

**Baseline Study of Teaching-Learning**

**in**

**SC/US Afghan Refugee Schools**

**of**

**Balochistan**

**Prepared by**

**Andrea Rugh**

**John Gillies**

**Academy for Educational Development**

**December 2000**



*Academy for Educational Development*

## Acknowledgements

We would like to thank the Islamabad staff--Helen Kirby, Nilgun Ogun and Lisa Laumann for their involvement and interest in the Baseline Study of SC/US Schools in Balochistan. In particular Helen Kirby helped considerably with setting up the logistics and organizing the team of supervisors who developed the tests of Basic Competencies for the assessment. It made it possible to get off to a fast start.

In Quetta, we want to thank Nayyar Iqbal, the Program Manager, whose sincere interest in improving the quality of Afghan refugee education in Balochistan must be an inspiration for his staff. He should be commended for the solid groundwork that he and his staff have established in the schools. Dr. Aminullah Amin (Project Manager Education) also enthusiastically made us feel at home, helped us organize our trips, and lent an informed presence and translation to our discussions of results. He made the arduous trip to Chagai to collect data from the remaining schools in that area that we did not have time to gather. Abdul Wahid, the Resource Facilitator in Surkhab, accompanied him on the trip and contributed to the various tasks of testing and correcting.

We especially want to thank the Quetta supervisory staff for their hard work in developing, administering, correcting and coding the tests from more than 50 RV and HBGS classes. Their good humor and enthusiasm never flagged. By name those who deserve our special thanks include Habiba Sadat, Hamida Sadat, Riga Jamali, Razia Sarajzada, Ghaffar, Niaz Muhammad, Bahauddin Baha, Jalalzai, and Sher Ahmed Nizami.

Our thanks are also due to Julia Dicum, Deputy Manager Programs, Uzma Israr, Nasir al-Karim and Naseer Younas. Without Daud Akbar and the data entry specialists he arranged--Abdul Rauf and Adeel Durrani, our inputting of the data could not have progressed so easily. Irum Lawrence was kind enough to arrange tickets and other logistics. We are also grateful to the staff who cared for and transported us: in particular Sarwar Khan, Zmarai, Farhad and Jumma Khan Kharoti, as well as the two cooks--Nasser Ali and Abdul Wasi who produced delicious meals in Quetta and on the road.

Very special thanks are due to Kalsum Kakar who carried out classroom observations and interviews, and whose insights and comments contributed to our conclusions. Kalsum had the difficult task of translating among the members of the staff, teachers and others, and keeping us "in the loop" in several different languages.

In the AED Washington Office we thank May Rihani for her enthusiastic support, and Nora Kruk and Sala Bah for backstopping the consultancy,

Last but not least we want to thank the teachers and students of the RV and HGB schools who welcomed us so graciously. It is in their interests that this study has been done.

**Baseline Study of Teaching-Learning  
in  
Afghan Refugee Schools of Balochistan**

**Table of Contents**

**Acknowledgments**

**Table of Contents**

**Executive Summary**

**I Background**

**II Study Purpose**

**III Study Method**

**IV Main Findings**

**V Recommendations**

**Annexes**

**A. Schedules**

**B. Quantitative Results--Student Performance and Related Factors**

**C. Qualitative Results--Observations and Interviews**

**D. Immediate Priorities for Action**

**E. Suggested Teacher Training to Focus on Student Learning**

**F. The Outlines of a School Improvement Program (SIP)**

**G. Forms, Instructions, Tests (separate document)**

**Baseline Study of Teaching-Learning  
in  
Afghan Refugee Schools of Balochistan**

**Executive Summary**

The main purpose of this study is to draw a baseline showing the present state of teaching-learning in the SC/US managed program of Afghan Refugee Schools of Balochistan. The baseline is based on both qualitative observations in classrooms and quantitative data of student achievement. Only now that Afghan educators have developed the Basic Competencies of Learning (BCL) providing a set of agreed-upon education standards is it possible to make this kind of assessment. This study is a first step in identifying the strengths and weaknesses of the current refugee education program in Balochistan so that improvements can be focused where they are most needed. The assessment will serve as a baseline against which future program improvements will be measured. A second purpose of the study is to investigate the inter-relationship between teaching and learning in SC/US schools and to make recommendations for future improvements in the quality of the academic program.

Our observations confirm that the Save the Children/US supported refugee schools in Balochistan, both the Home-Based Girls' Schools (HBGS) and mixed or single-sex Refugee Village (RV) Schools, have established an organized and effective foundation for learning. For the most part schools are adequately equipped with the physical and other facilities necessary for a good teaching-learning environment. Teachers are present most of the time, and seem motivated and competent in their subject matters. Most children are engaged in learning, show good discipline, and clearly know how to read and write and do simple math problems by second grade. The fact that some children have achieved nearly perfect scores on the assessment tests of this study shows that the competency items are not beyond the capabilities of third graders who have been taught well in SC/US schools.

The test scores can be interpreted several ways. Students on average answered about 60 percent of the questions correctly in both subjects. While this is good by the historical standards of the schools, competency scores should be closer to 80 and 90 percent. In terms of this higher competency standard, only 30% of the students answered 80% or more of the Pashto questions correctly, and only 13% answered 80% or more of the math questions correctly. As these figures clearly illustrate, the average scores are somewhat misleading in terms of achieving required levels of competency. While the average scores for both math and Pashto were very similar, it is clear that many fewer students are achieving competency in math than in Pashto.

The patterns of student learning in schools is also very instructive. The students in HBGS classrooms scored higher in all measures than did their counterparts in RV schools. Students in RV-girls schools scored significantly lower than did other students. The geographical patterns of student achievement are also noteworthy – students in Muslim Bagh, Loralai, and Surkhab had the strongest scores, while Mohamed Khail students did significantly

worse than students in any other region. In addition the study shows that there are competency areas where children are deficient, either because the topic had not yet been covered in class or in the textbooks, or because practice has not been sufficient to give them self-confidence in all the areas they are expected to learn.

It is possible that some children did not perform as well on the BCL tests as their observed behavior might suggest. Part of the reason may be that some are highly reliant upon teacher direction--by which is meant, that a number of teachers were observed to depend on formal presentations and little practice, or on practice that consisted of copying lessons or memory work. Consequently these children are not used to being presented with new problems and independently solving them without teacher direction. Similarly children are usually not expected to read textbook directions with comprehension in their daily work or provide appropriate answers by themselves. Without these skills it is difficult to assess accurately what they have learned.

The study finds distinctly different cultures of learning in HBGS and RV schools at least partly because of the differences between a home-like and an institutional environment, but also because the two systems are isolated from one another and therefore know very little of what goes on in the other. The girls-only RV schools are located somewhere in-between the two. The two cultures are not necessarily good or bad, and each may feel more comfortable to the students attending them. The general view has been that HBGS are weaker schools because they evolved out of the NFE system and employ less "qualified" teachers. This belief now has to be reconsidered given the fact that HBGS learning results have surpassed those in the RV schools. The comparatively poorer results of the girls-only RV schools however need to be addressed.

A large number of factors affect teaching-learning in any school system. These factors should continue to be investigated to improve the quality of learning in these schools. However, in order to have a starting point for school improvement, we are suggesting the two following points as being significant constraints on teaching-learning in the current SC/US program. We found that there was:

- too little focus in the entire schooling system on what children should be learning, and too much focus on prescribed teacher behaviors as the result to be achieved (under the untested assumption that these behaviors lead to quality learning), and
- insufficient teacher understanding of the effects of their teaching practices on learning; they also lacked awareness of the range of options to help students become confident, independent learners.

**The study recommends the following for discussion:**

- Expanding the HBGS system.
- Strengthening the learning program in RV girls' schools.
- Developing a system for continuous assessment of learning.
- Developing teacher supports to increase learning.
- Developing a better system for teacher selection.

- Developing a training program that expands awareness of practices that increase learning.
- Developing a coordinated School Improvement Program (SIP) with long-term capacity for continuous improvement.
- Providing greater flexibility of programming to meet different needs of the children.

## Baseline Study of Teaching-Learning

in

### Afghan Refugee Schools of Balochistan

#### I Background

Since SC/US took over the schooling program in 1995, there have been many important achievements both in the quantity and quality of educational opportunities in the Balochistan Refugee villages. Overall the program is excellent in comparison to school systems in developing countries where conditions are similarly difficult and resources scarce. This is no mean achievement under the special conditions that exist in Afghan refugee communities, including a politically volatile social context, fluctuations in schooling populations, restrictive norms on female movement, the largely illiterate family backgrounds of the students, and the remoteness of the villages. Every indication shows that parents appreciate the improvements made by SC/US in recent years in providing more places for the numbers and grades of the students involved and in increasing the seriousness of the academic program.

The refugee schools supported by SC/US in Balochistan are located in seven camps: Chagai, Loralai, Muhammad Khail, Muslim Bagh, Pir Alizai (distinguished here from nearby Saranan), Saranan, and Surkhab. The camps all have their unique populations and other characteristics that affect school-going and attainment. All but Chagai (6 hours) and Loralai (4 hours) are from one to three hours driving distance, which in terms of the logistics required to support them usually means a total of at least three and sometimes six hours of driving time for every supervisory visit to schools. Within the camps themselves schools also vary in the extent to which they are near or far from one another. Realistically speaking, this means that little meaningful support can be provided on a regular basis by the six male and four female supervisors who must travel separately and visit different school locations. An effort to create a system of academically well-qualified Resource Room Facilitators in better-equipped Resource Centers also suffers the problem of distance between the schools that must be serviced with few local transportation options.

In May there were 45 RV schools with 14,188 students (34% are girls) and 52 HBG schools with 1032 female students. The RV schools are largely mixed (34) but some are for boys only (6) and some are for girls only (5). HBGS are located in female teachers' homes and are for girls only. There is evidence (figures do not exist to confirm this) that most of the children who want schooling and can attend formal schools are being accommodated in RV schools. This does not mean that all children attend school regularly, however, according to interviews with teachers. Some children are needed for work at home and some have parents who simply do not see the value in this kind of "modern" schooling. A religious system of *madrassahs* exists in the camps and children may attend these schools as an alternative or a supplement to RV schooling. The schooling options for girls are particularly complex because many girls are subject to the effects of traditional values and are either prevented

from attending school by their parents or are withdrawn after a few years. Some families only allow the girls to attend school with female teachers in the protected environment of an HBGS. The demand for these schools in some areas out-strips SC/US capacity to provide them both because they are difficult to staff and support and because of resource constraints.

A important policy question for SC/US is whether to expand the HBGS system or to make more aggressive efforts to enroll girls in both mixed and single-sex RV schools, where they may be taught by male teachers (because of the difficulty of finding qualified female teachers). In a few cases, girls-only RV schools have attempted to satisfy the need for a protected schooling environment. Some mixed RV schools have physically separated the girls classes with walls, or have organized the school day so that girls attend in a different session than the boys. These strategies may not be entirely successful because of the difficulty of hiring the better-qualified female teachers usually required by SC for RV schools (compared to the less-well qualified HBGS teachers). This places an additional burden on the small female supervisory staff who are also difficult to recruit. To the extent that academic factors enter this policy question, the present study will suggest some important findings.

At the time of the study the SC/US supported schools were using two sets of instructional materials: one produced by the Gesellschaft Technishes Zusammenarbeit (GTZ) for math, Pashto, and religious education, and the other produced by the University of Nebraska at Omaha (UNO) for additional subjects taught from Grade 4. The GTZ student textbooks teach in a "modern" fashion with attention to the underlying meanings of new skills and concepts. Their accompanying teachers' guides are indispensable to their effective use. Teachers require considerable training before they become familiar with the presentations and uses of the materials. In common with other materials, they also suffer from the fact that there seems to be no available Afghan national curriculum which has made it difficult to address the issue of learning outcomes systematically. The UNO materials developed some time ago and patterned to large extent on traditional Afghan textbooks present lessons in a way that encourages rote forms of learning. Their coverage and content, for the most part, are out-dated. Up until now there have not been alternatives to these two sets of materials. A multi-agency initiative is now underway to assist Afghan educators in developing a set of primary curriculum objectives--Basic Competencies of Learning (BCL)--and producing instructional materials to address these objectives (Supplementary Materials) is an effort to focus current learning and fill the gaps in existing materials. A background issue for the present study is the question of whether existing materials address the learning needs identified in the BCL.

## **II Study Purpose**

The main purpose of this study is to draw a baseline showing the present state of teaching-learning in SC/US Afghan Refugee Schools of Balochistan. In 1999 Afghan educators developed a set of Basic Competencies of Learning (BCL) or standards for the primary system in math and language that now make this kind of assessment possible. This study is a first step in identifying the strengths and weaknesses of the current refugee program in Balochistan refugee villages against these standards so that improvements can be focused



where they are needed. This baseline serves also as a point against which these future improvements by SC/US can be measured.

It should be noted that SC/US programs have not been oriented up to now to explicitly teaching the Basic Competencies, although the GTZ textbooks used for Pashto and especially those used for math do cover a number of these competencies. It is therefore expected that gaps will be present in children's learning. It should be emphasized that the intent of the study is to find these specific gaps so that focused efforts can be made to fill them.

### **III Study Method**

The assessment consisted of two separate studies: one, a quantitative study, tested math and Pashto learning in 57 grade-three classes and collected relevant information that might relate to student performance, such as type of school, teacher qualification and others. The second, a qualitative study, was based on classroom observation and teacher interviews in a range of primary grades in HBGS and RV schools. (The complete findings for each study can be found in Annexes)

#### **The quantitative study methodology.**

The quantitative study was conducted by a team of SC/US supervisors in 57 grade three classes from RV and HBG schools in seven refugee villages of Balochistan. A total of 1256 students took tests of math and Pashto based on the Basic Competencies of Learning developed by Afghan educators for grade three of the primary level. The test developed by SC/US staff consisted of 33 Math test items including place value, addition, subtraction, multiplication, division, measurement, time measurement, fractions and geometry (basic shapes), and 36 Pashto items including synonyms, antonyms, vocabulary, comprehension, spelling, word and letter sequence (which is part of the comprehension and reading competencies), and grammar. Two versions of each test were developed, as is common practice in the schools to minimize students copying from each other. The tests, teacher questionnaires, and procedures were piloted and revised. Tests were administered using the same procedures in all schools over a two-week period. Scoring and coding of the tests was completed by the supervisors and consultants in the same two week period. Systematic accuracy checks found less than 1% error in scoring and coding. After data entry and cleaning, the data were analyzed using SPSS.

#### **The qualitative study methodology.**

The qualitative study was conducted by a two-member team consisting of one native Pashto speaker/interpreter and an education consultant. There were a total of 13 observations in RV schools and 9 in HBG schools. These observations usually extended for 2 or more hours in any one class and normally covered at least the math and Pashto lessons and in some cases religion lessons. In relevant grades (4 through 6), lessons were also sometimes observed in subjects taught using UNO materials--science, geography and history. Teachers were interviewed during the break, as were girls in grades 4

through 6 to determine the probability of their remaining in school. Two forms were used to provide the framework for the observations and interviews in the RV schools. The forms were based on characteristics such as classroom management, student practice, instructional time, teacher traits, etc., believed by many to affect student learning. It is unlikely that all of the SC/US staff have access to research findings on teaching-learning (which usually appear in English) and therefore summaries of relevant ones are found in the annex with the findings of the qualitative study.

The observations and interviews were conducted over two time periods--in the HBGS in May-June (details of which are written up in the July 2000 SC/US publication **Home-Based Girls' Schools in Balochistan Refugee Villages: A Strategy Study**), and in RV classes in September-October at the same time that testing was conducted in grade three for the quantitative study. The reason for the latter timing was logistical as well as to make as little disturbance in the schools as possible. Teachers did not know they would be observed in advance, and each was told that the purpose of the visit was to observe teaching-learning in the school. They were asked to carry on with their normal teaching program, although their anxiety was not always relieved by these comments. During the break they were interviewed to complete the forms and to elicit their opinions on what might improve teaching-learning in their classes.

One comment may be relevant about observations in classes, and in particular in these SC/US classes. When being observed, teachers in general try to do their best in whatever it is that they believe is being judged. In this case several teachers ran through a repertoire of teaching behaviors that had obviously been taught to them in training, even though in some instances these behaviors did not form a consistent or systematic effort to teach the objective of the lesson. In enough cases to believe it forms a pattern, teachers went through an array of teaching activities, and then turned to us and said they had completed the lesson, expecting us to leave as was probably the case in normal supervisory visits. These behaviors, although obviously not normal to every day practice, illuminate several points: first, teachers believe that the best way to teach is to focus on teaching behaviors; second, they believe they will pass an observation test by simply performing certain behaviors; third, they focus very little on the learning needs of their students; and finally, they are not aware of many of the actual factors that affect student learning (or presumably they would have displayed them). These comments are intended to form a backdrop for the findings of the qualitative study.

#### **IV Findings**

The major findings of the study, like the study itself can be divided into quantitative (linked to student learning scores) and qualitative observations and interviews in classrooms. A more complete report of each of these studies can be found in the annexes. Annex B is the comprehensive quantitative analysis and Annex C is the detailed qualitative analysis. Here only the most salient findings are reported.

## A. Quantitative Findings

**Finding 1: Student Scores are relatively low for the school system as a whole.**

The average (mean) scores for all students in the sample was 58.43% in Math and 60.73% in Pashto. The test scores ranged from zero in both subjects (indicating that the student has not achieved a single competency by the end of the year) to perfect scores in both subjects.

