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*A STUDY OF SCHOOL FACILITIES, TEACHER CHARACTERISTICS
CLASS-RESOURCES AND TEACHING PRACTICES AS RELATED TO
ACCESS, RETENTION AND DROPOUT OF CHILDREN IN KACHI
CLASSES OF QUETTA, SIBI AND LORALAI DISTRICTS OF
BALOCHISTAN*

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CHAPTER 1

INTRODUCTION

The efforts to improve the quality of primary education in Pakistan have often been directed by concerns shown towards, low access, low participation, high student wastage, low teacher performance and shortage of physical as well as instructional resources. The success of the efforts depend, to considerable extent, upon the existence of knowledge based on sound educational research. This knowledge base is, at present, very weak or virtually non-existent. The Primary Education Development Program of the Government of Balochistan has in the recent past, endeavoured to establish the required knowledge base by developing a profound educational management information services and by providing organizational support alongwith necessary funding for the conduct of need-based research to investigate the functioning of various aspects of primary education system.

The study reported in this paper is concerned with the phenomenon of kachi class (Pre-Primary grade). The kachi class is the beginning of the Primary stage. The children, both boys and girls are admitted in the primary schools at about five years of age and spend one year or more before being promoted to class I. It has been noticed that the rate of children leaving the school at this stage is relatively very high as compared to drop-out ratios at other stages of primary education. There may be several factors affecting this early dropout including both in and out-of-school factors.

Critics suggest that in-school factors include unimaginative and boring

teaching methods, lack of suitable instructional materials for this age group, harsh discipline and circumstances which force children to sit long hours in unsheltered, severe conditions with out necessary facilities of drinking water and toilets etc.

In order to improve the situation, a better understanding of the present kachi context is necessary. This study is an attempt in the same direction. During the study information was gathered intensively from primary schools describing the conditions, current teaching practices, utilization of instructional resources and policies/procedures that affect the access and holding power of these classes. Interviews were conducted with head teachers and kachi teachers. The classroom resources were inventoried and kachi classes were observed while in session. The measures of student engagement were taken to determine the materials and teaching methods best able to hold the attention of the students.

The data thus gathered has been analyzed to decipher conclusions and recommendations to improve the quality of education by suggesting better uses of educational resources and instructional time, and also by suggesting ways to improve the classroom management skills. Effective teaching practices have also been suggested to reduce student wastage and to improve the quality of learning among the students.

STATEMENT OF THE PROBLEM

The purpose of this study was to investigate the in-school factors associated with high drop-out in kachi classes and to identify current policies and practices affecting children's access to and retention in the pre-primary year.

OBJECTIVES OF THE STUDY

The main objectives of the study under review were as given below:-

- i) To identify in-school factors associated with high dropout in Kachi classes.
- ii) To describe current conditions, resources, teaching practices, and instructional material use in kachi classes as a prelude to the development of instructional material and teacher training programs for this schooling level.
- iii) To identify current policies and practices that affect children's access to and persistence in pre-primary (kachi) class.
- iv) To make recommendations about minimal resource materials, training and other supports that are associated with better retention (and presumably, more learning in kachi class).

CHAPTER 2

REVIEW OF RELATED LITERATURE

The practice of admitting children in pre-primary grade (kachi class) is prevalent in all the four provinces of Pakistan. The policies regarding the admission, attendance, promotion and curriculum in Kachi class are not specified and vary from place to place. It has also been noticed that a large portion of children attend Kachi classes without being officially admitted in the school. The proportion of children dropping out of this class has also been observed to be relatively high.

This section of the report presents a brief review of scant literature related to the issues and problems being considered in the present study.

Quantity and Quality.

A popular misconception in the field of education is that quantitative and qualitative improvements are incompatible. It is generally assumed that any effort to improve one will lead to a decrease in the other. A more recent view is that quality and quantity are complementary conditions (Warwick, 1989). Quantity may be indicated in numbers such as enrollment, number of schools, and number of teachers etc., while quality refers to the effectiveness with which schools and for that matter, teachers help children to acquire critical knowledge, skills and attitudes.

The effectiveness of schools can be looked upon from three perspectives. Firstly, effectiveness is viewed in terms of achievement of students in curriculum based tests. Secondly, the perceptions of students, parents, teachers, headteachers education officials and intellectuals of a particular society may constitute bases for judging the effectiveness of schools. In case of Pakistan it has been found that such members of the society thought that children in schools should be polite, disciplined, orderly, respectful and aware of social and religious obligations (Rugh, 1991). Lastly, the goals of education can also be seen as providing bases for evolving a conception of the effectiveness of schools. Mainly these goals were related to producing good

Pakistani citizens who can contribute to national development through their loyalty and skills. Most of these goals underline the importance of becoming good muslims. While these goals outline the characteristics, the child should acquire, such as pride in heritage, good behavior, character, and conduct and motivation suitable to a muslim, just as often they also emphasize the obligations of students towards spreading the message of Islam, to contribute to national development and to show loyalty to state.

Thus the conceptions of effectiveness and quality of education cannot be easily limited only to scholastic performance of children. These concepts need to be extended to include desired characteristics of discipline, character, citizenship and religion.

Access to Education.

The supply of education is a function of demand for it and not simply a function of a country's income or wealth. Some developing countries have achieved full enrollment (for both boys and girls) with per capita GNP levels less than those of other countries still far from enrolling all their children in first grade. In almost all cases universal enrollment has been accomplished by mobilizing local resources to supplement state revenues: family expenditure on public education have, in many cases, been as large as state expenditure (McGinn, in Anderson, 1988).

Definition of Access.

Access to education has two basic dimensions: opportunity and participation. Opportunity refers to the supply of educational resources such as schools, instructional materials and teachers. Limited educational access often results from limited educational resources. The second dimension of access, participation in educational opportunities, refers to the effective demand for education when education is available. Educational demand is often determined by cultural, family and individual factors which can facilitate or inhibit initial enrollment and/or continuation

in school. Both the initial enrollment and retention of the student in school are aspects of participation dimension of access. Cross-system comparisons of educational access reveal different patterns of access and retention among wealthy/poor, male/female and urban/rural children (Anderson, 1988).

Access to education is important because of its relationship to both economic development and social equality and justice.

Implications for Access.

The policies and approaches chosen for extending access to education as a right some times differ from those chosen to improve access to education as a means towards further development. When education for its own sake is the goal, resources are used to realize the greatest educational return in terms of internal efficiency and/or effectiveness of schools. When education is intended to achieve other developmental goals, the choices among different types of educational inputs require more precise knowledge about which education, and of whom, will produce the desired results.

Both of these approaches have important implications for questions of access- i.e. who receive education in society, how much and of what type (Academic Vs Vocational) and quality? Which is the better investment: to provide a little education to all of the people, to provide more education to most of the people, or to provide higher quality education to fewer, but more strategically placed people (Anderson 1988)?

Remoteness and Access.

The first factor that limits access to education is remoteness. Data clearly show that in all systems, rural children's opportunity for schooling lags behind that of urban children. A study of factors determining educational participation in rural Nepal found that for every kilometer of distance that a child had to walk to school the possibility of that child's attending school dropped by 2.5% (CERID 1984). Another study in Egypt showed that the critical distance that affected school participation was

between 1 and 1.5 Km. If the school were 1 Km away 94% of boys and 72% of girls enrolled; if a school were 2 Km away 90% of boys and 64% of girls enrolled. (Robinson, et al, 1986). Other studies show that distance affects girls more than boys and younger children more than older children (CERID, 1984).

Poverty and Access

The second general factor in limited access to education is poverty. Poverty often goes hand in hand with limited educational attainment and low occupational status of parent. In all countries children of poorer families are less apt to attend or complete school than children of families who are better off (Robinson, et al., 1986).

Within School Factors and Access

What goes on within schools also affects access. Teaching methods, staffing, curriculum content, classroom and other facilities are all found to affect entry and retention in school. The following sections of this chapter shall describe some of within school factors that influence access, retention, effectiveness and performance of schools.

Educational efforts in the developing world have traditionally focused on issues of access, teacher availability, school facilities and instructional materials-the quantitative allocation of resources. The prevailing rationale has been that once most students are in classrooms, and teacher is present then the basic conditions for schooling and learning are present. Acting on this premise, educational policy makers usually focus on issues of availability of resources and access and later on issues of quality. Allocation of resources without regard to the teaching process, however, does not guarantee learning. Rather, it is both the quantity and quality of the interaction between teachers and students that are relevant (Calderhead, 1984; Doyle, 1986).

While policy makers or school principals can initiate changes in the educational structure, the curriculum, and administration, it is teachers who are expected to have the greatest impact on learning.

Classrooms as Contexts

Teaching takes place in the classroom, a complex site where what happens is a function not only of the physical setting but also of the human participants, and their behaviors towards each other. Erickson and Shultz (1977) consider that:

Contexts are not simply given in the physical setting..... nor in combination of personnel (two brothers, husband and wife, fireman). Rather, contexts are constituted by what people are doing and where and when they are doing it. As McDermott (1976) puts it succinctly, "People in interaction become environments for each other."

Classrooms vary in terms of student/teacher ratio, age ranges, levels of attrition, retention and repetition rates, provision of basic instructional materials and in some cases, community support for schooling. The national curriculum can not anticipate the different circumstances in which teachers must implement it. Furthermore, education systems with severe resource constraints spend most (often over 90%) of the annual budget on salaries, leaving little for material inputs. The capabilities of teachers to manage and direct learning activities under these conditions are critical.

Classrooms are defined by their location (rural, urban, semi-rural and urban marginal), size, number of students, grade distribution, resources, language of instruction (first or second language), number of teachers and other criteria. Classrooms vary widely from those developed by community on an available plot of land, to those supported through local initiatives and those receiving funding and materials from the government. In many countries, multi grade classroom with one teacher for upto six grades are not unusual. Understanding the context in which

teachers work is essential for the identification of those classroom management practices that could be most effective in terms for learning outcomes.

