

Indonesia's Issues and Challenges on Teacher Professional Development

Asep Supriatna

(Indonesia University of Education, Indonesia)

1. Background

1.1 Issues and challenges of Indonesian teachers. Teachers' knowledge and skills are necessary to be refreshed and updated since science and technology are growing so fast and the high competitiveness of living in modern society. Without refreshing or updating teachers' knowledge and skills, teachers may not be able to attract students into learning engagement to provide students with appropriate hard and soft skills for competitive living in modern society.

Recently, the Government of Indonesia has paid more attention to the quality of teachers. Based upon Teacher Law 2005, the Government of Indonesia stipulated a teacher as a profession. Teachers should meet the qualification of at least a 4-year Bachelor degree and have teaching certificates. Teachers with a Bachelor degree and teaching experience of at least 10 years may apply for teaching certificates by submitting a portfolio document to be assessed by a panel at a university. A portfolio consists of a copy of the Bachelor certificates, teaching performance certificates issued by principals and supervisors, samples of teaching plans, and attendance evidence at seminars/ workshops/conferences. If the portfolio meets the requirement, teachers pass and get teaching certificates, then their salary is doubled. Otherwise teachers should take 90 hours of training and take examinations; a written test and performance test in the form of peer teaching. If teachers pass the written and performance test, teachers get teaching certificates, otherwise they repeat the examination. However, the Government of Indonesia has not prepared a system to regularly maintain teachers' performance after passing certification.

1.2 Current in-service teacher training. It seems that current in-service teacher training at the provincial level did not work well. Most teachers in West Java Province have not had an opportunity to refresh and update their knowledge and skills since their teaching appointment. The Provincial office of education has not had systematic in-service teacher training yet. Currently, the provincial office of education holds provincial level in-service teacher training. Few teachers (two teachers per subject per district) were invited for intensive three-day training at a hotel. If we calculate the number of teachers of junior secondary schools who participated in the in-service training from 26 districts for 6 subjects as equal to 312 (2 persons/subjects/districts x 26 districts x 6 subjects) teachers out of 82,229 teachers or only 0.4% of teachers who have access to in-service training. In following years, maybe the same teachers would be invited for

in-service training. Trainees received intensive lectures on subject matters or teaching methods from 8:00 to 17:00 and 19:30 to 21:30, so it makes the participants tired. The training programs were designed top down, whether it is needed or not to solve their problems at schools. The District office of education did not facilitate the trained teachers to disseminate or share experiences with other teachers at the district level. The results of in-service training benefited only the individual teacher. In most cases, the results of in-service training were not easy to put into practice, so they kept to the traditional way of teaching. This type of in-service teacher training could be expensive and it is not effective since it could not solve teaching problems at schools and only a few teachers have the chance to participate in the training. There are 306,094 teachers of primary schools (~~186,781 teachers~~), junior secondary schools (82,229 teachers), and senior secondary schools (37,0140 teachers). These teachers need refreshment of their knowledge and skills to improve their performance. The conventional way of the current in-service teacher training is impossible to train all these teachers at once.

1.3 MGMP or Subject Teacher Forum. The Subject Teacher Forum or MGMP is a non-structural organization of teachers whose establishment was stimulated in the Government Regulation No.38 in 1994 regarding Educational Personnel. It is a professional forum for subject teachers at the district level. According to the guideline published by the Directorate General of Primary and Secondary Education , the subject-teacher forum has 5 objectives as follows:

1. To encourage teachers to improve their knowledge and skills in planning, implementing, and evaluating teaching learning activities.
2. To share problems in daily teaching practice and solve the problems according to the characteristics of subjects, teachers, and school and community conditions.
3. To provide teachers with the opportunity to share information and experiences in curriculum implementation and science-technology development.
4. To provide teachers with the opportunity to share ideas for improvement of their knowledge.
5. To build collaboration with other institutions to create conducive, effective, and joyful learning.

The subject-teacher forum was expected to be a form of teacher professional development but it did not work. In fact, to achieve those objectives, the following problems must be addressed:

1. Most activities of subject-teacher forums were project-based held at the central city/district, so there was no guarantee for sustainability.
2. Teachers at rural or remote areas had difficulty to attend the forum due to transportation problems.