**Finding 2: Many more students are able to pass the Pashto test than the Math test. The passing measure is more useful than class averages for the baseline.**

The standard for passing the Basic Competency tests should be different than the 30% passing score that is traditionally used in the schools. Program personnel have discussed establishing a standard of 80% as a passing grade. Using this standard, 30% of the students tested would have passed the Pashto test, but only 13% would have passed the math test. For the purposes of establishing a baseline, the program could use either this 80% passing standard or the average test scores. The 80% competency standard provides more useful information if it will be the standard that students have to meet. Average scores are less informative because they say little about the distribution of scores (how many are very high or very low), or the variation of scores within a class. In this case, although the average scores for Pashto and math were quite close, almost three times as many students achieved a passing score on the language test than on the math test. This provides a better benchmark for measuring whether the system is successfully educating the children.

**Finding 3: HBGS schools had consistently higher achievement levels than either type of RV School.**

The HBGS students did consistently and significantly better than did students in the other classrooms. The average math score for HBGS students was 68%, compared to 59% for RV-mixed and 45% for RV-girls schools. The average Pashto score for HBGS students was 77%, compared to 58% for RV-mixed and 53% for RV-girls schools.

The difference between the types of schools is even more notable in terms of the proportion of passing scores. In the Pashto test, 60% of the HBGS students passed the test, and only 3% received a grade lower than 40%. This is dramatically different from students in RV-mixed schools, with a 28% pass rate and 25% who got less than 40% of the questions correct. The RV-girls schools performed poorly, with only 17% of the students passing the test with an 80% or more, and 34% failing to achieve 40%.

The passing rate for math was considerably lower for students in every type of school, but the HBGS students also outperformed students in the other schools in this subject. About 20% of the HBGS students were able to pass the math test, and only 5% failed to answer at

least 40% of the questions correctly. The RV-mixed schools were next, with a 13% pass rate and 18% below the 40% level. The RV-girls schools again took the last place, with only 3% of the students scoring 80% or more, and 39% of their students failing to get more than 40%.

One possible explanation for the relative success of the HBGS students is that they are generally older than the students who attend RV schools, and older students in general earned higher scores than the younger students. However, this was not the determining factor for HBGS students, who outperformed the RV students in every age cohort.

**Finding 4: Considerable variations in achievement exist among schools in different camps.**

The average scores and student achievements differed considerably in different locations. In the Pashto and math scores, schools in Loralai, Muslim Bagh, and Surkhab had the highest average scores, ranging in the 60%-70% range in math and between 60% and 77% in Pashto. This was followed by Chagai, Pir Alizai, and New Saranan. Mohamed Khail has the lowest achievement levels by a considerable margin. The average math score in Md. Khail was 28% and the average Pashto score was 26%.

The difference in achievement by location is even more dramatic when the proportion of students passing the test with 80% is analyzed. The strongest schools by a considerable margin were in Muslim Bagh, where 55% of the students received a passing grade in Pashto and only 3% failed to get at least 40% correct. Schools in Loralai also did particularly well, with 47% passing the exam and only 5% with low scores. The schools in the other areas were in the middle ground, except for Md. Khail where only one student managed to pass the Pashto test and 65% failed to answer even 40% of the questions correctly.

The patterns were similar for the math scores, although the achievement levels were overall lower than for Pashto. Loralai led the way in math with a 20% pass rate, followed by Surkhab and Muslim Bagh. At the low end, New Saranan had only 3% with a passing grade in math, and 32% who failed to get a 40%. Again, Md. Khail schools had the lowest achievement, with only 1% of the students who passed the exam with an 80% and a huge 65% who failed to get over 40%.

**Finding 5: Some competency areas have been mastered by a significant number of students.**

The math competency areas in which students are most competent are place values, in which over 50% of the students scored 100%, and addition, multiplication, and division, in which over 25% of the students scored 100%. The area of most difficulty in math was fractions. The bottom 25% of the students had particularly low scores in multiplication, subtraction, measurement, and fractions.

The Pashto competency areas in which students had the highest achievements were synonyms, antonyms, and similar words, in all of which at least 50% of the students had

perfect scores. In all of the other areas except for word and letter sequencing, at least 25% of the students received a perfect score. The areas of most difficulty were word and letter sequencing, and, for the bottom 25% of the students, similar words and spelling.

**Finding 6: Scores varied according to other factors, but only student age affected test results significantly.**

Test scores varied according to numerous variables, such as student sex, class size, mother tongue, and whether the class was in the morning or afternoon. However, for the most part these variations were not statistically significant. In terms of gender, girls did somewhat better than boys in Pashto, and boys did somewhat better in math. Afternoon classes had slightly higher average scores in both subjects than did morning classes. In the Pashto test, the difference between the average scores in the morning and afternoon was small, but significant. Class size was not a determining factor in achievement.

The age of the student was a significant variable in explaining the differences in test scores. The oldest age group averaged 16 points higher in math than the youngest group, and almost 20 points higher in language.

**Finding 7: Teacher academic background did not affect student learning.**

One of the most interesting findings was that the significant differences in the academic background of the teachers did not correlate with better test scores. In fact, the relationship (although not statistically significant) was in the opposite direction. The teachers with the highest academic qualifications had lower average test scores than did teachers who completed less than 12<sup>th</sup> grade.

**B. Qualitative Findings**

**Finding 1: There are distinctly different cultures of learning in SC/US schools**

There are at least two very different "cultures of learning" in SC/US schools, and one that operates in-between. These cultures exist despite the fact that they receive very similar instructional inputs and roughly the same kind of supervisory support. They may have developed into these different cultures because they are isolated from one another and therefore know very little of what goes on in the other. The two main cultures exist in HBGS on the one hand and RV (mixed and boys) schools on the other. The girls-only RV schools are located somewhere in-between, neither one nor the other (at least in the small sample we visited).

The two cultures are not necessarily good or bad, and each may feel more comfortable to the students attending them. The importance of this comparison is for SC/US staff to become aware of the different schooling environments operating in the Afghan refugee context and

their potential impacts on learning. A number of SC/US staff have seen the HBGS as a weaker learning environment for various reasons including the facts that it evolved out of the NFE system and employs less "qualified" teachers. This belief now has to be reconsidered given the fact that HBGS learning results have surpassed those of RV schools.

HBGS of course vary considerably. However their homelike atmosphere is still present in all schools: the rooms are smaller and more intimate; windows and doors are usually smaller and the light dimmer. The rooms are less "furnished" and more often decorated with both school and non-school related items. Overall they have a more informal atmosphere that extends to the way girls group in small bunches in the class--often touching one another, in the way teachers often sit on the floor with the girls, in the closeness and less distanced relationship between girls and teachers, in the greater readiness for teachers and girls to work out problems together or for girls to correct teachers' mistakes. Teachers are more relaxed about the amount of time they spend on each lesson, are less prone to lecture and are more likely to throw themselves immediately into solving problems or having girls read a Pashto passage. Teachers are more likely to use instructional aids and give concrete examples of the lesson's content. There is more informal discussion of what the class is doing, and certainly more between children when they are asked to work on problems where they sit. The teachers are more likely to give the girls a chance to do independent work (although not enough). At the same time these teachers are more likely to guide the girls through step by step solutions to problems every time so that it is difficult for them to become independent learners. Finally the breaks in HBGS tend to be short and businesslike (as girls go to the bathroom or get drinks) and the children often return to the class before they are over. Both students and teachers remove their shoes before entering the class.

The RV (mixed and boys) schools are characterized by a more formal atmosphere with a fairly strong sense that there is an organized administrative system in place. Classrooms are larger, have more furnishings, and are less likely to be "decorated"--there is less individual ownership invested in them. Children sit in well-defined rows at some distance from one another, teachers remain standing except occasionally when they sit on a chair. Teachers keep their shoes on while students remove theirs. RV teachers tend to follow lesson times fairly exactly even when only one teacher teaches all lessons (a gong sounds in most of these schools). They are more prone to lecture and to doing their own writing on the board or solving of problems. They are less likely to give independent practice and yet are more likely to let a student proceed alone in front of the class with solving a problem. RV teachers are more likely to remain "center-stage" during the lesson. Respect behaviors between students and teachers are highly developed. Breaks erupt into noisy behavior.

The two RV (girls-only) schools we saw operated somewhere in-between. The facilities are more formal than HBGS and the female teachers are more likely to arrange classes in rows, not sit on the floor, leave their shoes on, and follow lesson timings. Their administrative system is not as well-organized as the RV schools, possibly because the small size of the schools allows for more disorganization, and possibly because females in this age group are not used to asserting themselves over others. The difficulty in finding female staff also stretches the workload of teachers, making them cope with teaching loads covering classes at various grade levels, sizes and in different subjects. Double shift teaching loads are

difficult for Afghan women, because they have significant responsibilities at home as well as in school. In both schools of this type we visited, teachers were absent from the small teaching staff (although they were eventually brought from their homes) and their classes were left on their own. The registers, however, did not show a higher level of teacher absence in these schools. Chowkidars, as the only males, loom large in this environment with scolding for minor infractions directed at teachers, students, and visitors alike. Breaks are loud, chaotic, and the children are even aggressive (more so than in the mixed RV schools). Politeness behaviors outside the classroom are minimized. Female supervisors seem somewhat more reluctant to take on these schools.

**Finding 2: There are characteristics that provide a good foundation for program improvements in SC schools**

Our observations confirm that the Save the Children/US supported schools in Balochistan (Home-Based Girls' Schools and mixed or single-sex Refugee Village Schools) have established an organized and effective environment for learning. Physical facilities are basic but adequate for learning, including solid, well-lighted, and usually well-ventilated classrooms, with water and latrines located nearby. There are colorful mats in most classes, adequate blackboards and sufficient chalk. Almost all children appear to have textbooks, notebooks and writing supplies and most are in fairly good condition. Teachers seem to be present most of the time, and the schools for the most part are organized and in most cases tidy. Larger RV schools are managed by head teachers, who besides providing direction, often fill the place of absent teachers. The four hour day, six days a week, nine months of the year that is allotted for instructional time in RV schools comes to about the average total number of instructional hours in school systems around the world. The HBGS hours are considerably below the average. Most teachers seem to know the subject-concepts they are teaching. The children are disciplined and enthusiastic and generally engaged in the process of learning. These are all characteristics that tend to impact positively upon learning.

Our findings also suggest that SC/US has been successful in certain of its training objectives. Teachers have learned to teach Math and Pashto using GTZ materials with their more interactive methodologies. However most still use fairly rote methods in subjects where UNO materials are used (they reflect older techniques and are not as supportive of interactive approaches). It is likely that teachers have learned the new techniques in training and through the use of GTZ textbooks. For whatever reason, few teachers use the GTZ guide books, but in any case the GTZ lesson formats force teachers to use different and more interactive teaching methods even without the guides. A few teachers apply interactive methods to UNO materials but to a much smaller degree since the formats of these materials discourage innovative teaching approaches. These observations suggest the importance of well-structured learning materials in a context where teachers lack confidence in their teaching abilities or have difficulties adjusting from rote to interactive methods.

The observed classes exhibited a great deal of variation in teaching-learning activities. However the fact that some children have achieved nearly perfect scores on competency tests, shows that the kernels of a high quality system are already present in some of the

schools. This suggests that in environments where extensive training is possible, GTZ materials can be effectively used to teach BCL. However, the number of competency gaps in the materials suggests that the better teachers are either filling the gaps or instilling an independent ability in students to solve problems on their own (some of the test items are self-evident if analyzed carefully). The fact that children in some classes answered almost all the questions incorrectly shows that effort needs to be directed at improving learning in these weaker classes. The aim should be to attain a uniformly high standard of quality in teaching-learning.

**Finding 3: There are characteristics that appear to constrain program quality in some SC/US schools**

Competency tests as measures of what children should know require a very high average score before teachers and other educators can be satisfied with the teaching-learning environment. This level was not achieved in this baseline assessment where on average students answered little more than half of the questions correctly. The goal should be at least 80 or 90 percent correct answers.

A large number of factors affect teaching-learning in any school system. These factors should continue to be investigated to improve the quality of learning. However, in order to have a starting point for school improvement, we are suggesting that the two following characteristics of the teaching-learning environment may be causing significant impediments to quality (defined in this baseline study as the capacity to achieve the BC skills) in the current SC/US program. We found that there was:

- too little focus in the entire schooling system on what children should be learning, and too much focus on specific teacher behaviors (under the untested assumption that these behaviors lead to quality learning), and
- insufficient teacher understanding of the effects of their teaching practices on learning; they also lacked awareness of what helps students become confident, independent learners.

Despite their comparatively proficient showing in the baseline study, **many students probably do not perform as well on the BCL tests as their behavior suggests they are capable of doing.** This is largely because the students tend to be overly reliant upon teacher direction--by which is meant, that teachers depend on formal presentations and minor practice that too often consists of copying lessons or memory work. Consequently children are not used to being presented with new problems and independently solving them without teacher direction. Similarly children are usually not expected to read textbook directions with comprehension and provide appropriate answers themselves. Without these skills it is difficult to assess accurately what they have learned. In addition there are competency areas where children are deficient, either because they have not been covered by their teachers or because practice has not been sufficient to give them self-confidence in these areas.



## V Recommendations

Three types of implications/recommendations can be drawn from the findings. The first relate to policy issues concerned with the administration of refugee schools and the educational inputs that produce the best learning results. The second relate specifically to SC/US interest in improving its general training programs. Staff have raised questions about the effectiveness of current programs that focus on GTZ and UNO materials-specific training and the methods and practices assumed to be "good" teaching behaviors. Finally, the results of the study lead overwhelmingly to the conclusion that a high quality school improvement program could be built without much difficulty on the excellent foundation already established in existing schools.

Thus the recommendations/implications of the study include policy issues, training needs, and the outlines of a coordinated school improvement program. In all cases these should be discussed with those affected to make sure the new initiatives are realistic. The recommendations result from our limited time in the classroom and from student performance scores. Both suggest that SC/US might usefully review certain of its practices and policies to create a better teaching-learning environment in the refugee schools. These suggestions however need to be balanced against cost and other considerations to see if they are feasible. Student performance is only one element in the complexity of factors affecting these decisions.

### **Recommendation 1: Expand the HBGS system to accommodate more of the girls with special restrictions on their participation.**

As noted above there have been doubts about the quality of the HBGS program. The present study however indicates that the achievement of children in this system is significantly higher than that of students in RV schools. Consequently from a learning perspective there is no reason to restrict the size of the HBGS system. We therefore recommend that the HBGS system be expanded (all else being equal) to accommodate the girls needing this protected environment to enroll and continue in school.<sup>1</sup> This means developing some kind of needs assessment to see where demand exists both at entry level and at higher grades. HBGS are good schools, and although their student results still need to be raised to meet BCL standards, the potential of HBGS to reach these levels is very good. Their results justify the continuation of this school model. (See the Home-Based Girls' Schools Study-- July 2000)

### **Recommendation 2: Strengthen the learning program in girls-only RV schools.**

More effort and attention needs to be given to RV girls' schools. They may have special problems that do not exist in the other schools. From our limited chance to observe these

---

<sup>1</sup> A more complete rationale for expanding the HBGS system can be found in the study of these schools conducted in May-June 2000.

schools the problems may include poor administrative capability, sporadic supervision, an unstable student body, and teachers with conflicting outside activities. The supervisors need to discuss with teachers their poorer student results to determine how they might be more supportive.

**Recommendation 3: Develop a system for continuous assessment of learning to determine how the program is doing.**

The only way that teachers and supervisors can know whether learning is taking place is by testing students informally or formally. Teachers should give frequent short tests to students to see if they know the new concepts/skills and then address the areas where they are having difficulty. Supervisors also need to give frequent small tests to ensure children are learning the Basic Competencies. To test only at mid-term and end-of-year is too late to improve learning. (See Annex on Immediate Priorities for Action)

**Recommendation 4: Increase teacher supports that improve learning.**

Teachers should be given a chance in each camp to discuss their students' baseline results,<sup>2</sup> and to suggest how they might be better supported to improve these learning results. Supports might include instructional aids, mentoring relationships, supervisory visits, practice competency tests, and specific types of training. Training in all cases should be linked to teacher needs as reflected in student learning results, their needs as new teachers to be oriented to the program, or their own self-professed needs for certain kinds of training. The training (and supportive supervisory visits) should focus first on camps with the lowest student scores.

**Recommendation 5: Develop a better system for teacher selection.**

The results show that SC/US FESS' present strong preference for teachers with a minimum grade 12 academic background may not be a selection criterion that relates as directly to student learning as other criteria. The study shows that less-qualified teachers who are motivated and teaching with supportive materials can do the job, at least to the Grade 3 level that was tested. This is not a surprising finding given the variety of schooling programs Afghans have experienced. It is nonetheless an important finding for it may open up a larger pool of teaching candidates to SC/US schools. New criteria need to be developed based on characteristics that are more relevant to the refugee environment and student learning. We would suggest selection criteria that include results on BCL tests (with provision for BCL study before the test), a preference for local teachers from the refugee village where the school is located, an interview to determine Pashto speaking, writing, and comprehension ability, and to ensure that the candidate has good communication skills. The teacher might be asked to explain why he/she is motivated to become a teacher. Academic credentials should also be considered under the assumption that they reflect some subject-content knowledge but with less priority given to paper qualifications and more to actual proof of

---

<sup>2</sup> The results should be presented to them as a class average in relation to the overall grade 3 class averages broken down by subject matter.

abilities. In other words, paper credentials do not guarantee that a person will be a good teacher.

