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A PROFILE OF PRIMARY SCHOOL TEACHERS IN PAKISTAN

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A PROFILE OF PRIMARY SCHOOL TEACHERS IN PAKISTAN
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What are the characteristics of teachers in the primary schools of Pakistan? What is their gender, how old are they, what is their position in the school, how much formal education and training have they had, how long have they been teaching, what are their teaching practices and the facilities available to them, how are they supervised, where do they live, and how often are they absent from school?

A survey of 473 primary schools and over 900 teachers provides information on these and related questions. The survey was carried out in late 1988 and early 1989 in Pakistan's four provinces and the federal district. The design made use of probability (random) sampling applied first to districts and then to schools. About 100 field staff, including interviewers and coordinators, visited the schools and carried out interviews with headmasters, head teachers, and teachers. Most were themselves teachers, headmasters, or others with responsibilities in the provincial departments of education. Information was obtained from almost all of the schools.

eristics of teachers discussed in this paper were

chosen because of their possible relationship to the effectiveness of primary schools. A primary school is effective when it enrolls the students for whom it is intended, retains them for the full set of classes (grades) offered, and promotes learning in areas such as mathematics, science, and social studies.

1. PERSONAL CHARACTERISTICS AND LIVING CONDITIONS

Across Pakistan 60% of the teachers were male. In Baluchistan that figure was 76%, while in the federal district it was 31%. The average (mean) age of the teachers was 34. The averages ranged from 35 in Punjab to 30 in Baluchistan. 70% said that they were married and among them 87% were living with their spouses. About 4% of the married teachers said that they could not live with their spouses when they were teaching.

63% of the teachers reported that their fathers and 25% that their mothers could read and write. 40% of the teachers' fathers and 80% of their mothers had never gone to school or had dropped out before they completed the primary level.

When asked where they lived, 95% of the teachers mentioned that they lived with their spouse, their parents, or other relatives. Only 3% said that they lived alone. Their homes were, on the average, 6 kilometers from the school. Teachers reported spending an average of 30 minutes travelling from their homes to the school.

Teachers were also asked about the facilities and services they have in their homes, such as electricity, gas, and piped

water. The items most commonly present are electricity (84%), a sewing machine (80%), piped water (77%), and a radio (70%). Television was mentioned by 47% of the teachers. Items less often reported were a motorbike (18%), gas (27%), a refrigerator (29%), and a washing machine (32%). On average, teachers had at least 5 of these items and there were no significant differences across provinces in the total amount of possessions of teachers.

The survey findings showed differences across provinces in the quality of construction in the teachers' homes. The questionnaires used the Urdu term kaccha to refer to construction of mud and straw, and pacca to describe homes of permanent materials, such as brick. Overall 66% of the teachers reported that their homes were of pacca construction and 34% of kaccha. The figures for kaccha homes were 73% in Baluchistan, 54% in NWFP, 51% in Sind, 23% in Punjab, and 18% in the federal district.

. These findings show that 6 of 10 primary school teachers are male, their average age is 33, most are married and living with their spouses, they come from families in which most of their fathers but not their mothers were literate and in which neither parent had completed primary school. They live about 6 kilometers from the school in which they teach, spend 30 minutes travelling there, and, with differences across provinces, are more likely to live in homes built of permanent materials than of construction with mud and straw. Most have electricity, a sewing machine, piped water, and a radio; about half have a television set; and

two-thirds or more do not have a motorbike, gas, a refrigerator, or a washing machine.

2. TEACHING EXPERIENCE

To study schooling effectiveness it is helpful to know how much experience teachers have had in their profession and in the school where they are now employed. Some would argue that teachers learn how to be effective teachers not only by formal instruction about education but by direct experience in the classroom.

To explore those issues, teachers were asked about their present appointment in the school, how long they had been teaching there, and other aspects of their experience in teaching. For the sample as a whole 56% were appointed regular teachers, 30% headmasters, and 6% headteachers, and 3% substitute teachers.

