

## INNOVATIVE IN-SERVICE TEACHER TRAINING FOR BASIC EDUCATION IN INDONESIA

### Introduction

The Second Long Term Development Plan as decreed by the Peoples' Consultative Assembly ascertain that manpower development is to be given the highest priority in alignment with economic development. While the Ministry of Education and Culture (MOEC) has the responsibility for formal and non-formal education, both public and private, other ministries also supervise or operate the development of vocational schools and training institutes for the preparing skilled manpower in their respective sectors. The Ministry of Religious Affairs (MORA) is responsible for religious schools called madrasahs and for traditional Islamic boarding school called pesantren. The Ministry of Home Affairs is responsible for the administrative aspects of public primary schools.

During the early First Long Term Development Plan (PJP I : 1969 - 1994) the Government of Indonesia (GOI) adopted the policy of universal primary education by providing access to elementary education to all Indonesian citizens. A non-formal education equivalence to elementary schools were organized for adults, called Kejar Paket A (Package A Learning Group). Primary schools (Sekolah dasar or SD) were being built in every village, and the requirement for teachers were being met by establishing pre-service teacher education institutions called SPG (School for Teacher Education). The SPGs delivered six-years post elementary education programs. Graduates would be qualified to be SD teachers. While waiting for the SPGs graduates, the Government was forced to recruit teachers below the SPG qualifications to teach at the newly built SDs. In remote areas, even graduates of Junior Highschool (three years beyond elementary school) were appointed as SDs teachers. Religious schools within the responsibility of MORA are facing more serious problems, those are problems of under-qualification and mismatched. Most teachers at primary and junior secondary level religious school - Madrasah Ibtidaiyah or MI and Madrasah Tsanawiyah or MTs are graduates or college of religious teacher (PGA). These teachers have to teach the same academic subjects as in the general public schools, for which they did not have any training.

The success in the universal primary education program created social demand for secondary education. The Government responded by providing at least junior highschool (SMP) in each sub-district. This

was implemented by building new SMPs and launching an open junior high school (SMP Terbuka or SMPT). To supply the required teachers for the SMPs the Government supported the expansion of post-secondary level pre-service teacher training institutes (IKIPs) and the educational faculties of universities (FKIPs) in every province. A two-year post secondary program (Diploma II or D II) were offered for SMP teachers. The rapid expansion of the SMPs enrollment outstripped the ability of the IKIPs and FKIPs to produce SMP teachers. Consequently, under qualified teachers (below D II) were recruited.

At the end of the PJP I, the Government recognized the need to transform the educational system to enable the development of manpower for an industrializing economy and for the anticipation of the global market. The Education Act No.2 of 1989 mandated the expansion of universal basic education to junior secondary level (nine years of schooling) and the revision of the national curriculum. The consequence of this mandate is redefining the minimum qualification of teachers, which is D II for SDs and D III for SMPs In-Service Teacher Training.

The tasks of teacher upgrading and/or in service training is formidable, considering that there are 1.5 million SD and SMP teachers, and another a quarter million MI and MTs. Approximately 1.02 million SD teachers, 140.000 MI teachers, 250.000 SMP teachers, and 110.000 MTs teachers have to be upgraded. Likewise, the new curriculum of 1994 required also the retraining and/or refresher courses of existing qualified teachers to orient them to the new approach and structure and to the new textbooks and teaching materials.

The Directorate General for Primary and Secondary Education (DGPSE) is given the responsibility for teachers in-service training. There are basically three types of in-service teacher training, namely : refresher training, upgrading training and career training. Refresher training is intended for introducing new policies such as new curriculum including new teaching techniques or classroom learning management, and for management communication. Upgrading training is those for increasing teachers' academic and professional competencies. Career training is provided for teachers who are moving laterally or vertically, such as to become headmaster, supervisor, trainer, or other nonteaching assignment.