**Recommendation 6: Develop a training program that expands teacher awareness of practices that increase learning.**

Although teachers in SC/US schools seem committed to doing a good job and students in all classrooms seemed to be learning, many of the teachers are not fully aware of the impact of their teaching activities on learning. This may be because the implications of such behaviors have never been brought to their attention or because the emphasis in training has focused so strongly on behaviors that are assumed to assist learning. Teachers need to become more aware of the implications of their teaching practices if the focus of the SC/US program is to change to learning results.

A basic training program to support the goal of increased student learning needs to cover at least three areas: management of classroom resources, use of instructional materials, and knowledge of teaching practices that increase learning. (See Annex on Suggested Teacher Training to Focus on Student Learning)

**Recommendation 7: Develop a coordinated School Improvement Program (SIP) with long-term capacity for continuous improvement.**

SC/US should organize most of the recommendations above into a coordinated School Improvement Program (SIP). Such a program would include focused teacher selection, training, support, and continuous assessment as a means of knowing how schools, students, and teachers are doing. The difficulty of relying on a limited number of supervisors to improve teaching-learning suggests that a new system needs to be considered where more responsibility is lodged in local educators. In this system a local team, including the school head teacher, the teachers and the resource facilitator would be held responsible for ensuring learning results and bringing to bear the local and central resources available to support improvements. The FES would manage support to local offices by training local staff in their responsibilities, by developing and administering external tests of competencies, by reflecting on results and designing appropriate remedial programs, and by communicating good ideas from one refugee village to another. (See Annex on The Outlines of a School Improvement Program)

**Recommendation 8: Provide greater flexibility of programming to meet the special needs of refugee children.**

The assessment suggests that a number of students in the SC/US system may have special characteristics that help or hinder their ability to obtain a high quality education. For some it is that they cannot access the education program because of their sex and/or the availability of appropriate local opportunities for their level of learning. For others, they may be absent frequently because they need to participate in harvests or household responsibilities. Others enter school late, at an older age, and leave early. The SC/US school at present is oriented to

a standard grade level programming starting with grade one that may be inconvenient for a number of children. The kinds of programming that may be needed are:

- accelerated learning for older children (older students had higher BCL scores)
- self-instruction programs (with modest teacher supervision) for older girls and children entering higher grades where no full-time teachers are available
- catch-up classes for children who have been absent
- expanded lateral-entry opportunities for children who need to transfer

**Priority actions:**

While most of these recommendations require time to implement, two activities can be initiated immediately to improve learning in the schools in all grades:

1. Teachers need to understand clearly what children are expected to learn (and what will be tested, that is, the BCLs) and supervisors need to check periodically to ensure students are learning.
2. Teacher training can be mounted to develop awareness in teachers of forms of classroom management and teaching strategies known to increase student learning.

Both of these activities are described in more detail in the annexes on Immediate Priorities for Action and Suggested Teacher Training to Focus on Student Learning.

**Annex A Schedules**  
**Schedule for testing in RV schools (mixed)**

Date	School number	Camp	Teacher's name	Girls/ boys	Ranking given by FES	Class en ment	Number of children tested in Class	
25/9			Collate test, clarify instructions, prepare section envelopes					
26/9	36	Md Khail	Anar Gul	G	weak	40	26	
			Mullah Khan Md (pm)	B	weak	26	11	
	37	Md Khail	Murad Khan	B	weak	19	13	
			Murad Khan (pm)	G	weak	22	14	
	38	Md Khail	Md. Hussein (pm)	B	satisfactory	16	13	
27/9	16	Pir Alizai	Assadullah	B	satisfactory	41	40	
			Said Md (am? pm?)	B	satisfactory	39	32	
			Neak Md	G	satisfactory	17	13	
	21	PirAlizai	Nasreen (pm)	G	satisfactory	16	13	
27/9	40	Chagai	Khan Md. 3-A	G	Good	27	20	
			Mehraban 3B	B	Satisfactory	30	27	
	41	Chagai	Parwin 3A	G	satisfactory	27	28	
28/9	13	Saranan	Atta Md	B	satisfactory	38	30	
			Md Wali	B	new hire	35	28	
	23	Saranan	Khashhall (pm)	B	Satisfactory	30	28	
			Shakilla (pm)	G	Satisfactory	38	30	
28/9	44	Chagai	Juma Gul	G	Weak	21	13	
	45	Chagai	Adela. 3-A	G	Satisfactory	19	16	
			Habibullah 3-D	B	good	36	33	
29/9	9	Surkhab	A. Jalil	G	satisfactory	27	22	
	8	Surkhab	Lutfullah	B	weak	21	21	
	5	Surkhab	Maazullah	G	satisfactory	28	23	
	11	Surkhab	Shafiqullah	G	satisfactory	29	28	
2/10	29	Loralai	Majeed (pm)	B	satisfactory	31	22	
	31	Loralai	Md. Hashim	G	satisfactory	26	22	
			Abdullah (pm)	B	good	34	28	
	34	Loralai	Hayafullah	G	satisfactory	34	28	
			Smar Gul (pm)	B	satisfactory	49	40	
3/10	33	Loralai	Zafar	G	satisfactory	15	14	
			Md Yousuf (pm)	B	satisfactory	45	44	
	35	Loralai	Raz Md (pm)	B	satisfactory	29	22	
			Md Lal (pm)	B	satisfactory	27	20	
			Mehria	G	weak	21	17	
4/10	24	M. Bagh	Md Raza	G	satisfactory	27	26	
			Salam (pm)	B	satisfactory	25	21	
	26	M. Bagh	Shoja	B	satisfactory	28	20	
	27	M. Bagh	Mera Jan (pm)	B	satisfactory	33	17	
	25	M. Bagh	Najibullah (pm)	B	satisfactory	21	19	
Total						934	882	

## Schedule for testing in girls' RV schools and HBGS

Date	School number	Camp	Teacher's name	Girls/ boys	Ranking given by FES	Class en'ment	Number of children tested in Class
25/9	Collate tests, prepare instructions, prepare envelopes						
26/9	3 HBGS	Saranan	Sherbana	G	good	19	17
	1 HBGS	Saranan	Malina	G	average	21	17
	4 HBGS	Saranan	Malalai	G	average	11	7
	4 RV - girls	Surkhab	Mina (pm)	G	average	23	18
27/9	14 RV girls	Saranan	Aziza	G	good	36	34
	14 RV girls	Saranan	Zahra (pm)	G	average	36	27
	11 HBGS	Saranan	Malalai (pm)	G	average	16	15
	22 RV girls	Saranan	Pari Gul	G	good	27	25
28/9	13 HBGS	Pir Alizai	Fozia	G	average	16	15
	19 Rv girls	Pir Alizai	Sharafia (pm)	G	good	31	29
29/9	20 HBGS	Surkhab	Najiba	G	average	16	15
	21 HBGS	Surkhab	Rabia	G	average	19	17
	22HBGS	Surkhab	Gul Reza	G	average	17	15
	6 RV girls	Surkhab	Baowta	G	average	24	21
2/10	29 HBGS	Loralai	Quresh	G	good	16	16
	28 HBGS	Loralai	Kochi (pm)	G	good	22	22
3/10	27 HBGS	Loralai	Zargoona	G	average	17	17
	35 HBGS	Loralai	Karima	G	average	16	16
4/10	26 HBGS	M. Bagh	Halima	G	average	24	21
Total						407	364

## **Annex B. The Quantitative Assessment of Student Learning**

### **I. Background:**

The general objective of the quantitative study is to assess learning achievement in terms of the Basic Competencies in Math and Pashto in Refugee Village and Home-based Girl's Schools. The sub-objectives are:

- To establish a baseline for assessing future improvements in student achievement.
- To determine the extent to which the Basic Competencies of Learning are currently being achieved by students in the refugee villages.
- To identify specific areas where learning outcomes are weak, so as to better direct program resources, training, and materials toward addressing those weaknesses.

### **II. Research Questions**

Within the study objectives, several research questions are addressed:

- Is student achievement different for boys and girls?
- Is student learning significantly different in different types of schools (home based girls schools, girls only RV schools, mixed or boys RV schools)?
- Does teacher educational background, professional qualifications, or other characteristics significantly affect student learning?
- Do student characteristics such as age, gender, and mother tongue affect learning?
- Are any significant differences in learning achievement in different refugee camps?

### **III. Description of the Test:**

The quantitative study uses written tests to assess learning achievement in Math and Pashto for third grade students in Afghan refugee camps in Balochistan. The test characteristics are as follows:

- The questions on both the Math and Pashto tests were developed by Afghan educators working on the SC/US project. All of the questions are based on the Basic Competency areas for those subjects at the third grade level.
- The Math test includes 33 test items, measuring the following BCL concepts at varying levels of difficulty: place values; addition and subtraction; division and multiplication; measurement; time measurement; fractions; and geometry (basic shapes).
- The Pashto test includes 36 test items assessing the following BCL concepts at varying levels of difficulty: synonyms; antonyms; vocabulary; comprehension; spelling; word and sentence ordering; and grammar (singular/plural, masculine/feminine, punctuation).
- The tests are completion, calculation, and true/false questions rather than multiple choice.

- Two versions of each test were developed in order to minimize copying by the students. This is a common practice in the schools.
- The tests cover all categories of Basic Competencies for each subject, but not necessarily all of the specific elements within each area of competency.
- The test questions are linked in general terms to the content or sequence of the GTZ textbooks used in the classes, but could not be considered to be directly based on the textbooks. The Basic Competency approach and description has been introduced to teachers but the supplementary materials have not yet been completed or introduced in the classroom. Therefore, this test is not an assessment of the effectiveness of those materials or of the BCL approach. Rather, this test can be considered a “pre-intervention” assessment of learning achievement in the competency areas using existing materials (i.e. GTZ textbooks.)
- The tests were piloted in five classrooms in an RV-mixed school, with three girls and two boys sections. Test questions, instructions, and procedures were adapted based on the pilot test.

#### **IV. Characteristics of the Sample:**

The sample consists of 1256 students from 57 sections of third grade classes from six refugee camps in Balochistan. This relatively large sample represents over one-third of the total students enrolled in third grade. The sample is broadly representative of the school population, although not exactly due to both purposive and logistic constraints. For example, girls are slightly over represented in the sample due to the need to include two category of schools (HBGS and RV-girls only) that have only girls, as well as girls only and mixed classes in the RV-mixed schools. Other constraints were logistical, particularly in getting mixed groups of FES to the large, but distant, Chagai camp. As only one team of male supervisors went to Chagai, and only for two days, the area is slightly under represented. The overall population of third grade students in refugee camps changes frequently, as students and teachers are repatriated, as students drop out, as camps are consolidated, or as new students arrive. In the May 2000 reports, the school system consisted of 52 HBGS with 1032 students in grades 1-4, and 2,764 third grade students in refugee village schools (including girls-only, boys-only, and mixed).

The final determination of the sample was heavily influenced by logistical considerations. The HBGS and Girls-only RV schools were only visited by women supervisors, who required separate transportation and lodging facilities. The distance to Chagai and limitations on personnel and transportation limited the number of schools that could be included. The time available was also a factor in the final determination of the sample, as all tests had to be administered, corrected, coded, and entered in a two week period.

#### **V. Characteristics of the Teacher Questionnaire:**

The teacher questionnaire collected basic demographic and educational information about the teachers, including age, gender, native language, educational level, teacher training



received, and years of experience in teaching. The questionnaire also collected school specific information, including the number of hours each week spent on Pashto and math, whether the teacher teaches a double shift, the number of supervisor visits in the past two months and their purpose, and the last lesson completed in Pashto and math. The English version of the teacher questionnaire is included in Annex G1.

## **VI. Aspects of the Study that Affect Interpretation of Results**

The study, with both the quantitative and qualitative aspects, was conducted on a scale and schedule that reflects a range of considerations. It is not intended to be a definitive assessment of the factors of success for Afghan refugee village schools but rather served as a pre-test assessment before SC/US makes further program improvements. The following aspects of the study affect the interpretation of results:

- The concept of BCL has been introduced to teachers, but not yet implemented as a guide for learning and teaching.
- The format of the test was different from formats students are accustomed to, which may result in the test scores being somewhat lower than the students' actual competency. However, the fact that a significant number of students scored perfect or near-perfect grades indicates that neither the format nor the difficulty of the questions was an insuperable problem. One would expect that students will do somewhat better in future tests as they become used to the approach.
- The scheduling of the study was determined by programmatic and contractual factors and does not fully correspond to the school year. Students were tested in late September-early October, which is approximately two months before the end of the school year. Some teachers had not yet completed the teaching plan for the year, while others were already working on review. The tests in some classes reflect this, as many students had not yet studied the later material.
- The tests in Chagai camp were conducted on fourth grade students rather than third grade students. This region has a different school calendar due to the weather and had just started the new school year at the time of the study. Therefore, the students who had completed third grade the previous June were tested for the baseline.
- The results will be used to identify areas of strength and weakness in the current teaching, relative to the basic competencies. This can be used to orient teacher training and materials development in the future.
- The results will identify specific competencies where students are having trouble.
- The testing can establish a format and standard for annual assessment of student achievement. Future progress can be measured against this baseline.

## VII. Test Results

### A. Characteristics of the students and teachers.

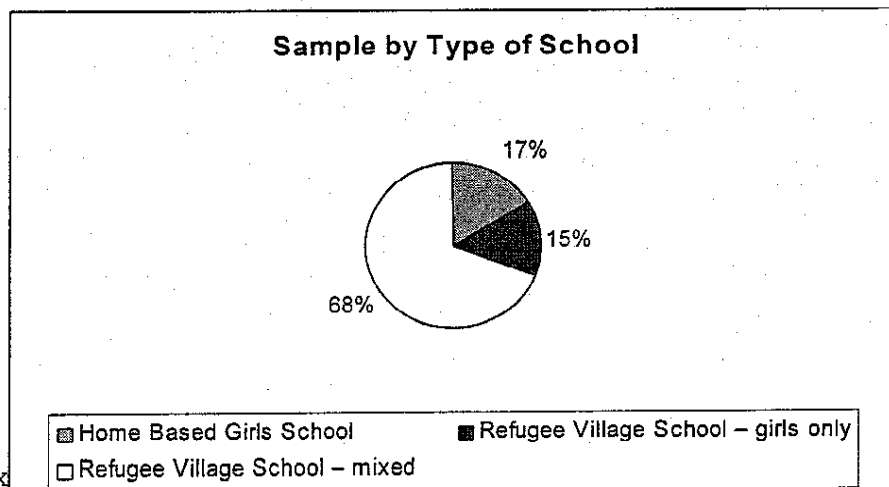
The sample included 57 third grade classes with a total enrollment of 1341. On the day(s) of testing, absenteeism was high in some areas because some students were working with their families as hired labor on the local harvest. The actual number of students who completed the test was 1256. Of this total, not all of the cases are included in all of the statistics due to missing data. In some cases, students failed to fill in information such as age or language. In others, the printing of the tests was faulty and not all of the pages or questions were included on the test. In these cases, the overall total of the test score for that section (math or Pashto) was not included in the statistics. However, all usable responses were included in the analysis for individual questions.

**Gender Distribution:** 43% of the students taking the test were boys and 57% were girls.

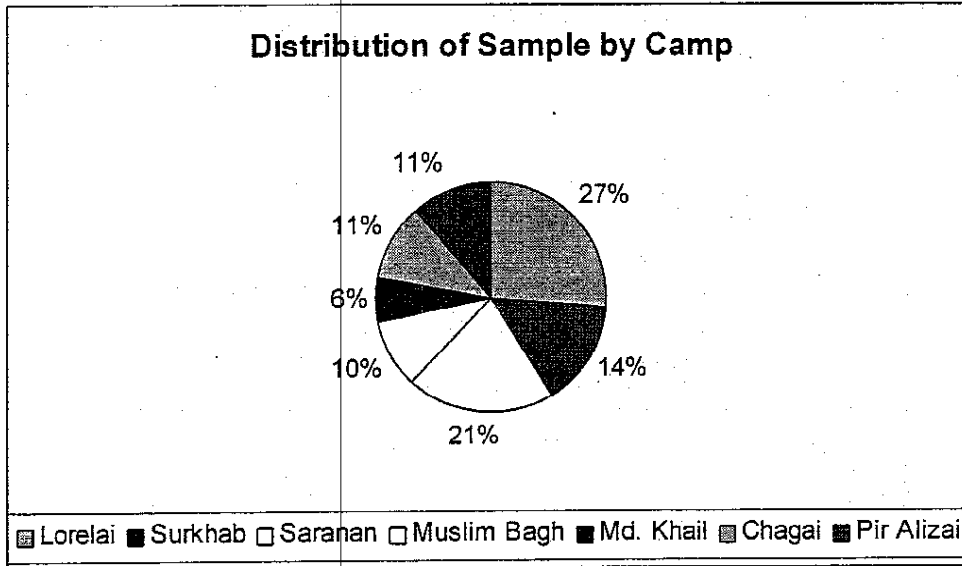
**Students by Type of School and Camp Location**

Count		School Type			Total
		Home Based Girls School	RV Girls Only	RV School - other	
Camp	Lorelai	72		260	332
	New Saranan	56	88	121	265
	Surkhab	47	39	96	182
	Muslim Bagh	21		99	120
	Md. Khail			79	79
	Chagai		28	106	134
	Pir Alizai	15	29	100	144
Total		211	184	861	1256

**Type of School:** Of the total number of students who took the test, more than two-thirds were in RV schools with mixed or boys-only classes. The students in HBGS represented 17% of the total, and those in girls-only RV schools represented 14.6% of the total



**Location of School:** The largest numbers of students were tested in Lorelai and Saranan refugee camps, which together represented just less than half of the students tested. The only camp with disproportionately low numbers in the sample was Chagai, which had only 10.7% of the students tested, none of which were HBGS. This relatively low representation of Chagai was due to logistics and time limitations of the study.