The descriptions of "typical" classroom suggests that although the presence of instructional material is important, how they are used is more critical question (Montero-Sieburth, 1989).

Teachers and Effectiveness

Teachers constitute single most important driving force in any system of education and are crucial in determining both the quantitative and qualitative aspects of performance of a school system.

Qualifications and achievement

The levels of formal and professional education of teachers are considered to be positively related to the achievement of student. In fact formal education of teachers is found to be the best single predictor of student achievement in mathematics and science (Warwick et al, 1989 report # 5)

Similarly, though less dramatic findings emerge when student's achievement was related to professional qualifications of their teachers. It was found that across all tests, students of teacher with no professional qualifications score lower than those holding primary teachers certificate (P.T.C) (Warwick, et al., 1989 report # 5).

These findings strongly support the importance of teacher's formal and

professional education and training in enhancing student's achievement in different subject.

Number of classes and student learning

Another important factor influencing the performance of students may be the number of classes taught by a single teacher. The hypothesis in this case is that the larger the number of classes taught the smaller the amount of time available for preparing and teaching any one class. Student's learning many suffer because teachers have to deal with different age groups and several text books. It has been found that larger the number of classes taught the lower the achievement test scores (Warewick, et al., 1989. report # 5).

Teacher Turnover and Student Learning

Research in other countries suggest that achievement is highest when there is little teacher turnover, that is where they stay in the same school year after year. The reason why this is so is not clear. One possibility is that high turnover reflects low teacher morale which leads to poor teaching. Another possibility is that students learn better from teachers familiar with them and school (McGinn, et al, 1989. Report # 2).

Average Time of Teacher per Student

The size of the school may also be related to the performance of

students. Some educators argue that small schools are better because students have more contact with teachers. Other educators believe that large schools are better because they can provide more material resources considered important for achievement.

The provinces differ in terms of average number of teachers per school. Schools in Punjab has smallest numbers of teachers (3.7 on average), those in Federal district the most. (8.8 teachers). Schools in Balochistan , N.W.F.P and Sind each average between 4 and 5 teachers per school. About 19% of schools have only one teacher. Provinces also differ in term of average ratio of pupils to teacher. In Punjab there are 48 pupils for each teacher, in N.W.F.P 43, about in Sind, Balochistan and Federal district about 30 students per teacher.

What does this mean in terms of Student contact with teachers? It has been found that each student in Federal district on average receives 10 minutes of teacher's time or 30 hours in 180 day school year. Each student in Punjab on the other hand would receive about 7 minutes or 21 hours in 180 day school year. The other three provinces fall in between, that is, with student receiving between 7 and 10 minutes per day of teacher's attention (McGinn, et at., 1989 report # 2). Also there are large differences in terms of student/Teacher ratio within each province. This suggests inefficiency in the assignment of teachers to school that is that some school are being assigned more teachers than are appropriate given size of the school.

Factors that Influence How Time is Spent

It is generally presumed that the more time students and teachers spend on tasks directly related to the curriculum the more students will acquire the knowledge, skills and values that the curriculum is meant to convey. In other words the more the time-on-task, the more learning.

At the same time, of course, how much is learned depends on how that time is spent. Teaching and learning time can vary considerably in terms of "quality" that is, in terms of how much is actually learned as a consequence (for example a "boring" teacher can spend even more time than an exciting teacher covering a point and teach less). Amount of learning is function of time spent learning multiplied by efficiency (or quality) of that time.

Instructional materials are an important variable because they complement , supplement or replace direct instruction. As such instructional materials directly affect teacher's instructional and management capacity. When teachers have textbooks. and guidebooks, these may compensate, in part, for lower levels of education and training.

The effective management of instructional time often involve creative use of instructional materials but this optimal use of time is only possible when materials are available

According to Lockhead (1987) and Fuller (1986) the influence of school variables on student achievement in developing countries is greater than in developed countries where student background variables are more likely to have an effect.

Among the school factors that are consistently related to student achievement are the presence and use of instructional materials, time spent on learning and teacher education.

Time and Instruction

From the instructional perspective, how time is used for academic engagement must be considered in connection with pacing and grouping. Pacing is the rate at which instruction covers a specific amount of curriculum content in a certain time. Some studies have found diverse pacing procedures; however most teachers pace their instruction to accommodate low achievers and this negatively affects the more able students. Time-on-task has more impact on students at or below their class mean than on students above their class means. Pacing is affected by the accumulated knowledge and hierarchical nature of the subject matter. During transitions from one activity to another in a class much of the time is off-task and hence affect student engagement (Arlin, 1979).

Seat work is a very common way of grouping. It requires students to perform tasks, usually reading or writing, on their own, often without direct supervision from the teacher. Research in Thailand indicate that about 30% of teaching activities involved written seat work. (Classroom Environment Study Report. 1985). The impact of seat work on learning and achievement depends on the availability and appropriateness of textbooks, workbooks or ditto materials, and the monitoring skills of the teachers. When instructions are not clear and tasks are

percieved as too difficult to accomplish low achievers cannot benefit from seatwork. As student engagement is positively associated with substantive academic interaction between teachers and students, seatwork which requires students to work on their own decreases interaction and thus often increases time-off-task (Seifart & Beck, 1984 and Filby & Cahen 1985).

Most of the above mentioned teaching strategies are commonly used in developing countries, although their effectiveness is controversial. In Thailand, for example, these strategies have been related to achievement but in Latin America such strategies have been identified as promoters of non active learning and are related to low achievement (Arancibia, 1986).

In some African countries these teacher centered strategies are regarded as appropriate to local cultural expectations (Windham, 1985).

In general teachers improve student's time-on-task by planning activities, giving clear instructions, classifying the specific objectives to be accomplished, taking student's needs and level of ability into account, making high success opportunities available and praising student for correct responses (Martin & Canty, 1980).

Time and Alternative Instructional Approaches

There are alternative approaches that use time in a different way from conventional classrooms. Some of these approaches are described in the following sections.

Mastery Learning"

Based on Carroll's model, the mastery learning approach assumes that students with different ability levels require different amount of time to accomplish the same tasks. Therefore each student should be given the time she or he needs to accomplish the objective. The curriculum content is broken down in to small units of learning to be mastered at the student's own pace. Formative evaluation is provided after the student has completed each unit. Individualized teaching and extra time tutoring are commonly used in this approach (Bloom, 1968).

Mastery learning has been introduced in Bolivia as a didactic model to improve the quality of instructions. However policy makers should be aware that it has not been proven able to enhance learning at all levels for all kinds of students and that it requires a significant increase in costs (Montero-Sieburth, 1989).

Adaptive Learning Environment

The Adaptive Learning Environment Model (ALEM) is designed to provide more learning opportunities in regular classrooms through self-paced and individualized instructional strategies. This model has increased teacher time on instructional activities and student engaged time in relevant academic activities and has improved achievement significantly. The program has been applied mainly in mathematics and it is not known how effective it will be with less structured subject matter (Wang, 1985). The ALEM's approach is especially useful in multi graded classroom and is cost effective since its aim is to reduce learning time. It also requires minimal organizational

change.

Reduced Instructional Time Project

The Reduced Instructional Time project (RIT) in Thailand is one of the best organized low cost learning systems. Its objectives are to find effective instructional methods to reduce the time students need to learn and to develop appropriate materials to reduce the time teachers need to provide instruction. The RIT Project has been implemented in multi graded schools with a student teacher ratio of 70:1 Instructional material have been developed and used to foster individual and peer learning so as to free teachers to monitor student's time-on-task, to help students improve their learning skills and to provide remedial teaching. The role of teachers changes from being the only source of instructions to managing materials and activities. Teacher Instruction time was reduced by 20-30% in the first grade, 30-40% in the second grade and by 50-90% from the third grade to sixth grade.

Although the RIT requires initial investments in material development, teacher training and organizational changes, it has proven to be cost effective because it reduces time spent on non-instructional activities, and improves both the quality of instruction and student achievement.

The research on Instructional time reveals that this variable can be controlled by educational policy makers and teachers to raise achievement. Improved time management is cost effective because it focuses on intensive and effective use of time, an existing resource to improve learning, without calling for additional

resources.

Instructional Materials

Instructional materials can be broadly divided into two categories: textbooks which are the most basic of all learning materials and other materials which include word cards, worksheets, notebooks, dittos, fact sheets, various forms of audiovisual materials, home made materials from environment and programmed materials.

Textbooks and Achievement

In contrast of industrialized countries where there are a lot of instructional materials, some developing countries have few or no instructional resources. In these instances adding a little can make a big impact on achievement. Many researchers argue that the availability of the textbook appear to be the most consistent school factor in predicting academic achievement (Montero-Sieburth, 1989).

How test books are utilized also makes a difference in learning. Research findings point out the importance of teacher training in using textbooks to improve their teaching and learning outcomes.

Instructional materials other than textbooks have been shown to have an affect upon achievement. Newspapers, when used as instructional material have shown a positive affect on reading achievement. Another study show that reading and

writing ability of primary school children have increased when posters and charts showing environmentally specific words were used (Chasterfield, 1978). Similarly, the use of programmed instructional material have been successful in developed countries. Similar Projects in Philippines, Indonesia, Liberia and Thailand have been effective in improving the efficiency of primary education.