3. A number of school principals neglected the forum since principals did not get a benefit for school improvement, so principals gave teachers teaching assignments on forum day instead of giving them permission to leave.
4. The forum activities did not attract teachers to attend since the activities were not promising any benefit for teachers.

There are 3 issues for Indonesian teachers: (1) the Government of Indonesia has not prepared a system to regularly maintain teachers' performance after passing certification; (2) Provincial level of in-service teacher training can only facilitate a very small number of teachers (0.4%) since it is too expensive to accommodate all teachers at a hotel; (3) MGMP or the subject teacher forum at the district level still did not work because teachers had transportation problems from rural or remote areas to the central district and activities were not attractive for teachers.

2. Justification

Based upon these issues, it is a challenge to develop a model of continuing and collaborative school-based teacher professional development at the provincial level. A triangle approach with school-university linkage as shown Figure 1 will be applied in the model development.

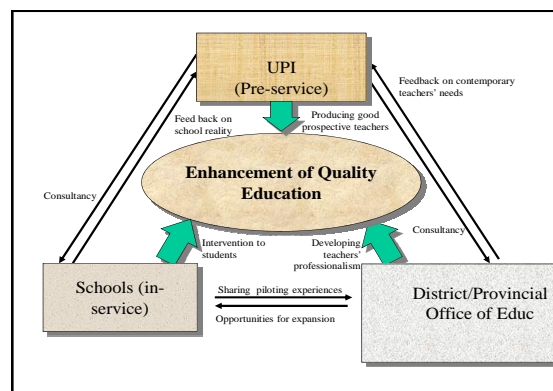


Figure 1. School-university linkage (Saito, 2004)

University (pre-service), schools (in-service), and the district/provincial office of education are important components that contribute to the enhancement of quality education. These three components should be inter-connected for enhancement of quality education. The University which functions as a pre-service teacher training institution needs feedback on school reality and contemporary teachers' needs to produce good prospective teachers. On the other hand, both schools (in-service teacher training) and the district/provincial office of education need university support. University could provide schools with consultancies to intervene between students in promoting student active learning. The University also could provide the district/provincial office of education with consultancies for teacher professional development.

Meanwhile, schools can share best practices of lesson study for dissemination by the district/provincial office of education. The venue of the teacher development will be at schools, so that all teachers have an opportunity to participate in professional development without problems or expensive accommodation and transportation. Lecturers visit schools and work collaboratively with teachers to conduct research lessons in promoting active student learning through hands-on activity, mind-on activity, daily life, and local materials. The model development provides teachers with contextual learning from their real class problems. Principals, supervisors and district/provincial education officers will be involved in the model development according to their functionality to promote role sharing, so that ownership will be built among them to guarantee sustainability.

Piloting of school-based in-service teacher training in the district of Sumedang has proven to be effective and efficient in promoting teachers' performance. Teachers and lecturers conducted collaborative research lessons promoting active student learning through lesson study principles. All mathematics and science teachers (556 teachers) in 8 working groups across the district of Sumedang had the opportunity to participate in regular bi monthly meetings. It was found that teachers become more confident in facilitating active student learning in mathematics and science. Students' learning skills have improved since students have more opportunity to explore mathematics and science concepts through experiment. Accumulation of good learning processes has improved students' achievement as indicated by an increasing average score on the national examination in mathematics from 2005 to 2008, as follows 6.68(2005), 7.61(2006), 7.66(2007), 8.04(2008).

Lecturers obtained important feedback on the school reality for improvement of pre-service education. They utilized the recorded learning process for teaching pre-service students through video conference. Students observed the lesson through video followed by comments and discussion among students. It was more contextual learning for prospective teachers than before when programs relied on imported learning theory through textbooks. Lecturers' attitude in teaching changed to be more democratic and accountable than before. Lecturers gave more opportunity for students to exchange views with others in their work group. Lecturer-teacher collaboration was strengthened through collaborative research lessons.