**Age of the Students:** The students in the sample ranged in age from seven years old to twenty-seven. The mean age of the students is 10.96 years, which is slightly older than the norm for third grade. Most but not all of the older students are in the HBGS.

**Student Age**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Age 8 and under	108	8.6	9.3	9.3
	Age 9	169	13.5	14.6	24.0
	Age 10	256	20.4	22.1	46.1
	Age 11	143	11.4	12.4	58.5
	Age 12	267	21.3	23.1	81.6
	Age 13	112	8.9	9.7	91.3
	Age 14	53	4.2	4.6	95.8
	Age 15	33	2.6	2.9	98.7
	Age 16-27	15	1.2	1.3	100.0
	Total	1156	92.0	100.0	
Missing	System	100	8.0		
	Total	1256	100.0		

**Language of the Students:** The students in the RV and HBGS in Balochistan are overwhelmingly native Pashto speakers. Fewer than 1% of the students responded that they spoke a different language at home.

**Session of Classes:** The sample included both morning and afternoon sessions in the schools. About 57% of the classes in the sample were in the morning session, and 43% were in the afternoon session. 70% of the teachers in the sample taught a double shift.

**Size of the Classes:** The class size in the sample ranged from the smallest class of seven students to the largest class of 49 students. The HBGS were the smallest classrooms, with the majority being between 15 and 20 students. The RV schools varied considerably in the number of students in each classroom. The most frequent size of class is between 26 and 30 students.

**Class Size, by Type of School**

Count		School Type			Total
		Home Based Girls School	RV Girls Only	RV School - other	
Class Size	Less than 14	7			7
	15-20	145		84	229
	21-25	59	39	105	203
	26-30		54	264	318
	31-35		29	127	156
	36-40		62	162	224
	Over 41			119	119
Total		211	184	861	1256

**Gender of Teachers:** Demographic data was collected for 54 of the 56 teachers in the sample. Of this total, 52% of the teachers were male and 48% were female.

**Language of the Teachers:** As is the case with the students, the teachers in this area are predominately native Pashto speakers. Of the total, 91% of the teachers said that Pashto was their mother tongue, and 9% identified Farsi as their mother tongue.

**Age of the Teachers:** The teachers in the sample were relatively young, with over 50% of the teachers in the 21-30 age group and 30% between 31 and 40 years of age. Five of the teachers (9.3%) were younger than 20 years old, all of whom were teaching in either a HBGS or an RV School for girls only. An equal number of teachers were between 41 and 50 years old, all of whom were teaching in RV mixed or boys only schools. (It is worth noting that many Afghans are unsure of their exact age, so the data represents their best estimate in many cases.)

## Teacher Age, by Type of School

Count		Age				Total
		10-20	21-30	31-40	41-50	
School Type	Home Based Girls	3	8	1		12
	RV - Girls Only	2	4	1		7
	RV - other		16	14	5	35
Total		5	28	16	5	54

**Education of the Teachers:** The educational level of the teachers varied considerably. The teachers in the RV boys only and mixed schools had the strongest academic backgrounds, 86% of whom had completed secondary school or higher. The HBGS teachers have the lowest academic qualifications, with only 36% having completed secondary school or higher. Over half (55%) of the teachers in HBGS or RV girls only schools have less than a 9<sup>th</sup> grade education.

## Highest Grade Teacher Completed, by Type of School

Count		School Type			Total
		Home Based Girls	RV - Girls Only	RV - other	
Teacher Education	6th Grade or Lower	4	1		5
	7th to 11th Grade	3	2	6	11
	Completed 12th Grade	3	3	20	26
	Completed 13th to 16th Grades	1	1	9	11
Total		11	7	35	53

**Training received by the Teachers:** The teachers were asked to identify the specific teacher training they had received. The options were training from the Experiment in International Living (EIL), training in the GTZ math and Pashto programs, training in the UNO materials for the higher grades, introductory training in the Basic Competencies for Learning (BCL), health education training, and other training. The great majority of the teachers responding to the question, 94%, indicated that they had received training in using the GTZ materials as well as in the UNO materials (89%). These training activities included teachers in all types of schools. In addition, virtually all of the HBGS teachers, 57% of RV-girls school teachers, and 66% of the other RV teachers had received training in health education. Only half of the teachers, all of whom work in RV-mixed schools, said that they had attended the training in Basic Competencies. The Basic Competencies

have not yet been introduced to home schools and women teachers in the RV schools. If in fact the HBGS and RV-girls only teachers were included in the BCL training, then this indicates a lack of familiarity with the term. Slightly more than a quarter of the RV-mixed school-teachers had received training from EIL prior to 1995 before SC/US began managing schools in Balochistan refugee villages.

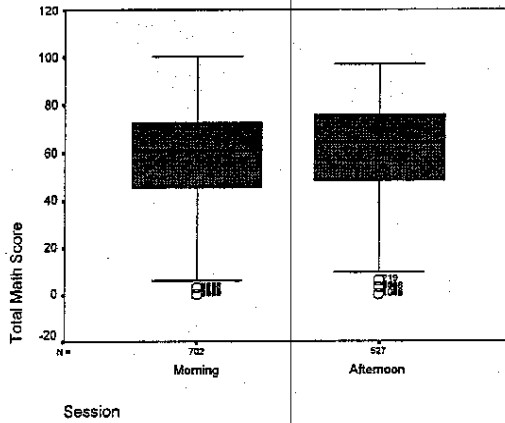
Training Received by the Teachers					
	HBGS	RV Girls	RV - other	Total	% of total teachers
EIL		1	10	11	20%
GTZ Materials	12	6	33	51	94%
UNO Materials	12	6	30	48	89%
BCL Training			28	28	52%
Health Training	11	4	23	38	70%
Other	2		7	9	17%

included in the testing had a higher proportion of HBGS and of girls in general, whereas the afternoon classes consisted of RV schools and had relatively more boys. Nonetheless, the difference in Pashto scores was significant, and significant in favor of the afternoon classes. This finding probably deserves some more analysis.

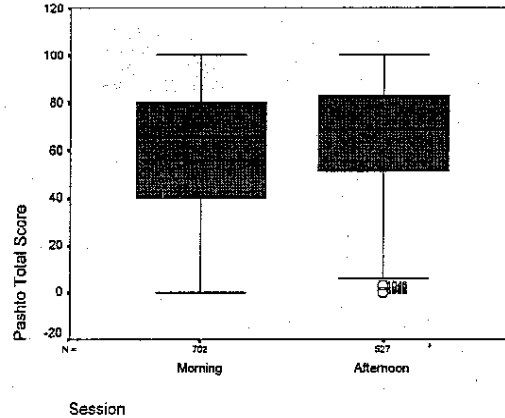
**Test Scores, by Session**

		Session		
		Morning	Afternoon	Total
Total Math Score	Mean	57.1263%	60.1594%	58.4332%
	N	708	536	1244
	Std. Deviation	23.7989%	19.7386%	22.1834%
Pashto Total Score	Mean	58.25%	64.03%	60.73%
	N	708	533	1241
	Std. Deviation	28.46%	24.04%	26.79%

**Math Scores by Session**



**Pashto Scores, by Session**

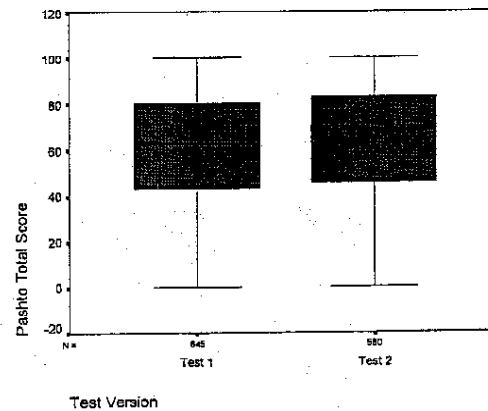
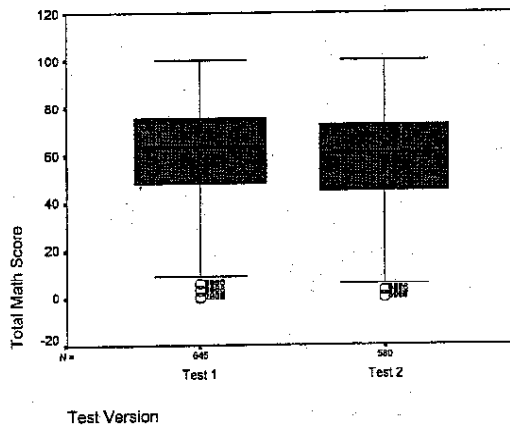


**Score by Test Version**

Two versions of the tests were given to the students. While an effort was made to split the tests evenly in each class, printing errors resulted in having slightly more versions of Test 1 than Test 2. There was not a significant difference between the scores achieved in the two versions of either the math or Pashto test. Although the difference in scores is more noticeable in the Pashto test, it is not statistically significant.

### Test Results by Version of the Test

		Test Version		
		Test 1	Test 2	Total
Total Math Score	Mean	58.6946%	58.0688%	58.3969%
	N	650	590	1240
	Std. Deviation	22.2742%	22.1165%	22.1926%
Pashto Total Score	Mean	59.49%	62.08%	60.70%
	N	655	582	1237
	Std. Deviation	26.62%	26.97%	26.81%



### Scores by Teacher Rankings

The teachers were ranked by the Field Education Supervisors as being either good, satisfactory, or weak in terms of their teaching practices. It should be noted that these classifications were made on the basis of observation of the teacher rather than test scores, which were not yet available. These rankings were reasonably accurate in the sense that students of the “weak” teachers had consistently lower student scores in both subjects. However, the classification distinction between “satisfactory” and “good” teachers is less clear cut, particularly in math. In other words, the supervisor observation of teacher behavior is better at identifying poor teachers than really good teachers. The mean test score in the classrooms taught by “good” teachers was 66%, whereas the equivalent scores in the “satisfactory” and “weak” teacher classrooms were 62% and 38% respectively. The distinction between good and satisfactory teachers is weak, particularly given that both of these categories of teachers had a range of student test scores between 0 and 100%.



### Tests Scores by Teacher Quality Score

Mean		
Teacher Quality	Total Math Score	Pashto Total Score
Good	55.36%	65.86%
Satisfactory	61.29%	62.42%
Weak	41.63%	38.12%
Total	58.40%	60.71%

A better way of assessing the accuracy of the teacher assessments is to identify the highest and lowest achieving teachers in terms of student performance on the study tests and relate these categories with the classification. Ten of the teachers were in classes with an average score of 80% or more in Pashto. Of these 10 teachers, only two were identified as “good” teachers by the supervisors, with the others classified as “satisfactory”. A similar finding applies to the teachers with the lowest scores. Seven teachers were responsible for classes with an average score of less than 40%. Of these seven teachers, five were classified as “satisfactory” and two were classified as “weak”. **From this assessment, it is clear that the criteria currently used for classifying teachers does not accurately identify the best teachers.**

The educational level of the teachers is also an important variable in assessing qualification. In fact, this has been a primary factor used in recruiting and selecting teachers for the RV schools, and to a much lesser degree for the HBGS. As was noted in the early part of the report, the HBGS generally have attained much lower educational levels than have the teachers in RV schools. The question that arises is whether the additional formal education is important in terms of student achievement.

As the table below illustrates, there is no significant correlation between the educational level of the teacher and the test scores of the students. In fact, if anything the data

### Test Scores by Teacher Education

Mean		
Teacher Education	Math Score	Pashto Score
6th Grade or Lower	63.69	70.00
7th to 11th Grade	62.80	70.62
Completed 12th Grade	61.08	61.56
Completed 13th to 16th Grades	54.56	56.82
Total	60.32	63.28

suggests that the teachers with the highest levels of education have lower average test scores than the other groups. However, there is not a statistically significant correlation, positive or negative, between test scores and teacher education.

The teachers with six grade education or below, as well as those with secondary education that stopped before 12<sup>th</sup> grade averaged higher student scores in both math and Pashto than did the teachers who are 12<sup>th</sup> grade graduates and higher. There are many possible reasons for this, including the heavy weighting of teachers with low educational levels in the HBGS, which create a different educational climate and have a different student population. It may also indicate that less educated and less experienced teachers are more likely to rely on the teaching methods proposed in the materials than are their more experienced colleagues. Whatever the reason, it is worth exploring and integrating into the norms for teacher recruitment and training.

Data was also collected about the number of years of experience of the teachers. Over half of the teachers (53%) have between one and five years of teaching experience. Sixteen percent of the teachers have one year or less, and another sixteen percent have between 11 and 20 years of experience. The years of teaching experience has little significant impact on student achievement, as noted in the table below. Interestingly, the least experienced teachers (with one year or less) and the most experienced teachers, with over 21 years of teaching experience, have the lowest student scores.

**Student Scores by Years of Teacher Experience**

Mean		
Years of Experience	Math Score	Pashto Score
Less than 1 year	50.98	56.78
1-5 years	62.73	64.93
6-10 years	66.42	74.33
11-20 years	63.88	65.00
More than 21 years	46.83	45.50
Total	60.22	63.36

### Scores by Student Age

The students in the sample ranged from seven years old to 27 years old. The test scores are clearly related to the age of the students, with the average math score of the oldest group being 16 points higher than that of the youngest group. The difference in the Pashto test is even greater. There is a significant correlation at the 0.01 level between age and test scores.

### Test Scores by Student Age

Mean		
Age Category	Total Math Score	Pashto Total Score
Age 8 and under	51.40%	53.12%
Age 9	58.43%	61.92%
Age 10	57.64%	60.48%
Age 11	63.76%	64.78%
Age 12	59.63%	61.82%
Age 13	62.54%	65.05%
Age 14	66.67%	69.97%
Age 15	63.54%	68.57%
Age 16-27	67.27%	72.57%
<b>Total</b>	<b>59.58%</b>	<b>62.10%</b>

Grouping the students by age group allows for an easier assessment of differences between age groups. As the following table shows, overall, the older students performed better than the younger students in both subjects.

### Mean Test Scores by Student Age

Mean		
Age Groups	Pashto Total Score	Total Math Score
Age 9 and Younger	58.46%	55.70%
Age 10-12	61.93%	59.75%
Age 13-27	67.35%	64.05%
<b>Total</b>	<b>62.10%</b>	<b>59.58%</b>

#### B. Test Results by Passing and Failing Grades

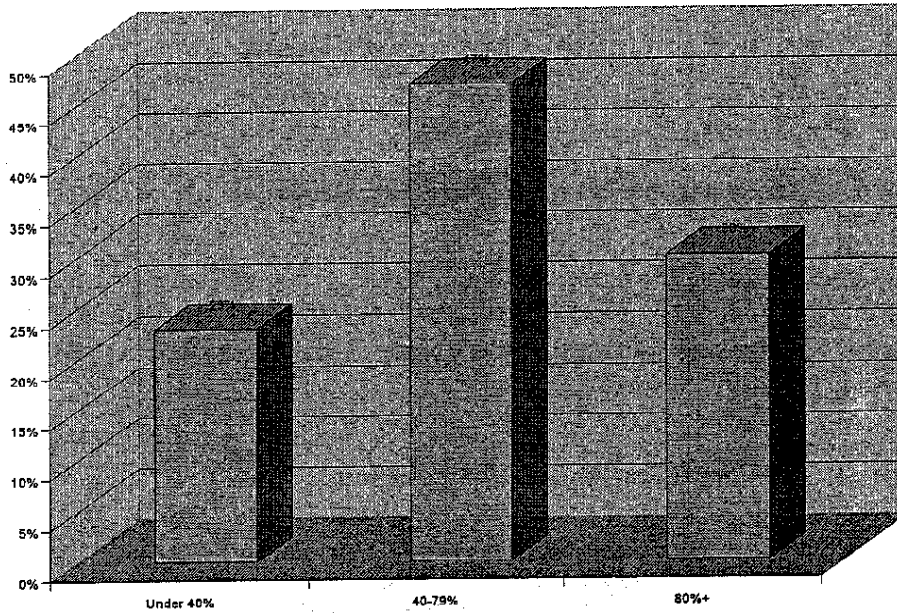
The previous analyses assess the results by measures of central tendency (average, median), dispersion (variance), and by percentile patterns (grades achieved by each percentile group). This analysis takes a more fundamental approach, recognizing that the Basic Competency approach is a measure of absolute achievement, rather than relative. The measure of success in a Basic Competency approach is that all students achieve a passing grade.