Teacher Training

The importance of teachers in helping the students can never be over emphasized. When the resources are scarce the need for innovative teachers become more pronounced. Better teacher training programmes can compensate for adverse working conditions. Recent literature suggests that Pre-service training is less useful than in-service training because the trainees have no relevant experience in a real setting where as in-service training is more effective with unqualified practicing teachers. Inservice Education and Training (INSET) has been seen as a means of revitalizing general morale within teaching profession as a whole by providing on going process for gaining acceptability for educational change and reform. Recent trend in INSET is to shift the base of training from specialist institutions to individual schools and to focus on their needs. Study circles or clusters and networks are used to disseminate new ideas and innovative practice. Simulation and peer critique are also found to be very effective in improving teaching practices.

The teacher training curriculum should provide a knowledge of content areas, time management skills, instructional strategies, organizing skills, inter-personal

skills and techniques for producing simple instructional materials. Since teaching is directive, active, engaging and complex process incorporating both social and academic domains, teacher training that extends this sensitivity is most useful.

CHAPTER 3

DESIGN OF THE STUDY

The present study was conducted using an eclectic design which combined the strengths of various methodologies. The qualitative descriptive data were supported by systematically collected information. As the nature of the study was descriptive, it has attempted to answer questions concerning the present status of the kachi classes. The data were collected through interview with headteachers and teachers of kachi class.

The location of the kachi classes were observed and recorded in an inventory of classroom resources. The kachi classes were observed while these were in session and information were recorded about the teachers' activities, students' activities, subjects being taught, and the proportion of students involved in gainful academic activities. The design of the study was of comparative/intensive nature rather than of generative/extensive type.

Universe

Present study was conducted in three districts of Balochistan i.e Quetta, Loralai and Sibi. All government schools of these districts, both male and female, having kachi classes, constituted the universe of this study. The purpose of including these districts in the universe was to get a sample, closely representing the characteristics of the overall population of Balochistan. For instance, Quetta district

represents a mixed population of Poshtoons, Balochs, Hazara and the settlers. Sibi is a Balooch district covering a wide range of Baloch tribes, speaking a variety of languages like Sindhi, Balochi, Brahavi and Saraiki. Loralai is a typical Pashtoon district representing a wide range of Pashtoon tribes. It was, therefore hoped that the findings and recommendations made on the basis of this study will apply to the whole of Balochistan .

Sample.

It was decided that a sample of 16 schools, 8 male and 8 female will be drawn from each district. Thus a total sample of 48 schools was drawn from all the three districts. A comprehensive list of schools for each of the above districts was obtained from BEMIS, Quetta.

Keeping in view the practical difficulties and for the sake of convenience, the following type of schools were excluded from the list.

- i) All private shools.
- ii) All mosque schools.
- iii) All schools beyond 20 Kilometers from the respective distt. head quarter.
- iv) All schools not easily accessible due to worst road conditions.

From rest of the list a purposive sample, a sample that would serve our purpose, was drawn with the help of the staff of the District Education Officer of the respective district. Keeping in view the aims and objectives of the study, the following

eight categories of schools were represented in our sample. Two schools were taken from each category in each district.

- i) Single class boys urban schools.
- ii) Single class boys rural schools.
- iii) Single class girls urban schools.
- iv) Single class girls rural schools.
- v) Multi class boys urban schools.
- vi) Multi class boys rural schools.
- vii) Multi class girls urban schools.
- viii) Multi class girls rural schools.

(A single class school means a school where a kachi class is taught by a single teacher separately where as a multi class school refers to a school where kachi class is combined with other classes).

Our actual final sample, however, deviated a little from the above stated sample. This so happened because of two reasons. Firstly because the desired type of school was not available within the delimited area. Secondly because the school which was reported to be a single or multi class school turned out to be otherwise on actual visit of our interviewers. Appendix-C gives the detail of actual final sample. Complete list of schools included in the sample also appears in the Appendix-B.

Instruments

Instruments for this study consisted of five proforma. These proforma were designed by Dr. Andrea Rugh, USAID Consultant for Primary Education Development Program, Quetta. A brief description of these proforma is given below.

First proforma (K - 1) was concerned with school information and was filled by our interviews through interviews with the head teachers of the respective schools. Information about school building; number of rooms; physical facilities; number of kachi children; rules for admission in kachi; reasons of dropout; special difficulties of teaching kachi classes; rules for promotion; and failures and repetitions was gathered.

Second proforma (K-2) was concerned with the characteristics of the kachi teachers and was filled by our interviewers through interviews with the respective kachi teachers. The proforma inquired about the sex, mother tongue, locality, qualifications, grades, professional training, inservice courses and teaching experience of kachi teachers. It also inquired about their teaching practices, the use of a.v. aids, teaching methods, contact with the parents, and opinion about reasons of dropout at kachi level.

Third proforma (K-3) was concerned with the classroom resources of kachi class. Information about being sheltered or unsheltered; size of the classroom; crowdedness; student chairs, tables and mats; teacher chairs and tables, number and condition of the black boards; teaching aids; pattern of combining kachi classes with other classes; student teacher ratio; and conditions affecting teaching learning in kachi

classes was gathered by our researches through observation of the kachi classes

Fourth proforma (K - 4) was concerned with teaching practices and teaching methods of the respective kachi teachers and was filled by our searchers through class observation. Three proformas (K - 4) were filled in for each kachi class observed i.e. at the beginning, in the middle and by the end of the school day. The proforma asked about the extent of active involvement of the teachers; role of the monitor; subjects taught by the teachers; various activities of the teacher; ways of using text books; ways of dealing with student responses; supervision of seat work; methods of dealing with student misbehavior; main language used by the teacher and the students; teacher's time spent on kachi class; and a description of teacher and student activities.

Fifth proforma (K-5) was also concerned with the observation of the kachi class. Information regarding student engagement, teacher's involvement, teachers activity, student activity, source of activity and subjects taught was recorded by our researchers. The proforma provided space for some observations to be recorded at an interval of ten minutes each. Three sets of proforma K-4 and nine observations of proforma K-5 were to be recorded by two independent researchers, simultaneously, for each kachi class.

The above stated five proformas appear in the Appendix-A of this report.

Field Testing

Above stated five proforma were field tested in six schools of Quetta.

Field testing was carried out in variety of schools including urban-rural, male-female, and single- multi schools. The purpose of field testing was to improve the proforma and procedure for data collection and to get a clear picture of difficulties and field experiences. In the light of the field testing the proforma were modified and improved. Some of the entries were discarded and items where there was some ambiguity were clarified. Some minor additions were also made in the proforma. Experiences gained through field testing were shared with the interviews during their training for the actual study and clear instructions were given so as to avoid the possibility of any type of errors during data collection.

Training of the Interviewers.

Before the start of the actual data collection the interviewers were given two days training in each of the three district head quarters. This training was given by the chief investigator, the co-investigator, and the field coordinator. On the first day of training the entries of proforma and procedure for data collection were explained to the interviewers through questions-answers. Various concepts were made clear to them. Instead of giving overall training to all interviewers on all profarmas, the interviewers were given specialized training on the proforma which they had to use in the schools. On the second day the interviewers were taken to various schools and were given field training. They filled in the proforma in the real settings according to specified procedure and were guided by the investigators wherever they experienced difficulty. At the end of the field training, the trainer and

the interviewers sat together and discussed their difficulties and experiences during field training. The trainer also went through the filled in proforma and made necessary corrections, he also pointed out errors committed by each interviewer.

Data Collection.

Data collection was made in the middle of September 1991. The selection of middle of September was made on the following grounds: (i) It was neither the beginning of the year nor the end of the school year. (ii) Schools were opened both in cold and hot areas of Balochistan. In cold areas schools were already in session whereas in hot areas the schools had reopened after summer vacation. (iii) Weather conditions were not too harsh. (iv) It was ensured that monthly or quarterly tests were not scheduled during this period. Thus an effort was made to avoid any unusual situation that might affect the results of the study.

Data collection in all the three districts were made by 3 principal investigators i.e. chief investigator, co-investigator and field coordinator with the help of the 36 interviewers. In each of the district data was collected by 12 interviewers, 6 males and 6 females, under the supervision of a principal investigator. four teams of interviewers, comprising 3 members each, covered 4 schools in one day. Thus the data collection was completed in 4 days in each district.

In each school the team of interviewers spent almost four hours, starting from 9 A.M. and ending at 1 P.M. Member A of the team was responsible for filling in proforma K - 1 and K - 2 (interview of the head teacher and the kachi teacher).

Member B was responsible for filling in proforma K - 3 and K - 5 (classroom resources and student engagement). Member C was responsible for filling in 3 sets of proforma K - 4 (teaching practices). The principle investigator visited each school personally and remained there for some time and supervised data collection.

At the end of every day's work, the 4 teams of interviewers gathered together and discussed their problems of the day with the principal investigator and chalked out program for the next day.

Data Analysis

After the completion of data collection, the data was entered in the computer. All closed ended items were pre-coded whereas open-ended items were coded after data collection. After data entry, data was analyzed and various tables were constructed. Most of the tables were simple frequency-percentage tables. However in some cases correlations were also computed.

CHAPTER 4

ANALYSIS OF DATA

Data have been analysed and presented in the following simple frequency-percentage tables followed by a brief interpretation. Advance statistical methods have not been applied to make the report as simple as possible. However some correlations have also been computed.

TABLE-1
DISTRIBUTION OF KACHI CLASSES ACCORDING TO
BEING SHELTERED OR UNSHELTERED

Class Type	Rural		Urban		Total	
	F	%	F	%	F	%
Sheltered	20	87.0	14	56.0	34	70.8
Unsheltered	3	13.0	11	44.0	14	29.2
	23	100.0	25	100.0	48	100.0

Table-1 shows the distribution of sheltered and unsheltered kachi classes. Reasonably good number of kachi classes (70.8%) in our sample are sheltered. There are almost one-third kachi classes which are yet to be sheltered and face the

hardships of severe weather conditions. The table also indicates that there are more sheltered kachi classes in rural areas than in urban areas.

