

DIRECTORATE OF PRIMARY EDUCATION

NWFP

KACHI STUDY

The Kachi study was a collaborative effort of the Directorate of Primary Education and the Pakistan Primary Education Development Programme. The study was designed and field-tested under the supervision of Andrea Rugh, consultant provided by Harvard Institute of International Development under a sub-contract for the PED Programme. The study was conducted in late September 1991 with the assistance of the personnel from the Directorate of Primary Education and eight districts of NWFP. A list of the participants is included in Annex D.

CONTENTS

Executive Summary.....	1
Introduction	1
Policies.....	2
Recognition.....	2
Dropout.....	4
Curriculum materials development and teacher training.....	5
Kachi classes in different settings.....	6
Implications for program quality.....	7
1 Problem.....	8
2 Study purpose.....	8
3 Sample.....	8
4 Findings.....	10
4.1 Definitions.....	10
4.2 Existence of preprimary classes.....	11
4.3 Facilities for preprimary classes.....	11
4.4 Preprimary class composition.....	12
4.4.1 Size of class.....	12
4.4.2 Multi-grades.....	12
4.4.3 Age range.....	13
4.4.4 Mixed gender.....	13
4.5 Preprimary schedules.....	14
4.6 School policies relating to preprimary.....	14
4.6.1 Admission.....	14
4.6.2 Attendance.....	15
4.6.3 Promotion.....	15
4.7 Efficiency	16
4.7.1 Kachi completion in one year.....	16
4.7.2 Age at completion of Kachi.....	16
4.7.3 Dropouts from preprimary.....	17
4.7.4 Reasons for dropout.....	18
4.7.5 Repetition.....	18
4.8 Teachers for preprimary classes.....	18
4.8.1 Existence of teachers.....	18
4.8.2 Profile of the sample preprimary teachers.....	19
4.8.3 Absenteeism.....	20
4.8.4 Assignment of teachers to preprimary.....	20

4.8.5 Teacher opinions and suggestions about teaching preprimary.....	20
4.9 Parent-teacher communication.....	21
4.10 Preprimary instruction as reported by teachers.....	22
4.10.1 Content	22
4.10.2 Practices.....	22
4.11 Observed teaching practices.....	23
4.11.1 Responsible person.....	23
4.11.2 Subjects.....	24
4.11.3 Teaching activities.....	24
4.11.4 Student learning activities.....	24
4.11.5 Feedback.....	24
4.11.6 Monitoring.....	25
4.11.7 Control.....	25
4.11.8 Language of instruction.....	25
4.12 Supervision.....	26
4.13 Student engagement and teacher involvement.....	26
4.13.1 Student engagement.....	26
4.13.2 Activities that hold the attention of children.	26
4.14 Kachi classes in different settings.....	27
4.14.1 Preprimary student-teacher ratio.....	28
4.14.2 Total students taught by individual teachers...	28
4.14.3 Sheltered classes.....	28
4.14.4 Multi-classes.....	28
4.14.5 Student monitors.....	29
4.14.6 Student attendance.....	29
4.14.7 Mixed gender classes.....	29
4.14.8 Teacher experience.....	29
4.14.9 Teacher age.....	29
4.14.10 Teacher origin.....	30
4.14.11 Teacher academic and professional training....	30
4.14.12 Teacher absenteeism.....	30
4.14.13 Dropout rates.....	31
4.14.14 Supervision.....	31
4.14.15 Teacher performance scores.....	31
4.14.16 Teacher practices.....	31
4.14.17 Implications.....	32
Annex A: Design.....	35
Annex B: Descriptions in Kachi classes.....	37
Annex C: List of activities in Kachi classes.....	38
Annex D: List of those participating in the study.....	44

DIRECTORATE OF PRIMARY EDUCATION**NWFP****KACHI STUDY****EXECUTIVE SUMMARY****Introduction**

Pre-primary classes of kindergarten (Kachi) and "nursery" (Zero) children exist extensively in Pakistan government schools, but remain largely unrecognized in terms of resources by the formal education system. As a result they use teachers, curriculum, textbooks, and physical facilities designed for other class levels and age groups. Some educators believe that the large classes and poor quality programs discourage children, causing them to drop out of school before they consolidate literacy skills. It has been unclear whether this is true or even whether dropout is a significant problem in these classes.

A consequence of the fact that pre-primary classes remain officially unrecognized is that educators are largely unaware of the actual conditions that exist in these preprimary classes or of the practices that teachers use to deal with a group that has no formally assigned resources. This study collects information about these pre-primary classes for the use of policy makers and implementers of an improved primary program.

The Kachi study has two objectives:

- 1) to gather current information on the conditions and practices in Kachi classes as a basis for making improvements in instructional materials and inservice training of teachers
- 2) to train relevant personnel in supervision of fieldwork, classroom observation and data collection so that they may become part of an institutionalized system of program improvement

The study was designed and field-tested in the spring of 1991 and conducted in September 1991. The sample consisted of Kachi classes in 64 NWFP schools selected randomly from categories of schools based on gender, location, and "quality" (as ranked by supervisors).

The present report describes the conditions and practices in Kachi classes, and briefly considers the relationships between certain conditions and practices in Kachi classes and assumed learning outcomes.

This summary extracts information from the findings and reorganizes it for the benefit of policy makers, curriculum developers and teacher trainers.

Preprimary classes in this report have been defined as two groups:

- 1) A Zero Class of children who are present in school but considered "unadmitted." They are usually below the age of 5, and may or may not be included in school census enrollment figures. These children appeared in 77 percent of the sample schools and averaged 17 children in the schools where they appeared or 6 percent of all sample enrollments
- 2) Kachi Class (First Junior) children who are informally admitted, usually at age 5, but not formally recognized with official resources. They may or may not appear in school census enrollment figures. An average of 38 of these children appeared per sample school or 18 percent of sample enrollments.

Policies

The findings of the study inform two policy issues of concern in considering the preprimary classes:

- o whether to recognize these classes officially with resources, and
- o whether there is a dropout problem in these groups that requires designing preprimary programs with more holding power

Recognition. At present, preprimary classes exist routinely, in most schools of NWFP. In the sample, preprimary students:

- o constituted about a quarter of the primary student enrollment;
- o consumed about a quarter of the primary teachers in a school;
- o were largely unsheltered (2 unsheltered against less than one sheltered class on average per school) which contributed to poor attendance when weather was inclement;
- o received instruction that consisted almost exclusively of reciting and copying letters and numbers; some were so young (3 years old) that they did nothing but sit passively in school all day.

One reason school officials admit preprimary children is that the current Class One curriculum is too difficult to complete in one year. Routinely, many school officials require that children be able to know letters and numbers and read simple sentences to enter Class One; some give tests of numbers or alphabet letters for admission to Kachi and some even to Zero Class.

There are four main policy options concerning recognition of preprimary classes, each with important resource implications:

- o Leave the situation as it is, with school staff deciding themselves whether to admit preprimary

children and coping however they can with the pressures caused by the resources these classes consume. Retaining the existing situation, will perpetuate and perhaps aggravate the negative conditions found in this report.

- o Remove all preprimary children and concentrate resources on the official five classes. This approach is the least costly in terms of resources, but would still require a change in the curriculum and instructional materials which at present are too difficult for children and cannot be completed in the time currently allotted for Class One instruction. It is possible, with this option that some children would be lost to the system if they were to wait until 6 years of age to begin education.
- o Accept children for both Zero and Kachi Classes; add more teachers per school, more sheltered spaces, appropriate instructional materials, and specialized training for teachers. This alternative is the most costly because two distinct educational levels will have been added to the system with distinctly different educational needs.
- o Accept children for Kachi Class only, from age 5, and prohibit all younger children from the schools. This transition can be made easily because procedures for Kachi classes are already fairly standardized with regular admission, promotion, and attendance policies, age limits, an informal practice of using the grade one primer, etc. By removing the Zero children from schools, it would reduce the size and range of preprimary classes to more manageable proportions. More resources would still be needed to provide adequate shelter, teachers, specialized training, curriculum, and instructional aids and materials for the Kachi group.

If the resources are available, this final option is probably the best, given existing conditions and public expectations about education in NWFP.

Dropout. With regard to the dropout situation, this study finds that dropout between Kachi and Pakki may be less than official statistics have suggested, for a number of reasons related to the way data have been collected. (The school census should shed further light on this question). In most other countries where careful studies have been made of dropout, the same has held true: dropout tends to be less than expected and repetition more than expected.

The study found the following:

Of sample schools having Zero children (77 percent), there was less than one child (.56) on average who dropped out since the beginning of the school year from an average group of 17 children per school. This would make a dropout rate of 3 percent. Since Zero children are usually not registered, this rate is difficult to confirm.

In sample schools as a whole, there was an average dropout of less than two Kachi children (1.73) since the beginning of the school year from an average 38 children, or a dropout rate of 5 percent. This number has been confirmed from the school register. Teachers believe students are likely to drop out by the middle of the year if they are going to drop out, but it is possible

that a few more children may drop out in this sample by the end of the year.

Teachers in two-thirds of the sample schools reported that half or more of the Kachi children took longer than one year to complete that class. Thus the problem appears to be less one of dropout, and more one of repetition. The ingredients of this problem are the admission of underage children that take the attention of the teacher, a difficult curriculum that is cannot easily be completed in a year, and teaching practices that are inadequate to the complicated demands of such multi-level classes.