The traditional measure of success in the RV schools has been a passing grade of 30%. The proposed passing grade for the Basic Competencies under discussion is 80%. This is

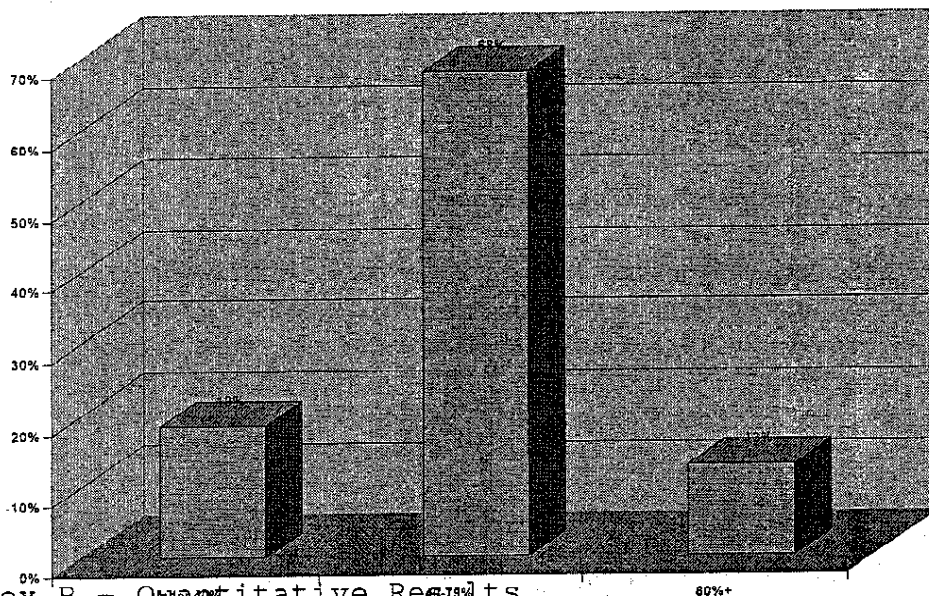
a useful measure to determine the extent to which the RV system is achieving the BCL goals, as well as for establishing annual improvement targets. The following tables and graphs divide the percentages into a passing grade (80% and above), intermediate grade (40-79%), and a low grade (below 40%). The analysis uses 40% rather than 30% as a low grade for symmetry, and because 40% is a low grade by any standard.

**Overall Scores.** In the Pashto test, 30% of the third grade students taking the test passed with a grade of 80% or higher, and 23% of the students got less than 40% of the questions correct. Girls did slightly better than the boys in both categories. In the math tests, many fewer students passed the test with an 80% or greater. Despite the fact that the mean scores were similar, the distribution was more heavily weighted to the center. Only 13% of the students answered 80% or more of the math questions correctly.

Distribution of Pashto Scores, by Passing Grade

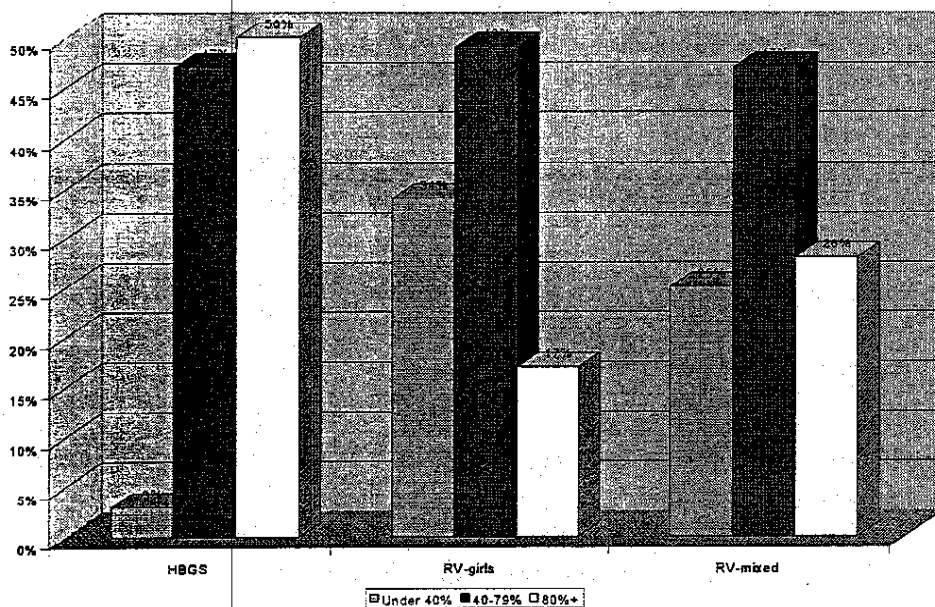


Distribution of Math Test Scores

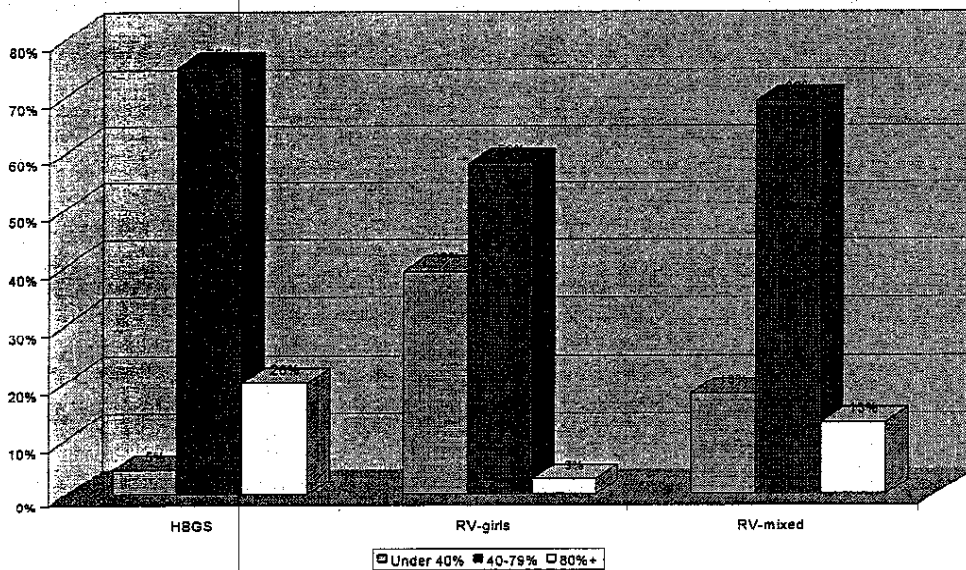


**Scores by Type of School.** Further analysis of the data by type of school and location shows significant differences in the school achievement. In the Pashto test, analysis by type of school shows that 50% of the students in HBGS passed the test with a grade of 80% or better, while only 3% of the students failed the test. The comparable numbers for RV-girls schools are 17% passing and 34% failing. For RV-boys and mixed schools, the percentage passing the test is 28%, while 25% received less than 40%. This is a significant difference in accomplishment. The scores in the HBGS show a relatively high level of achievement.

Distribution of Pashto Scores, by Type of School



Distribution of Math Scores, by Type of School



The achievements in math were significantly less impressive overall. However, the HBGS students continued to turn in the highest achievements, with 20% of the students achieving a passing grade and only 5% falling below 40%. Again, the RV-girls only schools were by far the poorest, with only 3% getting more than 80% of the questions correct, and over 39% falling below 40%.

**Relationship of Student Age and Type of School.** The results discussed above show that both student age and type of school are strongly related to student achievement. Given this combination, it is worth asking whether the relatively high scores of the HBGS are the result of the fact that students in these classrooms are generally older than are students in the RV schools. As is clearly shown in the tables below, the proportion of older students in the HBGS schools is significantly higher than in the RV schools. Almost half of the HBGS students are 13 or older, whereas only 10% of the RV girls school students fall into that category. Similarly, only 6% of the HBGS students are under 10 years old, compared to over a quarter of the students in the other schools. The overall *average* test scores by type of school are clearly related to this fact.

Age Group	Type of School		
	HBGS	RV - Girls	RV - Other
9 and under	6%	26%	28%
10-12	49%	64%	60%
13 and over	45%	10%	12%
	100%	100%	100%

Therefore, to accurately assess the quality of learning in different types of schools, it is necessary to disaggregate the student achievement by age within each type of school. This analysis, shown on the table below, clearly shows that students at every age group do better in the HBGS schools than in the other types of schools, and that the students in the RV-girls schools have lower achievement than do students in the other schools. Indeed, the *youngest* students in the HBGS schools had higher average Pashto scores than did the *oldest* students in the other two types of schools. The only area in which RV and HBGS students had the same level of achievement is in math scores for students aged 9

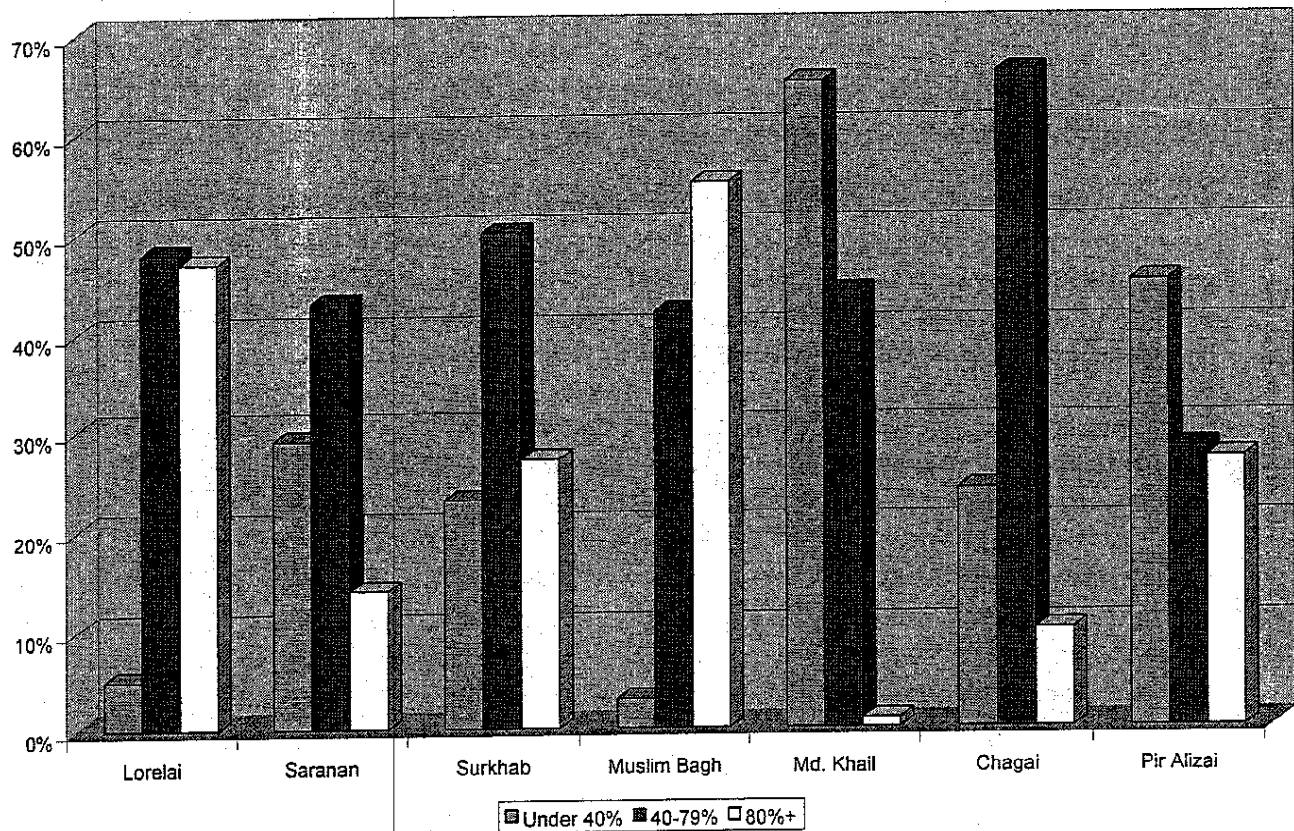
Age Group		Type of School			
		HBGS	RV - Girls	RV - Other	Total
Age 9 and Under	Pashto	66%	52%	59%	58%
	Math	59%	41%	59%	56%
Age 10 - 12	Pashto	78%	55%	60%	62%
	Math	69%	46%	61%	60%
Age 13 and Over	Pashto	77%	56%	61%	67%
	Math	68%	50%	64%	64%
TOTAL	Pashto	77%	53%	58%	62%
	Math	68%	45%	59%	60%

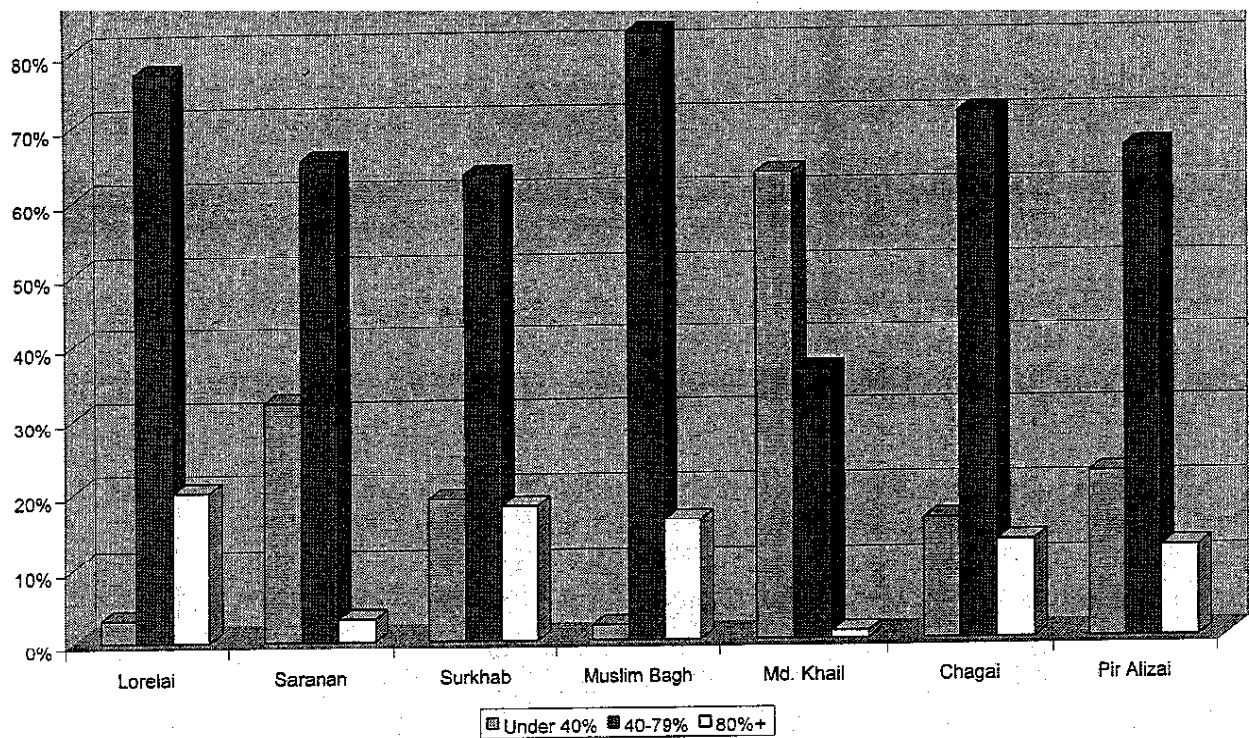
and under, a very small group in the HBGS schools. It is also noteworthy that whereas the older students in the RV schools consistently achieved higher scores than the younger

students, the same was not true for the HBGS students. In fact, the oldest group of students did no better than the students aged 10-12 in the HBGS schools. *Therefore, while age is an important factor in student achievement, the learning environment of the HBGS schools appears to be the more significant element.* (Note: there are slight discrepancies in the total percentages between this table and others in the report. This is because the total scores aggregated by type of school include all students, including those for whom age data is missing. This table includes only students with both type of school and age data included.)

**Scores by Location.** Analyzing the data by location, the schools in Muslim Bagh had the strongest performance with 55% of the students receiving a passing score in Pashto and only 3% of the students scoring lower than 40%. This is closely followed by schools in the Lorelai region. Schools in Surkhab and Pir Alizai also did relatively well, passing 27% of the students, although the proportion in Pir Alizai scoring poorly is also high. Schools in Chagai, Saranan, and Md. Khail had the poorest scores. In Md. Khail, only 1% of the students receiving a passing grade, and 65% got lower than 40%.

Distribution of Pashto Scores, by Location





The scores in math follow the same pattern, although at lower overall test scores. Students in Lorelai and Surkhab received the highest percentage of passing scores, followed closely by Muslim Bagh. Muslim Bagh continued to have the lowest proportion of scores below 40%. Md. Khail was again the only location where the majority of the students failed to achieve a 40% grade, and only one student passed the exam.

Scores of the Most Successful Teachers. As has been noted in the preceding analyses, considerable variation in learning outcomes exists between classrooms. However, there are clearly some teachers who are more effective than others in getting results. While the analysis of teacher characteristics discussed above is useful, the identification of the most successful classrooms, and their characteristics, is also useful.

Sixteen teachers achieved the distinction of having at least 50% of their students passing the Pashto test with a grade of 80% or more. The list of these teachers, in order of the proportion of passing students, is shown on the table below. The teacher rating factor is the classification given to the teacher by the FES. Five of these teachers are in HBGS schools, one is in an RV-girls school, and ten are in RV-boys or mixed schools.



**Most Successful Teachers - Pashto**

<b>% of students passing</b>	<b>Teacher Number</b>	<b>Teacher Education Level</b>	<b>Teacher Gender</b>	<b>Region</b>	<b>Teacher Rating</b>	<b>School Type</b>
100%	8	10	Female	Lorelai	Average	HBGS
100%	9	12	Female	Lorelai	Average	HBGS
95%	37	10	Male	Muslim Bagh	Average	RV-mixed
89%	6	4	Female	Pir Alizai	Average	HBGS
82%	11	14	Female	Loralai	Good	HBGS
81%	44	14	Male	Loralai	Average	RV-mixed
80%	36	12	Male	Muslim Bagh	Average	RV-mixed
76%	17	8	Female	Pir Alizai	Good	RV-girls
70%	47	16	Male	Lorelai	Average	RV-mixed
69%	32	10	Male	Pir Alizai	Average	RV-mixed
68%	38	12	Male	Muslim Bagh	Average	RV-mixed
62%	61	12	Female	Chagai	Average	RV-mixed
55%	28	12	Male	Surkhab	Average	RV-mixed
50%	43	10	Male	Lorelai	Good	RV-mixed
50%	45	11	Male	Lorelai	Average	RV-mixed
50%	10	12	Female	Lorelai	Good	HBGS

In the math test, the overall scores were much lower and the number of successful classrooms was correspondingly low. In only five classrooms were at least half of the students able to score 80% or higher on the math test. Of these, three are HBGS classrooms and two are RV-mixed.