83% of the teachers reported that they had been in the same school the year before the survey. They averaged 12 years of teaching in all schools. Teachers who were not headmasters averaged five and a half years in their present schools; headmasters with teaching responsibilities averaged eight and a half years. Headmasters had a longer record of service in their current school in Punjab and NWFP than in the other regions covered. Teachers in Punjab and Sind spent longer than other teachers at their present school.

3. EDUCATION AND PREPARATION FOR TEACHING

Interviews with education officials carried out by BRIDGES

and AEPAM staff brought out numerous questions about the qualifications and training of primary school teachers. Do they have the level of professional training needed to do their work? Did they have practice teaching before they began their work, and was that teaching supervised? And once they were employed as teachers did they have and use opportunities for in-service training? Given these concerns about federal and provincial officials, a report raising concerns about teacher qualifications (British Council, 1988), and the generally recognized importance of teacher training, the survey of schools probed that issue in some depth.

A critical question was the level of professional qualifications held by primary school teachers. The findings show that across Pakistan 9% of the teachers had no professional qualification, 64% had the PTC, 14% the JV, and the remaining 13% higher levels. The highest percentages of teachers with no qualifications were in Baluchistan (23%) and NWFP (20%), the lowest (1%) in the federal district. Teachers were also asked about the highest grade of general schooling that they had completed. 1% reported that they had primary education, 6% middle, 61% matriculation, 1% FSc, 9% the BA degree, and 3% an MA or MSc. The average level of schooling was highest in the federal district, where 39% of the teachers held the BA, BSc, or MA. When asked about the final grade or division they received in their academic training, 12% reported Grades A through E, 12% Division I, 59% Division II, and 17% Division III. 55% of the teachers in

Baluchistan were ranked in Division III, a figure two to three times as high as that of the other provinces and the federal district.

Teachers were asked if they did any practice teaching before becoming a regular teacher. Across the country 32% said that they had this experience. Practice teaching was least frequent in Sind (21%), most frequent in the federal district (57%), and similar (30 to 34%) in the remaining provinces. For those who did have practice teaching the average length was about one year, with a range from 74 weeks in Baluchistan to 29 weeks in NWFP. 80% of those who underwent practice teaching reported that it was supervised.

For those holding positions as teachers the main opportunity for new education is through in-service training. 46% of the teachers in the survey reported that they took part in such training. Participation was about the same across the provinces, with a higher rate (59%) in the federal district. The average number of courses taken by all teachers was 2.3. Baluchistan had an average of 1.6, NWFP 2.0, the federal district 2.2, Punjab 2.3, and Sind 3.2.

4. AMOUNT OF TEACHING AND ABSENCES

One aim of the school survey was to learn how many academic subjects and classes (U. S. equivalent term is grades) were taught by teachers in Pakistan. Because the survey was concerned with academic achievement in Classes 4 and 5, and had interviews with all available teachers who taught mathematics and science in

those classes, the findings probably overrepresent teachers with that experience and underrepresent others. This bias was necessary so that relationships could be examined between the characteristics of mathematics and science teachers and the results of student achievement tests in those fields.

When asked if they taught more than one class 57% of the teachers said that they did. The average number of classes taught by each teacher was about two and a half. Responses to other questions showed that 40% taught Class 1, 39% Class 2, 41% Class 3, 57% Class 4, and 55% Class 5. The main difference across regions was that teachers in Punjab and Sind were more likely than those in Baluchistan, NWFP, and the federal district to teach Classes 1, 2, and 3.

The study was also interested in how often teachers were absent from their schools. A case can be made that those who are often absent will be less effective teachers than those who are in their classes almost every day. Frequent absences may likewise indicate teachers with lower motivation to teach than those who are usually present.

The survey measured the absences of teachers in two ways. The first was by noting teachers who were missing from the school on the day of the survey. The results show that 90% of the teachers in the schools covered were present and 10% were absent. Absences for women teachers were higher than for men (12.3 to 8.1%). They were also higher in female schools (15.3%) than in male schools (9.7%) and lowest in schools combining males and

females (4.4%). More absences were found in rural (11.5%) than in urban (4.8%) schools. There were no differences by province or region nor by the type of school covered: primary alone, primary connected to a middle or high school, mosque school, or model school.