A practical matter is how the school census might be worded to obtain more accurate information about the numbers of preprimary children. One possibility that can be tested in the field is the following:

How many Kachi (First Junior) children were admitted to this school at the census cut-off time? (girls, boys)

How many of these children are attending Kachi Class for the first time? (girls, boys)

How many of these children are repeating Kachi Class? (boys, girls)

How many Zero children are attending the school, whether registered or not registered? (boys, girls)

How many of these children are attending Zero Class for the first time? (girls, boys)

How many of these children are repeating Zero Class? (boys, girls)

Curriculum materials development and teacher training

If existing conditions continue, teacher trainers and curriculum developers for Zero and Kachi Classes will need to prepare programs and materials which take the following conditions into consideration:

- o Single and multi-class teaching conditions (69 percent of the sample schools have some or all Kachi classes combined with other classes)
- o Large class size (average 72 children) in single and multi-classes taught by Kachi teachers
- o Variations in the size of classes taught by the Kachi teacher (11 to 163)
- o Age variation in children (3 to 7 in Zero, and 4 to 11 in Kachi)
- o A school day that allows 4.5 hours of instruction, plus a roughly half hour break
- o Limited instructional resources with mainly only textbooks and blackboards available

- o Lack of secure storage space (50 percent of teachers have none)
- o Lack of playgrounds where outdoor activities can take place (half the schools have none)
- o Inadequate shelter against the extremes of climate (the majority of preprimary classes are unsheltered)
- o Many teachers with possibly low ability (third division scores from their academic training)
- o Emphasis upon teacher-directed instruction (students show low engagement in learning when teachers are not directly involved in instruction)
 - o Dependence on local languages for instruction (88 percent)

Trainers and instructional materials developers, can build on the potential inherent in the following conditions:

- o Teachers usually have considerable teaching experience (over 10 years average in the sample), including previous work with preprimary classes (average 4 years).
- o Teachers are usually academically qualified at or above the local matriculate standard, and most are professionally trained
- o Inservice training is experienced by many teachers (77 percent of teachers have received training)
- o Teachers are familiar with the use of peer tutoring to extend the period when children practice
- o The existence of basic blackboards and textbooks
- o Fairly good attendance of preprimary students

The conditions existing now in preprimary classes suggest, among other considerations, the need for more self-instructional, less teacher-dependent materials, and a practically-based teacher training that helps teachers cope with the real conditions they face in their classrooms. Teachers, for example, need to be trained in the use of preprimary materials prepared in a manner that makes them more effective for this age group, and in teaching strategies that have been tested and prove useful under the kinds of multi-class, multi-age conditions that exist in these classes. The special needs of these age groups suggests that an early childhood learning component be emphasized in the training of teachers.

Supporting the conclusion above that instruction is too teacher dependent is the finding in the study that 96 percent of the time when a high percentage (75 percent) of children appear to be actively engaged in learning tasks, a teacher is directly involved in teaching them. Students in these classes

have become highly dependent on teachers for instruction. This fact has major implications for the amount of time available for learning in the majority of preprimary classes where multi-class teaching requires teachers to apportion their attention between classes.

Kachi classes in different settings.

Differences found in indicators that are sometimes associated with the quality of learning programs demonstrate some of the weaknesses and strengths of categories of preprimary teachers. The following are a general summary of the findings:

- o Urban and rural preprimary teachers showed few differences.
- o Male and female teachers exhibited some important differences, usually with the "more learning positive" aspects of the indicators in favor of the male teachers.
- o Teachers in supervisor-ranked high and low schools showed few important differences.
- o High-performing and low performing teachers showed important differences in teacher origin, professional training, the time spent directly involved with the class, the extent to which "effective practices" were used, and in the kind and variety of tasks students were asked to do.

Implications for program quality.

The teacher performance score seems to be supported as a reliable proxy for student learning outcomes in preprimary classes. This support comes from the fact that in the classes where teachers are able to keep their students engaged in learning, they are also more likely to use "effective teaching practices,"--practices which had previously been derived from observing teachers with students showing higher achievement scores. Therefore, "effective practices" again appear to provide a useful framework for organizing classes in Pakistani schools for the purposes of increasing learning---this time in preprimary classes.

Supervisors' rankings of the quality of school settings do not appear to be based on student learning criteria, since on most of the indicators that might distinguish more or less learning there is no difference between high and low-ranked schools. This suggests a need to know more about the "non-academic" criteria education officials use for judging schools, students and teachers in order that these important aspects of schooling not be neglected in a comprehensive preprimary program.

DIRECTORATE OF PRIMARY EDUCATION**NWFP****KACHI STUDY****1 PROBLEM**

Pre-primary classes exist extensively in Pakistan government schools but remain largely unrecognized in terms of resources by the formal education system. As a result, they take away from the resources available to the whole primary system; they use teachers, curriculum, textbooks, and physical facilities designated for other classes. None are designed specifically for the use, the capabilities or the age levels of preprimary children. Another major concern is the possibility that many children who enter the system through these classes, become discouraged and drop out before entering formal classes where they might consolidate literacy and numeracy skills. A consequence of being unrecognized, is that officials are unaware of both the actual conditions that exist in these preprimary classes and the practices that teachers use in dealing with a group that has no assigned resources. This study is aimed at collecting information about these pre-primary classes for the use of policy makers and implementers of an improved primary program.

2 STUDY PURPOSE

The Kachi study has two objectives:

- 1) to gather current information on the conditions and practices in Kachi classes as a basis for making improvements in instructional materials and inservice training of teachers
- 2) to train relevant personnel in supervision of fieldwork, classroom observation and data collection so that they may become part of an institutionalized system of program improvement

3 SAMPLE

The study sample consisted of 64 Kachi classes selected at random from within categories of conditions that curriculum writers and teacher trainers might face. The study is not statistically representative of the universe of Kachi classes in the province (the School Census will provide this kind of information on selected topics) though there is no reason to believe that the classes in the sample were substantially different from Kachi classes elsewhere.

NWFP districts were divided into two groups. One group of eight districts (Peshawar, Dir, Malakand, Chitral, Swabi, Kohat, Karak, Abbottabad) conducted the Kachi Study.¹ An effort was made to

¹ The other half (Charsadda, Nowshera, Mardan, Mansehra, Kohistan,

balance northern and southern districts in the sample. Eight schools were selected from each of these districts based on supervisor "quality" rankings² of schools from 1 to 4 and other characteristics believed to be salient such as gender and location. In theory, the sample from each district should have consisted of Kachi classes in schools having the following characteristics:

- a. "good" urban boys'
- b. "good" urban girls'
- c. "good" rural boys'
- d. "good" rural girls'
- e. "poor" urban boys'
- f. "poor" urban girls'
- g. "poor" rural boys'
- h. "poor" rural girls'

These schools were selected by the study coordinator (who did not personally know the schools) from a complete list of schools from each district indicating the above characteristics. In a few cases, alternate schools were selected because an actual school did not have the characteristics expected. The final sample, in the combinations above, contained:

"good" schools 50 percent
 "poor" schools 50 percent
 urban schools 48 percent
 rural schools 52 percent
 male schools 50 percent
 female schools 50 percent

All the schools were independent primary schools, including 14 percent with classes to grade 4 and the rest to grade 5.

The studies were conducted near the end of September 1991, after summer holidays and when both winter and summer area school sessions coincided as nearly as possible--that is, both were substantially into the school year.

4 FINDINGS³

Swat, DIKhan, Bannu) conducted a multi-class study. All the districts, therefore, received a similar training.

² From other studies in Pakistan, we have discovered that supervisors rank the "quality" of schools on the basis of physical conditions and the overall orderliness of the school. However, there is also a rough correlation between these rankings and student achievement in the higher classes.

³The study design is described in Annex A.

4.1 Definitions.

The education system in Pakistan formally recognizes only 5 classes⁴ or grades--Classes One through Five. However, most schools actually have six or seven identifiable levels of schooling. The additional classes consist of students in pre-primary levels. The names of these classes vary in different regions and different provinces. In NWFP, the Kachi Class, which precedes Class One of the formal system, is sometimes called the First Junior Class, usually to contrast it with the First Senior Class or Class One. If the term Kachi is used for the pre-primary class, then Class One may be called instead, the Pakki Class.

Preceding the Kachi Class in many schools is another group of children who are attending school but are considered "unadmitted." In some places these children are called the Zero Class.

The following are the class levels found in most NWFP schools:

Zero Class: children who are present but "unadmitted," usually below age 5; they may or may not be included in school census enrollment figures. These children appeared in 77 percent of the sample schools and averaged 17 children in the schools where they appeared. In the sample as a whole, their numbers ranged from 0 to 90 children in a school, and they constituted 6 percent of the primary enrollments.

Kachi Class (First Junior): children who are informally admitted, usually at age 5, but not formally recognized in terms of official resources; they may or may not appear in school census enrollment figures. An average of 38 of these children appeared per sample school, but their number ranged from 6 to 98 children. They constituted an average 18 percent of primary enrollments.

Pakki Class (First Senior or Class One): children officially recognized and always appearing in school census figures

Class Two

Class Three

Class Four

⁴In Pakistan, the word "class" is the equivalent of the American word "grade." Class is used here in the Pakistani sense of instructional level--Class One, Class Two, etc. or sometimes in the sense of all the children instructed by a single teacher. The word "classroom" is used to designate the space in which children are taught.

Class Five

This study provides information on the Zero Class where it exists, the Kachi Class and, where appropriate, other classes.

4.2 Existence of preprimary classes.

All of the 64 schools contained a Kachi Class and 77 percent contained a Zero Class. Table 1 shows the preprimary enrollments in sample schools and their proportion of school enrollments. The schools averaged 216 students, but ranged in size from 30 to 608 students. On average the preprimary children together constituted 24 percent of the primary enrollments in the sample.

Table 1 Preprimary enrollments in sample schools

Class	Average enr.	Range in sample	% of tot.sch.enr.
Zero	13	0 to 90	6 percent
Kachi	38	6 to 98	18 percent

4.3 Facilities for preprimary classes.

Table 2 shows the facilities available in the schools. These are facilities considered minimally necessary for schools and especially for the comfort of small children.

Table 2 Facilities in sample schools

Facility	Number	% of schools with
Drinking water	47	73
Washing water	44	69
Toilets	27	42
Playgrounds	30	47

The schools averaged 3.8 rooms per school, with 3.5 actually used for classes. About two-thirds of the schools had preprimary students taught in unsheltered conditions. On average, there were 2 unsheltered and .5 sheltered preprimary classes per school.

In an open-ended question, teachers identified a number of difficulties, related to facilities, affecting the teaching of Kachi children. Most important was the lack of sheltered space (44 percent), instruction areas which were too hot or cold (33 percent), noisy (33 percent), too small (30 percent), or where repairs were needed. Others complained of the lack of sitting mats, water, toilets, and moveable blackboards to use with classes in outside spaces.