The DGPSE has an implementation arms for developing and organizing in-service training. There are 12 national PPPGs (Teacher Training Development Center or TTDC), six of whom for general education and six for vocational education. Besides the national

centers, there are 27 BPGs (Teacher Training Center or TTC) one in each province in Indonesia. At the national level there is a national coordinating team for teachers training, called TKPP, chaired by the Director General. At the provincial level there are provincial coordinating teams for teachers training, called TKPD), chaired by the second highest ranking officer of the Provincial Office of Ministry of Education and Culture. The daily coordinating activities of the DGBSE has entrusted to the Director of the Directorate of Teacher and Technical Personnel Education (DTTPE).

There are a number of efforts for improving the teaching performance, but there is no coordinated system based upon empirical standards. There are about 140 types of in-service training programs for primary and secondary school teachers, with an estimated expenditures of US \$ 15 billion annually. The DTTPE has very limited role in most of the in-service training program. Let alone those under the jurisdiction of the MORA. Personnel from DTTPE are often invited to attend the planning session of the inservice training program implemented by different units, and these are considered by the said units that they have involved the DTTPE. Structural weaknesses within the in-service teacher training system and inadequate coordination among institutions involved in teacher training activities constrain the Government's efforts to cope with the massive teacher training requirements.

In-service training programs are implemented through either locally funded or externally assisted development programs. The content and structure are usually dictated by project design, and the implementation mechanisms vary widely among project managers. The PPPGs and BPGs have not been yet developed to fully carry out their mandate. Most of them felt that limited staff capabilities and resources have hampered them in carrying out their full mandate. There is certainly no single in-service training modality that can solved all of the teachers' lack of qualification and professionalism. A mixed and simultaneous programs with a strong coordination are what probably is required.

Since there is no in depth study that has been undertaken on the effectiveness, efficiency, attractiveness and relevancy of the different types of the in-service teacher training programs, it is really difficult to chose which of those are the most promising for dissemination and sharing. Five innovative cases, each with its own uniqueness, strength and also some weaknesses, which were chosen are :

Case # 1 : Primary School Teachers In-Service Training By Independent Learning

Case # 2 : Radio In-Service Training For Primary School Teachers (Diklat SRP)

Case # 3 : Diploma II Equivalence By Distance Learning

Case # 4 : In-Service Training Through Teacher Professional Enhancement Group (PKG)

Case # 5 : Professional Competency Training For Primary School Teachers (PEQIP Project)

Summary of each case is presented as follows.

Case # 1

### PRIMARY SCHOOL TEACHERS IN-SERVICE TRAINING BY INDEPENDENT LEARNING

#### Background

When Indonesia is declaring its independence in 1945 the need for primary school teachers were felt very badly. Practically anyone who is literate and wanted to join the teaching profession was appointed. A kind of "stop gap" measures were undertaken, each with its own curriculum, examination, and certification. The result was that the number of teachers increased significantly, but without any standard requirement. This condition was soon acknowledged, and the Government was setting standards for pre-service training by establishing SGB (four-year teacher training beyond primary education, and SGA (six-year training course beyond primary school). For providing standardizing the in-service training a BKTPG (written courses for teacher training) was established in Bandung in 1950.

During its existence for almost 50 years, the BPTPG has undergone a number of structural and organizational changes, but its mission is still the same, that is to develop written learning

materials to be used by teachers at all levels independently, for improving their mastery and competence. BPTPG is now called PPPG Tertulis (Written Teacher Training Development Center) or PPPG-T.

In accordance with the development of science and technology,

particularly those applicable to education and training, the strategy of instruction and the format of the written materials for independent learning are undergoing changes. The magnitude of the teachers to be trained is such that priority has to be given to those who are needed most, due to institutional limitation.

### Objective

There are two kinds of programs that have been carried out since 1990, and another programs that has just been started as pilot project. The two ongoing programs are called Type A Training (refresher training), and Type B Training (upgrading training). The Type A Training is intended for headmasters, and the objectives are for the headmasters to be able to : follow the development of science and technology, do their tasks confidently, get credit points for career development, and acquire knowledge with academic accreditation. Type B Training is intended for unqualified pre-school and primary school teachers (those who possess only junior highschool level certificate). The objectives of this training are for the teachers to : obtain SPG (senior highschool level) certificate, and improve their subject matter competencies. There are about 80.000 teachers targeted under this program, with their average age of 50.