TABLE-2
PHYSICAL FACILITIES AVAILABLE AT SCHOOLS

Facility	Rural		Urban		Total	
	F	%	F	%	F	%
Drinking Water	15	65.2	17	68.0	32	66.6
Wash Water	14	60.8	14	56.0	28	58.3
Toilet facility	10	43.4	16	64.0	26	54.2
Playground	9	39.1	9	36.0	18	37.5

Table-2 shows that in more than 50% of the schools drinking water, wash water, and toilet facilities are available to kachi children. Playgrounds are available in a small (37.5%) proportion of schools only.

TABLE-3
CLASSROOM SPACE FILLED BY KACHI CHILDREN

Space Filled	Rural		Urban		Total	
	F	%	F	%	F	%
No Classroom	3	13.0	11	44.0	14	29.2
Less than half of the space	4	17.4	1	4.0	5	10.4
Half the space	3	13.0	3	12.0	6	12.5
More than Half the space	6	26.1	6	24.0	12	25.0
All the space	7	30.5	4	16.0	11	22.9
	23	100.0	25	100.0	48	100.0

Table-3 shows the classroom position in kachi classes. Table indicates that about 29% of the classes do not have classrooms. 48% of the classes have classrooms and children are comfortably seated. 23% of the kachi classes are crowded. There are more crowded classes in rural areas than in urban areas.

TABLE-4
STUDENT DESKS/CHAIRS IN KACHI CLASSES

Desk availability	Rural		Urban		Total	
	F	%	F	%	F	%
No desks	22	95.6	24	96.0	46	95.8
Present but not sufficient	0	0.0	0	0.0	0	0.0
Present and sufficient	1	4.4	1	4.0	2	4.2
	23	100.0	25	100.0	48	100.0

Table-4 indicates that a large majority of kachi classes (95.8%) do not have any desks. Only a small (4.2%) proportion of kachi classes have desk facility.

TABLE-5
STUDENT SITTING MATS FOR KACHI CLASSES

Mat Availability	Rural		Urban		Total	
	F	%	F	%	F	%
No Mats	4	17.4	5	20.0	9	18.8
Present but not sufficient	7	30.4	8	32.0	15	31.2
Present and sufficient	12	52.2	12	48.0	24	50.0
	23	100.0	25	100.0	48	100.0

As is evident from table-5 the majority of the schools (81.2%) use mats for seating kachi students. Only in 50% of schools mats are available in sufficient numbers. In 31.2% of the kachi classes mats are available but are not sufficient.

TABLE-6

KACHI CLASSES HAVING NO DESKS AND NO MATS

No desks, No Mats	Rural		Urban		Total	
	F	%	F	%	F	%
Male	2	8.7	2	8.0	4	8.3
Female	1	4.3	2	8.0	3	6.2
	3	13.0	4	16.0	7	14.5
	N = 23		N = 25		N = 48	

Table-6 shows that there are at least 14% schools where kachi children neither have desks nor mats to sit on. They just sit on the ground.

TABLE-7
CONDITION OF BLACKBOARD IN KACHI CLASSES

Condition	Rural		Urban		Total	
	F	%	F	%	F	%
Difficult to read	2	8.7	9	36.0	11	22.9
Acceptable	14	60.9	9	36.0	23	47.9
Easy to read	5	21.7	6	24.0	11	22.9
No blackboard	2	8.7	1	4.0	3	6.3
	23	100.0	25	100.0	48	100.0

Table-7 indicates that most of the blackboards (70.8%), used in kachi classes, are either difficult to read or simply acceptable. Only 22.9% of the blackboards are in are easy to read condition. Some kachi classes (6.3%) have no blackboard at all.

TABLE-8
TEACHING AIDS AVAILABLE IN KACHI CLASSES

Teaching Aid	Rural		Urban		Total	
	F	%	F	%	F	%
Wall Charts	10	43.5	7	28.0	17	35.4
Teaching Kit	3	13.0	3	12.0	6	12.5
Flash cards etc	2	8.7	4	16.0	6	12.5

Table-8 indicates that only in a small number of schools various teaching aids are available in kachi classes where as in a large majority of kachi classes these aids are not available. The major teaching aid is the wall chart but only 35.4% of the kachi classes have wall charts. Teaching kits and flash cards etc are available in 12.5% of the classes only. More rural classes, as compared to urban classes, have the wall charts. This is, probably due to the fact that there are more sheltered kachi classes in rural areas than in urban areas.

TABLE-9
QUALIFICATION OF KACHI TEACHERS

Qualification	Male		Female		Total	
	F	%	F	%	F	%
Middle	1	4.0	0	0.0	1	2.1
Matric	12	48.0	12	52.2	24	50.0
F.A/F.Sc	11	44.0	11	47.8	22	45.8
B.A/B.Sc	1	4.0	0	0.0	1	2.1
	25	100.0	23	100.0	48	100.0

Table-9 indicates that qualification of majority of the kachi teachers (95.8%) is matric or intermediate. There are very few teachers whose qualification is below matric or above intermediate. Pattern of qualifications in male and female teachers is similar.

TABLE-10

PROFESSIONAL TRAINING RECEIVED BY KACHI TEACHERS

Type of training	Male		Female		Total	
	F	%	F	%	F	%
Untrained	12	48.0	7	30.5	19	39.6
PTC/JVT	12	48.0	10	43.5	22	45.8
SV	0	0.0	1	4.3	1	2.1
CT	0	0.0	3	13.0	3	6.2
B.Sc. B.Ed.	1	4.0	0	0.0	1	2.1
Other	0	0.0	2	8.7	2	4.2
	25	100.0	23	100.0	48	100.0

Table-10 gives a picture of professional training received by kachi teachers. Table shows that about 40% of the teachers are untrained. Majority of the teachers (45.8%) have PTC/JVT training. Only about 15% of the teachers received training higher than PTC.

TABLE-11

REFRESHER COURSES ATTENDED BY KACHI TEACHERS

Refresher Courses	Male		Female		Total	
	F	%	F	%	F	%
No refresher courses	14	56.0	11	47.8	25	52.1
1-3 Courses	10	40.0	11	47.8	21	43.7
4-5 Courses	1	4.0	1	4.4	2	4.2
	25	100.0	23	100.0	48	100.0

Table 11 shows that about half (52.1%) of the kachi teachers never attended any refresher course whereas 43.7% of them attended one to three courses.

TABLE-12
TEACHING EXPERIENCE OF KACHI TEACHERS

Experience	Male		Female		Total	
	F	%	F	%	F	%
1-5 Years	21	84.0	21	91.3	42	87.5
6-10 Years	3	12.0	2	8.7	5	10.4
Above 10 Years	1	4.0	0	0.0	1	2.1
	25	100.0	23	100.0	48	100.0

Table-12 shows that majority of the teachers (87.5%) have teaching experience of five years or less. Only 12.5% of the teachers have teaching experience of more than five years.

TABLE-13
PLACES OF DOMICILE OF KACHI TEACHERS AS COMPARED TO THEIR
PLACES OF DUTY

	Male		Female		Total	
	F	%	F	%	F	%
Same town/ village where teaching	12	48.0	12	52.2	24	50.0
Nearby town/village	6	24.0	6	26.1	12	25.0
Distant town/village	7	28.0	5	21.7	12	25.0
	25	100.0	23	100.0	48	100.0

Table -13 shows that 75% of the kachi teachers either live in the same locality where they teach or come from the nearby towns or villages. Only 25% of the teachers came from distant towns and villages. It is satisfying that more females than males belong to the same locality or nearby locality where they teach.

TABLE-14

MOTHER LANGUAGE OF KACHI TEACHERS

Mother Language	F	%
Urdu	8	16.6
Pashto	16	33.3
Brahavi	3	6.3
Sindi	7	14.6
Persion	1	2.1
Other	13	27.1
	48	100.0

TABLE-15

MOTHER LANGUAGE OF MAJORITY OF THE KACHI CHILDREN

Mother language	F	%
Urdu	5	10.4
Pashto	21	43.7
Balochi	3	6.3
Brahvi	5	10.4
Sindi	11	22.9
Other	3	6.3
	48	100.0

TABLE-16
LANGUAGES MOST OFTEN USED BY THE TEACHER TO TEACH
KACHI CLASSES

Language	F	%
Urdu	31	64.6
Pashto	10	20.8
Brahavi	1	2.1
Sindi	4	8.3
Other	2	4.2
	48	100.0

TABLE-17
MOTHER LANGUAGE OF KACHI TEACHERS AS COMPARED WITH
MAIN MOTHER LANGUAGE OF KACHI CHILDREN

	F	%
Language of the teacher and the student being the same	19	39.6
Language of the teacher and the students being different	29	60.4
	48	100.0

Table 14, 15, 16 and 17 indicate that Pashto, Urdu and Sindi are the main languages spoken by majority of the Kachi teachers whereas Pashto, Sindi, Brahavi and Urdu are the main mother languages of the Kachi children. Only in 40% of the classes, mother languages of the Kachi teachers is the same as the language of the majority of the children whereas in 60% cases mother language of the teachers and the children is different. Majority of the teachers (64.6%) use Urdu as main language of instruction although Urdu is spoken by 10.4% of the children.

TABLE-18
RULES FOR ADMISSION IN KACHI CLASSES

Rule	F	%
Children are not admitted before the age of five	39	81.2
Children are not admitted after last date	4	8.3
Children are required to take oral test	2	4.2

Table-18 shows that most of schools have liberal policy about admissions in kachi classes. The only rule which is observed by majority (81.2%) of the schools is that children are not admitted in kachi before the age of five. There are no other rules which may prevent children's access to kachi classes.