4.4 Preprimary class composition.

4.4.1 **Size of class.** It is difficult to teach preprimary students when there are large numbers of children in a classroom. In the observed classes, researchers reported an average 55 preprimary students. In addition, approximately 20 other students from other class levels were also taught by the same preprimary teacher. The average class size taught by one teacher was, therefore, 72 students, but their numbers ranged from 10 to 163.

Table 3 Observed class size including all students taught by Kachi teacher

No. of students	No. of teachers	% of teachers
11-19	3	5
20-39	10	16
40-59	13	20
60-79	15	23
80-99	12	19
100-163	11	17

4.4.2 **Multi-grades.** Research carried out in Pakistan by The BRIDGES Project has shown that children in multi-grade classes learn less. In the observed classes, more than half the teachers either taught Kachi as a single class or with Zero class. The rest combined the Kachi and/or Zero classes with younger classes, 1, 2, and/or 3 (28 percent) or with older classes, 4 and/or 5, (11 percent). It seemed therefore that where resources and teachers permitted, schools tried to separate out the

preprimary section from other classes, and if they combined them with other classes, they were more inclined to combine them with lower ones. On average preprimary teachers taught 2.4 classes. Table 4 shows the number of teachers teaching multi classes.

Table 4 Number of classes taught by preprimary teachers

No. of classes taught	No. of teachers	% of teachers
One	10	16
Two	31	48
Three	13	21
Four	9	14
Five	1	2

4.4.3 Age range. It is also difficult to teach preprimary classes when the age range is great. In the preprimary classes, the age range of the Zero children was greater than that of the Kachi children. 75 percent of the schools reported the youngest Zero child to be 4, 23 percent where the youngest age was 3, and 2 percent where the youngest age was 5. In about half the schools, the oldest Zero child was age 5 (43 percent), and in other schools they ranged up to 7 years of age. Therefore, substantial numbers of schools had Zero children who were as young as 3 years old, an age that is too young to subject to the long hours of inactivity required in most of these classes.

The age of Kachi admission seems to be more regularized. 95 percent of schools reported the youngest Kachi child to be age 5, and about half (42 percent) reported the oldest child as age 6. Others (22 percent) reported age 7, and the rest 5, 8, 9, 10 and 11 years. Thus, though the lowest age for Kachi admission seems to be consistent at about age 5, there is considerable variation in the ages when Kachi children complete the class. If these age differences represent repetition, then they may be distorting the extent of the dropout phenomenon.

4.4.4 Mixed gender. If coeducation were possible in the primary years, construction funds might be freed to build schools with more classrooms (rather than separate schools), and therefore the younger children might be more likely to learn in sheltered areas. Even though the sample schools were usually officially designated as either for males or females, a number (17 percent) of the preprimary classes observed by researchers contained children of both sexes.

4.5 Preprimary schedules

Time is an important resource for learning. The majority (76 percent) of preprimary classes spent 5 hours in school. Of that time, most (83 percent) had one break, of usually around 30 minutes. Learning time was therefore about 4 and a half hours. Preprimary children need adequate instructional time but they also need breaks where they have some physical activity. In 13 percent of the schools there were no breaks at all. Altogether there was only an average of 20 minutes spent in breaks.

4.6 School policies relating to preprimary

A number of policies relating to admission, attendance, and promotion affect the preprimary classes. Policies here are defined as rules and regulations that have become routine practice. In general, most schools had regularized the admission, attendance and promotion of Kachi children, while varying more widely with regard to rules affecting Zero children.

4.6.1 Admission. Though Kachi classes are not formally recognized, all the schools had very similar rules about which children they would admit to the Kachi class. These rules included age requirements, almost always age 5 (92 percent), testing the child for certain knowledge such as alphabets, numbers, etc. (34 percent), adequate mental capabilities (27 percent), the proper admission papers (26 percent), old enough to take care of him or herself and to come regularly (19 percent), a specified period in Zero class (8 percent), and appropriate fees and supplies (5 percent).

In contrast to the Kachi case, most of the rules concerning admission of Zero children involved the capabilities of the children, whether they were old enough to talk and understand, come to school alone, stay in school several hours, were toilet trained, etc. These rules varied from school to school, and sometimes case to case. Of those admitting Zero children, a number (32 percent) of respondents said they admitted children between the ages of 3 1/2 and 4. Some said they put the names of the children in the register, and others said they did not.

In schools where Zero children were accepted, teachers reported that they had refused admission to children because they were too young (52 percent), the wrong sex (21 percent), too old (19 percent), not enough space (11 percent), not enough teachers (10 percent), or too many students (8 percent). From these reports, age and sex seemed to be more important deterrents to admission than space or student/teacher ratios even when classes were crowded and contained large numbers of students.

Two-thirds of the schools reported a date in the school year after which preprimary children might not be admitted. A tendency existed for Kachi children either not to be admitted after the end of May (35 percent) or September (35 percent), whereas Zero children, if they were allowed to enter at all, were admitted throughout the school year.

In order for a child to enter Zero class, 87 percent of schools required that students bring supplies. Of those requiring supplies, (in an open-ended question), most often they consisted of takhtis (98 percent), ink pots (85 percent), pens (89 percent), pencils (28 percent), slates (26 percent), Urdu texts

(26 percent), and in smaller numbers other textbooks, notebooks, and chalk. Only one school mentioned the need for a uniform, which considering its cost at many times the cost of books, is a positive sign that perhaps at the Zero level, the costs of schooling are less than at higher classes.

4.6.2 Attendance. All the schools had rules for Kachi attendance. Most were related to the procedures of taking attendance (41 percent), while others related to how parents were notified and/or warned if children were absent (29 percent), how attendance should be recorded in a register (17 percent), how parents were required to send a message about the reason for a child's absence (15 percent), and the length of time a child could be absent before being expelled--usually 6 days (7 percent).

Zero classes had very similar rules, about taking regular attendance (85 percent), notifying parents about absences and/or warning them if children were absent (39 percent), requiring parents to send a message about the reason for a child's absence (50 percent), and the length of time a child could be absent before being expelled--usually 6 days (11 percent).

Teachers reported that in half the schools all the Kachi children attended almost every day, while in the rest (47 percent), half or more than half of the children came regularly. In general, then, teachers reported fairly good attendance for the preprimary children.

4.6.3 Promotion. Even though Kachi classes are not officially recognized, it is very difficult for children to enter Class One if they have not completed the Kachi year. And in some schools, children cannot enter the Kachi Class unless they have completed a certain period of time in Zero class and already know alphabets and numbers. In a few schools, there were even academic requirements such as knowing numbers 1-10 to enter the Zero Class.

According to teachers, to be promoted to Class One, Kachi children were required to know numbers, usually to 100 (100 percent), the alphabet (92 percent), read words and/or paragraphs (67 percent), religious prayers and recitations (47 percent), the English alphabet (31 percent), times tables from 2 to 5 (20 percent), Pashto alphabet (13 percent), some science such as about the universe, body parts, etc. (11 percent). To start the recognized part of schooling in all the sample schools, therefore, a child needed to know a considerable amount of information--much of it content that in many other countries is considered first grade material.

The teachers were under pressure to bring children to a specified standard of education, partly because a supervisor or head teacher was usually involved in decisions about promotion. About two-thirds of the schools reported that the supervisor and/or the teacher together decided on promotion; in another third the headteacher decided. Only 2 percent of schools had automatic promotion. The irony is, therefore, that though these classes are not recognized with resources, the supervisors feel that it is part of their work to ensure academic standards in these classes.

4.7 Efficiency

There is a general belief based on official enrollment figures that dropout rates are very high between

the Kachi class and Class One. Field workers in the present study did not concur in this belief. There are several reasons why dropout rates may appear high: confusion in the way enrollment figures are reported (Kachi figures may include Zero class), children may repeat the preprimary classes for several years before moving on to Class One, and general increases in school enrollment at this level as education becomes more accepted. Even when young Zero or Kachi children drop out, they may return in a year or two when they are ready for schooling.

The sample schools reported the following information on these issues. It should be remembered that the sample is not necessarily representative of the universe of schools in NWFP. However, the general conclusions are probably not very different from what would be found in other schools.

4.7.1 Kachi completion in one year. For perfect efficiency to occur, all children entering Kachi in one year would have to enter Class One the following year. Teachers were asked how many children completed the Kachi class in one year. In 42 percent of the schools, teachers said that about half the children completed Kachi in one year and 21 percent said fewer than half or none completed Kachi in a year. Only about a third (38 percent) said that almost all the children completed Kachi in a year. If the teachers were reasonably accurate in their assessments, Kachi figures alone with their high repetition component and even without the inclusion of Zero enrollments, would show a large inflation of enrollments.

4.7.2 Age at completion of Kachi. Another way to see if Kachi figures are inflated is to estimate how old children are when they complete the class. On average, according to most (92 percent) teachers, the average child completed Kachi by the time he or she was 6 years old. This figure does not confirm a large repetition rate. However, since it is a rough estimation of what happens with all children, it may not accurately reflect what happens to a significant group of children who take longer to complete Kachi.

Other age-related information also suggested a longer stay in the preprimary years than the ideal, though it is more difficult to obtain accurate information on how much figures might be distorted by these facts. For example, if a large proportion of the children entered the Zero class at ages 3 and 4, as reported, and these enrollments were recorded in the census, they would be likely to inflate preprimary enrollments for at least 2 and sometimes 3 years. Since Zero class formed about one-third of the preprimary population of these schools, the reporting of this group would considerably enlarge the numbers in the preprimary group. Similarly, though age 5 seems a fairly well fixed age of entry into Kachi, teachers reported children up to age 11 in some classes. We do not know if these children have simply enrolled late, or have remained in these classes for a number of years. The question, therefore, remains whether and to what extent Zero children and Kachi repeaters inflate the official Kachi numbers. Only a careful comparison of the actual status of preprimary children with the official census reports can clarify this question. Some schools tell us they record Zero classes in their official registers and some say they do not. It is likely that practice varies from school to school.

