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## **STATUS AND CONTINUATION OF TEACHER TRAINING AND SUPPORT UNDER PED**

### **FINAL REPORT**

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### **BACKGROUND**

The Primary Education Development (PED) Program stated two main objectives for provincial programs: to increase the enrollments of primary-age children, especially females and children in rural areas, and to improve the quality and efficiency of the primary school program.

As the Working Papers (1989) for PED noted, the central issues relating to teachers were:

- how to increase the supply of teachers sufficiently to staff the expected expansion in the primary system;
- how to attract more teachers to service in rural area areas;
- how to attract and keep more qualified teaching staff;
- how to make training qualitatively better and more relevant;
- how to ensure that qualitative improvements in instruction reach the classroom.

To address these objectives a number of activities were planned for the ten year PED program, among them:

- building Government Colleges of Elementary Training (GCETs) for females with hostel space as needed, so that every district in NWFP and every division in Balochistan would have one such training institution reasonably close to the homes of candidates;
- increasing the number of girls' middle schools near well-attended primary schools to expand the pool of qualified female teaching candidates;
- supporting AIOU middle and secondary degree programs for girls in areas where teachers are needed;

- changing policies that hinder PED objectives including ones related to the recruitment, appointment, and attendance of staff in primary (especially girls') schools;
- improving the GCET curriculum and training materials to make them more practical and more closely tied to implementation of primary school programs;
- providing teachers with annotated editions of student textbooks that include easy-to-follow, explicit teaching directions for each lesson;
- providing each classroom with an adequate supply of teacher support materials, such as alphabet cards, number cards and number lines, and supplementary reading, math, and science learning materials;
- providing training opportunities for educators to improve primary education through study tours, short and long-term training abroad, and in-country short-term training courses, seminars, and workshops.
- improving teacher support systems through materials-specific training for trainers, supervisors, and headteachers and involving them in the testing of new instructional materials;

To assist in implementing the above objectives long-term technical advisors were provided for both provinces. Unfortunately, these advisors left during the duration of the program (once in NWFP and twice in Balochistan) and therefore teacher training activities were disrupted and did not achieve all the objectives set for them under PED. Furthermore, the reduction in the length of the program from ten to four years made it difficult to obtain significant headway in a number of activities.

Because the two provinces stressed different activities, teacher-related components of the PED program are presented below as separate case studies for Balochistan and NWFP.

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## **CASE STUDY OF TEACHER-RELATED ACTIVITIES IN BALOCHISTAN**

### **BACKGROUND**

When the PED program initiated its first activities in 1990 the two most significant teacher-related problems in Balochistan were the absence of qualified teachers (especially females and especially in far-flung villages) to staff schools, and a poor quality training program that was unable to keep up with the backlog of untrained inservice teachers.

Conditions in Balochistan make the provision of education services particularly difficult. Balochistan is the largest province, occupying almost half of the land mass of Pakistan but containing

only five percent (about 4 million) of the population. The majority of the population (80 percent) is scattered in small settlements connected by poor roads. At the start of the PED program it was estimated that the literacy rate in Balochistan was 7 percent compared with 26 percent for Pakistan as a whole. Less than one percent of females in rural areas were literate, making it difficult to find the female teachers that educators felt at the time were necessary for girls' schools.

Planners estimated that over the course of the ten year PED Program the number of primary students in Balochistan would triple thus requiring an additional 10,500 teachers. The training capacity in the province at the time was not only grossly insufficient to meet this demand but was distributed in such a way that because of local traditions many female teachers did not have access to it. Unless immediate actions were taken to ease the situation, the backlog of untrained teachers would increase causing further problems in the quality of primary instruction.

## **GATHERING BASIC INFORMATION**

**Human Resource Survey.** Because of concern over lack of teachers in rural Balochistan, a study was contracted preliminary to the official start of PED. The Human Resource Survey (HRS) was designed to provide information to the Department of Education to plan building and staffing requirements for primary school expansion. Interviews were conducted in 9003 villages of the 20 districts of Balochistan existing at the time of the survey. The villages were identified from a comprehensive list of villages provided by the Office of Local Government. In each village, teacher-researchers collected information from a knowledgeable local leader on conditions in the villages, the availability of educational opportunities, student enrollments and degree holders. Community leaders were also asked to estimate parental demand for girls' education, the resources needed for initiating or expanding primary education, the availability of qualified female teaching staff, possible alternative teaching arrangements, ways to increase future pools of teaching candidates, and the impact of then-existing programs to improve the distribution of teachers.

The major findings of HRS, some of which overturned prevailing beliefs about attitudes in rural areas, were that a majority of parents and community leaders were substantially in favor of providing educational opportunities for girls, that there were already more mixed (16 percent of villages) than single-sex (4 percent) classrooms with girls attending, and that three times as many villages provided some type of primary schooling for boys compared to girls. As expected, few females had been educated in rural areas, and few were being educated to the level where they could become teachers. Indeed, almost no opportunities existed for middle or matric schooling for girls, even though 35 percent of villages with girls in primary schools reported that parents would be willing to send their girls' to middle schools if these school were located in the village or the girls were bussed to them.

The survey found that the majority of villages were willing to accept alternative provisions for the education of girls such as male teachers in Kachi through Class Three (only half as many accepted the idea of male teachers for Classes Four and Five). Almost the same ratios accepted the idea of coeducation at the primary level. About 30 percent of villages wanting educational opportunities for girls had local females or males available who could serve as teachers. In short, the survey showed a

substantial number of villages wanting education for girls and willing to accept alternative arrangements in order to obtain it. Considerable demand could have been addressed by altering the definition of schooling from "school-teacher-students" to "teacher-students".

