AND PERFORMANCE IN GURU BAIK ACTIVITIES

During the implementation of Guru BAIK, INOVASI collaborated with both national and local facilitators. Local facilitators played the largest role in supporting the sustainability of the Guru BAIK pilot in the two districts. Therefore we needed to assess their participation and performance. Table 3.23 shows the participation of all local facilitators in each activity, categorised by gender, location, institution and disability. All local facilitators attended all workshops, while only seven out of ten local facilitators attended the dissemination event, Gelar Karya.

Table 3.23 Number of local facilitators who completed all Guru BAIK activities

No.	Group	Workshop 1	Workshop 2	Workshop 3	Workshop 4	Gelar Karya	All activities
1	By gender						
	Female	0	0	0	0	0	0
	Male	10	10	10	10	7	7
2	By location						
	North Lombok	5	5	5	5	3	3
	Sumbawa	5	5	5	5	4	4

No.	Group	Workshop 1	Workshop 2	Workshop 3	Workshop 4	Gelar Karya	All activities
3	By institution						
	Government	4	4	4	4	3	3
	University	2	2	2	2	1	1
	Education Quality Assurance Institute(LPMP)	2	2	2	2	2	2
	Elementary school	2	2	2	2	1	1
4	By disability						
	Participants with disability	0	0	0	0	0	0
	Participants with nodisability	10	10	10	10	7	7
	Total	10	10	10	10	7	7

Facilitators' performances were also assessed by the EPD team during Guru BAIK workshops, based on criteria and minimum standard scores set by the team. The evaluation criteria were as follows:

1. Introducing the session and giving an the overview of it;
2. Stating the purpose of the session;
3. Identifying teachers' prior knowledge and skills by asking probing questions effectively;
4. Adhering to the purpose of the session during the facilitation process;
5. Motivating teachers to continuously learn and improve their pedagogical competencies;
6. Checking on the achievement of teachers regularly during the facilitation process;
7. Using relevant examples to support teachers in achieving the purpose of the session;
8. Engaging teachers to participate actively during the discussion;
9. Using the active listening technique in interacting with teachers;
10. Speaking clearly;
11. Facilitating teachers respectfully;
12. Being confident with the content of the session;
13. Using the allocated time to guide teachers intensively;
14. Talking at the right pace and for less than 10 minutes;
15. Giving constructive feedback to teachers;
16. Putting teachers at the centre of the discussions by giving them opportunities to share their opinions and ideas;
17. Giving opportunities for teachers to evaluate their achievements in each session.

Based on the above criteria, the minimum standard score of 60 was used to determine whether local facilitators had already demonstrated the skills needed to implement the Guru BAIK action research pilot. Table 3.24 provides the data about the local facilitators who were considered able to implement the Guru BAIK action research activity. Table 3.25 and Table 3.26 show the results of performance appraisals by district and institution.

Table 3.24 Local facilitators who demonstrated the knowledge and skills needed to implement the Guru BAIK action research program

No.	Data	Workshop 2	Workshop 3	Workshop 4	Average
1	Average facilitators' scores	61.43	68.17	74.17	67.92
2	Highest score	71.43	86.67	86.67	78.81
3	Lowest score	39.39	61.67	66.67	56.47
4	Minimum targeted score (out of 100)	60.00	60.00	60.00	60.00
5	Number of local facilitators who scored at least 60	7	10	10	8
6	Percentage of local facilitators who scored at least 60	70%	100%	100%	80% - achieved the target
Target					80%

Table 3.25 Local facilitators who demonstrated the knowledge and skills to implement the Guru BAIK pilot, by location, percentage

No.	Location	Workshop 2	Workshop 3	Workshop 4	Average
1	North Lombok	60	100	100	60
2	Sumbawa	80	100	100	100
Average		70	100	100	80

Table 3.26 Local facilitators who demonstrated the knowledge and skills to implement the Guru BAIK pilot, by institution, percentage

No.	Location	Workshop 2	Workshop 3	Workshop 4	Average
1	Government	50	100	100	75
2	University	100	100	100	100
3	Education Quality Assurance Institution (LPMP)	100	100	100	100
4	Elementary school	50	100	100	50
All institutions		70	100	100	80

Chapter 4 Conclusion

Based on the overall assessments of certain indicators, we can conclude that the Guru BAIK pilot met its targets. Out of 13 indicators, only one target was not met, which was the number of local facilitators who successfully completed all the activities in the Guru BAIK process from beginning to end. Most of the targets were exceeded. This study provides information that can be considered in future for further investigation, such as: the lack of women facilitators; areas for improvement for certain workshops that seemed to have limited benefit; and the performance gaps between the districts, age groups and by gender.