The general objective of the piloted project is to develop a model of accredited independent learning. Beside these activities, the PPPG-T is also supporting other in-service training programs with printed learning materials on demand.

### Curriculum

The curriculum for Type A training is consisting Indonesian Language, English, citizenships/social science, mathematics, physical science, health and physical education, and science of teaching. The Typy B training curriculum is based on the SPG curriculum of 1984. The pilot project curriculum is currently being developed in cooperation with the Center for Research and Development of Independent Learning of the UNS (University of Eleven March of Surakarta).

### Learning and Instructional Process

The learning and instructional process is to adhere to the concept of independent learning, which include the following indicators : 1) flexible time frame, 2) diagnosis, remediation, and

exemption, 3) content options, 4) alternate forms of evaluation and flexible times, 5) a choice of location by the participants, and 6) alternate forms of instruction. Participant is free to choose whether to study individually, or in group setting, with tutorials, or any combination of those.

Instructional materials are developed with the following steps : curriculum analysis, syllabus preparation, syllabus sanctioning, text writing, text evaluation, text review and editing, illustration, field-test, and printing. These learning materials are distributed to participants through the TKPD (local coordinating team for teachers' in-service training).

The instructional patterns is developed in a cyclical model of learning need analysis, decision of strategy, development of learning materials, implementation, evaluation, and feedback.

### Evaluation

Evaluation of learning is done through : formative test, individual assignment, summative test, and final examination. Formative test is taken at the end of each module; individual assignment is usually proven in various format, such as papers, reports, clippings, and portfolio. Summative test is given at the end of a semester. All of these assignments are to be sent to PPPG-T for grading. The final examination is done by a special team appointed by the DGPSE (Director General of Primary and Secondary Education). Examination is carried out at the capital of each provinces. Marking and grading of Type A training examination is done by the PPPG-T. Whereas, for the Type B training is done by the local examination team. Upon successful completion of these programs, participants will receive STTPL (certificate of completion of study) which warranted for professional credit points.

No evaluation of program effectiveness and impact has been undertaken so far. It is just assumed that the completion of program will have some influenced to the attitude and performance of teachers.

### Output and Outcome

The productivity of these program is relatively high; about 80% of the participants completed the program. However, participation to the program is low. In part this is due to the inattractiveness of independent learning.

## Prospect

Conceptually the independent learning modality is one of promising alternative. The fact that this program has survive more than five decades, indicate that it is worth to maintain. Although there is a feeling that the independent learning mode is probably teacher's last choice. With well coordinated and promoted activities this program deserve further attention.

## Case # 2

### RADIO IN-SERVICE TRAINING FOR PRIMARY SCHOOL TEACHERS (DIKLAT SRP)

#### Background

Indonesia is starting its first Five Year Development Plan (REPELITA) in 1969. One of the educational program within the the First REPELITA was to the use of radio for improving the educational quality through the improvement of teachers at the primary level first.

From the very beginning UNESCO have assisted in a number of studies and training. The study include : Educational Radio in

Indonesia (Koch,1969); Educational Broadcasting in Indonesia (Willings et.al.,1970); and Alternative Strategies fo Primary Education in Indonesia : a cost effectiveness analysis (Jamison,1971).

Training programme in-country and abroad were given to those to be responsible for the different aspects of educational broadcasting activities. These people were housed at what was then called Institute of Educational Media, which is now called PUS-TEKKOM (Center of Communication Technology for Education and Culture).

Pilot project for using radio broadcasting for teacher in-service training was started in 1974. In 1977 the Minister of Education and Culture decided to disseminate the use of radio broadcasting for primary school teacher training in 11 of 26 (now 27) provinces in Indonesia. The present DIKLAT SRP (Radio In-Service Train-

ing) is an outgrowth of what was developed since 1974. Current project is to cover 21 provinces, with a total participants of 118.200 primary school teachers.