4.7.3 Drop outs from preprimary. Teachers were asked when Kachi children were likely to drop out of school. This question was asked in order to know whether the study was conducted by a time in the school year when most of the dropout would have occurred. In about a third of the schools, teachers reported that no children dropped out of school. In half the schools they reported that the

children were likely to dropout in the middle of the year; 11 percent said at the beginning of the year and small percentages said at the end of the year and over the summer before entering Class One. Therefore, if the teachers were accurate about the time of drop out, this study would have caught most of the children who dropped out, since it was conducted well into the school year for both winter and summer areas. Researchers were asked to gather this information from the register and the teacher interview to ensure more accurate information. Both agreed very closely.

The study found that, of schools having Zero children (77 percent) there was less than one child (.56) on average who dropped out since the beginning of the school year from a group size of 17 children per school, or a dropout rate of 3 percent. Since there was a more casual attitude toward registering these children, it is possible that dropout is less easily determined in these children. Some may come to school one or two days and then leave, and the teacher would not count such a child as a dropout.

Because Kachi children are usually registered, the figures for these classes are likely to be more accurate. In Kachi classes, there was an average dropout of less than two children (1.73) since the beginning of the year from an average starting Kachi group of 38 children. This would mean a dropout rate of 5 percent from the beginning of the school year.

4.7.4 Reasons for dropout. Headteachers were asked to give the reasons for dropout and the most important they felt were the transfer of parents (33 percent), parents for personal reasons preventing the children from going to school (26 percent), and poverty (22 percent). Kachi teachers concurred with these factors. Studies in other countries have shown that teachers tend to emphasize home reasons for dropout, while parents, if asked, are likely to give school reasons for dropout. It is likely therefore that the reasons given for dropout in this study were weighted toward home problems because only teachers were asked about these reasons. In-school factors may also be important, but we can only know this if parents are asked about the reasons for dropout.

4.7.5 Repetition. As noted above, repetition may be the more serious efficiency problem. Teachers reported an average of about 5 repeaters in the Kachi class or 12 percent of the Kachi children. Some of these children may have been repeating for a second or even a third time. A number of studies have shown that repetition is associated with an additional problem, and that is, repeaters are more likely to become discouraged and drop out of school than children who progress through the system in the expected time period.

In summary, from an average class of 38 Kachi students at the beginning of the year, 36 (95 percent) are still in school, and 2 (5 percent) have dropped out. 5 (12 percent) out of the original 38 are repeaters. This year, if 31 children of the 38 children pass on to Class One, assuming that again 5 repeaters remain behind and 2 have dropped out, then the progression rate would be about 82 percent, with the possibility that the 5 repeaters might be promoted in the following year. If Zero class figures were included, then the progression rate would be lower.

4.8 Teachers for preprimary classes

4.8.1 Existence of teachers. The sample schools averaged 5.1 actual primary teachers out of a slightly higher number of sanctioned teachers (5.2). An average 1.3 (range 1 to 4) teachers were occupied with preprimary teaching. This meant that about 25 percent of all the primary teachers were teaching preprimary classes even though there was no official recognition given to these classes.

Because of the young age of the children, preprimary classes are especially difficult to teach when there are large numbers in a class. As noted above, sample preprimary teachers taught on average 72 children, including students in all their classes. About half (58 percent) taught classes with fewer than 40 students, while the rest taught classes of more than 40 and up to 163 students.

4.8.2 Profile of the sample preprimary teachers. Ideally, preprimary teachers should be highly qualified, experienced, intelligent teachers, ones who know the mother tongue of the children so they can communicate well with them, and preferably coming from the local area where they may know the children's parents and feel some sense of commitment to the quality of their instruction. It is probably better that they are not so old that they cannot meet the energy demands of working with small children and that there is some stability in their teaching service.

In this sample, half of the teachers were male and half female as an artifact of the design. They averaged 10 years of teaching experience, including almost 4 years in teaching the Kachi class. They also averaged 4 years service in the sample school but had served in an average 3 schools over their teaching careers. They averaged 31 years of age but ranged in age from 18 to 58 years. By far the largest number spoke Pashto (70 percent) as was the case of the majority (70 percent) of children. This was also the main language they used in instruction (72 percent). Altogether most (88 percent) of the teachers used a local language in instruction. Most came from the local area (58 percent) or from a nearby location (23 percent) rather than from far away (19 percent).

The majority were matric graduates (53 percent) or higher (46 percent). Only 2 percent were less than matric. More than half (56 percent) were second division graduates, and another third (33 percent) were qualitatively lower third division graduates. A small (8 percent) were first division graduates. The majority (66 percent) had completed the PTC training or a higher training such as CT (13 percent) or BEd (2 percent). The rest (20 percent) were untrained. A majority (77 percent) had received some inservice training.

In general, then, the teachers were reasonably young, had considerable experience in teaching most of the primary classes and in teaching Kachi in specific, had spent several years in the sample school, spoke the same language as their students, came from local areas, met or exceeded the academic and professional qualifications, and most had received some inservice training. The only undesirable characteristic in the sample of teachers was the fact that so many received a low division score in their academic training. It is, of course, not possible to assume that the teachers are good simply because they meet so many of the desired requirements--the quality of their training may be poor or there may be factors that have not been recognized that are more important. What is clear is that the teachers meet and exceed most of the current standards for recruitment, and, therefore, if they do not perform well, it is not because they lack qualifications.

4.8.3 Absenteeism. Complaints about the absenteeism of teachers are common. Most schools are unable to provide a substitute teacher unless it is known that a teacher's absence will be of several months duration. Thus when a teacher is absent, his or her class is likely to sit and do very little.

The school system allows a very large number of permitted leaves to teachers, up to 37 (25 casual and 12 earned) plus a number of other liberal leaves. Medical leave of up to 120 days without a certificate, or 180 days with a certificate is permitted after two years service. There are approximately 238 school days in the year, including exam days. If a teacher takes the usual permitted leaves (not including medical leave) then he or she can be absent approximately 16 percent of the time or approximately one day every week of the school year.

From the self-reports of sample teachers, almost all the leaves they take are of the permitted kind. They claimed their own "permitted" absences totalled an average of 6.1 days so far this year. Almost all (97 percent) said they did not take any non-permitted leaves. From casual observations in classrooms, it would appear that absences are more than teachers are willing to report.

4.8.4 Assignment of teachers to preprimary. Headteachers were asked how they assigned teachers to preprimary classes. More than half (64 percent) said they assigned the most experienced, and in lesser degree trained teachers (26 percent), the person who wanted to teach the class (15 percent) and by rotation among the teachers (13 percent). Half the teachers rated themselves as greater in experience (34 percent) or equal in experience (13 percent) to other primary teachers. Half were appointed before 1984 and on average had more than 10 years of teaching experience. There was extraordinary variety in teaching experience among them with a majority of teachers having taught each of the five classes as well as Zero class. Over 90 percent had taught Class One, and about 80 percent each of the other classes. The teachers averaged almost 4 years of experience teaching the Kachi class alone. In general, then, the preprimary teachers do seem to have considerable teaching experience.

4.8.5 Teacher opinions and suggestions about teaching preprimary. It is generally believed that conditions in the preprimary classes make them very difficult to teach. About half the head teachers felt teachers did not like teaching Kachi classes, and the other half believed teachers either liked teaching the class or found it about the same as other classes. The vast majority (90 percent), however, felt there were special difficulties teaching preprimary classes.

In an open-ended question, Kachi teachers reported the following as some of the difficulties they experienced:

- o the large numbers of students that prevent effective teaching (33 percent)
- o the young age of the children that makes it difficult for them to learn, makes them often absent, and makes them even incapable of "remembering their names" (33 percent)
- o the lack of space (10 percent)

- o multi-class teaching (8 percent)
- o a lengthy and difficult course (8 percent)

On a 4 point scale more than half the preprimary teachers claimed the lower two ranks when asked about the usefulness of textbooks for the preprimary classes: the textbooks were either not useful at all (8 percent) or only somewhat useful (45 percent).

Teachers made a number of suggestions in response to an open-ended question about improving the preprimary level. The most frequent suggestions were that teachers be assigned preprimary classes alone without other classes (48 percent) and that a separate room be provided (48 percent). Other suggestions included limiting the number of children in a class (22 percent), improving the syllabus by soliciting the help of teachers and making it easier (33 percent), and less frequently, simplifying the textbook for Urdu, English and math, providing better facilities for drinking, washing takhtis, electricity, fans, heaters, toilets and mats; and providing refresher courses, and incentives to teachers. A number wanted instructional aids of various kinds and some suggested simplified methods for teaching the alphabet. Several suggested extracurricular activities including trips, physical activities and competitions between schools. Finally, suggestions were made to provide supplies for poor children so all the children would come to school prepared with the proper supplies.

4.9 Parent teacher communication

Some people believe that the preprimary program might be improved if there were more communication between parents and teachers. The majority (81 percent) of teachers reported that they saw the parents of children in the course of their work--usually when the parents came to school for some reason. The reasons they came to school were largely procedural, related to attendance or lateness (37 percent), or admission (11 percent). Other reasons included complaints (13 percent), and loss of supplies (7 percent). The main "educational" reasons were when children were poor in their studies (10 percent), when parents wanted them passed (1 percent), and when parents were checking on "children's education needs" (15 percent). At present, the reasons for parent teacher communication are largely procedural or problem related, and in the latter case the solutions are frequently cast in a punitive frame. Increasing the communication between parents and teachers, unless set in a more supportive approach, is only likely to increase the pressures on preprimary children.

4.10 Preprimary instruction as reported by teachers

Teachers were asked to comment on preprimary instruction as they themselves carried it out.

4.10.1 **Content.** All the teachers reported they taught the alphabet and numbers, and almost all (94 percent) taught other content as well. The subjects taught to the Kachi group, according to teachers, included Urdu, Pashto, Islamiyat, English and Mathematics. In addition, in order of frequency, about half said they taught children about religious practices, a quarter said they taught the

names of body parts, 9 percent taught good behavior, and others told their students stories, taught general knowledge, etc. The teachers said they taught most of the content because it appeared in the syllabus, and about half said they thought up the rest of the content themselves. About half said they felt it their duty to give extra religious instruction to their students. Almost everything reportedly taught by teachers could be classified as information, not skill development, and the main, if not only, means of conveying the information was through memory work.

4.10.2 **Practices.** The teachers were asked to comment on practices they used in instruction.