The summary of Guru BAIK achievements is provided in Table 4.1. However, other key indicators, such as improved teaching practices and student learning outcomes, have not been measured as the endline data are not yet available. To measure the pilot's achievement in improving teaching practices and students' learning outcomes, INOVASI will conduct an endline study in the fourth quarter of 2017.

Table 4.1 Summary of Guru BAIK achievements

Key Performance Indicator	Precise Indicator	Target	Achievement
3.1 Teachers have the knowledge and skills to use classroom action research as a contextual teaching and problem-solving methodology	3.1.1 Percentage of teachers who identified problems/research questions which met the agreed criteria* (R)	65%	76%
	3.1.2 Percentage of teachers who developed action plans to address identified problems/research questions which met the agreed criteria (R)	65%	78%
	3.1.3 Percentage of teachers who successfully implemented their action plans (R) (carried out their action research)	70%	96%
	3.1.4 Percentage of teachers who successfully analysed collected data	70%	92%
3.2 The potential for sustainability and scale-out has been maximised	3.2.1 Percentage of local facilitators who demonstrated the knowledge and skills needed to implement the Guru BAIK action research pilot	80%	80%
	3.2.2 Number of schools that joined dissemination activities carried out on the process and findings of Guru BAIK	50	100%
	3.2.3 Number of participants in Guru BAIK dissemination activities	300	337
3.3 Teachers view classroom action research as a valuable teaching and problem-solving methodology	3.3.1 Percentage of teachers who agreed that Guru BAIK was a valuable activity	80%	81%
	3.3.2 Number of teachers who agreed they will continue to use the action research methodology to improve their work	80%	86

Key Performance Indicator	Precise Indicator	Target	Achievement
4.1 Local facilitators able to support the implementation of the Guru BAIK program	4.1.1 Number of local facilitators who successfully completed all activities in the Guru BAIK process from beginning to end (A)	10	7
4.2 Teachers trained to use classroom action research principles	4.2.1 Number of teachers who successfully completed all activities in the Guru BAIK process from beginning to end (A)	90	93
4.3 Teachers demonstrate improved practices in teaching and learning identified skills in the classrooms	4.3.1 Percentage of teachers who demonstrated improved practices in teaching and learning in the classroom (R)	80%	To be measured after the end-line survey
4.4 Students in participating teachers' classes improve performance in identified skills in literacy and numeracy	4.4.1 Overall average percentage increase in student learning outcomes as a result of action plans (R)	5%	To be measured after the end-line survey
	4.4.2 Percentage of research teams that achieved their targets in increasing student learning outcomes in literacy and numeracy	70%	96%
4.5 Experiences and findings have been documented and shared	4.5.1 Percentage of promising practices emerging from the Guru BAIK pilot shared locally (A)	100%	100%
	4.5.2 Percentage of promising practices emerging from the Guru BAIK pilot on the INOVASI learning platform	100%	To be measured after the finalisation of learning platform

Appendix A: Glossary

- activity* Actions taken or work performed through which inputs are mobilised to produce specific outputs, for example workshops are set up and the number of participants who attend them can be counted.
- baseline* The state before the intervention, against which progress can be assessed or comparisons made. Baseline data are collected before a pilot is implemented to establish the before state. The baseline data is important to document balance in pre-program characteristics between treatment and comparison groups.
- classroom action research* Research in which educators examine and reflect upon their own practices and evaluate strategies to improve practices in the classroom. It is a multi-stage type of research in which a problem is researched, changes are made, the problem is researched again, more changes are made, and so on, through a number of cycles, until the problem is solved.
- evaluation* A periodic, objective assessment of a planned, ongoing or completed activity, project, program or policy. Evaluations are used to answer specific questions, often related to design, implementation or results.
- formative assessment* Continuous assessments, often in diverse, non-standardised forms, made for the purpose of informing ongoing teaching.
- Gelar Karya* The dissemination activity of Guru BAIK. See Guru BAIK
- Guru BAIK* One of INOVASI's pilot intervention which stands for Guru Belajar, Aspiratif, Inklusif, Kontekstual (BAIK). This pilot title suggests that good teachers are those who are willing to learn and aspire to design an inclusive and contextual learning environment in the classroom. The specific purpose of the Guru BAIK pilot is to provide teachers with the knowledge and skills to integrate action research principles as a contextual, problem-driven methodology to tackle immediate issues and challenges with literacy and numeracy in their classrooms.
- indicator* A variable that measures a phenomenon of interest to the evaluation team or the program.
- monitoring* The continuous process of collecting and analysing information to assess how well a project, program or policy is performing. Monitoring usually tracks inputs, activities and outputs, though occasionally it also includes outcomes. Monitoring is used to inform day-to-day management and decisions. It can also be used to track performance against expected results, make comparisons across programs and analyse trends over time.
- on-the-job process* Follow-up activities after each workshop when the participants apply their skills and knowledge obtained from the Guru BAIK workshops in their own classrooms.