The second way of gathering data on absences was by asking teachers to indicate the number of days they had been out of school for specific reasons, such as illness. The average (mean) number of days teachers were absent for these reasons are summarized below:

Personal reasons	5.8 days
Health	4.8 days
Collecting pay	2.0 days
Training courses	1.6 days
Transportation	.3 days
Other	3.1 days

When the total number of days was summed for each teacher, the result was an average absence rate of 14.67 days per teacher.

Although there are not significant differences across provinces in the total number of absences, there were significant differences on the reasons for teacher absenteeism. Punjab had the highest average of personal absences with 6.5 days, Baluchistan the lowest with 3 days. With absences for health Sind was the highest with 7.3 days, Punjab the lowest with 3.9 days. Absences for other reasons were also most common in Sind at 5.8 days, least common in NWFP at 1.3 days.

5. TEACHING PRACTICES AND RESOURCES

Other studies on school effectiveness suggest that the way teachers teach is an important influence on student learning. To

the extent that teacher behaviors can be changed by training teaching practices are a fruitful area for policy intervention. For these reasons the survey asked teachers several questions about what they do in classrooms: how do they organize instruction for the children? what teaching materials do they use? in what language do they teach? This section summarizes the results from those items.

Instructional time

A critical question raised by the literature on effective schools concerns the amount of time teachers spend with their students. A broad proposition in this literature is that the greater the time spent on instruction, as distinct from administration or other tasks, the greater the learning by students. In this study, which involves many teachers responsible for more than 1 class, the question of instructional time can be approached in two ways: by asking how much time teachers have for any one class; and by considering what teachers do with classes assigned to them but which they cannot teach because of their work with other classes.

57% of the teachers interviewed are responsible for more than one class. Because of the sample drawn, which emphasized teachers in classes 4 and 5, most do not teach classes 1, 2, or 3 but do teach classes 4 and 5.

The first question is how much time teachers spend in instruction of a given class. The school survey asked several questions about how teachers dealt with the two subjects in which

achievement was tested, math and science.

On average, teachers devote 7 periods per week to math and spend 5 hours per week on this subject. There are differences across provinces in hours, with the federal district showing the highest average (5.5 hours) and Sind the lowest (4.5). Teachers who had not finished their math text at the time of the survey reported an average of 13 exercises in this field. Sind, NWFP, and Baluchistan had the highest number of exercises completed, Islamabad and Punjab the lowest. In science teachers have 5 to 6 periods per week and average 3.5 hours on this subject. They average 44 exercises in the Science book, with no significant differences across provinces.

How do teachers with more than one class manage instruction for children whom they are not teaching? Most (77%) assign tasks to this group. The figure is highest in Baluchistan (86%) and Punjab (85%), and lowest in NWFP (50%). Most of the multiclass teachers (67%) also use monitors, other students placed in charge of supervising the group of students that is not being taught. Monitors are most often used in Punjab (73%) and least often in Sind (44%). On average, monitors handle classes about 5 hours per week. Both the frequency with which tasks are assigned and monitors are used can serve as indicators of the time teachers are not spending with their classes.

Lesson plans and homework

Nearly all teachers (99%) assign homework and most (87%) use lesson plans. Teachers were also asked if they assigned homework

on the day before the survey. In the national sample 78% reported that they did, but the figures ranged from about 80% in Sind, the federal district and Punjab to 70% in NWFP and 51% in Baluchistan. Most teachers assign homework 5 days a week.

The survey further asked teachers about homework in math and science. The average (mean) number of problems per day in math was between 6 and 7 and in science 1.7. In math Punjab and the federal district had the highest number of problems, Sind the lowest. In science the average was highest in the federal district and Sind, lowest in Punjab. In addition to assignments in math and science, teachers assign an average of 2.5 exercises per day in other subjects.