#### Objective

DIKLAT SRP are intended for primary school teachers all over Indonesia, particularly those being disadvantaged for following other available training programme including the face-to-face programme and the distance learning mode using printed modules.

The main objectives of the DIKLAT SRP are twofolds : a. to increase the professional competence of teachers both in teaching methods and subject matter contents; and b. extending the learning opportunities for teachers on the job. Additional objective is to provide tools for management communication.

#### Curriculum

The broadcasting curriculum were undergoing constant development and changes. In the early stages the curriculum was oriented toward providing fresh and updated information, such as introduction of new curriculum. It used to be called "refresher courses".

In 1989 the Ministry of Education and Culture decided that primary school teachers should possess at least a Diploma II degree (two years beyond senior highschool). Accordingly the curriculum had to be adjusted with the new policy. Since Pustekkom is a non-degree granting institution, it has to cooperate with the Universitas Terbuka (UT=Indonesian Open University). Therefore, the broadcast curriculum is currently being based to the D II Equivalence Program By Distance Learning of UT.

#### Learning and Instructional Process

The instructional team are to consist of curriculum or subject matter specialists, media specialists, evaluation specialists, experienced teachers, scriptwriters, studio-teacher or casts, radio producers, and evaluation or liaison officer.

Broadcast programmes are prepared by the Production Unit in Yogyakarta and Semarang. Transmission of programmes are done mainly by the RRI (Radio Republic of Indonesia) from its national network, but also supported by local and commercial stations.

Under this present format, broadcast programmes are supplemental to the printed learning materials prepared by the IOU. This broadcast programme is accompanied by printed corollary learning materials, to be distributed in advance of the broadcast.

Teachers participating in the in-service training programme have to register themselves at the Pustekom Support Units, and they are encouraged to form a learning group at their respective schools. Learning activities by each group include group listening to the radio programmes, reading printed materials, and discussing the topics presented. These activities are done at the headmaster's office during the daily school break or directly after school hours, so as not to intervene the students' learning. Regular monitoring and supervision is carried out by the school supervisors.

#### Evaluation

Learning evaluation is done with written tests twice a year, organized during school holidays simultaneously. The test materials are prepared by a central evaluation team as part of the instructional team. However, the implementation of the test is delegated to the local evaluation team appointed by the Regional Office of the Ministry of Education and Culture (Kanwil Dikbud).

The local evaluation team will distribute the test materials to each learning group, and later on to collect and analyze the completed tests. Teachers are taking the tests at their respective schools under the supervision of the school principals. In about 30 days teachers will know their test result.

Teachers' mastery to a certain number of tests, will entitle them for credit points and grades. Accumulated credit points will entitle the teachers to get the certificate for training completion (STTPL). This STTPL is issued by the Kanwil Dikbud, and is a useful tool for teachers' career development.

#### Output & Outcome

The present project, initiated in 1991, has awarded 345,917 STTPL or a productivity of 70% (rounded). With the increased subject matter and teaching method competencies, these teachers are expected to perform better. However, it is believed that teachers' in-service training program alone will not suffice for the students' improved learning, since it depends also on other factors such as the availability of textbooks and other learning materials. For the teachers themselves, this project will provide an opportunity for career promotion.

#### Prospect

The development of broadcasting and telecommunication infrastructure (radio, television, telephone, computer networking etc.) is so fast, that it provides a potential tool for educational applications.

The history of the development of this project has indicates that more intensive effort is to be done for the successful application of these technology.

As prerequisite for further development are the policy support and will of the Ministry of Education and Culture, strengthening coordination with other related agencies, and institutional development of Pustekkom as the unit responsible.

Case # 3

### DIPLOMA II EQUIVALENCE BY DISTANCE LEARNING

#### Background

The decree of the Minister of Education and Culture in 1989 stated that the qualification of primary school teachers is to be increased from senior high school graduate level to Diploma II (D II) graduate (two years college level). There were about one million primary school teachers find themselves unqualified, due to the senior high school level certificate that they earned.