TABLE-18A

LAST DATE OF ADMISSION IN KACHI CLASSES

Last Date	F	%
Admissions are allowed within one month of the start of the new year	10	20.8
Admission are allowed within two months of the start of the new year	4	8.3
Admissions are allowed withing five months of the start of the new year	8	16.7
There is no fixed date	26	54.2
	48	100.0

Table 18A shows that most of the schools observe a flexible policy regarding last date of admission in kachi classes. In more than half of the schools (54.2%), admissions continue for an indefinite period. In some schools admissions are allowed upto a period of five months after the start of the new Year. Only in 20.8% of the schools admissions are not allowed after one month of the start of the year.

TABLE-18B

FREQUENCY OF REFUSING ADMISSION UNADMITTED KACHI CHILDREN

Reason for Refusal	F	%
Because of child being too young	13	27.1
Because of child being too old	7	14.6
Because of too many students in the class	7	14.6
Because of lack of teachers	6	12.5
Because of insufficient space	9	18.8
Because of child belonging to the wrong sex	9	18.8

N = 48

Table-18B indicates that majority of the schools are quite considerate in allowing admission to unadmitted kachi children. More than 70% of the schools do not refuse admission to unadmitted children. Only some schools refuse admission to these children because of their being too young (27.1%), non-availability of space in the classroom (18.8%), or because of the children belonging to the wrong sex (18.8%).

TABLE-19
DISTRIBUTION OF SCHOOLS ACCORDING TO THEIR ASKING
KACHI CHILDREN TO BRING SOME THING.

	F	%
Children are not required to bring any thing	16	33.3
Children are required to bring some thing	32	66.7
	48	100.0

TABLE-20
THINGS THAT KACHI CHILDREN ARE REQUIRED TO BRING

	F	%
Books, takhtis, slates, ink etc	27	84.4
Uniform	4	12.5
Fee etc	1	3.1
Fee etc	32	100.0

Table 19 and 20 show that in one third of the schools kachi children are

not required to bring any thing with them whereas in two-third of the schools children are required to bring something. Schools where children are required to bring something, most of the children (84.4%) are required to bring books, takhtis, slates and ink. In very few schools children are required to wear uniform or pay some sort of fee.

TABLE-21
SUBJECT MATTER WHICH THE KACHI CHILDREN ARE EXPECTED
TO KNOW FOR PROMOTION TO PAKKI

Subject Matter	F	%
Urdu alphabets	44	91.6
Counting upto hundred	44	91.6
Reading the premier	19	39.5
Kalimales	18	37.5
Simple general Knowledge	17	35.4
Multiplication tables	17	35.4

N = 48

Table-21 shows that, in majority of the schools, urdu alphabets and counting upto hundred are the main subject areas which the kachi children are required to master for promotion to pakki (grade one). In about one-third of the

schools the children are also required to read primer; to learn kalimahs and tables; and to have some simple general knowledge.

TABLE-22
SPECIAL DIFFICULTIES WITH TEACHING KACHI CLASSES AS
STATED BY THE HEAD TEACHERS

Difficulty	F	%
Childerns are too young	7	14.6
Communication is difficult	18	37.5
Classes are over crowded	8	16.6
Childers are difficult to control	12	25.0
Childerns are unable to maintain cleanliness	4	8.3

N = 48

Tables-22 gives a summary of the difficulties with teaching kachi classes. Some of the difficulties indicated by the teachers are (i) communication with the children is difficult (37.5%). (ii) Children are difficult to control (25.0%). and (iii) kachi classes are over crowded (16.6%)

TABLE-23

PREFERENCE SHOWN BY KACHI TEACHERS FOR TEACHING KACHI CLASSES

	F	%
They do not like to teach kachi classes more	28	58.3
They like to teach kachi classes more	18	37.5
They think teaching kachi is the same as other classes	2	4.2
	48	100.0

Table-23 shows that one-third of kachi teachers like to teach kachi classes more than other classes whereas about two-third of the teachers have either expressed their disliking or indifference for teaching kachi classes. This indicates some special difficulties with teaching kachi classes.

TABLE-24

FREQUENCY OF ASSIGNING HOME-WORK TO KACHI CHILDREN

	Rural			Urban			Total		
	F	T	%	F	T	%	F	T	%
Male	12	12	100.0	13	13	100.0	25	25	100.0
Female	7	11	63.6	8	12	66.6	15	23	65.2
	19	23	82.6	21	25	84.0	40	48	83.3

Table-24 indicates that majority (83.3%) of the kachi teachers assign home work to their students. Table also indicates that all male teachers assign home work whereas 65.2% of the female teachers assign home work. There are no differences in rural/Urban teachers regarding their assignment of home work. Table shows a tendency of compulsory assignment of home work to very young children which might be one of the reasons of dropout at kachi stage.

TBALE-25

NATURE OF HOME WORK ASSIGNED TO KACHI CHILDREN

Home work assigned	F	%
Reading the lesson	26	65.0
Writing alphabets, numbers etc	24	60.0
Writing takhtis	17	42.5

N = 40

Table-25 shows that 40 schools where children are assigned home work, tasks most often assigned are; reading the lesson; writing alphabets and numbers; and writing takhtis.

TABLE-26

WAYS OF ATTENDING TO KACHI CHILDREN BY THEIR TEACHERS

	F	%
Children who raise their hands	26	18.7
Children who do not raise hands	24	17.3
Childrens in the front rows	9	6.5
Childrens in the back rows	5	3.6
All about the same	56	40.3
Other	11	7.9
No teacher present	8	5.7
	139	100.0

Table-26 indicates that Kachi teachers use a mixed strategy for attending to their pupils.

Many of the teachers (40.3 %) attend them equally, not preferring one group of children to the other,

While some (18.7%) teachers are influenced by those raising their hands whereas some (17.3%) pay attention to those who donot raise their hands.

TABLE-27
METHODS OF DEALING WITH STUDENT MISBEHAVIOR
AS REPORTED BY KACHI TEACHERS

	F	%
Correcting with words	23	47.9
Warning the child	5	10.4
Informing the parents	3	6.2
Physical punishment	25	52.1
Rebucking the child	5	10.4
No misbehaviour	1	2.1

Table-27 indicates that majority of the Kachi teachers use physical punishment as a method of disciplinary control. Second most frequently used method is correcting with words.

TABLE-28

AVERAGE AGE OF CHILDREN AT THE TIME OF COMPLETING KACHI

AGE IN YEARS	F	%
5	1	2.1
6	40	83.3
7	6	12.5
8	1	2.1
	48	100.0

Table-28 indicates that majority (83.3 %) of the children complete Kachi at the age of six years while a small proportion of children complete at the age of seven. This may be due to admission at an old age or due to repetition. Very few complete at the age of five or eight.

TABLE-29
REPETITION RATE IN KACHI CLASSES BY SCHOOL LOCATION
AND SCHOOL GENDER.

	Rural			Urban			Total		
	R	T	%	R	T	%	R	T	%
Male	130	216	60.2	118	613	19.2	248	829	29.9
Female	114	355	32.1	178	402	44.2	292	757	38.6
	244	571	42.7	296	1015	29.1	540	1586	34.0

Table-29 summarises the repetition rates in urban/rural and male/female schools, computed on the basis of actual school record. Overall repetition rate, in our sample, is 34 % which seems to be very high. Repetition rate in rural schools (42.7 %) is much higher than repetition rate in urban schools (29.1 %) similarly repetition rate in female schools (38.6 %) is higher than the one in male schools (29.9 %). There is a great variation in the repetition rate of male schools, ranging from a low rate of 19.2 % in urban areas to a high rate of 60.2 % in rural areas.

TABLE-30
DROPOUT IN KACHI CLASSES BY SCHOOL GENDER AND
SCHOOL LOCATION

School Type	Male			Female			Total		
	D	T	%	D	T	%	D	T	%
Rural	45	217	20.7	123	327	37.6	168	544	30.9
Urban	67	652	10.3	83	437	19.0	150	1089	13.8
	112	869	12.9	206	764	27.0	318	1633	19.5

TABLE-31
DROPUT IN KACHI CLASSES BY SCHOOL GENDER
AND CLASS TYPE

Class Type	Male			Female			Total		
	D	T	%	D	T	%	D	T	%
Multi	39	210	18.6	17	130	13.1	56	340	16.5
Single	73	659	11.1	189	634	29.8	262	1293	20.3
	112	869	12.9	206	764	27.0	318	1633	19.5

Table 30 and 31 indicate that overall dropout rate in kachi classes is about 20 percent. Dropout rate in females is almost double as much as in males. Dropout rate in rural areas is quite alarming. It is more than double as compared to urban areas. It is amazing that dropout rate of single classes is higher than that of multi classes.

TABLE-32

REASONS OF STUDENT DROPOUT IN KACHI CLASSES

Reason	F	%
Parent's Illiteracy	5	10.4
Parent's Poverty	4	8.4
Parent's Negligence	20	41.7
Child's help needed at home	3	6.3
Transfer, migration, school change	16	33.3

Table-32 gives reasons of student dropout at kachi level as stated by kachi teachers. Negligence of parents, seasonal migration and school change seem to be the two major reasons of dropout as stated by Kachi teachers. Other relatively less stated reasons are illiteracy, poverty, and child's help to be availed at home.

TABLE-33

PROPORTIONATE TIME SPENT BY KACHI TEACHERS ON VARIOUS ACTIVITIES

Teacher activity	F	%
Reads from the text book	50	11.8
Writes on the blackboard	68	16.1
Explains the lesson	47	11.1
Asks questions	19	4.5
Makes corrections	39	9.2
Supervises the class	121	28.6
Not involved	79	18.7
	423	100.0

Table-33 shows that about half of the time (47.3%) teachers are either not involved or supervise the class just by walking around. Only major activities are reading the text book (11.8%) and writing on the black board(16.1%). It shows that most of the teachers like to resort to activities which are traditional, simple, non-challenging and non-innovative.