Though most teachers have received training in using instructional materials, they rarely make use of any but a limited number of aids. Few materials exist in the classrooms, and there is some debate about how useful certain aids provided in the past have been. All the sample teachers said they used blackboards frequently in teaching, over half (74 percent) claimed they used the teaching kits, while less than half (41 percent) used wall charts. Many of the classes were unsheltered and therefore had no permanent "wall charts." When they existed they were usually not related to the content taught to Kachi children or they reproduced religious themes that the children memorized.

In higher classes, homework is an important way to extend the practice of new skills but in preprimary classes it may extend what may already be a too arduous program of study. Almost all (95 percent) the teachers said they assigned homework to Kachi children. Many asked children to practice writing on their takhtis (73 percent), to memorize the lesson (45 percent), to rewrite the class work (30 percent), to practice Urdu letters (28 percent), etc.

One way to extend the teaching time of an over-worked teacher during the school day is to use students to assist in instruction. A number of teachers said they used this practice, for example, using smarter students to teach slower students (82 percent), student monitors to lead class learning (68 percent), or older students to teach younger students (60 percent). The quality of this student teaching observed in most classes appears to be low, especially when student monitors lead the chanting of the letters and numbers. Nevertheless, the practice is one that can be improved upon if teachers are trained in better ways of using student teaching.

Teachers were asked in an open-ended question to explain how they dealt with children who misbehaved in class. In perhaps more ideal than real response, a majority (58 percent) said they dealt "lovingly" with these children, some (25 percent) said they used harsh words, a few (13 percent) said they warned the child to behave, and the rest either contacted the parents or brought the children to the front of the room where they could watch them more closely.

When asked the same question about slow learners, more than half (54 percent) said they gave individual attention to the child. Others (24 percent) said they seated the slower child with a smarter child to help him or her, a few (11 percent) gave the child extra work to do, or brought the child to the front row (7 percent). The rest told the child to practice more at home or contacted the parents to obtain their help.

4.11 **Observed teaching practices**

During the study, researchers observed each preprimary class for 3 half-hour sessions distributed across one day. The fact that an outsider was present most certainly affected the teachers' performances. The following findings therefore should be taken as the best teaching the teachers were capable of performing without advance notice of the observers.

Of the 192 preprimary observations made by the researchers, many were multi-classes (82 percent). Of these about half (53 percent) were classes with only Kachi and Zero classes combined. Some consisted of Kachi alone with one higher grade (19 percent) and the rest consisted of Kachi and Zero classes together with combinations of higher grades (28 percent).

4.11.1 Responsible person. Usually the teacher was the main person responsible for the class (81 percent). However in a high number of classes (47 percent), a student monitor was used to lead the class for a portion of the time. In a quarter (23 percent) of the classes this monitor was used less than half of the time, while in another quarter, he or she was used for half or more of the time. During the time the student was in charge of the class, the teacher was usually supervising him or her (69 percent), working with another class (31 percent), or had simply left the room (22 percent).

4.11.2 Subjects. The subjects conducted during the three half hour intervals in each class included Urdu (50 percent), math (41 percent), local language (23 percent), English (13 percent) and religion (10 percent). No social studies or science appeared during these observations.

4.11.3 Teaching activities. The teachers conducted a variety of activities during the observed periods. Often they helped the children practice by calling on them for a response (82 percent),⁵ or they supervised seatwork (77 percent) or explained the lesson content (73 percent). Less often they reviewed known work (36 percent) or assigned homework (26 percent). The source/ model of the lesson came most often from the teacher speaking about (87 percent) or writing something (84 percent)--usually numbers or letters. Text books served as the source of part of the lesson in about half the classes and another major source of activity was previously memorized work such as, numbers, letters, verses or times tables (16 percent). One common activity was for a teacher to write a model on the child's takhti and for the child to trace the numbers or letters written by the teacher. This activity would take a long time for the teacher, especially if there were many children in the classroom.

4.11.4 Student learning activities. In class, children were most likely to be doing some kind of oral activity such as repeating numbers (78 percent), reading letters, numbers or words out loud (76 percent), answering teachers' questions (68 percent), or repeating alphabet letters (41 percent). The other main activity involved writing letters (40 percent) or numbers (33 percent). The rest of the time they were listening to teacher explanations (29 percent). Again, class time is mostly taken up with the

⁵ Teachers tend to think that oral interactions--calling on, recitations, repeating, etc. with children demonstrates teaching more than supervised seatwork. For this reason, there was probably more of this activity than normal because of the presence of the observers.

rote memorization of lists of information.

A considerable amount of activity in the preprimary classrooms related to personal needs. For example, in some classes children were permitted to drink (42 percent), go to the toilet (37 percent) and wash takhtis (30 percent) during class time. They were usually not allowed to eat or given any kind of break during the class period.

4.11.5 Feedback. Research suggests that students do better when they feel that they can successfully complete school work. Therefore, the kinds of feedback teachers give to students can be important both in reinforcing correct practice and in making the children feel good about their capabilities.

In general, teachers positively reinforced the students when they answered correctly. When children correctly answered in the observed classes, teachers repeated the correct answer (85 percent), or praised the student (75 percent), or asked the student how he or she came to the answer (74 percent). Only a few simply ignored the student and went on to the next question (10 percent).

When students answered incorrectly the response was less positive in terms of the research cited above. The teacher was likely to break in and give a correct response (85 percent)--making the student feel possibly that he or she was incapable of doing the work. Others said the answer was wrong (67 percent) or punished the child with harsh words or a beating (66 percent). Better were the teachers who simplified the question and asked the student again (77 percent).

4.11.6 Monitoring. If used properly, seat work assignments give teachers a chance to see how well children can do a new skill on their own. It also gives the teacher time for individual attention to children who are having difficulty. In the sample classes many of the teachers walked around the room and observed or helped the students (68 percent); or responded with help to those who asked for it by coming to the teacher or raising their hands (27 percent). The rest ignored the students and did something else.

4.11.7 Control. Normal discipline is difficult to observe as an outsider in the class. Both teachers and students are on their best behavior. In general the observers thought the teacher behaved in a kindly manner with the students (69 percent). Fewer felt they were firm (27 percent) or harsh (4 percent). Most teachers controlled behavior in their classes through words (86 percent) but a few (4 percent) used physical forms of control. Others (15 percent) instilled rules in the children so that they were orderly without any visible necessity for the teacher to control them. Almost all classes evidence rules with regard to leaving the room to go to the toilet, get a drink or wash takhtis. Most have politeness rules when in the presence of adults, and some have set ways to behave with visitors.

4.11.8 Language of instruction. Teachers generally used a local language for instruction (90 percent) and children also used a local language (96 percent). This indicates how important it is for a teacher to speak the local language if they are to communicate well with preprimary children. The teachers in this sample seemed well-matched linguistically to their students. Even though 14 percent of the teachers had a different mother tongue from their students, all except 3 (5 percent) were able

also to speak the language of the children. Those 3 who did not know the children's language used Urdu for instruction, plus another six teachers who used Urdu exclusively when teaching the Urdu alphabet.

4.12 Supervision

The quality of primary instruction in NWFP schools is supposed to be enhanced by outside supervisors checking on the performance of the teachers. As noted above, supervisors frequently helped to decide whether Kachi children could be promoted to Class One. Almost all (97 percent) the headteachers reported visits from supervisors. On average there were about 3 visits per school from the beginning of the school year until the time of the study, though the number of visits ranged from 0 to 26.

Supervisors checked attendance (98 percent), tested the achievement of students (97 percent), offered teaching advice (92 percent) and checked supplies and furnishings (74 percent). Headteachers, in addition, reported in an open-ended question that supervisors usually stressed cleanliness and discipline (19 percent), encouraged teachers to work harder (14 percent), tried to solve the problems of the school, and in lesser degree encouraged special programs for parents to obtain more resources for the school, checked school funds, etc. Experience watching supervisors suggests that they put more weight in orderliness than in academic performance: the appearance of the school, discipline, the condition of furnishings, the way registers are filled out, attendance, etc. They may test the performance of children but rarely observe the teaching practices of teachers for ways to improve instruction.

4.13 Student engagement and teacher involvement.

4.13.1 Student engagement. The more time students spend engaged in instructional tasks, the more they are likely to learn. In the classes researchers observed, there was clear evidence that children were more likely to be engaged in learning tasks when the teacher was actively involved in directing their instruction. In 82 percent of the cases where the teacher was directly involved, more than half of the children appeared to be engaged in learning tasks. In a large number (43 percent) three-quarters of the class were engaged in learning. When the teacher was **not** directly involved with the class, only a small number of classes (11 percent) showed a high level of engagement (more than 75 percent of the class), and in 73 percent of the cases, less than half the class was engaged. This suggests strongly that learning at present in Kachi classes is highly dependent upon the teacher's active involvement in directing instruction. This finding was conclusive despite the fact that teachers and students exerted their best efforts to carry on continuous work in the presence of the observers.

4.13.2 Activities that hold the attention of children. Using student engagement scores as a measure, the study finds that children were most likely to pay attention when the teacher was pointing out something on the blackboard, and least likely to pay attention when the teacher was preparing their individual takhti boards with numbers or letters for them to trace over. Students were most likely to remain engaged in learning tasks when they were listening to a teacher identify something written on a blackboard and then were required to respond orally. High engagement activities included:

- o reading letters, numbers and words
- o repeating letters and numbers orally
- o answering teacher questions

They were least likely to remain engaged when asked to write on their takhtis alone. They were also more attentive to Urdu and less attentive to instruction in numbers.

These findings suggest that, under present conditions, children are more involved in learning when there is whole group instruction where all feel involved and may potentially be called upon to respond. This type of activity engaged more of the students' attention than when teachers spent time directing their attention to individual students without giving other children something to do in the meantime. Observations in classrooms brought out the importance of assigning independent tasks to children in such a way that there was some **contingent** behavior required, that is, when the teacher's attention returned to this class, the children were expected to show some product they had accomplished in the meantime.