**Multi-class study.** Studies were also conducted by faculty members of the University of Balochistan into the conditions then existing in multi-classes and Kachi classes, and into the phenomenon of dropout in the early primary years.

The major findings of the multi-class study were that: about a third of the schools in the sample (which was a purposive sampling of one and two-teacher schools) turned out to be only partial schools with fewer than five grades. Half of the schools were one room and most of the rest were two-room schools; many classes were held in the open. The total enrollment of the schools tended to be small with over three-quarters having less than 80 students. In close to 75 percent of the schools there were unadmitted children, that is attending children who were underage or otherwise unable to pass admission requirements to join the Kachi class. Facilities were poor: water was available in only a quarter of the schools and toilets in a third. Absences, dropouts, and repetition were all inversely proportional to the increase in grade level. The students of a single school often came from a number of language backgrounds which probably accounted for the fact that teachers commonly used Urdu rather than a mother tongue to teach daily lessons. More than half the teachers were less than 20 years old. Over 70 percent of teachers were untrained and about the same number had never received inservice training. The student textbooks, with lessons the children could not master on their own and with few self-exercises, made it difficult for teachers to absent themselves from a class and expect learning to continue. The easiest approach under these conditions was to fall back on memorization. Teachers recommended an integrated text that would be easier to teach under these circumstances than the number of separate subjects they were asked to teach at the time of the study.

**Kachi study.** The Kachi sample which included large urban as well as rural schools probably gives a better idea of the range of conditions in Balochistan. The major findings of this study were that: about a third of the Kachi classes were unsheltered and more of these were found in urban areas where school enrollments were larger. In half the classes, the space allotted to Kachi students was not enough and they appeared crowded. In more than 70 percent of the classes there were attending but "unadmitted" (unregistered) children. Facilities were poor: water and toilets were available in only half of the schools. In over half the classes the teachers' language backgrounds were different from that of the students which probably accounted for about the same number who relied on Urdu rather than a mother tongue to teach daily lessons. About half the teachers were matric and the other half intermediate graduates. Almost half the teachers were untrained and about the same number had never received inservice training. The children spent most of their time copying, or reciting Urdu letters and numbers, and the teachers spent most of their time supervising these activities. Student engagement rates were significantly higher in sheltered as opposed to unsheltered classes, and when teachers were directly involved with the children.

The Kachi repetition rate was 34 percent, slightly higher for females than males, and the dropout rate was 20 percent, double the rate for females (27 percent) as for males (13 percent). The dropout rate

was twice as high in rural (30 percent) as in urban areas (14 percent), and it was slightly higher in single (20 percent) as opposed to multi-grades (17 percent).

**Kachi dropout study.** A study was also conducted into the causes of dropout at the Kachi level as determined through 72 parent interviews in 3 districts: Quetta, Sibi, and Loralai. The main reasons for dropout were school-based (39 percent), home-based (33 percent) and economic--related to income production (28 percent). The highest single reason was the poverty of parents and the fact of too many children to educate (23 percent). The districts varied considerably from 64 percent (Quetta), to 17 percent (Sibi), to 28 percent (Loralai) complaining of school based causes such as education's lack of relevance, poor facilities, severe weather for unsheltered children, and physical punishment. Economic reasons were also less severe in urban Quetta (10 percent) than in more remote districts like Sibi (45 percent) and Loralai (33 percent).

### **Master Teacher Supply and Training Plan.....**

## **INCREASING FEMALE EDUCATION IN RURAL AREAS**

To address the most pressing problems related to lack of female education in rural Balochistan, the PED program focused its early efforts on increasing the number of female teachers in rural areas and in building community support for girls' education.

**Training local female teachers.** The Mobile Female Teacher Training Unit (MFTTU-1) was established in 1990 by the Directorate of Primary Education (then the Department of Education) in collaboration with UNICEF. The purpose of the Unit was to prepare young women with minimum qualifications to teach primary school classes in their own communities. Using the HRS data, villages were located where female middle school students were reported to exist. These women were gathered in centers where trained secondary school teachers and administrators conducted an intensive course prepared specifically for these candidates. The materials for the two-month course were developed by teacher trainers from within the education department who condensed the regular nine-month Primary Teaching Certificate (PTC) course into its essential elements and provided a detailed schedule of when to introduce each element. This course and the "crash" course that followed attempted to introduce the PTC curriculum in a more concrete and practical way that would be useful for teachers teaching in the field.

The first cycle of training began in Khanozai and Panjgur in December 1990 with 41 trainees and a second cycle was conducted in Sibi and Dera Allah Yar starting in April 1991. Altogether 120 women were trained through this course. A number of problems were encountered in implementing this activity initially. The major problems concerned methods of selecting candidates, a weak curriculum, lack of follow-up supervision in the field, and difficulties in placing candidates who graduated from the course.

To resolve these problems, the improved program (MFTTU-2) started to coordinate its activities with the Community Support Program (CSP) to identify women candidates for training. The program was

extended to three months in order to utilize materials developed for the "crash program"--the condensed PTC course developed for untrained inservice teachers (see below). MFTTU staff also work in closer coordination with the departments that sanction and appoint teachers, so that now 120 teaching posts are reserved annually for MFTTU graduates to ensure that their skills are used. Graduates can receive a PTAC if they have already or will have completed the Matric degree within two years of finishing MFTTU training. Thus they will move up the career ladder with relevant increments in salary and status just as other certified teachers do.

**Establishing community schools.** In the past many of the problems encountered in opening girls' schools resulted from a lack of community support. Conflicts arose over whether or not girls should be allowed to go to school, over appropriate locations for their schools, and over outsider teachers assigned to girls' schools. A number of girls' schools closed soon after they opened because of these problems. To resolve this issue the Directorate of Primary Education established the Community Support Program (CSP) in (date?).