TABLE-34

PROPORTIONATE TIME SPENT BY KACHI CHILDREN ON VARIOUS ACTIVITIES

Activities	F	%
Reading	149	35.2
Writing	121	28.6
Listening	23	5.4
Answering	21	5.0
Reciting numbers, tables, poems	49	11.6
Repeating after the teacher	11	2.6
Doing nothing/making noise	49	11.6
	423	100.0

Table-34 shows the time distribution for various activities of the children. It is obvious from the table that most of the children's time(63.8%) is spent on reading and writing, leaving little time for other useful activities like question/answers, interaction with the teacher, nature study, playing and art and handwork.

TABLE-35
TIME ALLOCATED FOR VARIOUS SUBJECTS IN KACHI CLASSES

Subjects	F	%
Urdu	158	37.3
Arithmetic	137	32.4
Islamiat	33	7.8
Science	16	3.8
General Knowledge	24	5.7
Pashto	22	5.2
No subject involved	33	7.8
	423	100.0

Table-35 shows that most of the time in Kachi classes is spent on urdu (37.3 %) and arithmetic (32.4 %) respectively. Only a small proportion of time is given to Islamiat, Science, GeneralKnowledge and Pashto. Since urdu and arithmetic are two major subjects at Kachi level, this time allocation seems to be reasonable.

TABLE-36

STUDENT ENGAGEMENT RATE IN KACHI CLASSES

1.	Engagement Rate for all boys schools	68.9 %
2.	Engagement Rate for all girls schools	65.2 %
3.	Engagement Rate for all rural schools	68.9 %
4.	Engagement Rate for all urban schools	65.5 %
5.	Engagement Rate for all multi classes	68.4 %
6.	Engagement Rate for all single classes	66.4 %
7.	Engagement Rate for all sheltered classes	69.9 %
8.	Engagement Rate for all unsheltered classes	60.7 %
9.	Engagement Rate where teacher is not involved	41.6 %
10.	Overall engagement rate	67.2 %

Table-36 shows average student engagement rate in various situations for all the 48 schools in our sample. Overall engagement rate is about 67% which cannot be considered to be very much satisfactory because it is assumed that in the presence of and external observer in the class teachers must have showed their best performance. The likelihood is that the actual routine engagement should be far below the one reported above. Table shows that there are no major difference in engagement in various situations. However it is evidenced that being sheltered or unsheltered makes a difference on engagement. Classes which are sheltered are more likely to be engaged than those which are unsheltered. Similarly teacher's involvement also makes a difference. Engagement where teacher was not involved dropped considerably (41.6 %).

TABLE-37

TEACHER QUALIFICATIONS, TEACHERS TRAINING AND SHELTEREDNESS AS
RELATED TO STUDENT ENGAGEMENT.

1. Teacher Qualification as related to student engagement
 $r = 0.127$ (not significant at .05 level)

 2. Teacher training as related to student engagement
 $r = 0.013$ (not significant at .05 level)

 3. Shelteredness as related to student engagement
 $r = 0.286$ (significant at .05 level)
-

Table 37 shows that shelteredness is significantly correlated with student engagement i.e. student engagement is higher in sheltered classes than in unsheltered classes.

CHAPTER 5

SUMMARY, FINDINGS AND RECOMMENDATIONS

SUMMARY

Government of Balochistan is putting its best efforts for the development of primary education through innovative programmes like Primary Education Development Programme, Mobile Female Teachers Training Programme, Educational Management Information system, and Primary Education Curriculum Reform Project. The basic objective of all these programmes is to enhance literacy rate and to improve the quality of education at primary level. This objective is being hampered by high dropout rate in the kachi class. There may be several factor affecting this early dropout, including both in and out-of-school factors. In school factors may include unimaginative teaching methods, lack of suitable instructional material for this age group, harsh discipline, and circumstances which force children to sit long hours in unsheltered conditions. To improve this situation requires a better understanding of the present kachi context and an examination of minimum physical facilities and instructional support that will help the teacher in providing a better learning situation.

Present study was conducted under Primary Education Development Programme, as part of the effort to improve the effectiveness of primary instruction. The study focused on factors associated with Kachi dropout. Information was

gathered from primary schools, describing the conditions, current teaching practices, use of instructional materials and policies and procedures that affect the access and retention of children in kachi classes. Interviews were conducted with the head teachers and kachi teachers, classroom resources were inventoried and kachi classes were observed while in session. Measures of student engagement were taken to determine the materials and teaching methods best able to hold children's attention. A set of five proformas, appearing in appendix-A of the report, was used to gather the above information. Data was collected in the second week of September, 1991 by a team of 36 interviewers under the supervision of 3 principal investigators. Sample of the study consisted of 48 schools of Quetta, Sibi and Loralai districts of Balochistan, 16 schools taken from each district. The sample included male/female, rural/urban and single/multi grade schools.

It has been found that primary school in the sample lacked in physical facilities such as a classrooms, seating arrangement for children, drinking water and playgrounds. The teachers used teaching methods, which lacked professional competence. Physical Punishment used by teachers might be contributing towards dropout along with other negative effects on the children. Most of the children's time in the class was spent on reading the textbooks, writing takhties and memorizing the syllabi. Very little amount of school time was spent on other useful activities such as question-answers drawing and hand-work, nature study and observation and learning through play way activities.

It has been recommended that a minimum level of physical facilities

should be provided at each and every school in order to improve access and retention and to reduce dropout.

Suggestions have also been given to improve the quality of instruction through short, practical, methods courses for primary teacher's which should be related to real educational situation in the field.

FINDINGS OF THE STUDY

Physical Facilities at School

- 1) Majority of the Kachi classes (70.8 %), in our sample were found to be sheltered where as only 29.2 % of these were unsheltered.
- 2) There were more sheltered classes in rural areas than in urban areas.
- 3) Drinking water, wash water and toilet facilities were available in more than fifty percent of the schools.
- 4) Playgrounds were available in about one-third of the schools whereas two-third of the schools did not have this facility.
- 5) In more than 50 % of the schools Kachi classes were either unsheltered or filled all the classroom space. In about 48 % of the schools children had enough space to be seated comfortably.
- 6) Although there were more sheltered classes in rural areas, proportion of crowded classes was found to be higher in rural areas as compared to urban areas, probably due to smaller room size or multi grade teaching.

- 7) A large majority of the of the Kachi classes (95.8 %) did not have desk facility. Only in 4.2 % of the schools, this facility was available to Kachi children.
- 8) Majority of the schools used mats for seating Kachi classes, but only in 50 % the schools mats were available in sufficient quantity.
- 9) There were at least 14 % of the Kachi classes where neither desks nor mats were available.
- 10) In majority of the schools (93.7 %) blackboards were available to Kachi classes whereas in 6.3 % of the schools this facility was not available to the.
- 11) In most of the Kachi classes (70.8 %), blackboards were either difficult to read or just acceptable. Only in 22.9 % of the classes, the blackboards were in an easy to read condition.
- 12) Wall charts were available in about 35 % of the Kachi classes whereas these charts were not available in 65 % of the classes.
- 13) Only 12.5 % of the schools had teaching kits and flash cards available at Kachi classes.

Kachi Teacher's Characteristics.

- 14) Qualification of majority of the Kachi teachers (95.8 %) was found to be matric or intermediate. Only one teacher in our sample was found to be a graduate.

- 15) As regards the professional qualification of the Kachi teachers most of the teachers (45.8 %) received PTC/JVT training. Quite a big number (39.6 %) was found to be untrained. Only a few received training beyond PTC.
- 16) Half (52.1 %) of the teachers never attended any refresher courses. About 40 % of them attended one to three courses during their service.
- 17) Majority of the teachers (87.5 %) was found to have a teaching experience of one to five years.
- 18) Half of the Kachi teachers belonged to the same village/town where they taught. At least 25 % of them were found to be coming from distant areas.
- 19) Pashto, urdu and Sindhi were found to be the main languages spoken by Kachi teachers.
- 20) Pashto, Sindhi, Brahavi were the main mother languages of the majority of the Kachi children.
- 21) In 40 % of the schools language of kachi teacher and children was the same whereas in 60 % cases it was found to be different.
- 22) Majority of the teachers (64.6 %) used urdu as the language of instruction although it was spoken by 10.4 % of the children.
- 23) Only 37.5 % of the teachers expressed that they would like to teach kachi classes more as compared to other classes whereas most of them

(58.3 %) were reluctant to teach kachi classes.

- 24) Communication being difficult (37.5%), children being difficult to control (25.0%) and over-crowded classes were some of the special difficulties in teaching kachi class as stated by kachi teachers.

SCHOOL POLICIES

- 25) Schools did not have special rules about admissions in kachi classes. The only rule observed by majority of the schools (81.2 %) was that children were not admitted before the age of five.
- 26) Most of the schools observed a flexible policy regarding last date of admission in kachi classes. More than half of the schools did not have any fixed date of admission only 20.8% of them did not allow admission after one month of the start of the new year.
- 27) Policy of the schools regarding admission to unadmitted kachi children was quite accommodating. More than 70% of the schools never refused admission to these children. Only in some of the schools admission was denied on specific grounds.
- 28) In two third of the schools kachi children were required to bring some thing whereas in rest of the schools they were not required to bring any thing.
- 29) Schools where the children were required to bring somethings mostly (84.4%) they were required to bring books, takhtis, slates, ink etc.

- 30) In majority of the schools (91.6%) kachi children were expected to know urdu alphabets and counting upto hundred for promotion to pakki. However in at least one third of the schools children were expected to know kalimahs, tables, simple general knowledge and to be able to read the primer.
- 31) Average time spent by kachi children in the school was found to be 4.4 hours.