In response to a question about whether students completed their homework, 90% of the teachers said that it was completed by all or most students. The largest number giving this response was in Baluchistan (97%), the lowest in Sind (80%). Almost all of the teachers (96%) stated that they read the homework that was turned in. Some teachers (16%) also had someone else read the homework. More than 9 of 10 (92%) reported grading the homework and 44% mentioned that they discussed all or most assignments with their students. Almost all teachers (99%) say they return the homework to the students.

Only 7% of the teachers in the sample have heard about the Integrated Curriculum Scheme; this number is significantly higher in Islamabad and NWFP. Most of the teachers in Islamabad (57%) and 30% of them in NWFP have heard about this project, in the

other three provinces the percentage of teachers who have heard about it is much lower. Consequently, very few of the teachers teach the integrated curriculum (12%), and this figure is higher in Islamabad (43%) and NWFP (30%).

Only 9% of the teachers in the sample have heard about the teaching modules, although this percentage is substantially higher in Islamabad (34%) and somewhat higher in Baluchistan (18%) and NWFP (18%). Very few of the teachers in Punjab (6%) and Sind (10%) have heard about this innovation. Most teachers do not use the modules, both at the national level (32%) and at the provincial level. There is no difference in the percentage of use by province. On average the modules have been used for about 2 years by those who use them.

Testing.

Most teachers (82%) reported that during the month of teaching before the interview they tested their students in writing. The figure was highest in Islamabad (90%) and lowest in Sind (64%). Nearly all teachers (94%) report that they usually discuss the results of the tests with the students.

Teaching kit and other materials.

Almost all teachers (94%) report that they have a blackboard and 98% of those who have one say that they use it. Most teachers (55%) report that they have no other teaching materials.

At the national level 63% of the teachers report that they have a teaching kit. The highest figures are in NWFP (70%), Punjab (65%) and Sind (62%) and the lowest in the federal

district (52%) and Baluchistan (35%). Most teachers (80%) who have kits indicate that they are at the school.

Two-thirds of the teachers with kits indicated that the training manuals were in the kit. The presence of these manuals varied significantly by province. The highest figures were in NWFP (76%) and Sind (74%) and the lowest in the federal district (40%) and Baluchistan (43%). Most teachers who had kits (78%) reported that some of its parts of the teaching kit were broken or missing. 80% also noted that the government does not resupply incomplete or broken kits.

One question raised by BRIDGES and AEPAM interviews with federal and provincial education officials was whether teachers who received teaching kits ever used them in the classroom. The survey results suggest two conclusions: the kit was probably never used by the 37% of the teachers who did not have one; and for those who did have access to a kit, 53% had used it at some time. On average teachers applied materials from the kit to 8 lessons during the year of the interview, with a wide range of numbers around that average. Of those who had a kit 72% said that they had no problems with it.

Another question raised by education officials was whether teachers had received any training in how to use the teaching kit. The findings show that 78% of those who had a kit received no training in its use. The highest figures for the lack of training were 83% in Punjab and 78% in NWFP; the lowest figures were in Baluchistan and Sind (both 62%). The average amount of

time spent in training was 19 days, with highs of 53 days in the federal district and 28 days in Baluchistan and a low of 16 days in Punjab.

Textbooks

One hypothesis being explored in the study of schooling effectiveness is that achievement will be higher when students have textbooks throughout the school year. To explore that hypothesis the survey asked two questions about textbooks in math, science, Urdu, Islamiyat, and Social Studies: were the books available at the beginning of the school year? and are they available now (the time of the interviews)?

The results show that the 5 textbooks were more likely to be present at the time of the survey than at the beginning of the school year. One indicator is the percentage of teachers who reported that all or most of their students had textbooks. The figures at the beginning of the year were 64% for Urdu, 59% for Math, 56% for Islamiyat, 55% for Social Studies, and 53% for Science. By the time of the survey the comparable figures rose to between 88 and 92%. In other words, there are delays in supplying primary schools with textbooks that can be used at the beginning of the school year.

Language of Instruction

During interviews with educational officials before the survey BRIDGES and AEPAM staff were told that the language of instruction was Urdu in all provinces except Sind, where it was Sindhi. The survey results show a different picture.