The purpose of the CSP was to determine village commitment to girls' education before education departments invested major resources in the locality. A CPS promoter team--one male and one female, would visit villages expressing an interest in primary education for girls. The team visited parents and community leaders and, if they were convinced of the interest in girls' education, would start a 14 step process which included receiving a guarantee from the village that at least 20 girls would attend school, that a suitable facility would be made immediately available for classes, and that a woman from the village between the ages of 14 and 40, with at least middle pass qualifications would agree to teach. The woman who was chosen would be recommended to the DEO female of the division and if accepted would receive one of the 120 reserved posts. After a brief orientation she would open a Community School for a two or three month probationary period and if she showed potential as a teacher, she would join the MFTTU training.

Four or five trainers were assigned to each site: a field trainer who worked full-time with MFTTU and the rest experienced "Crash Program" trainers employed for the period of training. One of the latter was "in-charge", with the responsibility for administration at the site. The MFTTU trainer would monitor the training to ensure that the needs of the local teachers were being met. In most cases, the training focused on practical strategies for multi-class instruction. Following the training, the field trainer supervised the teacher in her class and planned in-service workshops as need arose.

## TRAINING THE BACKLOG OF PRIMARY TEACHERS

To address problems in the quality of instruction, PED concentrated initially on training the backlog of inservice teachers. When primary schools were first opened in Balochistan no teacher training was available. Persons who could read and write were employed with the understanding that they would be trained at a later date. This practice of training after employment was called "on-service" training to differentiate it from short intermittent "inservice" training that did not lead to a teaching certificate.

By the time the PED program was established, there were 11 GCETs operating in Balochistan with

only one of them in Pishin designated for women(?). Eventually the GCETs developed the capacity to train a number of primary teachers equivalent to the total employed annually but could not eliminate the backlog of untrained teachers. In 1990 this backlog amounted to 8000 untrained teachers that needed to be trained in order to clear the GCETs for a new preservice program. The issue was mainly one of equity, since untrained teachers remained fixed at a low pay scale and could not advance until they took the nine month on-service course and obtained their PTC.

**Accelerated Primary Training ("Crash") Program.** To overcome this problem, an Accelerated Primary Training ("Crash") Program was designed and implemented in 1992. The course consisted of a three-month intensive workshop based on the curriculum of the regular GCET nine-month PTC course. The special features of the course were that it was field-based, emphasized new materials developed for multi-grade teaching, stressed teaching aids and used especially trained instructors. The course materials, covering readings, charts, diagrams--everything needed to teach the course, were published in a 512 page manual. Trainers were also provided with a day-by-day, hour-by-hour time schedule indicating when topics should be taught to cover the whole course. Though the crash course was completed in three months rather than nine months, planners estimated that by requiring regular attendance and eliminating the days lost for holidays, strikes, and exams, that the number of contact hours between student and teacher would be comparable in the two programs.

Trainers for the crash program were trained using the "cascade" method. The Technical Assistance (TA) team together with two Senior Subject Specialists conducted a three-week workshop in the Bureau of Curriculum and Extension (BCE) to train Master Trainers--Senior Subject Specialists and Subject Specialists in the use of the crash program materials. The Master Trainers, in turn, trained secondary teachers and headteachers who then trained primary teachers at Crash program sites. The courses were supervised regularly by Senior Subject Specialists, Directors, and Deputy and Assistant Directors from the BCE and PED.

Trainers administered mid-term exams at their sites, and the BCE conducted final exams at the end of the course. Those passing the final exam and meeting the attendance requirement were awarded the Primary Teaching Alternative Certificate (PTAC). This certificate gives teachers all the rights and privileges toward salary and promotion in Balochistan but not in the other three provinces.

The crash program was held over a two-year period at approximately 50 sites during holidays in winter and summer zones. Two thousand teachers were trained during each of the holidays. By mid-March, 1994, all untrained teachers had received training.

## **IMPROVING TEACHER TRAINING**

To improve teacher training, PED had plans to develop a new training course for preservice teachers and a better supervisory support system for teachers in the field. It was widely recognized during the planning of PED that teacher training in Balochistan was of very poor quality. BRIDGES studies had determined that whether a teacher was trained or not made no significant difference in the achievement scores of their students. The Minister of Education at the time of PED planning

suggested a full assessment of the existing training program to determine its strengths and weaknesses. Unfortunately attention was diverted to other priorities and this study was not undertaken. One of the major problems was the high cost of teacher training which not only included actual training costs but also the costs of teachers' salaries which continued through the 9 month course and the costs of replacing teachers with substitutes while they were absent.

Some of the problems in quality which were widely noted were that teacher training was too theoretical, it allowed little application of abstract principles that were taught, instructors were not trained as trainers and often had no experience in primary classrooms, little emphasis was placed on primary subject content knowledge where teachers were weak, the teaching model even in the training colleges remained memorization, students didn't take the course seriously and were often absent, and the country-wide final exam required instructors to teach to out-moded requirements rather than allowing them to develop more relevant instruction. These problems were reinforced by teachers, supervisors and managers who were products of the same system and therefore had no experience with alternative models.

**Proposed new GCET curriculum.** The Education Secretariat in 19?? issued an order that in the future it would be mandatory for all teachers to be certified before being posted to classroom service. Consequently even before the end of the crash program, a new program of preservice training was being designed to replace the old "on-service" program. Meetings were held to study the needs of teachers and students, and to prepare the preservice curriculum. It was agreed that the training should be more practical and more oriented to producing desired student learning results.