TEACHING PRACTICES

- 32) Majority of the teachers (83.3) assigned home work to kachi children.
- 33) Proportion of male teachers, assigning home work to the children, was greater than the female teachers. Hundred percent of the male teachers, as compared to a 65.2% of the female teachers, assigned home work to their pupils.
- 34) Home work, usually, included reading of the lessons (65%), writing alphabets and numbers (60%), and writing takhtis (42.5%).
- 35) Most of the kachi teachers (40.3%) attended their pupils equally. Some (18.7%) teachers attended those children more who raised their hands and the other (17.3%) attended those who did not raised their hands.
- 36) Most frequently used methods of disciplinary control, in kachi classes, were physical punishment (52.1%) and correcting with words (47.9%).

TIME ALLOCATED TO VARIOUS ACADEMIC ACTIVITIES

- 37) Almost half of the class time (47.3%), kachi teachers were either not involved or they supervised the class just by walking around. Rest of the teacher's time was spent mainly on two activities i.e reading the text book (11.8%) and writing on the black board (16.1%).
- 38) Most of the children's time (63.8%) was spent on reading and writing, leaving little time for other useful and desirable activities like question-answers, teacher-pupil interaction, guided play, art and hand-work, nature study etc., appropriate to this age group.
- 39) Most of the time in kachi classes was spent on Urdu (37.3%) and Arithmetic (32.4%). A relatively small proportion of time was given to Islamiat, General knowledge, Science and Pashto also.

REPETITION AND DROPOUT

- 40) Overall repetition rate was found to be 34%.
- 41) Repetition rate in female kachi classes (38.6%) was higher than the one in male classes (29.9%). Similarly repetition rate in rural areas (42.7%) was much higher than the one in urban areas (29.1%).
- 42) Overall dropout rate in kachi classes was about 20 percent.
- 43) Dropout rate in females (27.0%) was double as much as in males (12.9%).
- 44) Dropout in rural areas (30.9%) was more than double as compared to the

one in urban areas (13.8%).

- 45) Negligence of parents; transfers, seasonal migrations and school change; and parent illiteracy were the main reason of dropout as stated by kachi teachers.
- 46) Average age when a child completed kachi was reported to be six years.

STUDENT ENGAGEMENT

- 47) Overall engagement rate in kachi classes was 67.2%.
- 48) There were no significant differences in the engagement rates of male-female, rural-urban and single-multi schools.
- 49) However, engagement rate in sheltered classes (69.9%) was found to be higher than the one in unsheltered classes (60.7%).
- 50) Correlation between shelteredness and engagement ($r = 0.286$) was also found to be significant at .05 level.
- 51) Engagement rate dropped considerably where the teacher was not involved.
- 52) Correlations between teacher qualifications and engagement; and between teachers training and engagement were found to be insignificant at .05 level.

RECOMMENDATIONS

The effectiveness of school programs in Pakistan, particularly in Balochistan can be improved. The effectiveness of primary school program is related to the performance of the system with reference to (i) retention of children in the system till the successful completion of the program (ii) being attractive to the users (both parents and children) so that they become desirous, of participation in the school program and (iii) imparting knowledge, skills and values as delineated in the aims/objectives of the system. The findings of this study point towards the measures that can be adopted for effective functioning of primary education programs in Balochistan. These recommendation/measures are suggested with the belief that by adopting desired measures, our primary education system can function at the required levels of effectiveness. The success of primary education development programs is linked to successful implementation of desired actions and recommendations of this and other similar studies.

PROVISION OF BASIC SCHOOL FACILITIES

The presence of certain physical facilities such as classrooms, proper seating arrangement for children, drinking and wash water, toilets and play ground is helpful in the improved impact of other inputs such as teacher education and instructional material. It has been found in the present study that engagement of students in gainful academic activities is increased when the children are seated in regular classrooms, Similarly the presence and use of educational charts and to some

extent blackboard is also linked to the existence of a classroom. The existence of physical facilities at school is also, related to many other important variables of school effectiveness such as willingness parents and community to send children to school, the holding power of the school particularly at lower grade levels and to improved teacher morale.

It is therefore suggested that certain minimum physical facilities should be provided at each and every school with out any considerations of type or location of school. The consideration equity and equal opportunity also demand a bare minimum level of physical facilities at all primary schools. The proposed minimum level of basic facilities include classroom, desks for children, water and toilet, blackboards and educational charts and a playground.

It is also suggested that the data of school census available at BEMIS, Quetta should be used to draw a comprehensive plan of action to provide minimum physical facilities to each primary school. The number of students, the pattern of increase in the number of students, the number os classes/section, number of teacher should be considered in deciding about these physical facilities.

LEARNING MATERIALS

The quality of learning among the children at the beginning stage can be improved by improving the quality of learning materials such as textbooks and exercise books. It has been found in this study that a significant proportion of the student engagement time is spent in using the textbooks. Students read from the

textbook. They copy from the textbook, memorize and learn from the textbooks. It is therefore suggested that students learning materials (textbooks) should be well sequenced simple and appropriate to the age of children. The subject matter of the textbooks should be made more and more relevant to the needs of children and should be related to the local environment. The text books at pre-primary of lower primary grades should be made more durable and attractive.

It is also recommended that the existing arrangement of distribution of textbooks and other learning material should be properly monitored, and these materials should definitely reach those who need it badly. The needs of potential dropouts (children of poor and illiterate parents) with regard to textbooks and other learning materials should be met properly.

TEACHER TRAINING

The effective performance of any educational system is a function of the performance of teachers who run that system. The performance of teachers can be improved effectively through many strategies. It has been found in this study that the performance of trained and untrained teachers is not much different when seen in terms of student engagement of their students in academic activities. This means that the methods of teaching, adopted by trained and untrained teachers are very similar. It has also been found that various teaching styles of teaching at kachi level with respect to use of textbook, use of blackboard and use of instructional material were similar among trained and untrained teachers, This points to the ineffective mature of

teacher training programs with respect to devolving requisite teaching competencies. The problem in many current teacher training programs is that the also abstract and over burdened nature of courses has little to do with actual classroom conditions and required competence in the use of appropriate teaching styles is not developed.

It is therefore recommended that instead of making large scale comprehensive and possibility expensive and ineffectual changes in the training programs, improvement in the performance of teacher should be made by developing short practical, methods courses which are based on effective teaching practices and are related to the practical problems faced by teachers in real educational settings. These courses can either be preservice or inservice and should be accompanied by easily used support materials such as annotated lesson plans, annotated textbooks, simply charts and other practice materials, Such materials should be used to reinforce and maintain effective teaching practices in the classroom and motivate teachers to address their teaching to qualitative improvement in student learning thereby reducing student wastage.

These courses should be attended by teachers supervisors and managers of teachers so they will learn how to provide for change in the classroom. These courses should be disseminated broadly only when they are proven to improve teacher performance and consequently student learning.

In these short, practical, hands-on methods courses teacher should learn the following skills and competencies:

- i) to carry out effective teaching learning steps by practicing them in actual

classroom situation.

- ii) to effectively employ a broad repertory of teaching methods and understand the implication of various methods for learning in different contexts.
- iii) to use various teaching support materials.
- iv) to adjust the teaching strategies to demands of subjects, pupils and learning environment.

INSTRUCTIONAL MATERIALS

Instructional material such as teacher guides, simple charts, and practice material help in improving the quality of instruction. It has been found in this study that teachers base their instructions on textbooks, which do not provide any help to teacher with regard to the methods of teaching or the steps to be followed in helping the student in learning the required subject matter.

It is therefore recommended that teachers at primary levels particularly at lower grade should be provided with instructional support materials. One such material could be annotated texts. These annotated text would prove best teacher guides because these help the teacher in adopting appropriate teaching act in an effective sequence. In annotated guides, instruction (lesson planes) for teacher appear in the margins surrounding a reduced size copy of the child's text.

Similarly simple charts related to various subjects and for various grades can also make teaching easier, effective and interesting for children.

It is therefore recommended that a special cell may be established for

production, field testing and implementations of very much needed in instructional materials. These teachers guides, charts and other instructional support material are very useful where teachers are under qualified and professional training is poor.

AVOIDING PHYSICAL PUNISHMENT

Physical punishment meted out to children in school especially in the primary school causes a number of educational problem apart from resulting in severe damage to personality developments. It has been found in this study that a significantly large proportion of kachi teachers use physical punishment as a method of controlling children in their classes. It has also been found that physical punishment is among the major causes of dropout at kachi stage. It is therefore recommended that a special drive should be launched to inform teachers of bad effects of physical punishment. This drive may include short courses, seminars and workshops which are widely disseminated along with a campaign on print and electronic media. It is further suggested that special measures may also be evolved to check teachers using physical punishment and disciplinary action should be taken against teachers using physical punishments.

BACKGROUND RECORD OF CHILDREN

It is recommended that complete records of children particularly at kachi stage should be properly maintained. These records should have a complete traceable address of parent. Other background information should be available with school so

that teachers can contact the parent if the child is absent for a long period of time.

AVOIDING GRADE REPETITIONS

It has been found in the present study that a significantly large number of kachi children repeat the kachi grade. Grade repetition has also been stated to be a cause of dropout at this stage. It is therefore recommended that an appropriate policy may be evolved regarding the promotion and repetition and the schools should follow it. It is suggested that repetition at lower primary grades should be discouraged.

LANGUAGE OF INSTRUCTION

The issue of language of instruction, the language of textbooks, language of majority of children in the class, the language the teachers is a complicated issue. It has been found in the present study that language of children and language teacher are different. It has also been found that majority of teachers at kachi level use Urdu as a language of instruction. It is recommended that a comprehensive research study should be conducted to analyse the language issue. The study should be conducted in different parts of Balochistan representing all areas where different languages are used. The study should analyse the language issue in detail and recommend appropriate measures.