For Pakistan as a whole most of the teachers (68%) do teach in Urdu, but there are substantial differences across provinces. In the federal district and Baluchistan, where several different languages are used in the province, the main language of instruction is Urdu. In Punjab 80% of the teachers use Urdu and 20% Punjabi. The main exception is NWFP, where 71% of the teachers use Pushto. In Sind 60% of the teachers use Sindhi and 40% other languages.

In this sample 194 teachers indicated that they actually use two languages in their classes. Across Pakistan the most common second language was Punjabi. This also varied by province, with Punjabi most common second language in the federal district and Punjab, Urdu in Baluchistan and Sind, and Pushto for those using another main language in NWFP.

Most teachers (59%) ask students to translate from one language to another to make the material more clear to those students speaking languages other than that used by the teacher. This practice is most common in NWFP (82%), Punjab (64%), and Baluchistan (60%). It is reported by only 25% of the teachers in Sind and 30% in the federal district.

There are also differences across provinces in the language in which translations begin and end. For the country as a whole 86% of the teachers report that translations begin in Urdu. In NWFP 93% of the students are described as translating into Pushto, in Punjab 83% translate into Punjabi, in the federal district 64% also translate into Punjabi, in Sind 61% translate

into Urdu, and in Baluchistan 40% translate into Baluchi. De facto, if not de jure, there is a kaleidoscope of languages seen in primary school classrooms.

Punishment

Most teachers (53%) report that they use physical punishment while teaching. and there is a significant difference in the use of physical punishment across provinces. A majority use such punishment in NWFP (66%) and Punjab (61%) while most do not use it in Islamabad (61%), Baluchistan (54%) and Sind (87%).

Meetings with parents and with other teachers

Most teachers (86.3%) meet with other teachers to talk about school matters, this is similar in all provinces, except Sind where there are significantly less teachers who meet with others (63%). Of the teachers who meet, on average teachers meet 50 times a year with other teachers to talk about school matters; the frequency of meetings is highest in Islamabad, where it is 124 meetings a year on average, and it is lowest in Baluchistan (27 meetings in a year).

37% of the teachers meet with most or all parents during the school year, 9% meet with none, 16% with a few and 37% with some.

Summary: How do teachers teach in Pakistan?

The typical teacher in our sample is not a subject specialist, but someone who teaches several subjects and, in about half the cases, several classes. Teachers manage multiclass sections by assigning tasks to the groups they are not teaching at that time and by using student monitors.

Most teachers make lesson plans and rely on teaching strategies such as assigning homework to students, reading it and grading it, testing students and discussing the results of the test with students. About half of the teachers use physical punishment, although there is a great difference across provinces in the amount of punishment used.

Teachers use local languages to teach in the different provinces. In addition they ask students to translate for one another while they teach.

Blackboards and textbooks are the primary resources used for teaching. Most teachers have and use blackboards. There is variation among schools in the availability of textbooks at the beginning of the school year. Over half of the teachers have a teaching kit, with wide variation across provinces. Only about half of the teachers who have a teaching kit have ever used it, and most teachers were never trained to use it.

Most teachers meet with each other to talk about school matters. Over a third of them meet with all or most parents during the school year.

6. SUPERVISORS AND LEARNING COORDINATORS

Primary school teachers are supervised and sometimes assisted by several kinds of officials. The operating head of government schools is the District Education Officer (DEO). The traditional line of supervision begins with the DEO and continues through the Sub-District Education Officer (SDEO), the Assistant

Education Officer (AEO) and, in schools that have them, the Headmaster or Head Teacher. Another supervisor found in some areas is the Headmaster of the Center School which has responsibility for observing and improving certain primary schools. In the school survey almost 90% of those commenting on visits from Center Schools were in Punjab.