The new Faculty of Education program will combine three programs--the PTC (Primary Teaching Certificate), CT (Certificate of Teaching) and FA (Faculty of Arts in Education). These programs were taught previously in the GCETs as one-year programs and were taken by students in the order PTC, CT, FA for a total of three years. With few exceptions the PTC and CT courses were the same, however, and therefore, the new course will complete in two years what earlier took 3 years. Specifically, the new program will consist of two years with the option of stopping after the first year and receiving the PTC. Students will be encouraged to complete the full two-year program, even though the one year option will be left open to accommodate those who can only afford one year of study. Graduates of the full two year program are expected to make better primary teachers than those who take only one year.

The curriculum for the first year will consist of 70 percent pedagogy and 30 percent subject content matter. The second year will reverse the ratios with 30 percent pedagogy and 70 percent subject content matter. Methods of teaching will be included in all content courses with an emphasis on multi-grade strategies of instruction. Some of these more practical ways of presenting the curricula have been tried successfully in the "mobile" and "crash" courses. The lecture-memorization method which predominated in all classrooms including those in the teacher training institutions, will be replaced with demonstrations of teaching practices by the trainers themselves or using videos, or through observations in real classrooms. Each course will require supervised practice of what has been learned in class. These supervised practicums might, for example, include peer teaching or

micro teaching in lab schools and later after the student teacher gains confidence, in normal classrooms under supervision. It is expected that by placing the bulk of the pedagogy (how to teach) in the first year and subject content taught in the primary school, that a candidate should be minimally prepared to teach at the primary level.

By June 1994, the preservice course will have (progress report--where does it stand?--begun? being planned?).....

**Overseas training.** Over the course of PED ?? number of candidates were enrolled in degree programs in the US, and ??? education officials took short term courses or went on study tours.

## **IMPROVING TEACHER SUPERVISION AND SUPPORT**

Is there anything for this section or anything on materials-specific training? Perhaps this part can refer to Janet's Curriculum Report which I presume talks about this.

## **SUMMARY**

In Balochistan the main PED efforts concerning teachers have focused on developing programs to deal with the serious problem of finding female teachers to teach in rural areas. Since 1990, a mobile teacher training program has brought training closer to potential female candidates, supporting them in opening schools for girls in areas where girls' schools have not existed before. The program now coordinates with the Community Support Program which provides a link between education departments and communities in rural areas to ensure efficient and effective use of local and provincial resources for girls' education.

To improve instruction, PED efforts in Balochistan have been directed first at eliminating the backlog of untrained teachers through a "crash" training that managed to graduate almost 8000 teachers. The training colleges are now being converted to preservice institutions where teachers will be trained before they enter service rather than as under the previous system where they were trained after serving a number of years in classrooms.

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## **CASE STUDY OF TEACHER RELATED ACTIVITIES IN NWFP**

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## **BACKGROUND**

In 1990, at the start of the PED Program the most significant teacher-related problems in NWFP were the uneven distribution of teachers and the poor quality of instruction. Policies requiring merit recruitment favored selection of urban candidates who when appointed to rural areas exerted pressure on authorities to transfer them to urban posts near their homes. The problems were exacerbated by

policies giving urban teachers higher allowances that made urban posts more desirable. At the same time the schooling system as a whole was becoming increasingly subject to political influences that resulted in large numbers of inservice teachers having themselves transferred to positions which better suited their personal circumstances. Periodic freezes in hiring aggravated the situation as enrollments increased dramatically in some schools without similar increases in teaching staff. In some urban areas it was common to find kindergarten classes with over 100 children and only one teacher.

Many Pakistani educators blamed teachers for the overall problems of quality in the primary program, and believed that with more dedication they could provide better instruction. It was difficult to convince them that teachers faced major problems in their classrooms with inadequate and difficult-to-use instructional materials, excessively large numbers of children, multi-grades, and few resources such as chalk or paper. Poor quality training did little to improve the teaching skills of teachers who themselves were products of a program that had been in decline for years.

Geographical conditions in NWFP, while better than Balochistan, still make it difficult to provide education services to many parts of the province. In land mass, NWFP is the smallest province of Pakistan and contains about twelve percent (about 10 million) of the total population. The population is settled in comparatively more densely settled communities with greater access to urban areas and therefore to more services. However, in the north of the province, and to the east, there are formidable mountain ranges that make it difficult if not impossible to provide education services in all areas. Some areas like Chitral are blocked during all months except the summer ones from road access to Pakistan. Others like Kohistan have high mountains and deep gorges that make access difficult, and they are also inhabited by nomadic populations that do not remain long enough in one place to enjoy normal schooling programs.

At the start of the PED program it was estimated that the literacy rate in NWFP was 15 percent compared with 26 percent for Pakistan as a whole. Less than four percent of females in rural areas were literate, making it difficult to staff new rural girls' schools with female teachers from local areas.

Planners estimated that over the course of the ten year PED Program the number of primary students in NWFP would double, requiring an additional 32,700 teachers. Most teachers entering the service now in 1994 complete a preservice course, but at the time PED was planned there was a backlog of 36,000 untrained teachers. The training capacity in the province in 1989 was insufficient to meet either the increased demand for preservice training or to train the backlog of untrained teachers. The training institutions that existed were distributed in such a way that many female candidates would have had difficulty joining them in their locations far from their homes. The PED program set the objective of building training institutions more conveniently located in each district with hostel space to accommodate rural candidates.

Also, studies and education planning documents recommended improving the quality of the training teachers received in NWFP. BRIDGES studies showed for example that the students of trained and

untrained teachers alike showed the same overall poor results on achievement tests.