In order to meet teachers' academic qualification, a D II Equivalence program was launched. Since the students of the D II Equivalence program would be the existing primary school teachers, the Directorate General of Higher Education (DGHE) and the Directorate General of Primary and Secondary Education (DGPSE) called for the services of the Universitas Terbuka (UT = Indonesian Open University) to conduct the program by distance learning mode. Distance learning mode is chosen as one alternative for the program, because while joining the program, the students should stay on their teaching. Distance learning mode does not require students quit from their job. In addition, distance learning mode can reach students who reside in many different areas, including those in remote areas.

#### Objective

The objectives of the program are: a. to strengthen knowledge, skills, and attitudes of primary schools teachers in order to be able to improve their teaching, which will result in better student learning; and b. to increase qualification of primary school teachers from senior high school graduate to Diploma II graduate.

#### Curriculum

As an equivalence program, the curriculum of D II Equivalence Program should be equivalence to the curriculum of the Pre-service D II Program. The load of the previous curriculum was 82 credit semester (82 sks), divided into six semesters. Based on their years of teaching experiences, students can be waived from a number of subjects.

Learning from the experiences during the launching of the program and based on feedback from the field, the curriculum is revised. The revision was done by referring to the 1995 D II Pre-service Curriculum, and by considering inputs from users. The structure of the revised curriculum is outlined as follows.

a. General Courses : 8 sks; b. Education Courses :10 sks; c. Subject Area and Teaching-Learning Process Courses: 50 sks; d. Integrated Learning: 2 sks; e. Multi- Grade Teaching: 2 sks; f. Teaching Practicum: 4 sks; and h. Local Content Program Development: 2 sks. The load of the revised curriculum is 78 sks, divided into five semesters. The unique picture of the revised curriculum is the focus on the characteristics of primary education, which will be explicitly reflected in the instructional materials. Since the launching of the revised curriculum should wait the readiness of the instructional materials, this revised curriculum will be launched in the 1997/1998 academic year.

#### Learning and Instructional Processes

In accordance with distance learning modes, the main learning process is distance learning. The students are supposed to study the instructional material individually, working in a study group to discuss problems related to the subject, and to identify problems that will be discussed in tutorial classes. To strengthen the independent learning, tutorial activities are designed through cooperation with the Regional Office of Education and Culture.

Relating to tutorial activities, each student is required to attend the tutorial activities at least 75 % of the number of hours for each subject. Tutorial activities are supposed to encourage students to optimally participate in class discussion, observation, simulation, and other class activities. Learning from tutorial experiences, the students are supposed to be able to apply active learning approach when they teach in their own classes. In addition to tutorial activities, students are also required to take science practicum and teaching practicum, guided by practicum instructor and teaching supervisor respectively. For science practicum, students are provided with science kit.

#### Evaluation

Evaluation of student achievement is done through take home exam (self- test), final exam for each semester, practicum report, and teaching examination. The final exam is a centralized exam which is conducted in the district throughout Indonesia. The teaching examination is conducted locally, and the final score is sent to UT. The final exam is graded in UT Jakarta.

#### Output and Outcome

Up to August 1996, this program has graduated 75.615 students, who are teaching in primary schools throughout Indonesia. They are expected to improve the quality of primary education. From some direct observations to primary schools, it is evident that teachers who graduate from this program perform effective teaching behavior. In addition, there are also some advantages for the graduates, such as higher academic and social status, involvement in other training, and opportunity to promotion.

#### Prospect

There are still more than half a million primary school teachers who have to be given the opportunity to increase their qualification. Since most of the primary school teachers reside in areas which is widely dispersed, the prospect of D II Equivalence Program through distance learning mode is still promising. However, the present system's productivity is relatively low. Report indicates that productivity is around 45%. as compared with the conventional face-to-face approach run by 30 LPTKs of 75% on the average. Reasons for these are not known exactly, but intellectual guesses are that bureaucratic procedures and highly centralized structure are the main obstacle. What is expected is more flexibility in the processes, although quality control of the product is to be maintained.