ADOPTING APPROPRIATE TEACHING STRATEGIES FOR MULTIGRADE TEACHING

The phenomenon of Multigrade teaching is wide spread in primary schools in Balochistan. The findings of this study show that there is no difference in the engagement of student in a single class and the engagement of students in a multi-class. It has also been observed that the engagement of students in academic activities fall considerabley when teacher is not involved with the kachi class. The involvement levels of teacher in a multigrade class are bound to change with different grades at different times. Thus in a multigrade class the students' time on task is assumed to be much lower than that of students in a single grade class It is therefore recommended that a comprehensive study of teaching practices in multigrade classes should be conducted to suggest methods of teaching to increase student's time on task in multigrade classes.

References

- Anderson, L.W (1985). "A Retrospective and Prospective View of Bloom's Learning for Mastery", In M.C Wang and H.G. Walberg (Eds) Adapting Instructions to Individual Differences. Berkeley CA: McCutcheon Publishing corp.
- Anderson, Mary B.(1988). "Improving Access at Schooling in the Third World: An Overview". BRIDGES Research report series NO.1. March.
- Arlin, M.(1979). " Teacher Transitions can Disrupt Time flow in classrooms." American Educational Research Journal,16. PP 42-56.
- Bloom, B.S. (1968) " Learning from Mastery." Reprinted in C.W.Fisher and D.C. Berliner (Eds) Perspectives on Instructional Time. New York: Longman
- Brophy J.(1986)." Teacher Effects Research and Teacher Quality." Journal of Classroom Interaction. 22(1) PP 14-23
- Brophy J.& Good, T.L.(1986)." Teacher Behavior and Student Achievement in M.C. Wittrock (Ed) Handbook of Research on Teaching: Third Edition. New York: MacMillan Publishing.
- Calderhead, J. (1984).Teacher's classroom Decision Making. New York: Holt, Rineheart and Winston.
- Carroll, J.B. (1985) "A Model of School Learning" In C.W. Fisher and D-C. Berliner (Eds) Perspectives on Instructional Time.New York: Longman.

- CERID/WEI, (1984) Research Center for Educational Innovation and Development. Determinants of Educational Participation in Rural Nepal. Kathmandu: Tribhuvan University Press.
- Chesterfield, R. (1978). "Effects of Environmentally Specific Materials of Reading in Brazilian Rural Primary schools." The Reading Teacher, December. PP.312-315
- Doyle, W.X (1986). " Classroom Organization and Management ". In D.Wittrock (Ed) Handbook on Research in Teaching. Third Edition New York: MacMillan.
- Filby, N.N., & Cahen, L.S. (1985). " Teacher Accessibility and Student Attention " In C.W. Fisher and D.C. Berliner (Eds) Perspectives on Instructional Time. New York: Longman.
- Fuller, B. (1985). " Raising School Quality in Developing Countries: What Investment Boost Learning? " Washing. D. The World Bank. Education and Training Development. Report NO EDT. 7.
- Fuller, B.(1986). " Observing School Qualities in the Third World: A Note on Methods". Washington D.C. The World Bank.
- Lockhead, M.E (1987) " Schools and classroom effects on student learning gain: The case of Thailand." Paper presented at Annual Meeting of the American Educational Research Association, Washington, D.C. April, 20-24.
- Martin, O.& Canty, A. (1980). "Instructional Behaviors that Enable Teachers to Maximize Allocated Classroom Time ". Paper Presented at the annual meeting of the Mid-South Educational Research Association in New Orleans, NOV. (ERIC # ED 20). 580).

- McDermott, P.R." Goldman, S.V.; Verenne, H.(1984) " When School Goes Home : Some Problems in the Organization of Homework, " Teacher's College Record. 85(3) P.P 391-409
- McGinn, N., Reimers, F. & Warwick, D.P. (1989). "How Do Public Primary Schools in Pakistan Differ Across Provinces ? " BRIDGES. Papers on Primary Education in Pakistan Report # 2.
- Montero-Sieburth, Martha, (1989)." Classroom Management : Instructional strategies and the Allocation of Learning Resources". BRIDGES. Research Report Series No. 4 April.
- Robinson, Wade. M.,et,al (1986). "Third Annual report of the Study of USAID Contributions to Egyptian Basic Education Program". Vol.II. Washington D.C: Creative Associates, Feb.
- Rugh, Andrea B. with Malik, A.N. and Farooq, R.A. (1991). "Teaching Practices to Increase Student Achievement". BRIDGES Research Report Series No.8.
- Seifert, E.H., & Beck, J.J. (1984). " Relationship between Task Time and Learning Gains in Secondary School." Journal of Educational Research.78(1) PP 5-10.
- Wang, M.C. (1985)." An Analysis of Program Design Implications for Teacher and Student use of school Time ". In C.W. Fisher & D.C. Berliner (Eds) Perspectives on Instructional Time. New York: Longman.
- Warwick, D.P., Reimers, F. & McGinn, N. (1989). "The Implementation of Educational Innovations in Primary Education in Pakistan. BRIDGES. Papers on Primary Education. Report # 1.

Warwick, D.P. Reimers, F. & McGin, N. (1989). "Teacher Characteristics and Student Achievement in Math and Science". BRIDGES. Papers on Primary Education in Pakistan Report # 5.

Windham, D.M. (1985). "Internal Efficiency and the African School." Paper prepared for IREDU, University de Dijon, France.

**LIST OF SCHOOLS INCLUDED IN THE SAMPLE OF KACHI STUDY
QUETTA DISTRICT**

School Code	School Name	School Type
001	Govt. Girls Middle School, Abdullah Jan Lane, Quetta.	UGS
002	Govt. Girls Primary School, Ali Bhadur road, Quetta.	UGM
003	Govt. Girls Primary School, Jan Mohammad Road, Quetta,	UGS
004	Govt. Girls Primary School, Ismail Colony, Sirki Rd.,Quetta	UGM
005	Govt. Girls Primary School, Killi Sheikhan.	RGS
006	Govt. Girls Primary School, Brewery Road, Quetta.	RGS
007	Govt. Girls Primary School, Nawan Killi.	RGS
008	Govt. Girls Primary School, Killi Nasran.	RGS
009	Govt. Primary School, Yet Road, Quetta.	UBS
010	Govt. Primary School, Basti Panchait, Joint Road, Quetta.	UBM
011	Govt. Primary School, Ghous Abad.	UBS
012	Govt. Primary School, New Nichari, Jail Road, Quetta.	UBS
013	Govt. Primary School, Killi Shadi Khan.	RBS

014	Govt. Primary School, Killi Jeo.	RBS
015	Govt. Primary School, Darvesh Abad.	RBM
016	Govt. Primary School, Balo Zai.	RBM

SIBI DISTRICT

<u>School Code</u>	<u>School Name</u>	<u>School Type</u>
017	Govt. High School, Railway Colony, Sibi.	UBS
018	Govt. Middle School, Gharibabad, Sibi.	UBM
019	Govt. High School Luni Tehsil Sibi.	RBS
020	Govt. Middle School, Gulu Shehr, Tehsil Sibi.	RBS
021	Govt. Middle School, Marghazani, Tehsil Sibi.	RBM
022	Govt. Primary School, Mizri, Tehsil Sibi.	RBM
023	Govt. Primary School, Bus Adda, Sibi.	UBM
024	Govt. Primary School, Hamalabad, Sibi.	UBM
025	Govt. Girls Middle School, Dehpal Khurd, Sibi.	UGS
026	Govt. Girls Model High School, Sibi.	UGS
027	Govt. Girls High School, Luni	

	Tehsil Sibi.	RGS
028	Govt. Girls Middle School, Gulu Shehr, Tehsil Sibi.	RGS
029	Govt. Girls Primary School, Kurak, Tehsil Sibi.	RGS
030	Govt. Girls Primary School, Marghazani, Tehsil Sibi.	RGM
031	Govt. Girls Primary School, Dehpal Kalan, Sibi.	UGM
032	Govt. Girls Primary School, Hanbi, Sibi.	UGM

LORALAI DISTRICT

School Code	School Name	School Type
033	Govt. Girls Primary School, Hazara Mohallah, Loralai.	UGS
034	Govt. Girls Primary School, Baboo Mohallah, Loralai.	UGS
035	Govt. Girls Middle School, Murtat Kalan, Loralai.	RGS
036	Govt. Girls Middle School, Sanjavi, Loralai.	RGS
037	Govt. Girls Middle School, Zangiwal, Loralai.	RGM
038	Govt. Girls Middle School, Loralai Cantt.	UGS
039	Govt. Girls Middle School, Gurdwara, Loralai.	UGS
040	Govt. Middle School,	

	Majeedabad, Loralai.	RBS
041	Govt. Middle School, Zangiwal (Jogezai), Loralai.	RBM
042	Govt. Primary School, Irrigation, Zangiwal, Loralai.	RBM
043	Govt. Primary School, Kudazai, Zangiwal, Loralai.	RBM
044	Govt. Primary School, Loralai Cantt.	UBS
045	Govt. Primary School, Bazar, Loralai.	UBS
046	Govt. Model High School, Loralai.	UBS
047	Govt. Primary School, Hazara Mohallah, Loralai.	UBS
048	Divisional Public School, Loralai.	UBS

**Distribution of schools included in the
sample of the kachi study**

Rural				Urban			
Boys		Girls		Boys		Girls	
Single	Multi	Single	Multi	Single	Multi	Single	Multi
5	7	9	2	9	4	8	4
12		11		13		12	
23				25			

Number of rural schools	23
Number of urban schools	25
Number of boys schools	25
Number of girls schools	23
Number of single-grade schools	31
Number of multi-grade schools	17
 Total number of schools	 48