## **GATHERING BASIC INFORMATION**

In NWFP, most PED activities started with a background study to determine the details of a problem and identify potential solutions to address it. As a consequence, studies were conducted into the potential for girls' education in rural areas, policies affecting the recruitment and service of teachers, the conditions of classroom instruction (described more completely under the curriculum sections of this report) and the subject content knowledge of teachers. Informal studies were also conducted in classrooms to determine the management and pedagogical techniques that might be most useful to teachers during training. The studies in this section are reported under the relevant topics where they served as the start-up activity.

## **POTENTIAL FOR GIRLS' EDUCATION IN RURAL AREAS**

**HRS:** Out of concern for the lack of female teachers in parts of NWFP, a study similar to that of Balochistan was contracted to determine conditions affecting girls' education in rural areas. The Human Resource Survey (HRS) in NWFP collected information in almost 9,000 villages in the 20 districts of NWFP existing at the time of the survey.

The findings of this survey were similar to those of Balochistan and, as in that province, overturned a number of prevailing beliefs about attitudes in rural areas. The major findings were that a majority of villages reported parents and community leaders who were substantially in favor of providing educational opportunities for girls, that there were already almost as many mixed (48 percent of villages) as single-sex (52 percent) classrooms in villages where there were educational opportunities for girls, that three-quarters of the villages provided some form of primary schooling opportunity for boys compared to only about 60 percent for girls. Almost all villages reported some boys attending primary school somewhere and almost three-quarters reported some girls attending. The attending numbers dropped at the middle school level to 89 percent for boys and 36 percent for girls, and at the matric level to 80 percent for boys and 23 percent for girls. Indeed, almost no opportunities existed directly in the village for middle (4 percent of villages for girls and 11 percent for boys) or matric schooling (2 percent for girls to 8 percent for boys), even though about half the villages with girls in primary schools reported that parents would be willing to send their girls' to higher levels of education if schools for these levels were located in the village, there was a mobile teacher coming to the village or the girls were bussed to the middle schools.

As in Balochistan, the NWFP survey found that the majority of villages were willing to accept alternative provisions for the education of girls such as male teachers in Kachi through Class Three (about two-thirds of these villages would also accept male teachers for Classes Four and Five). Almost the same number accepted the idea of coeducation at the primary level. Half the villages wanting educational opportunities for girls have potential female teachers within ten kilometers. In short, the survey showed substantial numbers of villages wanting education for girls and willing to accept alternative arrangements to obtain it.

HRS provided baseline information that could be used to plan the more effective location of schools--where they were needed and wanted and where free land or buildings were currently available. It showed that resources could be saved in many villages by opening mixed schools with more readily available local male teachers. If school construction had been prioritized on the basis of such criteria it probably would have proved more effective in increasing enrollments. Unfortunately political influences in NWFP were too pervasive to realize all these objectives in the short period that the PED program existed. A number of middle schools, however, were added to existing primary schools in rural areas in recognition of the fact that more rural females needed to achieve higher qualifications if they were to enter the teaching profession.

## IMPROVING THE RECRUITMENT AND CONDITIONS OF TEACHERS

Almost every conference concerned with primary education in NWFP noted problems in the recruitment, distribution and conditions of employment of teachers. A significant part of the problem lies in the policies that exist to control these aspects of staffing. At the start of PED, the education system of NWFP was governed by the Education Codes of 1935. However, official rules and amendments had been issued from time to time which were not widely distributed and were therefore unknown to some officials. Even the original codes were not available in many education offices. Consequently many practices took on the character of rules, while actual rules were not implemented, and considerable variety occurred in the way the rules were understood and carried out.

**Policy study.** In November 1991, PED consultants conducted a study into the most important rules, regulations and common practices which determine the recruitment, training and posting of primary teachers in NWFP. The consultants located existing codes and interviewed officials in provincial and district offices to determine their interpretations and practices in cases covered by the rules. The report identified 20 priority areas where remedial actions or modifications of the codes were likely to lead to more efficient and effective administration of the primary system. The first priority was to prepare a clear and realistic set of regulations concerning the responsibilities, training, posting and transfer of teachers, supervisors and administrators that would be available for all concerned officers throughout the system.

Recommendations were organized under headings related to the problems they resolved. The most important were:

- **to increase the supply of female primary teachers**, the government should remove an existing freeze on hiring, upgrade primary to middle schools, and relax rules limiting teacher recruitment in areas where female teachers are needed,
- **to ensure staffing for far-flung areas**, plan staffing at the tehsil level, relax rules related to recruitment and transfers in favor of local candidates, provide incentives to outsiders when local people are not available, equalize allowances which favor urban employment and modify GCET recruitment in favor of candidates from areas where they are needed,

- **to retain qualified teachers**, pay teachers according to their qualifications, create advanced degree programs in primary education, and reward good teaching performance;
- **to improve the quality of teachers' performance**, assess the quality of PTC training, hire AIOU to train untrained teachers, improve supervision, review and change leave policies, and reward teachers for their students' performance.

A handbook of current rules and regulations has been published (??) and provided to all district offices (??). In 19?? a committee was formed to review the rules and regulations and to consider the recommendations made in the report (??). They have....?? (status of progress)

## PLANNING TEACHER REQUIREMENTS AND DISTRIBUTION

**Master Teacher Supply and Training Plan.** To determine the number of teachers that would be needed for the expansion of the primary program, a "Master Teacher Supply and Training Plan" was prepared in 1993 covering both quantitative and qualitative concerns regarding teachers. The report discusses the difficulties of using different projection techniques. MORE????.....

## ELIMINATING THE BACKLOG OF UNTRAINED TEACHERS

Most teachers in NWFP are now required to have a Primary Teaching Certificate before entering service. Earlier, however, many entered service without this certificate and, at the time PED started, it was estimated that there was a backlog of approximately 36,000 untrained teachers. Most of these teachers served in classrooms subject to there being no trained teacher available who could take their place. They also could not advance along the salary scale until they acquired proper certification. These untrained teachers therefore had a strong motivation to upgrade their credentials. About one thousand untrained NWFP teachers at the start of PED, were enrolling during their free time and at their own expense in the distance training courses of the Alama Iqbal Open University (AIOU).