#### Case # 4

#### IN-SERVICE TRAINING THROUGH TEACHER PROFESSIONAL ENHANCEMENT GROUP (PKG)

#### Background

The basic idea behind this training mode is that regular training program tend to tell the teachers what they should do, and those who are telling teachers to do possess only theoretical and conceptual

background with no field experiences. The PKG (teacher professional enhancement group) is based on the principle of "from teachers, by the teachers and for the teachers". The PKG mode is for Junior and Senior High-school teachers. The Education Act No.2 of 1989 stated that Junior High-school is part of nine years basic education.

The initial design and development of this project was supported by UNDP/UNESCO technical assistance in 1979. A positive assessment by the World Bank in 1983 resulted in the provision of loan for further application of this unique training for a period of ten years, starting in 1985.

The main activities of the project are to develop and implement PKG mode and to provide science equipments. Other supporting activities are the development of management information system related to professional development, and training for educational administrators.

### Objective

The main objective of the training is to improve professional competencies of teachers, by sharing and solving common problems found in the field, in a group setting. The problems to be solved are mainly practical, that is how to manage daily classroom instruction that would improved students' active learning. The intervening objective is to have a pool of core teachers (Guru Inti), PKG instructors, PKG's development team, PKG's supervisors, head of PKG Sanggar (location of PKG activities). All of these personnel are experienced and successful teachers.

Subject matter mastery and competencies to be developed are general science (started in 1980), mathematics (started in 1982), English (started in 1986), Bahasa Indonesia (started in 1986, and social science/ geography (started in 1990).

### Curriculum

Curriculum is based on the existing school curriculum, that is curriculum of 1984 at the beginning, and later curriculum of 1994. The PKG's groups are encourage to develop and enriched the curriculum suitable with their conditions and characteristics.

The PKGs activities are not limited to mastery of subject matter, but also on mastery of classroom learning management, including the improvement of teaching skills.

### Learning and Instructional Process

Learning group activities are led by core teachers. Core teachers are respected senior teachers who have undergone a special training in group setting led by PKG's instructors. Instructors are selected teachers who have the mastery in particular subject matters and who have got advance training in country or abroad.

Selected instructors are appointed as member of PKG's development team. Method of instruction and learning are based on student's discovery and problem solving.

Group activities are carried out regularly in Sanggars. There are Sanggar at provincial level, mostly for core teachers activities, district Sanggar for first phase group activities, and sub-district Sanggar for second or dissemination phase activities. These Sanggars were build and equipped attached to a particular schools which met a certain qualification standard. The schedule of group meeting at sanggar is organized in such a time so as not to sacrifice students' learning. Learning materials and supplies are provided for each Sanggar, and at Sanggar teachers are expected to prepare their own teaching materials.

#### Evaluation

The PKG model had been evaluated as a successful program in improving teachers' professionalism. However, not all teachers are applying what they got at the PKG. Evaluation of individual learning at the PKG is not carried out. Supervision being done on teacher's regularity in attending PKG sessions, but no reward or punishment is given. There is also a very serious concern expressed by instructors and teachers alike, that their approach of teaching by discovery and problem methods were nullified by the fact that test items in the final examination (Ebtanas) are mostly of memory types.

#### Output and Outcome

The quantitative output of the PKG mode is substantial. Practically in every sub-districts there are PKG Sanggars. It is claimed that around half of public SMP teachers have been cooperating in PKG activities, but no information as to the mastery level they had attained. There is yet no valid proof of the affect of these activities on improved students' learning.

#### Prospect

The principle of "learning by themselves, from themselves, and for themselves" is an ideal as well as practical one. But nationwide dissemination of this mode will have to cater for the geographic conditions, for the possible quality deterioration of speedy duplication,

for the development and operationalization of Sanggars, and for ways and means of activating the school principals and supervisors. Teachers' reluctant to apply the discovery/problem solving method, could be based on a practical consideration, that is to prepare the students for final examination. If this is true, than it will jeopardized the project's goals.