4.14 **Kachi classes in different settings.**

One aim of the study was to see if differences in some indicators might be associated with differences in the main teaching settings of the Kachi sample. The settings were classes:

- o located in urban and rural areas,
- o taught by male or female teachers,
- o in schools ranked high or low by supervisors,
- o taught by teachers scoring high or low on a "performance measure."⁶

The following summarizes the findings on the selected indicators:

4.14.1 Preprimary student-teacher ratio. The number of preprimary students taught by individual teachers was higher in urban areas (71) than rural areas (42), in boys' schools (66) than girls' schools (44) and in supervisor-ranked low quality schools (66) than in high-ranked schools (52). The number of preprimary students a teacher taught, however, made little difference in the performance scores of teachers (high: 58 children; low:61 children).

4.14.2 Total students taught by individual teachers. A different pattern emerged in the

⁶The teacher performance score measured the extent to which, when observers were present in the class, teachers kept their students actively involved in learning tasks. An admittedly crude, measure, it depends for its reliability on the extent to which it reflects a reality that goes on in the class when observers are not present, and serves as a valid proxy for student learning. It has been used in this study because of the need for a simple-to-use independent measure of student learning not requiring achievement testing of such young children.

total number of students taught by teachers when students of all classes were combined. The total was the same in urban (74) and rural (70), male (73) and female (70), and high (70) and low (69) ranked schools. Higher performing teachers, however, were more likely to have a larger number of students in their classes (74) than lower performing teachers (64).

4.14.3 **Sheltered classes.** Presumably, classes which are sheltered have a better environment for learning and are more likely to have regular attendance. Urban schools were less likely to be sheltered (26 percent) than rural schools (48 percent), boys' schools less likely (28 percent) than girls' schools (47 percent), and low-ranked schools less likely (30 percent) than high ranked schools (44 percent). Whether the class was sheltered or not, however, did not appear important in terms of teacher performance scores (high: 38 percent; low: 35 percent).

4.14.4 **Multi or single classes.** When preprimary classes are combined with other classes teachers presumably have less time to devote to the preprimary children. In the sample, the large proportion of preprimary classes in all categories of schools were multi-class. With regard to the more optimum situation, urban schools were about as likely to have preprimary classes taught by a single teacher (32 percent) as rural schools (33 percent), and boys' schools (34 percent) about as likely as girls' schools (31 percent). High-ranked schools were somewhat less likely (26 percent) than low-ranked schools (33 percent) to have preprimary classes taught by a single teacher. High performing teachers were slightly more likely to teach in single classes (34 percent) than low performing teachers (29 percent).

Observers also roughly estimated the amount of time a teacher spent with other classes. Those who spend no time with other classes presumably have more time for the instruction of their students. In the observed samples, somewhat more of the rural teachers (71 percent) devoted all their attentions to the preprimary class than urban teachers (63 percent). Many more male teachers did the same (79 percent) compared to female teachers (55 percent). Teachers in high ranked schools (70 percent) were more likely to spend all their time with the observed class than teachers in low-ranked schools (60 percent). The largest difference, not surprisingly, was found in the much greater time the high-performing teachers (74 percent) spent with the preprimary classes as compared to the low performing teachers (47 percent).

4.14.5 **Student monitors.** Many teachers use student monitors to lead the practice of numbers, letters and multiplication tables. Urban (54 percent) and rural (52 percent) teachers used student monitors to about the same extent. Female teachers used student monitor more (61 percent) than male teachers (44 percent). Teachers in high-ranked schools used monitors more (67 percent) than those in low-ranked schools (38 percent), while high performing teachers use monitors less (50 percent) than low performing teachers (61 percent).

4.14.6 **Student attendance.** When almost all of the preprimary children attend class regularly, presumably they learn more. Teachers ranked the attendance of their preprimary children lower in urban (42 percent came regularly) than in rural classes (58 percent), lower in female teachers' classes (34 percent) than in male teachers' classes (66 percent), but about the same in high (52 percent) and low ranked schools (50 percent). More of the low performing teachers (59 percent) claimed their

students came regularly than did the high performing teachers (47 percent).

4.14.7 Mixed gender classes. One would expect more mixed gender classes in small informal rural settings than in cities. This is indeed the tendency in the sample, where there were somewhat more mixed gender classes in rural (21 percent) than in urban schools (16 percent). Boys' schools were more likely to have girls attending (25 percent) than girls' schools with boys attending (13 percent). The high ranked schools had fewer mixed classes (26 percent) than the low ranked schools, while low performance teachers had fewer mixed classes (29 percent) than high performance teachers (34 percent).

4.14.8 Teacher experience. Some people believe that teachers become more proficient, the longer they teach. If this true then the urban teacher should be more proficient because of their longer service experience (12 years) compared with rural teachers (8 years). Male teachers had about the same length of service (10 years) as female (11 years) teachers, and the same was true for high-ranked (9 years) and low ranked (10 years) teachers. High performing and low performing teachers were exactly the same (10 years).

Teachers were asked how long they had taught preprimary classes and all of the categories of teacher averaged approximately 4 years teaching these classes.

4.14.9 Teacher age. Perhaps more youthful teachers teach preprimary classes in settings where teachers are more difficult to recruit. This proved not to be the case, and in all settings the average age of the teacher was about 30 years.

4.14.10 Teacher origin. Teachers who come from a distance may have poorer attendance and may not have as much motivation to provide quality instruction to children from families they do not know. Urban and rural teachers in the same proportion (19 percent) came from some distant area. Male teachers were more likely to come from a distance (22 percent) than female teachers (16 percent), and low ranked schools' teachers from farther than high ranked schools (19 percent). The highest proportion of teachers coming from a distance were the low performance teachers (29 percent). Only 15 percent of high performing teachers came from a distance.

4.14.11 Teacher academic and professional training. There were only minor differences in the average years of academic training of teachers in the different settings, but more significant differences in whether they had received professional training. Urban teachers had finished 11 and rural teachers 14 years of academic training, and male teachers 12 compared to female teachers' 11 years. The teachers in high and low ranked schools and the high and low performing teachers all had finished 11 years of academic training. Other studies (see BRIDGES Survey) have shown that longer years of teacher academic training are associated with higher levels of student achievement in Pakistan. However, these studies were conducted in Classes Four and Five where more subject content knowledge is required of teachers. Preprimary teachers do not appear to need the longer academic training.

More (23 percent) urban teachers remained untrained compared to rural teachers (18 percent). Only

a small proportion of the male preprimary teachers were untrained (9 percent) compared to a fairly significant number (31 percent) of female teachers. The high-ranked schools had fewer (15 percent) untrained teachers than the low-ranked schools (27 percent), and the same was the case of the high performing teachers (17 percent) compared with the low performing teachers (29 percent). These findings suggest that training **does** contribute somewhat to the quality of Kachi teaching.⁷

4.14.12 Teacher absenteeism. When teachers are absent children often do not learn. The urban, rural, male and female teachers all averaged absences of 5 days. Teachers from high-ranked schools (3 days) and with high performance (4 days) averaged fewer days absence than teachers from low-ranked schools (5 days) and with low performance (4 days). The differences in numbers of days are small but when multiplied by the number of teachers in the sample they may be important.

4.14.13 Dropout rates. Student dropout rates sometimes reflect the quality of school programs. Even small differences can be significant when computed over a number of years of primary schooling. The Kachi sub-samples showed only minor differences in dropout rates. The urban classes had a Kachi dropout rate of 5 percent compared with a rural dropout rate of 4 percent. Male teachers' classes had a 4 percent rate that compared with 5 percent for female teachers. High ranked schools had a rate of 4 percent and low ranked schools 6 percent. Low performing teachers had a rate of 6 percent and high performing teachers 4 percent. Though most of these dropout rates are in the expected direction--more for girls than boys and higher where performance or ranking is lower, the variance is too small to conclude that they reflect real differences in the quality of the program.

4.14.14 Supervision. The quality of the program may be better when there is frequent supervision. Urban teachers received about the same number of visits from supervisors (3.0) as rural teachers (3.5). Male teachers were visited more (4.6) than female teachers (2.1). High and low-ranked schools received about the same number of visits (3.5) while high performing teachers received more (3.5) than low performing teachers (2.8).

4.14.15 Teacher performance scores. Presumably, teachers who keep the attention of children directed toward instructional tasks provide a better quality learning program. Based on the percentage of teachers having high performance scores,⁸ there was little to differentiate urban (71

⁷A BRIDGES Survey found the opposite when studying Class 4 and 5 students. The Survey concluded that the length of a teacher's academic training was associated with student achievement but that the present PTC preservice training was not.

⁸High scores were those where the teachers averaged more than 75 percent of the students actively involved in learning tasks during the nine, ten-minute observations conducted for each teacher. Having observers present in the classroom probably explains the inflation of these scores, as teachers and students alike tried to impress the observer. The scores should be taken as a relative, rather than an absolute measure of how much of the time teachers keep students actually engaged when the observer is not present.

percent) and rural (76 percent) teachers or high-ranked (74 percent) from low-ranked (70 percent) schools. Male teachers had somewhat higher performance scores (78 percent) than female teachers (69 percent).

4.14.16 Teacher practices. One clue to what makes one group of teachers perform better than others may be found in the teaching practices they use in the classroom. Observers were asked to look for whether preprimary teachers used "effective teaching practices."⁹ These practices consisted of a set of systematic instructional steps that include reviewing relevant material, presenting new material, helping children practice, supervising independent seat work, and assigning extra practice in the form of homework.¹⁰ High performing teachers consistently used each of the effective steps more than the low performing teachers and were consistently more likely to use more of the steps. In addition, high performing teachers were more likely to engage children in the activities noted above that tend to hold children's attention better. Not only did a higher percentage of high performing teachers assign these and other tasks, but they were more likely to assign a greater variety of tasks than low performing teachers.

The effective practice steps which distinguished high and low performing teacher in the sample were "guided practice" and "independent practice" where there were 23 and 34 percentage point differences between high and low performing teachers. On the basis of these practices alone, there is little difference between urban and rural teachers (6 and 1 percentage point spread) or high-and low ranked schools (3 and 6 percentage point spread). Male teachers were more likely than females (10 and 13 percentage spread) to use these two steps. These tendencies of teachers to use effective practices equate closely with overall teacher performance scores.