In 1979, under the Primary Education Project, the World Bank and the Government of Pakistan added a new tier of officials called Learning Coordinators. Working within the Union Council, the smallest administrative unit of government, they were to supervise and work with teachers in from 10 to 20 schools. Their tasks were to visit the schools at least once a month, observe teachers in the classroom, inspect their lesson plans, and make suggestions on how they could improve their teaching. Learning Coordinators are now found in all 4 provinces, though not in every District. In the school survey none were mentioned in the federal district. For more details on this position see Warwick, Reimers, and McGinn (1989).

The school survey asked teachers how often the supervisors and Learning Coordinators (LCs) visited their classrooms, how long they observed their teaching, and, in the case of the LCs, what effects they had on teaching. In response to a question about whether anyone from the Education Department or the Center School visits their classes, 89% of the teachers reported that there were such visits. During that school year the DEO visited an average (mean) of 1.3 times, the SDEO 1.9 times, the AEO 2.6

times, the Headmaster of the Center School, based on reports from 139 teachers, 6.5 times, and the LC 7.1 times. These findings show that two innovations developed to improve teaching, the LC and the Center School, led to greater contacts between teachers and outside observers than the traditional system of supervision.

Another indicator of contact is the length of time since the last visit with the observer. The reports showed an average of 3.5 weeks for the DEO, 6 weeks for the SDEO, 3.1 weeks for the AEO, 1.8 weeks for the LC, and 2.4 weeks for the Headmaster of the Center School. Teachers were also asked how long each person observed their teaching. The averages were 1.2 hours for the DEO the SDEO and the Headmaster of the Center School and 1.5 hours for the AEO and the LC. A significant difference across provinces is that LCs in NWFP spent nearly three hours observing teaching during each visit, a figure more than double that of any other province.

Teachers were then asked if they received comments on their teaching during these visits. 57% said that they received such comments from the DEO, 65% from the SDEO, 63% from the AEO, 81% from the LC and 50% from the Center School Headmaster. The relatively high figure for the LC partly supports the theory on which this position was created. However, the lack of comments noted by 20% of the teachers suggests that the tasks to be performed by this group, which emphasize improvement of teaching, are not being fully implemented.

. What effect did visits by supervisors and LCs have on

teaching? The main effect, reported by 52% of the teachers, was learning new methods of teaching. Only 3% said that they received help on preparing examinations, and 13% that they learned about weaknesses in their teaching. In reply to a question about whether supervisors and LCs created problems for them, 87% of the teachers reported no problems and only 1% said that they were no help.

SUMMARY

The following are the main characteristics of primary school teachers in Pakistan.

- * On average teachers are 34 years old; 60% of them are male; 70% are married; 95% are living with their spouses or family.
- * 56% are regular teachers, 30% headmasters; averaged 12 years of teaching in all schools, over 5 years in their present school.
- * 1% had completed only primary school, 6% middle school, 61% matric, 32% higher levels; 9% had no professional qualification, 64% had the PTC, 27% higher levels. 32% had had practice teaching while 46% had some form of in-service training.
- * 57% of the teachers taught more than one class, with an average of about 2.5. 10% were absent from school on the day of the survey. The average number of days absent for teachers interviewed was 14.67 days.
- * Teachers devote 7 periods and 5 hours per week to math, 5 to 6 periods and 3.5 hours per week to science.
- * Teachers with more than one class often assign tasks to students they are not teaching and use monitors an average of 5 hours per week. Nearly all use lesson plans, assign homework, and use tests.
- * Almost all teachers have blackboards and use them. 63% report that they have a teaching kit and, among them

57% state that they have used it. 78% of those with a kit received no training in how to use it.

- * There are significant differences across provinces in the language used by teachers in their classes. Most teachers also ask students to translate from one language to another to help students learn.
- * Most teachers meet with other teachers to discuss school matters; over a third of the teachers meet with most parents of the students.
- * Teachers are visited by the District Education officer an average of 1.3 times a year, the Sub-District Education Officer 1.9 times, the Assistant Education Officer 2.6 times, the headmaster of the Center School (mistly in Punjab) 6.5 times, and Learning Coordinators or supervisors 7.1 times. Comments about their teaching were received most often from the Learning Coordinator and the headmaster of the Center School.

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