**Most Successful Teachers - Math**

<b>% of students passing</b>	<b>Teacher Number</b>	<b>Teacher Education Level</b>	<b>Teacher Gender</b>	<b>Region</b>	<b>Teacher Rating</b>	<b>School Type</b>
69%	8	10	Female	Lorelai	Average	HBGS
64%	28	12	Male	Surkhab	Average	RV-mixed
59%	9	12	Female	Lorelai	Average	HBGS
54%	5	5	Female	Surkhab	Average	HBGS
50%	44	14	Male	Loralai	Average	RV-mixed

**C. Test Item Analysis**

The following charts show the test results for each question in the Math and Pashto tests, as well as the overall statistics for the groupings of questions by competency area. This data will be useful to the Field Education Supervisors in refining the test questions and in developing new questions in the future. (Note: Test Item Analysis included separately.)

## **I      Introduction**

This annex describes the findings of the qualitative study. These findings focus on school, teacher, and student characteristics and the teaching-learning processes that may be affecting the quality of learning in SC/US schools. The descriptions are based on observations and interviews in Refugee Village (RV) and Home-Based Girls' (HBGS) Schools. Although many of these points may seem small and insignificant as factors affecting learning, the accumulation of many small "inefficiencies" in the end may have a large impact.

Most topic sections below begin with a paragraph entitled "relevance." Often these paragraphs describe findings drawn from international research to show how some educators believe a particular topic relates to program quality. Because many of these findings are "soft" (i.e. they do not consistently show the same result from context to context, or study to study), it is probably better to see them as "conventional wisdom." The purpose of this annex is to suggest factors that may be affecting learning results either positively or negatively in SC/US schools. SC/US staff may want to review these factors when searching for possible reasons for a particular learning result. They may especially want to review them when they are seeking remedies for less-than-satisfactory performance.

Most of these general research findings are discussed in Noel F. McGinn and Borden, Allison M. 1995. *Framing Questions, Constructing Answers: Linking Research with Education Policy for Developing Countries*. Cambridge, MA: Harvard University Press, Harvard Institute for International Development. If research is reported in McGinn and Border, it is not cited further here unless included as a direct quote.

## **II      Sample**

### **A.      Characteristics of the school samples observed.**

The sample of observed classes were located in 11 mixed RV schools, two girls-only RV schools and nine HBGS. In the RV schools we visited three grade 1, three grade 2, four grade 4, three grade 5, and two grade 6 classes (in two schools more than one grade was observed for selected subjects), and a full range of grades from one through four in HBGS. Seven of the RV classes took place in the morning and six during the afternoon shift while most of the HBGS were in the morning. All of the observed RV teachers but one taught two shifts; only one of the HBGS teachers taught two shifts. Four RV classes were male only students, six were female only and three were mixed classes. Ten RV teachers were male and three were female. All the HBGS teachers and most of the students were female.

## **III      Basic Inputs**

There are four basic inputs normally required in establishing a context for teaching-learning: sufficient places in which students can study, sufficient time in which to learn the curriculum,

instructional materials that cover the curriculum, and an administrative-management system for organizing the school environment.

## A. Places in which to learn

### 1. Facilities and furnishings

**Relevance.** Where the relationship has been studied directly, physical facilities have not had a significant effect on student learning. They may have a positive psychological effect by providing a pleasant environment in which teachers and students carry on the teaching-learning process, or if conditions are poor, they may have the effect of driving good teachers away. A number of studies have suggested that proper latrines have an impact on girls' willingness to go to and stay in school.

**SC/US school facilities and furnishings.** Overall the facilities in RV and HBG schools although basic provide a satisfactory, even in most cases pleasant, environment for teaching-learning. In the context of Afghan refugee education the schools reflect an appropriate emphasis on crucial instructional inputs rather than costly physical facilities. RV schools are simple structures, consisting of solid, usually well-lit and well-ventilated classrooms, with water and latrines located nearby. The extremes of heat and cold are felt in these classrooms, but that is also the case in refugee homes. There are colorful mats in most classes, adequate blackboards and sufficient chalk. HBGS differ in that the rooms are usually smaller and more home-like, and ventilation is likely to be curtailed because of smaller windows that can be covered in winter to keep rooms warmer.

School furnishings are minimal. RV classrooms usually have a chair and sometimes a table for the teacher, and in a few classes--usually where older children study--low desks for two or three students that hold books and can be used for writing as the child sits on the floor. In these classes of older and usually fewer children these desks do not overcrowd the room, and they tend to make it easier for bigger children to write while sitting on the floor. These low desks although nice are not necessary for younger children who work quite well using their book packs as desks.

### 2. Class size (teacher/student ratios)

**Relevance.** There is a general feeling that class size impacts learning, because as class size increases teachers have less direct time to assist the learning of each individual student. However, most studies in developing countries show no significant differences in student achievement that can be related to teacher/student ratio (up to class sizes much larger than those in SC/US schools). Class size is thought even less likely to make a difference in subjects that require less of teachers' direct attention, when teachers are experienced and can manage the learning of students effectively, when textbooks allow for self-study, and when students are motivated to learn.

**SC/US teacher/student ratios.** Class size in SC/US schools is not an important issue from the point of view of learning. The classes we observed had on average 21 students present and 5 absent.

### 3. Shifts

**Relevance.** Having more than one shift can be a cost-effective use of space. However it can also affect student learning:

- negatively if it reduces instructional time and/or the teaching is poorer because of greater teaching loads
- positively if smaller classes learn better or time is managed more effectively

**SC/US use of shifts.** The large number of students seeking admission to SC/US schools in recent years has caused SC/US to form double-shifts rather than increase class size. While this is a good way to use classroom space it may overtax teachers who teach 8 hours of double shifts, especially since present teaching methods are highly teacher-dependent.

We also did not see instances where multi-grade options were used for small classes, although the instability of student populations and attendance probably creates many mixed-achievement classes where students might well be treated as though they occupied different grade levels. This would be easier to do if teachers used methods that emphasized independent student learning and if textbooks were more amenable to self instruction (which will be the case with Supplementary Materials).

### B. Opportunity to learn (allotted time)

**Relevance.** Sufficient time must be provided to children to learn a body of skills and knowledge. The amount of time should be determined by the needs of the curriculum and children's capacity to learn. A school system sets the number of years and hours in a year that it feels is sufficient for learning the curriculum. In other countries of the world:

- the length of the primary cycle varies from four to nine years, but around half of countries require 6 years.
- the number of schooling days and hours in the school year also varies. The world average is 879 hours per school year, but varies from 600 to more than 1100.

**Allotted time in SC/US schools.** SC/US schools have a six year primary cycle. The RV schools are in session four hours a day, six days a week, nine months of the year. This totals near to 900 hours (a rough calculation) or about the average number of instructional hours in school systems around the world. HBGS have fewer hours overall in the day, week and year than RV schools. They are in

session three hours a day, five days a week, eleven months a year to total less than 700 hours a year, or considerably below the world average.

Schedules are displayed prominently in most SC/US schools. These schedules define the amount of time that should be spent on each subject in the curriculum.

Grades 1 through 3 usually devote 6 hours a week each to Pashto and Math, and divide the remaining time between religion, handwriting and drawing, with considerably more of the remaining time spent on religion.

Grades 4 through 6 spend 6 hours a week each on Pashto and Math, and additional classes are taught in religion (*Hikayat, Fiqa, Tajweed*), geometry, science, history and geography. Some teachers claim they also teach drawing and sports (although no sports classes were observed). The two drawing lesson observed were consisted of the teacher drawing a flower or teapot on the board and asking the children to copy and color it in.

### **C. Materials with which to learn.**

#### **1. Instructional materials and writing supplies**

**Relevance.** Textbooks are found to be the single most effective input in improving learning (especially when they did not exist before or were in short supply). Textbooks make learning more uniform across schools, indicate to teachers what they should teach, and frequently how they should teach it if guides or other instructions accompany them. The following are research findings on textbooks:

- Textbooks are an essential requirement of schooling. In the world, schools vary from ones where every child has a textbook per subject matter to ones where up to 20 students share a single book.
- Large classes with instructional materials do as well or better than small classes without materials.
- Textbooks that can be used in self-instruction are especially effective in large and multi-grade classes.
- Spending on instructional materials is a cost-effective way to improve student learning and reduce dropout.

**SC/US materials and supplies.** Almost all children appear to have textbooks, notebooks and writing supplies in SC/US schools and most are in fairly good condition. The quality of teaching is clearly enhanced by the GTZ books with their explanatory exercises and diminished in the subjects taught using the UNO books.

Younger children appropriately used reusable writing supplies such as slates while older children were provided with notebooks. In some classes notebooks seem to be used fully (with every page covered in writing) but in some classes, many pages were left blank or scribbled on in a way that showed careless use. In such a resource-limited environment teachers should be made aware of the importance of conserving supplies. There could perhaps be a discussion in training of how to make the best use of writing supplies. (See also the sections on notebook use below).

## 2. Teachers' guides

**Relevance.** Instructional materials are more likely to be used effectively if teachers are provided instructions in how to use them.

**SC/US use of teacher guides.** SC/US provides teacher guides for GTZ materials and sees that new teachers are given training in their use. Although the GTZ teachers' guide is said to be available to all teachers, yet it was rarely in evidence in classrooms. The few times teachers used it, they took considerable time reading the instructions while the students sat waiting. It is possible that teachers are either so familiar with the guide and/or the subject-matter that they do not need the guide. It is also possible that teachers find the guide too complicated to use during the class period. The fact that teachers have had some training in the guide, along with better format of GTZ textbooks means that GTZ materials are taught in a more interactive way than UNO materials that do not have these advantages.

## 3. Instructional aids

**Relevance.** Children learn better when there are concrete examples of the concepts they are learning. Many classrooms around the world mount wall posters of alphabet letters and numbers, maps, diagrams, and other illustrative materials. When these examples are present it saves the time teachers would use in putting the examples on the blackboard.

**SC/US instructional aids.** HBGS had more visual aids than RV schools and more of them were related to the textbook lessons. Teachers often said their husbands brought them back from cities where they worked or the teachers still had them from a previous teaching experience. More than half of the RV classes had no visual aids at all on the walls of the classroom. The rest had an ad hoc collection that bore little relation to the curriculum of the class or might at best be used during one specific lesson. They included (usually one of each) a pictorial representation of the rotation of the earth, geometric shapes, numbers, a diagram of measurements, definitions of scientific terms, drawings of different sources of vitamin C, maps of the world and of Afghanistan, the five senses, a list of 40 countries and their capitals, and several Koranic verses and Hadith. There are many useful

prototypes in resource centers and perhaps teachers check them out when needed. Given the low cost of these items and their beneficial effects on learning, SC/US should consider providing aids that are carefully matched to the needs of various classes (clocks, shapes, colors, alphabets and numbers for lower classes, maps and scientific diagrams for older classes). Teachers could make their own aids, but should be urged to post them so they will be seen.

The instructional aids that included counting stones, flashcards, and strings for hanging cards seemed suitable and were occasionally observed to be used. It is difficult to know how available these are in schools. In some cases they were stored in either the head teacher's office or the resource room.

#### 4. Libraries

**Relevance.** Children need opportunities to practice reading. This is true at all times but it is particularly important for children who live in communities where little reading material is available.

**SC/US libraries.** All HBGS classes of grade 3 and above and all RV schools are equipped with tin trunk libraries said to be used by students and sometimes community members. We did not see these libraries used in class during our observations. However we did see children in one HBGS checking out books to take home and read, and in several cases we saw sign-out books that showed considerable use. Still teachers do not seem to fully appreciate the potential uses of the library or the need for children to practice reading independently. Any program to encourage more independent work will find these libraries very useful.

#### D. A system for organizing the learning environment

##### 1. School organization and management

**Relevance.** At least one study reports that a school's appearance (cleanliness, orderliness, and general tidy look) influences the way supervisors and communities view the school. Many studies cite the importance of school heads in managing the educational resources of schools well and taking the leadership in school quality.

**SC/US school organization.** RV schools appear to be well organized on an administrative level. A *chowkidar* maintains security and keeps the grounds reasonably clean. The HBGS have a protection implicit in their private home locations. SC/US provides teachers with easy-to-use register books in which to take attendance. The schools run smoothly with relatively little bureaucratic hassle. Larger schools (with 500 or more students) are managed by full-time head teachers. Lesson timings in RV

schools are announced by gongs. The most prominent (sometimes the only) poster on classroom walls is the daily schedule. Teachers are aware of the amount of time they should spend every day on various lessons.

School head teachers appear to act primarily as administrators rather than managers of resources, and although they are concerned that their schools do well during inspections and exams, they appear to focus more on administrative matters and are not aware of how they might play a more significant role in student learning. Few head teachers appear to take responsibility for learning in the schools and actively engage the teachers.

#### **IV. Student factors that affect learning**

A number of student characteristics are thought to affect learning. One of the main predictors of learning is students' family background, including especially their socio-economic level and whether their parents are educated. Most of the parents of students in SC/US schools are poor and illiterate. There is little SC/US can do about these background characteristics, but it can provide a high quality learning that does much to compensate for their disadvantages. Some of the other student characteristics thought to affect learning include attendance, motivation and discipline, and mother tongue (especially if it is different from the language of instruction).

##### **A Student attendance**

**Relevance.** Student absence is a predictor of repetition (which in turn is a predictor of dropout) and therefore of major interest to efficiency and quality of learning in a system. Children cannot learn if they are not present in school.

**SC/US student absences.** Student absence and dropout appear to be serious problems in SC/US schools. In the RV classes we observed 21 students on average were present and 5 were absent. More than half the classes had five or more students absent, and one class had 15 out of 38 students absent. The problem is greatest in grades one and two. In looking back at the previous month's absences, every class but one had several children with absences of more than ten days. At the beginning of the year for these classes, SC/US registered an average of 35 students, suggesting an average drop out rate of 9 students by the end of the year when we visited. It was a bigger problem in the early grades where classes were larger.

The registers suggest the instability of the student groups. Most classes start the school year with significantly more students registered than are now actually present or expected in class. Consequently there are three numbers of importance in looking at attendance figures: registration, present enrollment, and students who are actually present. SC/US is now collecting information on



the missing children to see why they left school. This is an important activity to reveal what if anything can be done to prevent absences and dropout.

Several teachers complained of lateness that they explained as usually occurring because students are working in the fields or hauling water. It seems to be a bigger problem in the afternoon shift. We also noticed that children continued to straggle in for up to a half hour after break, and sometimes up to an hour after school started. In one case several boys missed the entire Pashto lesson because it occurred after break. Again it comes down to wasting instructional time. If teachers cannot prevent this from happening they should at least schedule important subjects in a time period when most children will be present.

The matter of attendance, lateness, and dropout are good subjects to bring up with PTAs and try to solicit their support.

## **B. Discipline and motivation**

**Relevance.** A study in Pakistan showed that achievement scores rose as the frequency of punishment by teachers declined. Students probably learn better in an encouraging atmosphere rather than a harsh one where they are constantly under the threat of punishment.

**SC/US discipline and student motivation.** SC/US has a policy of no physical discipline in its schools. The students in SC/US classes we observed were well-behaved and self-disciplined and we saw no teacher-administered direct physical or psychological punishments even though we spent considerable time in each classroom. In most classrooms teachers have instituted systems to regulate children's behavior. Children ask permission to enter a classroom, address the teacher politely, respond uniformly to attendance taking, leave their shoes outside the class, raise hands to answer questions, and then stand to answer. These procedures probably help to maintain a well-regulated and disciplined atmosphere.

Most children also maintained a very high level of engagement in their academic work. The few exceptions were children who for various reasons did not seem to be full-fledged members of the class (brought along by their sisters) or in one case, a child who seemed mentally incapable of doing the work. In one mixed class where girls sat next to a side wall and the teacher spent most of his time addressing the boys with his back to the girls, there was also a lower level of attention among the girls than was usual in most classes.

Overall student motivation seems high in SC/US schools. Students describe themselves as coming from homes where the older generation is non-literate--they seem to appreciate the opportunity to learn and gain respect within their families and communities. Most have ambitions that exceed the opportunities that will ultimately become available to them.

### **C. Students' mother tongue**

**Relevance.** Studies have shown that children who learn first in their mother tongue are able to learn more quickly, and also to learn a second language better.

**SC/US and the language of instruction.** We found that all the children in the RV classes where we observed or tested were learning in their mother tongue or were proficient enough in Pashto to be able to learn in that language. There were a few students in HBGS who were not as familiar with Pashto and had some difficulty with instruction. Because they are restricted in their movements, girls would have a harder time learning languages other than their mother tongue and might need special help in such cases.

### **V. Teacher characteristics that may affect teaching-learning**

**Relevance.** A number of studies have related certain characteristics of teachers to student learning. The results again are not always consistent. The teacher characteristics below however appear to affect learning positively in most studies and might be used along with subject-knowledge tests as criteria for selecting teachers. In parentheses are possible ways the criteria might be assessed:

- High verbal ability (IQ, interview)
- High expectations for learning (interview)
- Knowledge of a variety of teaching techniques (relevant training)
- Knowledge of subject content (sufficient academic training or test of subject competencies)
- Knowledge of the language of instruction (tests and interviews)

(Adapted from McGinn and Borden 1995)

This section looks at characteristics of SC/US teachers that are generally thought to affect student learning: teachers' academic training and presumed subject content knowledge, professional training, subject specialization, mother tongue, residence, teaching experience, sex, absences, and expectations for student learning.