Sumedang district education officers recognized the benefits for a new paradigm in in-service teacher training through school-university linkage. Disparities in student learning quality between urban and rural/remote areas were reduced. They took initiative to disseminate best practices of the developed in-service teacher training to primary schools and senior secondary schools.

The best practice of piloting in school-based in-service teacher training in the Sumedang district will be scaled up and enhanced for program development at the provincial level. Program development of a model of continuing and collaborative school-based teacher professional development will be implemented in four target districts in West Java Province, which are committed to support the program implementation. The four target districts are Bandung city, Bandung district, West Bandung district, and Subang district (Figure 2). The

Indonesia University of Education is located in Bandung city, which is in the center of the 4 districts. Distribution of junior and senior secondary schools in the target districts is shown in Table 1.

Table 1. Junior and Senior Secondary Schools in Target Districts

	Bandung city	Bandung district	W.Bandung District	Subang district	Total
Public JSS	54	58	38	60	210
Private JSS	158	178	58	27	421
Public Islamic JSS	2	8	-	4	14
Private Islamic JSS	36	184	-	54	274
Public SSC	27	18	14	17	76
Private SSC	92	50	12	5	159
Public Islamic SSC	2	3	-	2	7
Private Islamic SSC	7	20	-	5	32
Total	378	519	122	173	1,192

Notes:

Public JSS = Public junior secondary school

Private JSS = Private junior secondary school

Public Islamic JSS = Public Islamic junior secondary school

Private Islamic JSS = Private Islamic junior secondary school

Public SSC = Public senior secondary school

Private SSC = Private senior secondary school

Public Islamic SSC = Public Islamic senior secondary school

Private Islamic SSC = Private Islamic senior secondary school

The total number of secondary schools in the 4 target districts are 1,192 schools. Bandung district has the largest number of schools (519 schools) in the 4 target districts because it has a larger area than the other 3 target city/districts and it has an urban area. Bandung city is urban area so it has more schools (378 schools) than West Bandung district (122 schools) and Subang district (173 schools).

West Bandung district and Subang district are mostly rural areas of agriculture. West Bandung district does not have Islamic schools because it is a new district; it was part of Bandung district so the Islamic schools are still under the coordination of Bandung district. The cooperation program will be offered to all schools and the target schools will be selected based upon principals' commitment to improve the quality of education and support their teachers. The target city/districts/ will be divided into 8 clusters of working groups per district or city to reduce distance or transportation problems for teacher meetings. Subject based lesson study will be applied for junior secondary schools and school-based lesson study will be applied for senior secondary schools since the number of junior secondary schools (918) is bigger than that of senior secondary schools (274). The distance among senior secondary schools is also rather far away. Approximately, there will be 400 junior secondary schools and 40 senior secondary schools as main target schools.