Case # 5  
PROFESSIONAL COMPETENCY TRAINING FOR  
PRIMARY SCHOOL TEACHERS (PEQIP PROJECT)

Background

The professional competency training is part of an integrated Primary Education Quality Improvement (PEQIP) Project, supported by loan from the World Bank. The project was designed to raise the quality of education by : improving the capabilities of teachers; establishing a teacher support system through the clustering of schools; improving the quality and supply of books and learning materials to schools; improving management ability of head-teachers, supervisors and educational managers; establishing monitoring of education as a routine activity and making use of the information obtained; and increasing community support for schools.

The PEQIP project is taking place in six provinces, out of 27 provinces, in Indonesia. In each of the six provinces one district was chosen for the project field implementation. The main activities in the field are training, development of cluster group activities, assistance for schools from tutors and consultants in implementing change, and provision of books and learning materials. The training itself are to include training for teachers, advisory teachers, tutors, headmasters, supervisors, and educational managers. This case will focused on the training of teachers.

Objective

The training organized under this project is based on the requirement as stated in Curriculum 1994 for teachers to approach learning problems creatively and innovatively. In operation, the creativity and innovativeness are broken down into the following objectives: 1. able and feeling free to elaborate, simplify and adapt the learning materials and methods of teaching in accordance with students' characteristics and the learning environment, 2. mastery in at least four main academic subjects i.e. Indonesian language, Mathematics/Arithmetics,

Physical Science and Social Science, 3. competence in making and using instructional media in teaching the four subjects, 4. competence in the management and evaluation of instruction program, and 5. able to transfer his/her competencies to other colleague as part of dissemination strategy.

### Curriculum

There are two categories of programs : general and specific. The general program are for all of those involved in the implementation of the quality improvement project in the field. Specific programs are designed for specific group including classroom teachers.

The specific program for classroom teachers is to include : 1. techniques of beginning writing and reading; 2. Indonesian language using communicative approach; 3. mathematics/arithmetics oriented toward its application in daily living and by using deductive and inductive methods; 4. physical sciences and its application in daily live; and 5. social sciences associated to the community environment.

### Learning and Instructional Process

Training is done first for tutors and advisory teachers. Tutors are teachers who have been freed from class teaching activity. Advisory teachers (pemandus) are classroom teachers who have the mastery in a certain subject. Tutors and pemandus subsequently train classroom teachers in their areas and offer direct help in schools and classrooms to the teachers they have trained.

Training for tutors and pemandus is done by face-to-face mode, for a total of four weeks off the job. Each training program is usually participated by 50-60 participants. These training were done nationally or by a national team during its three years of project implementation. In 1995 training were done by two consulting teams, one domestic instructional team for languages and social science, and a mixed team for mathematics and physical science. Subsequently most of these tutors and pemandus are organizing local training which each lasted for 24 days and was residential.

Shortly after the face-to-face instruction teachers are expected to participate in the follow-up activities which are centered at the core school in the cluster. This follow-up activities are expected to assure that teachers are implementing what they are trained for.

### Evaluation

Evaluation during the training is done superficially, that is whether teachers are attending the instruction timely, participating in the discussion group actively, or doing their task assignment.

No formal or indepth evaluation of the project has been carried out. However, inputs from participants as monitored by two groups of expatriate consultants, has indicated that there has been little significant impact on teaching-learning activities.

#### Output and Outcome

During the past four years there were approximately 300 tutors and pemandus, and 575 teachers in five cohorts that have been trained.

On average the EBTANAS (National Final Examination) scores rose in most subjects over the period in the project. However, the reasons for the improvement in these scores have not been studied, nor how they relate to scores in non-PEQIP areas in the same province.

#### Prospect

In view of the limited impact of PEQIP on the teaching-learning processes it is vital that attention is paid to developing this area before dissemination takes place, otherwise the impact of dissemination will likewise be limited. The key to dissemination is the quality of the trainers. Cost analysis should also be done prior to the dissemination of project activities.