#### **A. Academic training and subject content knowledge**

**Relevance.** According to McGinn and Borden 1995 "The general academic education a teacher receives more often accounts for student learning than does the professional training received." This is probably because a teacher with longer academic training knows more and is more confident in teaching the subject matter. One study showed that countries differ widely in their academic requirements for teachers from as little as six years of schooling to university graduation.

**SC/US teachers' academic training.** The SC/US teachers range in academic backgrounds from a few years of home or NFE schooling (only HBGS teachers) to Grade 12 and higher. A third of the HBGS teachers have grade 12 or higher and almost all of the RV teachers with a few exceptions for female teachers. The tight job market for men makes it possible to hire more highly qualified teachers albeit often ones who have been trained in unrelated fields.

The baseline assessment showed that attainment of high levels of student performance in SC/US schools was not related consistently to teacher academic characteristics. Consequently SC/US should be able to relax its rigid academic requirements in RV schools and give more importance to other criteria in selecting teachers such as performance on competency tests. This may have the additional benefit of providing a larger pool of female candidates.

Most SC/US teachers seemed to know the subject matter well enough based on our observations, (although testing might show more accurately whether they actually know the relevant concepts). However there were two exceptions: some HBGS teachers were weak in the math concepts of higher grades, and some male RV teachers seemed to have difficulty reading the teacher forms for the assessment which were written in Pashto. In one class, students made several corrections in the Pashto passages the teacher wrote on the board. This may be due to the variety of education programs the teachers have experienced--some may have studied mainly in other languages. SC/US should provide opportunities for all teachers to up-grade their knowledge and skills, first on a voluntary basis and then as part of remediation if their students' results are poor. This could be done as a self-study exercise of BCL and SC/US administered tests and certificates for those who do well.

The tests that are presently used for teacher selection (and to teach at higher grades of HBGS) consist of questions that are not closely related to the subject content a teacher needs to know to teach at the primary level. Many test items depend on the memory-recall of details. After taking the tests those with the highest scores are selected even though most do not achieve high averages, and some even have major gaps in specific subject areas. In one test, for example, that was administered during the selection process for Grade 4 HBGS teachers, of 22 tested, 20 received scores of less than 50 (most considerably less than 50) out of a possible score of 70. If the test consisted of items that should be known by a teacher to teach grade 4 (and this is questionable), then such low scores should have disqualified most of these teachers. It would be more reasonable now that BCL are available to test teachers on competencies required for a certain grade level and to let them study and retake the exam until they are proficient at the full complement of skills they will need.

The selection process up until now should not be faulted since it was based on a schooling program that did not have clearly defined learning goals. BCL makes it possible now to know what is required.

## B. Teacher Training

**Relevance.** Although studies have identified academic as opposed to professional training as generally more important in student achievement, this does not mean teachers should not be trained. Rather such studies suggest that the training programs teachers are attending may not be relevant and that training should perhaps be oriented more to actual conditions of the classroom. Teachers, for example, who are trained in classroom management techniques have been found to be able to handle more students without a reduction in learning.

There is little research on the right combination of teacher skills and knowledge that is most effective in producing learning results. There are several reasons for this including the fact that it is difficult to study what actually occurs during the training process, and to differentiate the effects of teacher knowledge from teacher skills.

The best pre-service training according to McGinn and Borden includes:

- basic subject matter content
- exposure to instructional objectives and methods of the curriculum
- classroom management techniques, and
- opportunities for supervised teaching practice

Teachers also need training in how to use the instructional materials that will be available to them in the classroom and in strategies to increase the learning of their students.

**SC/US training.** We did not observe SC/US training but were given a number of documents describing specific training programs. According to these documents, teacher training consisted mainly of how to use GTZ and UNO materials (methodology, objectives, lesson plans, and the materials required to teach the lesson). This kind of training is important because it takes teachers some time to become accustomed to the GTZ materials and guides, and because the UNO materials require that teachers "enrich" their teaching if children are to learn much from them. The duration of the training often consisted of a few days to a week. This training however leaves important gaps in the areas of curriculum objectives, classroom management techniques, and knowledge of strategies to increase learning. The Grade 3 teachers who filled in the questionnaire for the present study showed that 94 percent claimed to have been trained in GTZ and 89 percent in UNO materials (see Annex B for more details)

## C. Subject specialization

**Relevance.** Studies have shown that it is better to assign teachers to subjects and levels for which they have been prepared. However, at the complexity of subject matter taught at the primary level

most teachers should be competent to teach the entire content without difficulty if their own education has been adequate and instructional materials are supportive. Most schools around the world do not have subject specialists in the primary grades, and especially at the lower grades (except for religious or foreign language studies). The rationale for using a single teacher is that very young children do better with one nurturing teacher who understands their needs rather than a series of teachers who are less involved with them. One issue that arises is whether schools scheduled around teacher specialization have the requisite flexibility to meet student learning needs (which may not always fit into the time slots available).

**SC/US teachers with specialties.** Many of the RV schools divide teaching assignments into specific subject matters. Several teachers (where this was not possible) mentioned their discomfort in teaching subjects in which they had not had subject specialization training, where their education had been weak in these subjects, or where they felt they had little aptitude. This is somewhat surprising in primary grades where for the most part specialist knowledge should not be required if instructional materials sufficiently explain new concepts and skills. Most of the comments were made about teaching religious courses and subjects taught with UNO materials from grade four and higher. The complaints may reflect the poor quality of UNO materials. The solution to this problem may be more training for teachers in subject content for UNO subjects, and hiring specialists for religious courses.

#### **D. Teachers' mother tongue**

**Relevance.** Studies have shown that bi-lingual teachers speaking the language of instruction and the language of the children are more effective at producing learning in children. Although applicable only in a few cases of students where Pashto is not well-known, this finding suggests the importance of teachers being able to communicate with children in languages they know.

**SC/US teachers' language proficiencies.** All teachers who were asked in interviews or on questionnaires claimed to have Pashto as a mother tongue. However, as the comments above suggest this was either not true or a few teachers did not reach proficiency in reading and writing in that language. A selection test for teachers that assesses comprehension and grammar points in Pashto should be able to differentiate between those who are proficient in the language and those who are not. It is unrealistic to think that bi-lingual teachers would be assigned to classes where there are students who speak mostly Dari, but other solutions might be found like assigning a bi-lingual student to help a peer.

## **E. Residence of teachers**

**Relevance.** Studies have shown that teachers living in the local community are more likely to be active in school-community relations, are absent less often, and tend to have students with higher achievement.

**The residence of SC/US teachers.** All but one teacher we interviewed lived in the local community or within a reasonable bicycle ride away. The one exception was a teacher who lived in Quetta and roomed during the week in the local area. A number of others (who were not interviewed) also come from Quetta or villages that require long daily commutes. Because of the advantages of hiring local teachers, this should be a priority for SC/US, all other qualifications being equal. Because of the difficulty in finding qualified teachers, especially females, it sometimes has been necessary for SC/US to hire outsiders. The finding of this study that academic qualifications are not necessarily the best predictor of good teaching (and good student learning) will hopefully give more weight to criteria (such as test evidence of BCL concept knowledge) so that more local people will be eligible.

## **F. Teacher experience**

**Relevance.** On the one hand, experience or the length of time spent in teaching, often helps a teachers become more confident and proficient at teaching and, on the other, it makes some teachers unwilling to risk trying new methods and materials.

**The experience level of SC/US teachers.** The experience of the teachers we interviewed ranged from a few months to 33 years. There was a tendency for the more experienced teachers to employ their own patterns of teaching, independent of the steps proposed in the GTZ materials. They also tended to teach with greater confidence using whatever methods they used. The least experienced teachers, two in HBGS and one in a girls' RV school, who had only been teaching a few months found it difficult to teach the exercises in the GTZ textbooks, and in some cases, they taught incorrect information. They complained that they had not received training in how to use the guides. Almost all the teachers, young and old, reverted to a rote form for teaching the UNO materials, suggesting that rote patterns lie just below the surface, most likely because this method of instruction was what teachers experienced in their own childhoods.

## **G. Teacher sex**

**Relevance.** While there is a wide range of variation in the teaching behaviors of male and female teachers, there are a few general tendencies of the sexes that may have an effect on student learning. Female teachers have been found to be more sensitive to the learning needs of young children, pacing lessons more carefully to the level at which children can learn most effectively. Their

instruction tends to be more interactive, more informal and with less social distance between student and teacher. Male teachers on the other hand tend to organize their classes at a more formal level, require students to use more distancing respect behaviors and to "lecture" during more of the instruction period, even to very young children.

**Teacher sex in SC/US schools.** Most of the behaviors described above were clearly evident in SC/US schools. The more inviting atmosphere, the more interactive approaches and the fact that HBGS teachers are more likely on the whole to pace learning to the needs of students may be some of the strong advantages HBGS have over mixed and single sex RV schools, especially for the education of young girls. When female teachers teach in single-sex and mixed RV schools they appear to be affected by the more formal environment, the higher number of students, the two-shift format and other factors that impede their ability to adjust to student learning needs in the same way as HBGS teachers. The male teachers (perhaps as a consequence of being observed) almost invariably lectured much of the period and clearly believed they had to hold center stage if they were to demonstrate their competence to us. While "being observed" creates an abnormal situation, it also gives teachers opportunities to show what they believe is "good teaching." Making teachers conscious of these points may help them to be more reflective about their teaching styles.

## **H. Teacher absences**

**Relevance.** There is little research on the effect of teacher absence on student learning. The effect probably varies depending on the size of school, the availability of substitute teachers, the length of absences, and the solutions that schools use to deal with the problem. The main issue is whether students lose or waste instructional time because of teacher absence.

**SC/US teacher absences.** Most teachers seem to be present most of the time in the limited number of SC/US classes we observed, and this should be seen as a major accomplishment. We did visit schools where a few teachers were absent in other classes or were late coming to class.

RV teachers are allowed to be absent for personal reasons for 9 days in the school year, or one day a month. It is not clear why this policy exists since most jobs do not allow these kinds of absences, and the consequences can be great on student learning. SC/US schools do not have sufficient teachers to institute an adequate substitute system for absent teachers. In looking through the registers in RV classrooms we found that 9 teachers had not taken any leave the previous month, one had taken one day and two had taken three days.

There does not seem to be a standard way of dealing with the problem of teacher absence when it does occur. HBGS classes, which are held in the home of the teacher, usually continue with one of the better students taking charge. This happens even when the teacher is absent for a prolonged time

on, for example, maternity leave. In watching one of these student-led classes it was clear that the quality of teaching was not equal to that of a good teacher, but that may not always be the case. We were told that in RV schools another teacher or head teacher may take charge of a class, another teacher may consolidate the class with his own, or the schedule of rotating teachers may simply continue with gaps in the subject lessons taught by the absent teacher. Given the importance of making the best use of instructional time, SC/US staff may want to discuss the arrangements for ensuring that learning continues in the absence of a teacher. This might be a good time to encourage independent learning in the older students--a writing exercise, a report on a book from the library, or some other project. The main requirement should be that someone check the work at the end of the day or students may not take it seriously.

## **I. Teachers' expectations of student capabilities**

**Relevance.** Many studies show that teachers' expectations of their students' abilities to do the required academic work affect student learning outcomes. Positive expectations increase the chances of higher results.

**SC/US teachers' expectations of student capabilities.** The teachers interviewed in the RV schools were asked to rank their students' capabilities to do the academic work on a 4-point scale. Five said their students were excellent, six felt they were good, and two said the students were below average. No one said the students were poor. Two male teachers spontaneously reported that girl students were generally more capable than male students. These relatively positive views of teachers about the capabilities of students are a good sign, and we did not observe any teacher behavior that would overwhelmingly contradict these views.

## **VI The instructional process and effective teaching**

A number of factors in the instructional process affect learning. These include most importantly the way a teacher manages the educational resources available in the classroom, including the utilization of space and instructional time, the instructional process, and specific teaching strategies.

### **A. Classroom management**

**Relevance.** Teachers have a number of resources at their disposal in classrooms to effect learning: time, classroom space, instructional materials, aids, and their own abilities are some of the most important. The way that they make use of these resources has an important impact on learning. Classroom management requires that teachers be aware of the consequences of various actions and sensitive to the best ways to improve instruction for their students.



The section below looks at:

- the visibility of the blackboard
- the use of instructional aids
- the physical arrangement of children
- the calling of children to answer questions

### **1. The visibility of the blackboard**

For the most part blackboards were hung in a way that made them visible to all children, and most were hung at a height where teachers and students could write on them without difficulty. In a few classes blackboards rested on the floor, were hung partially over a window where the glare prevented children from seeing, or were damaged by cracks or uneven surfaces that interfered with writing and erasing. Teachers were clearly not always sensitive to their students' need to see the blackboard. All teachers had some form of duster and sufficient chalk for their needs.

### **2. The use of instructional aids**

There were many "things" hung in classrooms but most did not appear to be used or were not particularly useful on a continuing basis in everyday instruction. In one RV class a teacher asked students to rearrange words on a suspended string and in another a teacher used flashcards. Other than these examples we did not see RV teachers using instructional aids in their teaching. On the other hand HBGS teachers use a limited number of instructional aids (stones, flashcards, maps) more frequently and more of them are hung around their rooms, although not always particularly appropriate for their class levels, and not consistently enough to suggest that these aids are supplied to them. Overall, teachers (including HBGS teachers) do not seem fully convinced of the value of aids---they may see them more as toys than as serious work, or when they use them it is often an "awkward" or limited use.

### **3. The physical arrangement of children**

In most SC/US classes we observed, students were arranged in rows with a convenient aisle through which the teacher could pass to examine the children's work. In larger classes children were often farther from an aisle and consequently were not called upon as frequently to come to the blackboard. Some children sat at an angle or behind an open door that obscured their view of the blackboard. Children in some classes transferred to new places as the sun's rays moved across the room.

Recent research (Nigel Hastings unpublished report, UK Sunday Times 10/8/00) suggests that even very small changes in seating arrangements can have a dramatic impact in increasing student

learning. Hastings found that children seated in traditional rows or in pairs and concentrating on their own work improve their on-task time by 16 to 124% over children working in groups. Group work, the authors conclude, may be good for team projects but is not so good when children are expected to accomplish work on their own. The research suggests that group work may be useful for short periods to give some variation in the learning arrangements and for certain tasks but not as the main form of learning.

Several RV and HBGS teachers asked children to form groups for a particular learning task--in one case to develop a set of questions to ask a group across the room (this seemed a useful variation on the usual dry presentation of UNO materials). In another case the RV teacher formed groups and asked children to read the lesson--they did so individually and therefore the group arrangement did not make sense. The same variation took place in HBGS with some of the group work useful and some not.

#### **4. The calling of children to answer questions**

All children should have the same opportunity to answer questions before the group. If some children are systematically excluded then their motivation and capacity for learning is likely to decrease. Teachers in SC/US classes used different techniques for calling on children--both sequential and random order and with patterns that produced limited, substantial or complete coverage of students. If one method is applied consistently it may have disadvantages that eventually lower student learning. If the methods are varied the advantages and disadvantages may compensate for one another. The teacher who calls on students in one obvious order is more easily able to cover all students, but she/he may lose the attention of those who are only engaged when their turn is coming. If the teacher calls students randomly, the advantage is that students stay alert while the disadvantage is that it may be difficult for the teacher to remember which students have been called.

Another issue is the coverage of any single learning task: should every child have a chance to answer a particular type of question? Should only a few answer the questions? Will others learn by simply hearing the answer? Can choral responses ensure that every child knows the answer? The SC/US teachers varied in the way they addressed these issues, although it was not clear they knew the ramifications of what they were doing. Every class we observed had a teacher "blind spot" occupied by students who were not called upon as often as others. Sometimes it was a group occupying a physical location at the front or the back of a class, or a group that sat next to the wall. Sometimes it was a specific group of children: ones known not to answer correctly, ones who didn't raise their hands, or in one case the girl students in a mixed class. The systematically ignored students were generally more passive and less engaged in the learning task (although it is not clear that this was a result or the cause of being ignored).

What should the behavior of a teacher be when a student answers correctly or incorrectly? SC/US teachers again had a variety of ways of responding. Some simply said the answer was correct or incorrect and dismissed the student. Some asked for confirmation from the class (a technique that helps keep the others engaged). Some asked other students to correct the mistake (keeps others alert but leaves the mistaken student less confident). Some teachers gave the student at the board hints that allowed him/her to produce the right answer.

Finally, some teachers spent more time practicing skills than did students. These teachers wrote the exercise on the board (rather than letting a student write the problem or passage). Then they described step by step what a student should do, giving no opportunity to learn. In the classes of such teachers, children tend not to know how to solve new problems (even when they know how to do them) without a teacher's giving them detailed instructions. These children will almost certainly have difficulties with exams.

In the long run all of these behaviors in asking and eliciting answers impact student learning. None in itself is "correct" in all cases. Teachers need to be aware of the implications of different techniques and learn to vary them according to what is best for their students.

#### **B. The effective use of time**

**Relevance:** Using time effectively is also a classroom management issue but its importance deserves special attention. Included in this topic are issues of student engagement in the task, the time spent on the task, the appropriateness of the task, the pacing of activities to meet the learning needs of children, and coverage of the curriculum. All have a time dimension that is important.