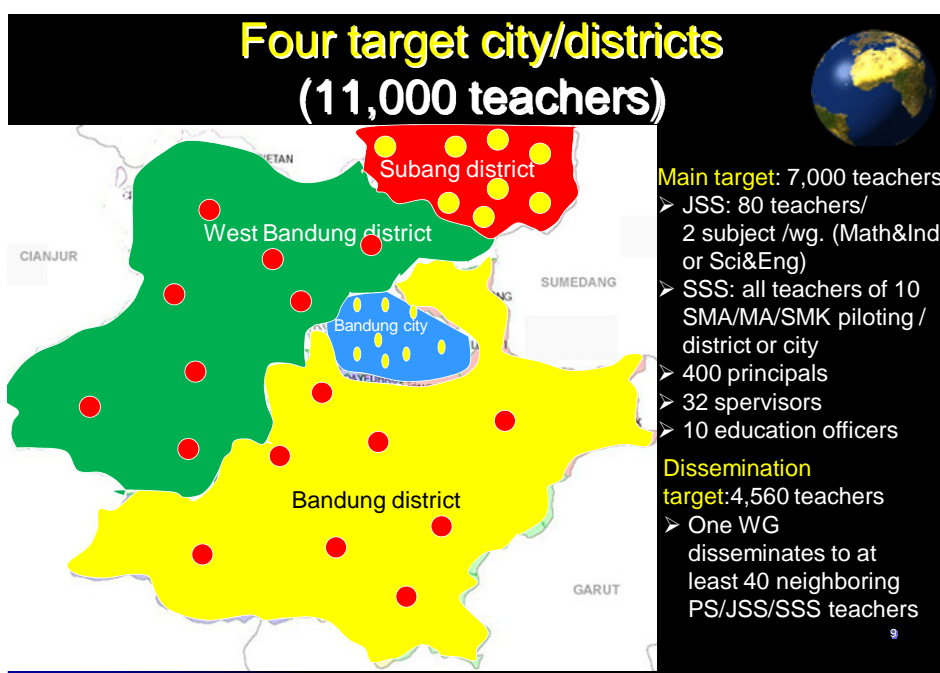


Figure 2. Map of four target districts

Target teachers are approximately 11,000 teachers including principals and supervisors. Main target teachers are about 7,000 junior and senior secondary school teachers. Four subject teachers (mathematics, science, Indonesian, and English) of junior secondary school and all subject teachers of senior secondary school will be selected as target teachers based upon their commitment by submitting a signed agreement. About 4,000 primary school teachers will be the dissemination target of working groups.

3. Objectives

The objective of the study is to develop a model of continuing and collaborative school-based teacher professional development in West Java Province. The model development will adopt and enhance best practices of piloting school-based in-service teacher training in the district of Sumedang. Detailed objectives of the model development are as follows:

1. To improve teachers' skills in designing lesson plans for promoting active student learning by translating curriculum contents into learning materials for students to understand.
2. To improve teachers' skills in facilitating student learning utilizing available learning resources and paying more attention to student learning difficulties.
3. To improve teachers' skills in reflecting the lesson to be followed up for continuous improvement.
4. To improve teachers' communication skills at both classroom and scientific forums.

5. To improve the quality of the learning process of prospective teachers
6. To promote teacher-lecturer collaborative research lessons
7. To promote ownership of the program through the involvement of principals, supervisors and district/provincial education officers to guarantee sustainability.

4. Methodology

R and D type study will be applied in the development of a model of continuing and collaborative school-based teacher professional development. Effectiveness of the developed model (program implementation) will be evaluated by the CIPP (Context Input Process and Product) model. Figure 3 illustrates the CIPP model for program evaluation. A baseline survey functions as a need assessment so the program implementation will be contextual to daily teaching practice. This survey is aimed to obtain information regarding the current situation on the project site as important input to the program implementation. Data collection will be based upon purposive sampling through questionnaires, interviews, and observations. Questionnaires will be distributed to representatives of students, teachers, principals, supervisors, and district/provincial education officers. Representatives of students, teachers, and principals will be interviewed. Several teaching-learning processes will be observed and recorded. In addition, a paper test will be given to students of several classes of junior and senior secondary schools. Progress of the program implementation at the representative project site will be monitored through observation and interviews to obtain feedback for further improvement of program implementation. An endline survey will be conducted at the end of the project to obtain information on project output. Data will be collected through a similar instrument to the baseline survey. Post-project study will be conducted to obtain information regarding project sustainability.