4.14.17 Implications. The findings about the effective practices have important implications. First, the teacher performance score appears to be supported as a reliable proxy for student learning outcomes in preprimary classes. This support comes from the fact that in the classes where teachers are able to keep their students engaged in learning, they are also more likely to use "effective teaching practices,"--practices which had previously been derived from observing teachers with students showing higher achievement scores. Therefore, "effective practices" again appear to provide a useful framework for organizing classes in Pakistani schools, this time in preprimary classes.

Second, the supervisors' rankings of the quality of school settings do not appear to be based on student learning criteria, since on most of the indicators that might distinguish more or less learning there is no difference between high and low-ranked schools. This suggests a need to know more about the "non-academic" criteria education officials use for judging schools, students and teachers in order that these important aspects of schooling not be neglected in a comprehensive preprimary program.

⁹In a BRIDGES study, these practices were associated with higher achievement in the students of teachers who used them. The BRIDGES study was conducted in higher primary classes.

¹⁰Homework was effective with higher primary classes but may not necessarily prove an effective practice with preprimary classes.

In summary, the differences found in indicators that are sometimes associated with the quality of learning programs demonstrate some of the weaknesses and strengths of categories of preprimary teachers. In general there were few differences between preprimary teachers teaching in urban and rural schools and somewhat greater differences between male and female teachers--usually with the "more learning positive" aspects of the indicators in favor of the male teachers. Differences were usually not discernible between teachers teaching in supervisor high-ranked school settings and low-ranked settings. However, between high-performing and low performing teachers there were a number of important differences identified in teacher origin, in professional training, in the time spent directly involved with the class, in the extent to which "effective practices" were used, and in the kind and variety of tasks students were asked to do.

ANNEX A

DESIGN

The Kachi study is comparative, intensive and limited to a small number of classrooms in each district. Half the districts of NWFP participated in the Kachi study (and half participated in a multi-grade study). Proformas were simple and systematic to meet the requirements of multiple users and the need for similar coverage in all sample schools. They allowed, however, for the training of supervisors and learning coordinators in a number of data collection techniques, including interviewing, observation of teaching behaviors and assessment of student engagement in learning. Two of the proformas are appropriate for use after the study by supervisors to evaluate and suggest improvements in classroom teacher performance. The researchers who collected the data were local learning coordinators and supervisors who are responsible for the quality of academic performance. Overall responsibility for the research in each district rested with the Assistant District Education Officer for Academic Affairs who was given training in the issues and purposes of the studies. Followup after the study will involve these officials and researchers. They will be given the results of the studies and will take part in discussion about the implications of the studies. Policy makers in Peshawar will develop action plans based on the results, and the field staff who have taken part in the study will implement the results through the same institutional channels.

Steps in conducting the study

1. Responsibles meeting. In the beginning of September, the ADEOs and the ASDEOs on the male and female sides from 7 districts plus Peshawar (32 persons) assembled in Peshawar for training. They were asked to bring a list of the schools in their districts. The one day training session included:

Discussion about Kachi, multi-class issues, and airing of the way these issues are manifest in each district

Discussion of the role of these officials in relation to field studies, programs to improve quality, etc.

The purposes and anticipated uses of the studies.

Selection of a sample of schools from each district for the study

- Agreements about arrangements for field work
 - o dates for training and data collection
 - o researchers required
 - logistics including transport
 - supervisor (ASDEO) responsibilities

2. Supervisor training. The ASDEOs remained in Peshawar to take a three day practical training in how to conduct classroom data collection. They were given practice in using proformas in schools

until they become comfortable with them. Their training schedule was performed exactly as they were expected to train the supervisors/learning coordinators in the field. This system of training the ASDEOs in an innovative practice and having them transmit this training to supervisors/ learning coordinators is the system that will be used in the Directorate to support the adoption of new learning materials and teaching practices. The Kachi study in half the districts and the multi-class study in the remaining districts are serving as a vehicle for setting up the initial stages of this system in NWFP.

3. Researcher training and field work. When the ASDEOs returned to their districts, each trained 4 LC/supervisors, 4 on the male side and 4 on the female side. Their training program was the same as that experienced by the ASDEOs in Peshawar. They were sent to the schools in teams of two to spend 2 days in each school. The teams completed the work for their district in a week--that is with each of the 4 teams covering two schools. This training was observed by Primary Directorate consultants in Chitral, Dir and Karak to ensure the quality of the training.

ANNEX B

DESCRIPTIONS IN KACHI CLASSES

The following descriptions were written while observing Kachi classes:

Observation 1:

This observation was conducted in a Government Primary Boys' School in a rural area of a far flung district. The school was ranked "good" by the supervisor.

The school gate opens into a large open yard, lined with trees that provide shade and shelter for the children. This District is characterized by hot summers, and rainy winters. A flowering garden lines the veranda of the school. The yard is well maintained and orderly. The school is a two room building with rooms that are clean and neat. Both rooms are used for instruction: one room accommodates Zero, Kachi, Pakki, and Class Five. Classes Two, Three, and Four occupy the other room.

It is a mixed school for boys and girls. There are a total of 51 children in the school, distributed as follows: Zero class 10, Kachi class 11, Pakki class 12, Class Two 3, Class Three 3, Class Four 6, and Class Five 6.

The school has two teachers: the headmaster is an experienced teacher, and the second teacher is a fresh PTC graduate. The headteacher lives next door to the school; only a wall separates the school from his home. He regards the school as an extension of his home; he makes sure that the school building is well maintained, the school premises are kept clean and neat, and the yard and garden are well tended.

He comes to school regularly, and has not been absent from school since the beginning of the year. The students come from the neighborhood, and the school forms one large extended family. The headmaster obviously enjoys the trust of the community since parents send their daughters to a boys' school, although it is one of the most conservative communities in the Province.

Children sit in rows, with the Zero Class at one end of the room, and Class Five at the other end. The teacher has devised a system which works efficiently and keeps children occupied all the time. He stands in front of the room, and the first group of children, the Kachi class, comes forward to form a circle around him. He works with this group. The children in Zero class listen attentively. In the meanwhile, the Pakki children are getting ready for their turn. They review their lessons by moving over and curling up next to the children in class five, who help them with their class work. The Kachi children return to their places with instructions on what to do next. There is a bustle of activity, while the Zero class moves into the circle around the teacher, and the Kachi class children get their takhtis (wooden writing boards), kalam (pens), and dawlat (ink pots) ready.

Now the Kachi children take their takhtis and kalams to the children of the fifth class who line up the

takhtis for them so they can practice writing the letters. In the meantime, the Zero Class children have reviewed the previous lesson, and have learned a new lesson. They are back in their places; and the Pakki Class have moved into the circle ready to recite their lesson. Fifth Class children are writing letters for some Kachi children who have difficulty doing so by themselves. The teacher is free now to turn his attention to the Fifth Class, who are ready to start their lesson.

It is a well-managed class, no child sits and waits for the teacher, older children are well trained in helping the younger children. They sharpen their kalams, give them dawat if they do not have ink, they line up their takhtis, they write letters for them to copy, and they listen to them recite and correct their mistakes; in short they are attentive to their needs. It is a nurturing environment where children learn much more than reading and writing, they learn to take care of one another.

Observation 2:

This observation was conducted in a Kachi classroom in a Government Primary Boys' School in the rural area, of a far-flung district.

This school is ranked as a good school by the supervisor.

A set of man-made steps dug into the slope of the mountain lead to the school. The school is situated in a clearing on the mountain slope. The yard is small and drops sharply into the road below. The school is a two room building used to accommodate seven classes: Zero through Class Five. Children who are four years of age are allowed to attend school as unadmitted students provided they have an older brother in the school who can bring them.

There are three teachers in this school. The headteacher who has 17 years of teaching experience, and has taught all primary classes at one time or another. He is in charge of teaching the lower classes in the school. He works with Zero, Kachi, and Pakki children, a group half the size of the total school enrollment. One room is reserved for this age group, and the other room accommodates the upper two classes, while the middle classes sit in the yard.

The children all sit on mats facing the teacher. The teacher starts by writing Urdu sounds on the board, he calls upon different children to sound out the syllables, then he writes an additional sound and the children combine these sounds to make words. The teacher encourages the children as they attempt to read the words he forms on the board. The teacher explains the lesson in the children's local language. He has the young children sound one letter sound, while the older children do the longer syllable.

In the writing exercise, he has the children come up to the board to write a letter or supply a missing syllable in a word. The difficulty of the task depends on the level of the children. Some children make words by matching cards. All the children are given a chance to practice some language skill; and all groups of children are engaged in learning activities; each age group was given tasks that matched their level.

All children in that class could decode sounds and read. The teacher did not use the textbook; and no child in that class recited passages from the book from memory.

Observation 3:

This observation is conducted in a Kachi Classroom in a Government Primary Boys' School in a rural area, of a district near urban areas of NWFP. The supervisor made no comments on the school.

A partly demolished wall along a road stands at one end, and a puddle of water formed by a running tap, marks the entrance of this school. The school is a two room building with an open space that was once walled in, but now merges with the dirt road outside. There are six classes in the school, two teachers, and a headmaster.

The Kachi class sits outside in the sun. There are some 38 children in this group. Some children look quite young, and others much older. No shelter is provided to shade the area. They sit on mats in rows. The other school item available for them is a blackboard. The board has written on it, the numbers from one to hundred. One child stands in front of the board and reads out the numbers, pointing to the board with a stick. The rest of the class repeats in unison after him. The volume of the noise rises when visitors appear on the scene. The teacher holds a stick and walks between this group of children, the Kachi class, and another group of children, the Pakki class, which occupies one of the two rooms. The voices of the children fade as the teacher walks away, and they forget the presence of the observer. The student monitor is hoarse from shouting out the numbers. After awhile, he hands the stick over to another student monitor who in turn starts the recitation exercise followed by a chorus of tired voices who keep up the activity. The children look tired from the heat of the sun, and the monotony of repetition. Their voices rise and fall with the movement of the teacher, and the proximity of his stick. This will continue as long as we are there, so we slip away quietly hoping that the ordeal of this futile exercise will cease with our disappearance.