**AIOU courses.** By June of 1993, PED had contracted with AIOU to train 1000 untrained inservice teachers to PTC level through contracts. PED was willing to contract an additional 500 but there was difficulty in recruiting these additional inservice teachers because of their preference for the shorter and easier Curriculum Bureau condensed course which had no travel requirement (see below).

**"Condensed" course.** To eliminate the backlog of untrained teachers in NWFP, a condensed course similar to that conducted in Balochistan was prepared. The duration of the course was three months. Approximately \_\_\_\_\_ inservice teachers took the training and received a \_\_\_\_\_ certificate. MORE????

## IMPROVING THE TRAINING OF TEACHERS

The PTC certificate is a requirement for entering teaching service in NWFP. It takes precedence in recruitment over longer academic training even though BRIDGES studies have shown that teachers' professional training makes no difference in student learning results and longer academic training makes a greater difference.

Efforts to improve the training of teachers in NWFP began with an in-depth study of two teacher training colleges in the province conducted by Huma Nauman for the BRIDGES project. This study showed an appallingly poor program of training, where instructors and principals were often absent, came late and delivered lectures with little application to the conditions that existed in real classrooms. Practice teaching was virtually non-existent though it featured heavily in the documents of course curricula. There were also abuses in the way students were recruited for training colleges when politicians nominated candidates--often months after the course began, who were poorly qualified for the work or came from areas where teachers were not needed.

**Teacher Content Study.** In an effort to know more about the skills of teachers, a major study was conducted of teachers' knowledge of primary subject content. 900 PTC and CT students in six GCETs (3 male and 3 female) were tested using the PEP-II Class Five curriculum-based achievement tests in math, science and Urdu. Tests were conducted at the beginning and at the end of the GCET course. In addition approximately 600 primary teachers from a representative sample of 184 primary schools were tested in four districts.

The major findings among the preservice PTC students at the beginning and at the end of the course were that they did not command full mastery of any subject and that they were seriously deficient in math and science. The PTC course, therefore, does not have a major effect on teachers' knowledge of the subject content in Class Five. In other words teacher training does not prepare teachers to teach much of the primary curriculum. However, the study showed that the longer the academic training of teachers the better their scores on the tests. On average, female students scored about the same as males on science and Urdu, while males scored higher than females on math. Females tended to have lower academic qualifications than men, and therefore when the scores were controlled for qualification, females scored higher than men. This may mean that females are better students than men when they are of the same qualification.

The inservice teachers scored approximately the same as the PTC students. Additional findings for their group were that the length of service improved the scores of inservice teachers in math and science but not Urdu. Also teachers who taught Class Five scored higher in these two subjects than teachers who had not taught Class Five which suggested that they probably learned some of the subject content while teaching Class Five materials. As BRIDGES studies also discovered for students of these teachers, there was no difference in achievement scores of trained and untrained inservice teachers. There were also no differences in scores of teachers who obtained their PTCs from various sources: through normal GCET courses, the AIOU program or the condensed course. They were all equally poor.

The report recommended remedial training of preservice and inservice teachers in subject content

knowledge used in the primary program. This training needs to be organized around existing primary textbooks and should ultimately replace the present courses taught in PTC training that cover content. Preservice and inservice courses need to be linked to avoid duplication and to ensure that both trainings are closely tied to the realities teachers face in classrooms. The Curriculum Bureau in collaboration with the Directorate of Primary Education should develop a plan to address the problem and assign responsibility for implementing it.

Through the IMDC, PED responded to these recommendations with a number of activities, many of which have been elaborated in the sections of this report concerned with curriculum. To quickly summarize the portions of that section that relate to teachers and their difficulty with content knowledge, the IMDC:

- developed annotated teacher guides with detailed instructions for teaching each lesson of new textbooks including answers to practice problems,
- provided materials-specific training for all newly developed materials including training in the concepts contained in new textbooks,
- developed teacher training units for preservice and inservice training covering the concepts and subject content of the primary curricula.

The IMDC invited the Curriculum Bureau to open a branch office in Peshawar and assign four staff members to work on the development of teacher support and training materials and to carry out field work with the GCETs. These staff assisted by the IMDC have conducted pre and post tests of PTC student content knowledge in the course year 1993-94, have briefed GCET staff in detail about the deficiencies in each subject area, have trained instructors in the use of content units to remediate student deficiencies, and have provided supplementary instructional materials to support teachers in the field during their practice teaching and later inservice teaching. During training, the CB staff have also brought together district supervisors (ASDEOs and LCs) and instructors in local GCETs to begin developing a more meaningful link between training and classroom teaching.

**Classroom management.** As noted also in the curriculum sections of this report, the IMDC developed classroom management units for the training of teachers. Problems in instruction were identified during evaluation studies of experimental materials in almost 800 schools, and exemplary teachers were invited to the IMDC during their holidays to suggest how these problems might be resolved. Their advice was incorporated in short training units for preservice and inservice teachers, and instructors in GCETs were trained in how to use them just prior to student practice teaching.

**Master training for GCET instructors.** Did it happen? When? It's in the Annual Work Plan progress reports.

**Providing commodities to GCETs.** A commodity support survey was conducted in the Curriculum Bureau, the Education Extension Center, and in all 18 GCETs in 1993 and orders for commodities

were placed. The commodities started arriving in ??? and were placed in the GCETs in ??? Training in the use of the commodities was conducted in ??? (was it?)