- outcome* A result of interest that is measured at the level of program beneficiaries. Outcomes are results to be achieved once the beneficiary population uses the project outputs. Outcomes are not directly under the control of a program-implementing agency; they are affected both by the implementation of a program (the activities and outputs it delivers) and by behavioural responses from beneficiaries exposed to that program (the use that beneficiaries make of the benefits they are exposed to).
- output* The tangible products, goods and services that are produced or supplied directly by a program's activity. The delivery of outputs is directly under the control of the program-implementing agency. The use of outputs by beneficiaries contributes to changes in outcomes.
- process evaluation* An evaluation that focuses on how a program is implemented and operates, assessing whether it conforms to its original design and documenting its development and operation.

Appendix B:

Guru BAIK evaluation indicators

Key Performance Indicator	Precise Indicator	Target	Primary Data Source	Main Levels of Disaggregation	Timing
IMPACT					
1.1 Improved student literacy and numeracy	1.1.1 Improvements in students' performance in numeracy and literacy tests, relative to the control group		School and community survey, student learning assessment module	Sex Disability	December 2016 (baseline)
1.2 Improved students' attitudes	1.2.1 Improvements in students' motivation, experience and perception of teachers and schools, relative to the control group		School and community survey, student module, Section G and I (for the 3rd – 5th grades) and Sections B, E, and F (for the 1st and 2nd grades)	Sex Disability	December 2017 (midline)
	1.2.2 Improvements in parents' opinion of schools, relative to the control group		School and community survey, Parent module, Section I		December 2018 (end line)
	1.2.3 Improvements in principals' opinion of students' attitudes and learning, relative to the control group		School and community survey, Principal module		
1.3 Improved teaching practices	1.3.1 Classroom teaching improvements, relative to the control group		School and community survey, classroom observation module		
	1.3.2 Improvements in principals' satisfaction with/opinion of teachers' practices, relative to the control group		School and community survey, principal module, Section F		
	1.3.3 Improvements in teachers' planning and assessment, relative to the control group		School and community survey, principal module, Section G	Sex Disability	
	1.3.4 Improvements in teachers' opinion of supervision by principals, supervisors, school committees, relative to the control group		School and community survey, teacher module, Section G	Sex	
	1.3.5 Improvements in teachers' opinion of schools and communities and their participation		School and community survey, teacher module, Section H	Sex of children	
1.4 Improved teachers' knowledge, attitudes and skills	1.4.1 Performance improvements in teachers' test, relative to the control group		School and community survey, teacher test module.	Sex	
	1.4.2 Improvements in teachers' absenteeism, relative to the control group		School and community survey, teacher survey module, Section D	Sex Disability	
	1.4.3 Improvements in teachers' professional development and training, relative to the control group		School and community survey, teacher survey module, Section E	Sex	
	1.4.4 Improvements in principals' satisfaction with/opinion of teachers' knowledge, attitudes and skills, relative to the control group		School and community survey, principal module. Section F		
	1.4.5 Improvements in supervisor satisfaction/opinion of teacher knowledge, attitude, and skills, relative to the control group		School and community survey, supervisor module, Questions G1 – G15, and Section H.		
	1.4.6 Improvements in parent satisfaction/opinion of teacher knowledge, attitude, and skills, relative to the control group		School and community survey, parent module, Section F.		