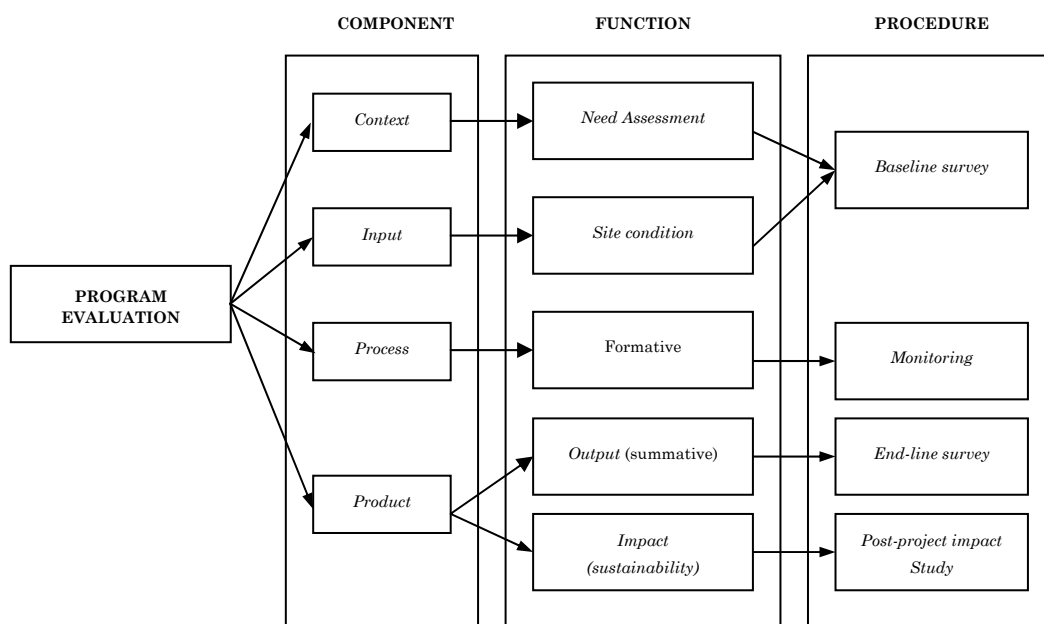


Figure 3. CIPP model for program evaluation

5. Activities

The following eleven activities were set up:

1. Kickoff meeting. This activity was intended to provide stakeholders with general information for the whole program. The stakeholders include representatives of the legislative, the head of the district office of education, the head of the district office of planning, chairperson of education board, representatives of the parent association, representatives of principals, and representatives of the teachers' association.
2. Baseline survey. This survey is aimed to obtain information regarding the current situation of teaching-learning processes and their environment. Data will be collected through questionnaires, interviews, and observations. Questionnaires will be distributed to a representative sample of students, teachers, principals, supervisors, and personnel of district offices of education. Representatives of students, teachers, and principals will be interviewed. Several teaching-learning processes will be observed and recorded. In addition, a paper test will be given to students of several classes of junior and senior secondary schools.
3. Principal and supervisor training. One hundred principals and 8 supervisors in a target district participate in the training twice a year to improve their understanding on quality improvement of education. In the first training, the cooperation programs and lesson study principles will be introduced followed by discussion on how schools could support teachers with transportation fees for regular meetings within the working group. The role of principals will be emphasized to guarantee that their teachers implement

training results in daily teaching practice. Following the training, principals observe the lesson and have post-class discussion based upon their finding.

4. Facilitator training. Fourty two facilitators are selected teachers based upon capacity and commitment from 8 working groups of schools to lead the lesson study activities of their working groups. Facilitators participate in the two-day training session 4 times a year. Principles of lesson study will be introduced in the first training. Main activities for the following trainings are open lessons by facilitators and post-class discussion. Day-1, a facilitator teaches a lesson while other facilitators observe the lesson and discuss their findings soon after the lesson. Day-2, similar activity (open lesson) was done with a different facilitator as a teacher. Lecturers give comments and suggestions to improve the learning quality.
5. Subject based lesson study. This is the main activity done twice a month. The activity for the subject based lesson study will be done in 8 parallel working groups twice a month for junior secondary school teachers on the MGMP (subject forum) day; mathematics teachers on Wednesday; science teachers on Saturday; Indonesian teachers on Tuesday and English teachers on Thursday. Twenty to fourty subject teachers per working group have the regular meeting at a school within the working group. A subject teacher meeting takes place in 4 working groups at a target district or 2 subject teacher meeting, for example mathematics and Indonesian, at a working group on a different day. Five one-day meetings will be held per semester at different schools within the working group according to an agreement in hosting the meeting. Facilitators are in charge of inviting their members and organizing the meeting and one of them will chair the meeting. Meeting-1 preparation: teachers select topics to be studied in one semester based upon the current curriculum. They share learning problems and discuss how to solve the problems in promoting active student learning. Lesson plans are designed collaboratively through considering several aspects: hands-on activity, mind-on activity, daily life, and local materials. Among the teachers it is agreed who will teach the lesson to be observed and which school within the working group is to be the venue for following meetings. Lecturers engage in discussion, instead of giving lectures. A supervisor is assigned to participate in a working group. Meeting-2: the same participants as meeting-1 review the lesson plan, teaching materials, and student worksheet. Meeting-3 open lesson: a faciltator chairs a briefing before starting the open lesson, gives the teacher an opportunity to inform observers on the topic to be taught and its expectation. The Chairperson reminds observers how to behave during the observation of student learning activities. Observation is focused on student learning. How do students learn? Why do students not learn? The teacher teaches the lesson while other teachers, supervisor, university students, and lecturers observe the lesson to collect data regarding student learning activities. Then, post-class discussion is held soon after the lesson to reflect student learning. The Chairperson, first, gives an opportunity to the teacher to reflect on the lesson followed by other observers to comment and share