**Changing the PTC curriculum.** A preliminary plan for the redesign of the PTC curriculum was prepared by the consultant in 1993 but never implemented.???

**Strengthening the Curriculum Bureau's teacher training functions.** A report was prepared by the teacher training consultant suggesting revisions in the organization of the CB to better cope with training functions. The Secretary of Education formed a committee of officials to consider the recommendations. What happened???

**CB/Education Extension Center/GCET Staff Training.** Training was given in "Effective Teaching Practices" to relevant staff of the CB/EEC/GCETs. They were also trained in the creation of innovative materials for use in classrooms. When?? Where?? What?? By whom??

**Overseas training.** Over the course of PED in NWFP, 3 candidates were enrolled in MA degree programs in the US, ??? education officials took short courses, and 5 study tours were conducted. MORE???

## IMPROVING THE SUPERVISION AND SUPPORT OF TEACHERS

Near the beginning of PED activities, the teacher training consultant was invited to conduct workshops for approximately 500 supervisors (Learning Coordinators) who had been appointed by the government and had been inservice without training.

**Learning Coordinator Master Training.** In coordination with UNICEF, Learning Coordinator training was conducted in the summers of 1991 and 1992 for the government appointed inservice LCs who were not yet trained. Their training was supposed to elaborate the model provided by PEP-II. By the end of the 1992 Fiscal Year a second round of LC Master Training was completed and the third round was planned for completion in August 1993. The second round also included PEP-II LCs as participants (Is this true????). Training materials for these courses were developed by the consultant. They included revised "Effective Teaching Practices" and "Generic Teaching Skills" packages which contained units on "Individual Student Differences," "Motivation," "Higher Level Thinking Skills," "Classroom Management," and "Problem Solving". These packages were field-tested in one supervisor training and with selected inservice and GCET instructors.

**Head teacher training.** Did it happen? When? What? It is in the Work Plan Activities.

## SUMMARY

In NWFP, PED efforts concerning teachers have focused on identifying policies that inhibit the effective and efficient operation of primary schooling, on increasing training opportunities for teachers with an emphasis on materials-specific training (see the curriculum sections of this report)

and on improving supervisory support. Since 1990, construction of new GCETs for girls has brought preservice PTC training closer to the home areas of girls, while a condensed PTC course and funding of AIOU candidates has helped eliminate the backlog of untrained teachers. Officers in almost every district have participated in the introduction, training, monitoring and evaluation of new IMDC materials. They have worked with teacher guides detailing the steps to be taken in teaching each lesson in classrooms. Training units based on classroom observation and the expert advice of model teachers have been prepared in the IMDC for use in preservice and inservice courses. Since 1991, also, a series of training workshops have been conducted to increase the awareness of Learning Coordinators about pedagogical concepts and methods that might be used to improve the quality of classroom instruction.

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## **ACCOMPLISHMENTS**

In the four years of its existence in Balochistan and NWFP, the PED program has made progress in addressing education problems that relate to teachers. The major accomplishments can be summarized under the informal objectives that were set in the original "Working Papers" for PED.

### **1. To increase the supply of teachers sufficiently to staff the expected expansion in the primary system:**

- X number of new GCETs have been constructed with an increased output of X teachers,
- x number of girls' primary schools have been upgraded to middle schools to increase the number of female teacher candidates in rural areas,

### **2. To attract more teachers to service in rural areas:**

- New GCETs have been built closer to the homes of prospective female teachers, in areas where female teachers are needed,
- Policy changes have been made to allow/encourage girls to go to boys schools, and for male teachers to teach in girls' schools where communities accept the idea and there is no female teacher,
- Other policy changes have been recommended to provide incentives for rural service, to recruit and appoint teachers at the tehsil level, and to equalize urban and rural allowances.

### **3. To attract and keep more qualified teaching staff:**

- Policy changes have been recommended to provide rewards for teachers with high achieving students,

- The backlog of untrained teachers have been largely eliminated by offering alternative distance and condensed training courses.

4. To make training qualitatively better and more relevant:

- Balochistan is planning a preservice course that is more practical and relevant to classroom realities,
- NWFP has provided materials-specific training to supervisors and teachers in 800 experimental schools in every district of the province; and training materials in subject content and classroom management techniques for preservice and inservice teacher training,
- A number of workshops in each province have improved teacher, supervisor and curriculum development skills in support of an improved instructional program,

5. To ensure that qualitative improvements in instruction reach the classroom:

- Training has been provided for supervisors in methods and concepts required to improve instruction,
- Better instructional materials and other support aids have been developed for classroom teaching.

## CONSTRAINTS ON PROGRAM ACCOMPLISHMENTS

Though a substantial number of improvements have been made, many constraints still make it difficult to implement a program of the magnitude planned for PED. Among the constraints are the following:

- **Lack of GOB and GNWFP recurrent budgets** to expand the supply of teachers adequately to maintain official teacher student ratios. Consequently, as enrollments increase, many classes have also increased, in some cases, to 100 students or more.
- **A perception of schooling as requiring buildings** before the government provides other inputs, has slowed the universalization of primary education--it will be a very long time before all villages have a school building; in the meantime a teacher and students can constitute a schooling unit, and many villages are ready to provide interim facilities if the government will provide a teacher.
- **Bureaucratic lack of responsiveness**--many essential actions have not been taken by the provincial governments nor critical policy changes made that would have solved a number of serious problems in the primary system.

- **Poor management of resources** partly resulting from poor planning capacity is a problem that has not been adequately addressed; a great deal of information is now available to plan the allocation of resources with some precision, but planning still relies more on subjective opinion than empirical data.
- **Lack of organized procedures and vested authority to make changes**--procedures for changing curricula, introducing new materials, sanctioning needed posts, refining the career ladder, etc. are not clear; even when innovations are developed, tested, and approved, it is sometimes difficult to find people with the authority to ensure that they are disseminated to the wider system.