ANNEX C

LIST OF ACTIVITIES IN KACHI CLASSES

The researchers wrote a list of activities of teachers and students during half hour observations in Kachi classes. The following are lists selected to give examples of teacher activities in Kachi classes:

Observation 1:

- A. The teacher repeated the Urdu letters while pointing at them on the blackboard.
- B. A new lesson was given to the students.
- C. Students were asked questions about the lesson.
- D. Students were asked to identify letters on the blackboard.
- E. Flash cards having letters were used.
- F. Pieces of thick paper were used to explain the concept of "First order numbers."
- G. The teacher ignored children who were not engaged in the learning task.

Observation 2:

- A. The teacher sharpened penpoints for the children.
- B. The teacher wrote on the takhtis of the children with a pencil.
- C. The teacher supervised the children while they wrote on their boards.
- D. The teacher checked the takhtis to see if they were writing correctly.
- E. The teacher helped children to write by taking their hands in his hand and guiding them.
- F. The teacher checked the letters of the children.
- G. The teacher asked them to repeat the letters and numbers.

Observation 3:

- A. During this half hour the teacher was not present in the class, because he was teaching another class.
- B. A student monitor was teaching the class.
- C. The students were not paying any attention to the monitor.
- D. All the students were playing.
- E. The monitor himself finally stopped for some time.
- F. After some time the monitor again asked the students to pay attention.
- G. Children left the classroom to drink water, go to the toilet, and wash their takhtis.
- H. The monitor had a stick in his hand with which he threatened the students.

Observation 4:

- A. The teacher asked the students to read the Urdu letters one by one.
- B. Other students repeated after the student reading the alphabet.
- C. The teacher was sitting at a table.
- D. Sometime he paid attention to what the students did and sometimes he did not.
- E. The teacher seemed exhausted by that time in the day.
- F. The children were mostly engaged in talking with one another.
- G. The teacher became angry and asked the children to wash their takhtis.
- H. When the children returned to the room, the teacher was busy with another class.
- I. The children started quarreling among themselves.

Observation 5:

- A. The teacher wrote and then gave the names of the alphabet letters on the blackboard.
- B. The teacher asked the student monitor to teach the class.
- C. The children read in turn from the blackboard.
- D. All the children repeated the letters either after the teacher or the monitor.
- E. The teacher taught from the textbook.
- F. The teacher asked the children to write on their takhtis.
- G. The teacher wrote on each child's takhtis with a pencil.
- H. The teacher asked the children to write over the teacher's writing with ink.
- I. The students did as they were told and wrote with ink.
- J. The teacher checked their takhtis.
- K. The teacher didn't point out any mistakes or ask the children to correct them.
- L. The teacher asked the students to wash their takhtis.
- M. The children followed instructions and washed their takhtis.
- N. The children went outside to eat, drink water, and go to the toilet.

Observation 6:

- A. The teacher first told the children the names of the English alphabet letters.
- B. Then the children read them one by one.
- C. The teacher corrected the mistakes of the children.
- D. The children wrote the alphabet letters on their slates.
- E. The teacher pointed to the alphabet letters on the blackboard.
- F. The teacher gave dictation and the children wrote.
- G. The teacher corrected the students who were incorrect.
- H. The teacher corrected the students' mistakes by asking other students for the correct answer.
- I. The teacher praised the children and clapped for them when they were correct.

Observation 7:

- A. The teacher identified a series of numbers.
- B. The teacher asked one student to come to the front of the class and repeated the numbers with the

help of that student's hand, nose, head.

C. The teacher helped the children practice with flash cards.

D. The teacher explained the concept of first and second order numbers.

E. In a ten minute period, the teacher asked the children to write numbers on their takhtis.

F. The children went to wash their takhtis.

G. The children came back with dry takhtis.

H. The children continued to write numbers and alphabet letters on their takhtis.

I. The teacher walked round the class and corrected the mistakes of the children.

ANNEX D

LIST OF THOSE PARTICIPATING IN THE STUDY

We would like to gratefully acknowledge the help of a large number of people who contributed to the study by their helpful discussions of Kachi issues, the field testing of the questionnaires, the logistics of the study or by their help in collecting and analyzing the data.

Special thanks should go to Saeeda Lodhi (Additional Director for Curriculum and Teacher Training), and Zahida Shah (Deputy Director for Curriculum and Teacher Training), Mona G. Habib, Jamshida Khan and Tom LeBlanc (Consultants to the Pakistan Primary Education Development Program), and Mohammad Sadiq Siddiqui and Anwar-ul-Amin (researcher assistants).

The following participated in a meeting in Peshawar to discuss Kachi issues and to plan the logistics for the Kachi study on September 1, 1991.

Name	Designation
----	-----
Misal Jan	ADEO Kohat
Fazal-e-Rashid	ADEO Distt. Dir at Timargarah
Hazrat Mohammad	ADEO Batkhela Malakand Agency
Zar Khan	ADEO Peshawar
Ghazi Hussain Shah	ADEO Abbottabad
Fida Mohammad	ADEO Swabi
Abdullah Khan	ADEO Chitral
Amir Ahmad Khan	ADEO Chitral
Mrs.Firdous Sherdil	Dy. DEO (f) Kohat
Miss.Bibi Abida	ADEO (f) Peshawar
Mrs.Taj Mahal	ADEO (f) Batkhela

The following persons were present in Peshawar from Sept.1 - Sept.4 in the workshop to learn how to train data collectors.

Name	Designation
----	-----
Mohammad Ayub	ASDEO (M) Malakand
Fazal-e-Khaliq	ASDEO (M) Malakand
Taj Mohammad	ASDEO (M) Haripur
Mohammad Amin	ASDEO (M) Lahor
Rahim Akbar	ASDEO (M) Lahor
Abdul Raziq	ASDEO (M) Dargai
Niaz-u-Din	ASDEO (M) Swat Malakand
Mohammad Khan	ASDEO (M) Dir

Qasim Jan	ASDEO (M) Dir
Mahboob Jan	ASDEO (M) Dir
Mohammad Yousaf	ASDEO (M) Dir
Abdullah Shah	ASDEO (M) Dir
Said Badshah	ASDEO (M) Dir
Abdul Malik	ASDEO (M) Timargarah
Mohammad Jan Khan	ASDEO (M) Dir
Mohammad Qasim	ASDEO (M) Dir
Fazal-e-Rabbi	ASDEO (M) Dir
Munnawar Shah	ASDEO (M) Malakand
Janat Gul	ASDEO (M) Malakand
Badshah Gul	ASDEO (M) Timargarah Dir
Shireen Zaman	ASDEO (M) Dir
Abdul Jalil	ASDEO (M) Chitral
Nisar Ali	ASDEO (M) Hangu
Ajab Khan	ASDEO (M) Kohat
Faizur Rehman	ASDEO (M) Wari Dir
Mohammad Quraish	ASDEO (M) Hangu
Shahabuddin	ASDEO (M) Hangu
Ahmad	ASDEO (M) Wari Dir
Matiullah	ASDEO (M) Wari Dir
Noor Mohammad	ASDEO (M) Mastuj Chitral
Mohammad Abid	ASDEO (M) Chitral
Gul Mulla Khan	ASDEO (M) Dir

The following attended the Kachi Class Study From Sept.1 - Sept.4 and participated as active members in the training and also in the field work.

Name	Designation
----	-----
Parveen Akhtar	ASDEO (F) Haripur
Mumlikat Bibi	ASDEO (F) Malakand Batkhela
Zarin Jan	Learning Coordinator (F) Swabi
Basmeen Begum	ASDEO (F) Swabi
Mohammadia	ASDEO (F) Dir
Sharafat Jan	ASDEO (F) Banda Daud Shah Karak
Farhat Sultan Shahnaz	ASDEO (F) Karak
Salma Naheed	ASDEO (F) Kohat
Attia Khattak	ASDEO (F) Peshawar
Taj Mahal	ASDEO (F) Batkhela
Azra Yasmeen	SDEO (F) Chitral
Yasmeen Aziz	ASDEO (F) Abbottabad

Sher Abbas Khan ASDEO (M) Peshawar
 Mohammad Shafiq ASDEO (M) Banda Daud Shah Karak
 Mohammad Jamil ASDEO (M) Timargarah Dir
 Mohammad Younas ASDEO (M) Chitral
 Qazi Mohammad Shafiq ASDEO (M) Abbottabad
 Noor-ul-Haq ASDEO (M) Swabi
 Jehanzeb Khan ASDEO (M) Malakand
 Mohammad Anwar Khan ASDEO (M) Kohat

The following collected the data for the Kachi study in the NWFP Districts.

PESHAWAR (F)

Bushra Ambarin
 Nusrat Bano
 Zurriat Shaheen
 Atia Khattak

PESHAWAR (M)

Muzaffar Shah
 Hayat Gul
 Liaquatullah Jan
 Mohammad Jehanzeb

CHITRAL (F)

Bibi Ayesha
 Jamila Begum
 Jehan Ara

CHITRAL (M)

Mohammad Abid
 Ali Jabbar Khan
 Fazal Ahmad
 Khurshid Ahmad
 Mohammad Sharifullah

MALAKAND (F)

Taj Mahal
Mumlikat Bibi
Robina Naz
Nasrin Amin

MALAKAND (M)

Sultan Ali
Fazli Qadir
Aminullah
Khaista Rehman

ABBOTTABAD (F)

Shaheen Kausar
Naseem Akhtar
Jahan Ara
Yasmin Aziz

ABBOTTABAD (M)

Mustajer Shah
Muhammad Ashraf
Sahibzada Salahuddin
Mohammad Younus

SWABI (F)

Nagina Jabeen
Salma Shaheen
Zarin Jan
Iqbal Yasmin

SWABI (M)

Abdullah
Abdur Rauf
Khan Bahadur
Mohammad Saleh

KOHAT (F)

Farhana Shaheen
Shahida Parveen
Rafia Nahid
Noorul Sabah

KOHAT (M)

Sayed Umar Shah
Mohammad Zeli
Sayed Dilbar Hussain
Imdad-ud-Din

DIR (F)

Irshad Begum
Jamila Begum
Mushtaq Begum

DIR (M)

Mohammad Din
Shahinshah Khan
Abdur Rehman
Mohammad Shoaib

KARAK (F)

Fazeelat Rehman
Samina Kausar

Khalida Aziz
Farida Khanum

KARAK (M)

Muslim Khan
M.Farooq Islam
M.Ihsanullah
M.Resham Gul