views on his/her findings regarding student learning. Lecturers give comments and suggestions to improve the quality of students' learning. Then teachers redesign the lesson plan to be followed up by teachers in his/her classes and the findings are shared at the following meeting. Meeting-4 and -5 have similar activities as meeting-3: findings of follow-up from the previous meeting are shared at the briefing session before the open lesson and post-class discussion, except different school venues and teachers open the lessons.

6. School based lesson study. This activity will start for 10 piloting senior secondary schools in a target district. The selection of piloting schools is based upon proposals to be evaluated by a commission composed of education district officers and lecturers. Selection criteria is based upon the commitment of school principals and teachers in reforming their school. All teachers regardless of the subject they participate in have regular bi-monthly lesson study activities. School principals assign a teacher to be a coordinator for implementing school based lesson study. The regular, bi-monthly meeting for all teachers in a piloting school will be held on one day while students have extra curricular activities, such as music, sports or boy scouts. A workshop for all teachers and staff will be held prior to implementing regular school based lesson study to discuss the principles of lesson study and have an agreement on which subjects and teachers will be selected for open lesson in the semester. Teachers who teach the same subjects work collaboratively in preparing lesson plans, teaching materials, and student worksheets. Open lesson activities are done similar to subject based lesson study, except the participants are all teachers in one school. Two lecturers of the Indonesia University of Education will be assigned to work collaboratively with teachers.
7. Evaluation workshop. This workshop will be held twice a year at the end of the semester to share experiences, discuss problems, and solve the problems for the improvement of quality lesson study activities in promoting active student learning. Representative principals, supervisors, and facilitators of the 8 working groups and 10 piloting schools where lesson study is based present their findings followed by discussion. Monitoring results will be presented by lecturers for feedback in following activities. District/provincial education officers and lecturers of the Indonesia University of Education give comments and suggestions for improvement of following activities.
8. Dissemination forum. The best practices of continuing and collaborative school-based teacher development by applying lesson study will be disseminated to other schools. This activity will be held at every working group twice a year by inviting primary school principals and teachers of neighboring schools. Teachers and principals from the working group share their findings followed by discussion. Each working group disseminates the best practice to 40 teachers of dissemination targets per semester. Facilitators are encouraged to help dissemination targets to implement lesson study.
9. Conference and publication. A conference on lesson study will facilitate sharing best practices and benchmarking among teachers as practitioners, policy makers, and

developers. Results of the research will be published through journals and a website as learning resources for others to learn. Each working group will be assigned to share findings in the form of articles or videos through the website.

10. Coordination meeting. This coordination meeting is to make sure the program implementation is on the right track. The Annual JCC (Joint Coordinating Committee) meeting among provincial decision makers give suggestion for the program implementation. A management meeting among the management teams of the involved institutions discuss planning, implementation, and evaluation of programs. Task team members will have meetings 4 times a year to discuss, share, and reflect on program implementation.
11. Endline survey. Similar instrument for baseline survey will be used for endline survey. Then the results of the endline survey will be compared with the baseline survey to obtain information on the effect of the developed programs.

6. Role Sharing

This program promotes role sharing instead of being reliant on a single donor. Schools are responsible for teacher transportation fees and teacher assignments. The district office of education coordinates teachers, principals, and supervisors of all target schools. The provincial office of education is responsible for training and publication of best practices as learning resources for teachers. The Indonesia University of Education supported lecturers with transportation fees. The Directorate General of Higher Education supports financial allocation for the Indonesia University of Education. It is expected that role sharing systems promote ownership of the program to guarantee sustainability. The total budget for 3 years of program activities is US\$ 2,014,097. It was agreed that the involved institutions contribute to this total budget, such as the contribution of Directorate General Higher Education DGHE (40.50%), Indonesia University of Education (10.04%), provincial office of education (19.31%), district offices of education (5.65%), and schools (24.5%).