## RECOMMENDATIONS

Because the teacher-related PED activities have been disrupted in both Balochistan and NWFP during the short duration of the program, there is much left to be accomplished. Again, recommendations can be summarized under the objectives of the original PED design.

### **1. To increase the supply of teachers sufficiently to staff the expected expansion in the primary system:**

- Continue the construction of GCETs as needed to staff present and planned expansion
- Plan teacher needs with more precision (NWFP is exceeding the need for teachers now because construction goals have lagged); extra capacity provides the opportunity to increase the qualifications of entrants and to divert more of the instructors' time to badly needed inservice training.
- Study the implications of different rates of enrollment increase. If GOP budgets cannot reasonably be expanded for universal education then more attention should focus on helping the private sector set up schools for low and middle income families. Assistance might come in the form of initial training of teachers in, among other skills, the use of new materials produced under PED.

### **2. To attract more teachers to service in rural areas:**

- Refine recruitment to GCET training, especially in the case of females, to give priority to women from areas needing teachers.
- Assign a provincial official the job of visiting each district office to solve problems of appointments to hard-to-staff schools; this person should know the latest rules concerning relaxing qualifications and should be given the authority to solve staffing problems, including authorizing special allowances where necessary.

- Many needed policy changes have yet to be made, including ones recommending incentives for rural service, the recruitment and appointment of teachers at the tehsil level, and the equalization of urban and rural allowances. To make it easier to address these issues, reports should be prepared costing out the implications of various options so that actions can be taken responsibly.

### **3. To attract and keep more qualified teaching staff:**

- A review committee needs to look at the policy book compiled by PED concerning teachers--their pay, their allowances, transfers, advancement, leaves, etc. and they need to devise a fair less complicated system which satisfies the needs of both teachers and the education program.
- Incentives should be provided for highly qualified, and good teachers. Incentives might include extra points on the seniority scale or pay prorated by academic qualification. Such a system needs to be protected from abuse.

### **4. To make training qualitatively better and more relevant:**

- The preservice PTC course needs to be thoroughly overhauled. It will be important that this new course be practical and relevant to classroom realities, and maintain enough of the crucial aspects of previous teacher-student relations so teachers will not reject the course out of hand. The core of the program needs to revolve around training in subject content knowledge, materials-specific training, practical methods, and concrete classroom management tips.
- More training units constituting lessons and demonstration materials need to be developed for the GCETs in subject-content, materials-specific training, practical methods, and concrete classroom management topics. These should serve as the core of an improved PTC course and should be used immediately while a full-fledged PTC course is being developed. (Some of these units have already been developed in NWFP, and some parts of the revised crash-curriculum in Balochistan could be adapted to these purposes).
- Preservice and inservice programs should be connected more closely, either by locating both in GCETs or by using GCET instructors for both types of training. The idea is to develop a more productive communication between practitioners, trainers and program developers. In addition, if inservice training is located in GCETs, the courses will be able to take advantage of trained instructors and greater resources which will eventually equip these institutions. Field supervisors need to be involved in this closer liaison.
- Training is needed for GCET instructors and field supervisors in what and how to teach teachers. Both need to be involved in the evaluation of training programs to know their impact in classrooms.

- Preservice PTC candidates needed to be tested on their knowledge of primary level subject content at the start and at the end of each academic year; they should not be awarded a PTC if they do not meet a determined standard of proficiency in subject content knowledge. NWFP has started this process and it needs to continue.

#### **5. To ensure that qualitative improvements in instruction reach the classroom.**

- A vigorous inservice program is needed for what is now a backlog of "undertrained" as opposed to "untrained" teachers. Extensive inservice programs are needed to improve the skills of classroom teachers, whether they are graduates of PTC, MFTTU or crash courses. NWFP studies show that inservice teachers have many of the same weaknesses as PTC students. They also need to learn subject content knowledge, how to teach the student texts effectively and how to organize classes for more efficient learning. They will also need to be trained in new materials and programs as they come on line. These objectives will be facilitated if training materials for preservice courses are produced in units that can be adapted for shorter one or two-topic inservice courses.
- Annotated student texts designed for teachers bridge the gap between theory and practice, and show teachers exactly what they are supposed to teach. These "daily lesson plans" are essential to move teachers away from the only instructional approach they have known up to now, "lecture-memorization".
- A system of accountability for quality learning needs to be organized from the teacher up to the highest authority in the provincial government. At each level, there needs to be consequences of performance, good and bad. NWFP has created such an accountability up to the level of SDEO but the system is unlikely to continue without the leadership to press it.
- Much more evaluation of the effects of innovations in the system need to be conducted in schools and classrooms where the effects are intended to be felt. It is not clear, for example, whether the "condensed" courses have had any effect on student learning, and whether hands-on PTC training such as the creation of visual aids is ever used in classrooms. (Much "practical" training may turn out to be just another form of "theory" if it is not evaluated properly).
- Inservice training should be connected to field supervision in a productive way. Candidates for the training and their skill levels need to be determined by supervisors from observations in the field. These supervisors then also need to be involved in the training to know what teachers have learned so they can follow-up in the classroom.
- More instructional materials and other support aids adapted to real conditions and needs should continue to be developed to assist the teacher in her work.
- Small observational studies should be conducted in classrooms to determine exactly what

kinds of training are needed by teachers, and how these needs change as new programs and training are brought on line. Incalculable resources have been wasted by forgetting this essential step. It is not enough to rely on experiences in other countries or on theoretical assumptions of what is needed.