Key Performance Indicator	Precise Indicator	Target	Primary Data Source	Main Levels of Disaggregation	Timing
END OF PILOT OUTCOMES					
2.1 Teachers use classroom action research processes and/or products as a contextual teaching and problem-solving methodology	2.1.1 Number of trained teachers who continue to use classroom action research processes as a contextual teaching and problem solving methodology in the class	70%	Facilitator reports GB pilotrecords Survey	Sex Disability Subject Grade Location	
	2.1.2 Number of non-INOVASI trained teachers within the school and cluster (scale-out) using classroom action research processes as a contextual teaching and problem-solving methodology	50%	Facilitator reports GB pilotrecords Survey	Sex Disability Subject Grade Location	October 2017
	2.1.3 Number of teachers who implement a second cycle/new research questions after 3 months	30%	Facilitator reports GB pilotrecords Survey	Sex Disability Subject Grade Location	December 2017
INTERMEDIATE OUTCOMES					
3.1 Teachers have the knowledge and skills to use classroom action research as a contextual teaching and problem-solving methodology	3.1.1 Percentage of teachers who identified problems/research questions which met the agreed criteria* (R)	65%	Facilitator reports Criteria results from workshop 1	Sex Disability Location	March 2017
	3.1.2 Percentage of teachers who developed action plans to address identified problems/research questions which met the agreed criteria (R)	65%	Facilitator reports Criteria results from workshop 2	Sex Disability Location	March 2017
	3.1.3 Percentage of teachers who successfully implemented their action plans (R) (carried out their action research)	70%	Facilitator reports Evaluation in workshop 4	Sex Disability Location	April and May 2017
	3.1.4 Percentage of teachers who successfully analysed collected data	70%	Facilitator reports Evaluation in workshop 4	Sex Disability Location	May and June 2017
3.2 The potential for sustainability and scale out has been maximised	3.2.1 Percentage of local facilitators who demonstrate knowledge and skills needed to implement the Guru BAIK action research program	80%	Facilitator performance appraisal (evaluation) I	Sex Disability Institution (represented)	October 2017
	3.2.2 Number of schools that joined dissemination activities carried out on the process and findings of Guru BAIK	50	Program records Activity evaluation	Location Time	September 2017
	3.2.3 Number of participants in Guru BAIK dissemination activities	300	Attendance records Biodata	Sex Disability	September 2017
3.3 Teachers view classroom action research as a valuable teaching and problem-solving methodology	3.3.1 Percentage of teachers who agree that Guru BAIK has been a valuable activity	80%	Activity evaluation	Sex Disability Location	April 2017
	3.3.2 Number of teachers who agree they will continue to use the action research methodology to improve their work	80%	Activity evaluation	Sex Disability Location	April 2017

Key Performance Indicator	Precise Indicator	Target	Primary Data Source	Main Levels of Disaggregation	Timing
OUTPUTS					
4.1 Local facilitators able to support the implementation of the Guru BAIK program	4.1.1 Number of local facilitators who successfully completed all activities in the Guru BAIK process from beginning to end (A)	11	Facilitator performance appraisal (evaluation) Workshop evaluation (1-4) Facilitator reports	Sex Disability Institution (represented)	October 2017
4.2 Teachers trained to use classroom action research principles	4.2.1 Number of teachers who successfully completed all activities in the Guru BAIK process from beginning to end (A)	90	Facilitator reports GB program records Survey	Sex Disability Location	October 2017
4.3 Teachers demonstrate improved practices in teaching and learning identified skills in the classroom	4.3.1 Percentage of teachers who demonstrated improved practices in teaching and learning in the classroom (R)	80%	Observation by facilitators pre-test and post-test	Sex Disability Location Subject	Beginning and end of research (April and May 2017)
4.4 Students in classroom of participating teachers improve performance in identified skills in literacy and numeracy	4.4.1 Overall average percentage increase in student learning outcomes as a result of action plans (R)	5%	Review and aggregation of data collected by research teams	Sex Grade Location	September 2017
	4.4.2 Percentage of research teams that achieve their targets in increasing student learning outcomes in literacy and numeracy	70%	Reviews of data collected by research teams	Subject Location	September 2017
4.5 Experiences and findings have been documented and shared	4.5.1 Percentage of promising practices emerging from the Guru BAIK program shared locally (A)	100%	Data from teachers' evaluation Pilot records	Subject Location	October 2017
	4.5.2 Percentage of promising practices emerging from the Guru BAIK pilot on the INOVASI learning platform	100%	Review of results of research projects	Subject Location	October 2017



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