7. Progress and Expeted Output

This research has been designed for three years, from 2010 to 2012. Lesson study approach has been applied for In service Teacher Training INSET of junior and senior secondary school teachers in 4 districts. Teachers and teacher educators work collaboratively and periodically to conduct research lessons in promoting active student learning through hands-on activity, mind-on activity, daily life, and local materials. This study is expected to develop a model of continuing and collaborative school-based teacher professional development. Teachers and lecturers or teachers among themselves work collaboratively to continuously study the lesson promoting active student learning. It emphasizes classroom activities as learning resources for knowledge sharing and creation to promote teachers' performance in facilitating active student

learning. It is expected that improvement will occur in teachers' ability to translate curriculum content into learning materials for students to understand as well as pay more attention to student learning difficulties. Students are expected to enjoy learning so that they are able to improve their learning skills which will affect students' achievement and attitudes.

Lecturers are expected to obtain experience on school reality in collaborative study lessons at schools as contextual learning resources for pre-service students. It is also expected that improvement will occur in lecturers' performance to facilitate student learning and more attention will be paid to student learning difficulties. The participation of prospective teachers in lesson study at schools will enrich them with real practical situations.

Teacher-lecturer collaborative research lessons are expected to produce articles for publication to provide other teachers across the country with references for the improvement of quality learning. Video records of student learning activities in classrooms are important physical output for further learning resources for teachers and prospective teachers. It is mandatory for facilitators of every working group to be able to record and edit the videos.

Another important output to be expected from this program is the strengthening of the partnership between UPI and provincial offices of education.

8. Activities done for the period of April to July are as follows:

Baseline survey

Data collection was done in 4 district sites through a questionnaire for students, teachers, principals, school supervisors and education district officers; focus group discussion for representative teachers; and observation of the teaching learning process. The sample size was 4 junior secondary schools and 4 senior secondary schools in 4 districts as experiment sites and 1 junior secondary school and 1 senior secondary school in another district as the control site.

Kick off meeting

Kick off meetings were done at each district site: 27th April (Subang district), 18th May (Bandung and West Bandung districts), 21st June (Bandung city). The MoU was signed by the Rector of UPI (Indonesia University of Education), city/district Mayors and Heads of the Provincial Office of Education. The program framework was introduced to stakeholders to commence the program activities.



Figure 1. Kick off ceremony at Bandung City. MoU was signed by the Rector of UPI and Head of Bandung City Education Office (left). Student performance of drama at knock off ceremony (right)

1st Principals training

About 100 principals and supervisors were trained at each district to build a sense of ownership of the program. The trainings were held on 19th May (West Bandung District), 22nd May (Subang District), 24th May (Bandung District), and 1st July (Bandung City). Participants discussed the program framework, principles of lesson study as continuing teacher professional development, and the role of principals and supervisors in implementing the program. Trainees actively participated in the discussion as indicated by many trainees asking questions.

1st Facilitator training

Facilitator is a selected teacher who meets the requirements of competence and commitment to organize the teacher development of the working group level. A two-day training session was held to improve facilitators' understanding and skills in facilitating the learning process as well as the role of the facilitator in running the program. Principles of lesson study in practice were introduced through observing and reflecting on the lesson from the following day. Participants were eager to implement lesson study as teacher professional development.





Figure 2. Activities of facilitator training

References

Peraturan Pemerintah Nomor 38 tahun 1992 Tentang Tenaga Kependidikan

Saito E. (2004), The Study on Partnership between Scholl and University to Improve quality of Mathematic and Science Education in Indonesia, Paper Presented at National Seminar on Collaboration between Scholl and University, Indonesia University of Education, Bandung July 10 July

Zamroni, (2004), Pedoman MGMP, Departemen Pendidikan Nasional, Jakarta