All else being equal the more time spent in learning, the more a child will learn. However that assumes the time allotted for learning is spent effectively. What is important is academically engaged time rather than allocated time (assuming that enough time is provided). Engaged time varies depending on the way teachers organize instruction. Research shows that:

- The number of engaged hours in the school day are more important than the length of the school year.
- Student attendance and the coverage of the curriculum is more important than scheduled hours of instruction in increasing achievement. Emphasis on these two elements alone without other interventions will increase learning.
- In all countries of one study, language learning is emphasized over math. On average, language occupied 35 percent of the curriculum compared to math with 18 percent.

**SC/US schools use of instructional time.** Teachers in SC/US schools know how much time school authorities want them to spend on various subjects. Even when nothing else hangs on classroom

walls, the school schedule is usually displayed. In HBGS where only one teacher teaches the class, teachers follow the schedule flexibly. Indeed, it is common for HBGS teachers to take considerably more time on some subjects than others, for reasons that seem to include their feelings of comfort with a particular subject matter, their perception that children need more time to master some subjects, or because they have a set routine for teaching lessons and take whatever time is required to finish the routine. HBGS teachers conform with the international pattern noted above by spending more time on Pashto learning.

By contrast, most RV teachers followed the timetable precisely with gongs announcing the end of each half hour to 45 minute lesson so teachers know when to begin teaching the next lesson. Often the teacher is in the middle of an activity when the gong rings and hurries to finish in order to start the next lesson. RV schools where sufficient numbers of teachers exist follow a system of rotating specialist teachers to teach the various subject matters. This requires set lesson times to accommodate the scheduled movement of teachers. Such a system almost certainly causes loss of instructional time as teachers move between classes. Also the division of the school day into equal lesson lengths assumes that subjects can be taught in the same amounts of time. This is not necessarily true and may be one advantage HBGS with its single teachers maintains over RV schools. HBGS teachers rarely conform precisely to the schedules.

As a result of the system of "subject specialists" (even at the youngest grades) the RV school schedule seems "chopped up" and concerned more with addressing scheduling requirements than students' needs to learn. By the fourth grade comparatively little time is available for Pashto and math and much greater time is spent on other subjects taught through the recognizably deficient UNO materials and methods.

Most schools have a break of from 15 to 30 minutes to divide the school session in half. In a number of classes, as mentioned earlier, children came in up to one half hour after the end of break. If important subjects such as Pashto or math are scheduled after the break, an habitual late-comer might miss much of the learning in these subjects. It is possible that the children stand in line for the latrines during breaks and because of large numbers of students are late for class. This may be an important issue to address given the significant amount of instructional time that may be lost in this way.

Overall, however, of the time allotted for the school day (3 hours in HBGS and 4 hours in RV schools) little time seems to be lost to non-learning activities other than those already mentioned. Teachers take a few minutes to call the roll--sometimes more than once a day to ensure that children return from the break, but do little else that noticeably takes time away from instruction. Children are generally well-behaved and most are intensely engaged in their lessons. Since time is not wasted in non-academic activities, the way it is used during the instructional process (see below) is probably more important in affecting student learning.

## C. Teaching process

**Relevance.** Effective teachers use practices that increase the time spent in learning and use that time efficiently. According to McGinn and Borden 1995, they:

- achieve an orderly environment with few distractions
- use an orderly sequence to teach lessons (usually involving review, learning objectives, presentation of concepts and various kinds of practice)
- use a variety of methods and practice tasks, and
- pace lessons appropriate to children's abilities to learn

### 1. Teaching practices

Previous sections have talked about classroom management practices in SC schools that may affect children's abilities to learn, including the way children are arranged in classes, the way they are called to respond to questions and the way instructional time is used. This section looks at steps teachers use in whole or in part in instruction, and ends with examples of actual patterns used by teachers to teach math and Pashto in SC/US classes. The instructional steps described below cover most of the practices used by teachers to teach lessons in SC/US schools. When used together systematically, they form a set of steps that were found to be associated with higher student achievement in Pakistani schools.

**a. Setting an objective.** Several RV teachers were seen to write the objective of the lesson on the blackboard, and noted it orally to the students. Since the objective is not explicitly described in the instructional materials currently used in SC/US classes, teachers may not know precisely what the purpose of the lesson is. New supplementary materials (due in schools in 2001) based on BCL standards will help make lesson objectives clear. It is important that children and teachers know what the expected learning for that day should be, if for no other reason than that they can both know when the expected learning has taken place.

**b. Review of prerequisite knowledge.** Some teachers reviewed the lesson of the previous day, often as a memorized recitation, or by asking questions that were given to them in homework or that had appeared in the previous lesson. One teacher planned a set of review problems that led up to the work of that day's lesson (see second example for math below). Overall, however, review was generally conducted as a way of going over previous work and not designed specifically as preliminary to some new work.

**c. Presentation of new concepts and skills.** Most teachers start a lesson by asking children to open their books to a new lesson, and then begin asking questions about the new problems in math, or asking children to read the Pashto lesson before the class. Female teachers are more likely than

male teachers to ask children to work directly on the new lesson with little or no formal presentation or explanation. Male teachers on the other hand spend more time "lecturing," modeling the work to be done and writing on the blackboard, sometimes for as much as 5 or 10 minutes. Most presentations of Pashto involve reading the lesson first. Teachers vary in whether they read it themselves or let students read it, usually sentence by sentence, with little attention given at that point to understanding the meaning of the passage. Part of presentation may also include extracting difficult words and defining their meaning on the blackboard in different ways (through definitions, synonyms, or antonyms). The better teachers may ask children to write the new words in sentences to show they know their meanings. Eventually teachers may also ask comprehension questions. Occasionally a teacher has students develop questions to ask other members of the class.

Math often follows a similar pattern of starting immediately with problems from the book, either modeled first by the teacher or directly solved by students with the teacher offering step by step guidance. Explanation of the underlying concepts is infrequent, even though students usually are required to go through complicated calculations to show that they know each step needed to arrive at an answer.

In most classes it is difficult to differentiate a presentation stage of teaching from a guided practice stage. Teachers seem to expect children to assimilate the concepts as they go along rather than ensure that they understand them. Overall the teachers emphasized very mechanical ways of knowing--the act of reading properly rather than an understanding of what is read, the practice of writing correctly following dictation rather than the use of writing as a tool to express ideas. What is being learned for the most part achieves only the lower level thinking skills of Bloom's six level taxonomy: knowledge, comprehension, application, analysis, synthesis and evaluation.

Some of the GTZ procedures in math force a kind of explanation upon children through asking for extra steps in solving problems (showing that multiplication is the reverse of division, for example). Teachers still teach these steps mechanically, however, rather than using them as an excuse to explain. Consequently the potential in the "presentation" step for learning new concepts and skills is usually under-utilized.

**d. Guided practice of new skills and concepts.** Theoretically a period of "guided practice" should develop children's early confidence in the new material and help the teacher know when they are ready to apply their skills on their own. In a systematic approach, guided practice often comes after a presentation that explains and illustrates the new skills and concepts. Guided practice generally involves a whole class of students working on relevant problems and examples under the close supervision of the teacher, often using the blackboard to write a "problem" for children to solve. In some SC/US classes guided practice takes up the entire lesson period with the aim (it seems) of seeing if individual children can correctly complete the practice problems posed by the teacher. In some classes teachers do not go beyond the problems (math) in the book which are

usually not enough to provide a question per child. In Pashto, the class reads the lesson again and again, one line per child. Given the "blind spots" for calling on students described above and the limited number of exercises, it is rare to see all children being asked to perform. It would be difficult given these limitations for a teacher to know if all children are becoming confident in the new concepts and skills. Despite these limitations, however, children do learn to read, write, and do math problems, albeit mostly mechanically.

An important part of guided practice is for children to be exposed to exercises in a variety of forms and formats. They should be able to do a math problem for example that is presented horizontally or vertically, or in comparable words. They should be able to do exercises presented at Bloom's various levels of thinking skill (see above). Only when all students can complete a variety of exercises can a teacher know that they have comprehended the new concept and are able to apply it in all the forms it may appear.

**e. Independent practice.** Independent practice is essential in the learning process, for it allows children to practice what they have learned by applying it to new problems. Most of the SC/US teachers short-change independent practice conducted during class time and assign this kind of practice to children as homework. Very little time is spent in independent practice during the lesson even though it is important in building the confidence of children to cope with new material. Conducted during class time, independent practice can be still be monitored by teachers with immediate reinforcement of correct responses.

Another reason for independent practice is that in order to perform accurately on exams students need to know how to read instructions and understand what a problem requires without a teacher's help.

**f. Homework.** More often than not in SC/US classes independent practice is left to homework assignments. The large majority of teachers, however, defeat the purpose of independent practice by assigning children memory work, copying textbook passages, or transferring correct answers from the blackboard to their workbooks or notebooks.

Homework gives teachers the opportunity to determine whether students have grasped the point of new materials. However, although they tend to check memory work orally, many SC/US teachers do not check written homework at all and when they do there is rarely evidence that children correct the mistakes teachers find. It is even rarer to see teachers re-correct student books after corrections have been made. Teachers who assign mainly copying as homework may assume that children's work will be as free from mistakes since the models they imitate are correct. We observed that this was not a true assumption.

The notebooks and textbook exercises of SC/US students varied considerably in content and appearance from class to class. Some were neatly written filling page after page of exercises and passages. These were usually the ones that were consistently corrected by teachers. At the other end of the scale were notebooks and textbooks that had few pages filled, many mistakes, and much random scribbling. These were almost never corrected by teachers, and because even the textbook exercises had not been filled in correctly or completely, one wondered whether the concepts have been learned at all. Independent practice whether in class or at home requires a "consequence" if it is to serve its purpose---it must be seen and corrected by a teacher, or a student is not likely to learn from the practice and even may not bother to do it. These are sometimes called "contingent learning activities,"<sup>1</sup> that is, ones with a consequence.

**g. Assessment.** Most good teachers develop ways to determine whether their students are grasping the concepts/skills or not, before moving on to new work. They do this by asking questions and checking written work. Presumably, SC/US teachers grow to know some of their students' capabilities by calling on them in class. But as we noted certain children are almost never called upon. If teachers do not correct notebooks they also miss an opportunity to know how much children have learned. We did not see any teacher conducting a systematic review of previous work to determine whether children remembered what they had learned before. Even were teachers to know about their students' progress, there is little flexibility in RV schedules to spend more time on a particular skill. Most teachers complete a lesson a day or break the lesson into parts defined (one presumes) by the teachers' guides. In some classes, one paragraph a day was completed in Pashto which meant it took three days before a 3-paragraph passage could be comprehended. Other lessons covered considerable ground in only one day. Whereas teachers might lengthen the time spent on single lessons, there is the conflicting importance of completing as much of the curriculum as possible.

Assessment in these SC/US classes might be made easier and cover all students if teachers administered frequent short tests of the main learning objectives covered during a specific time period. Teachers would need help in developing the tests at first to make sure they did not rely on questions of memory. The present system of mid and end-of-year exams comes too late to ensure that students are learning what is expected of them throughout the year.

## 2. Subject specific strategies

**SC/US teaching of math and Pashto.** As noted above the same amount of time is allotted on schedules to teaching math and Pashto in the SC/US schools. This schedule (which is the same for all schools) appears more closely adhered to in RV schools where there is the rotation of subject

---

<sup>1</sup> This concept can usefully be applied in multi-grade classes where activities assigned to one group of students while the teacher works with another require evidence of completion like completed exercises or children are not likely to remain engaged in the task.



specialist teachers, and often ignored in HBGS where single non-specialist teachers decide how much of the time to devote to each subject. HBGS teachers varied in the amount of time they devoted to each subject but generally speaking they tended to spend more time on Pashto than math, and that was especially true for teachers who were unsure of their abilities in math.

Both systems have their particular advantages and disadvantages: the RV system ensures a minimum amount of time spent teaching each subject, usually by a teacher who feels confident in the subject matter. Yet it does not permit flexibility of scheduling to accommodate a subject that is more difficult or takes longer to learn. The HBGS system on the other hand accommodates the learning needs of children, yet often has teachers that feel less confident in one or the other subject matter (and therefore may be letting their preferences dictate the attention paid to each subject). The disadvantages of the HBGS are easier to remedy without changing the basic scheduling of instruction. Teachers can be offered subject-content training to upgrade their skills and provided assessment tools to ensure they are giving adequate attention to both math and Pashto subjects.

Below are several patterns observed in SC classes for teaching math and language arts skills. These examples are presented to show some techniques teachers use and should not be taken as necessarily "good" or "bad."

### **Two patterns observed for teaching math.**

**Math observation 1** (Mixed RV school, grade 5, male teacher, 10 female students present; 30 minutes duration):

The math specialist enters the class with a friendly smile, and asks the girls how they are and why they feel good. He says the topic today is the addition of fractions. He calls a girl (his daughter) to the front and breaks a piece of chalk in half. "What is this?" he asks holding up one piece. She answers, "One-half." "If we put the two pieces together what do we have?" "One whole." "If I break the chalk in three pieces what is one piece called?" "One third." "Put together they are two-thirds or with all together they become one again."

The teachers asks one girl to get a bucket. The teacher puts four different items including a glass together and shows that the glass is not one-quarter because the items are different. He then shows on the blackboard with shaded circles what  $\frac{3}{4}$  means. Then he puts more complicated problems on the board ( $5 \frac{1}{8} + 3 \frac{1}{4} =$  oooooooo plus a fraction he represents in shaded circles as ooo\oooo) and he shows them how to find a common denominator and then to do the addition. He finishes with a subtraction of fractions problem whose answer is a whole number. Most of the illustrations have been performed by the teacher.

Now the class turns to a new lesson and the children take turns reading a passage. Again he calls on his daughter to read the new problem. The teacher takes off the lid of the water cooler and removes 20 cupfuls of water to put in bucket. He asks the girls how many cups of water are in the bucket. They say "20." He removes 5 cupfuls and throws them outside, asking the girls how many now are in the bucket. They reply "15." He removes another 2, and they say there are now 13. He continues to give examples based on the same 20 denominator that is the example from the book. The students read problems and girls take turns writing problems on the board and solving them.

This teacher demonstrates the new concepts in very creative ways but focuses his attention on a small number of students and provides no time for independent practice to ensure that all students are learning the skills.

**Math observation 2** (Mixed RV school, grade 5, male teacher, 21 male students present):

The following is an excerpt from a pattern used by a teacher who expressed the need for hands-on practice by students if they are to become proficient at math (unfortunately we did not see the end of this lesson):

The teacher writes the lesson's objective on the board, "Subtraction of Fractions," and reads it aloud to the students. He tells the students that he wants to give them some simple problems from previous lessons that will prepare them for this day's lesson. He gives them a subtraction problem  $\underline{\quad} - 8 = 2$  and asks for the missing number. He then asks the students to explain an easy way to arrive at the answer. The children say that  $8 + 2$  can be added together to find the missing 10. Addition in other words, he points out, is the reverse of subtraction.

The teacher asks the children to do another problem. This time it is a problem involving the addition of fractions:  $4 \frac{3}{4} + 3 \frac{2}{7} = \underline{\quad}$ . One child comes to the board and solves the problem showing each step along the way. At one point he gets stuck and a chorus of children shout out what he should do next. The teacher stops them and says the student can do it himself, which he does after the teacher asks a few questions. When the problem is done, the teacher reiterates that today's lesson is about subtraction of fractions and puts a fairly simple subtraction of fractions problem on the board. The children begin reducing the fractions to ones with common denominators as they had done in the addition of fractions problem and the teacher asks for suggestions about how they might then solve the problem. They do it without any difficulty.

In the lesson above the teacher leads the children through a set of exercises that demonstrate the logic of the operations to come. In doing so they learn the new concept easily with little explanation.

## Two patterns observed for teaching Pashto

**Pashto observation 1** (girls-only RV school, grade 4, female teacher, 22 female students present, 20 min. duration):

Students are asked to read the Pashto lesson aloud to themselves as the teacher walks up the aisle listening to see that they are doing so. The teacher announces the topic of the passage, and then asks the girls to read one sentence at a time in order around the room. The teacher asks comprehension questions in a random sequence and individual students respond with memorized responses. A girl comes to the blackboard and the teacher dictates a sentence which she writes. The teacher asks if the sentence is correct and another student comes to correct a mistake. This continues until all the sentences of the passage are completed and corrected. The teacher walks around the room correcting the students' notebooks where they have copied the lesson passage from the book. The children look at the teacher's comment (good or otherwise) but do not look at their mistakes or correct them. The teacher finishes checking about a third of the books, from those pushed in front of her. She goes to the board and writes words from the lesson and asks students to make complete sentences using them. Then she asks them to write synonyms for each word. She has spent 20 minutes on Pashto; the schedule calls for 40 minutes. The entire lesson appears to be review of work they have done before, probably to impress us with what the students have learned.

This example shows a fairly conventional pattern for teaching language arts in SC schools. While it is not very imaginative, the teacher does have a system for teaching what she believes to be critical points and is conscientious about providing a variety of tasks and checking children's learning. The children read and write well but there is no way of knowing whether the children comprehend the entire passage.

**Pashto observation 2** (Mixed RV school, grade 4, male teacher, 23 female students present, 45 min. duration):

(After the break) The teacher asks a girl to read the passage from the previous day, and then he asks comprehension questions of several of the girls. Children open their notebooks to the homework page and the teacher corrects notebooks of about half of them (mainly the most aggressive). One by one in sequence the girls now reread the passage, a line at a time, repeating the passage until each has had a turn. They stop in the middle of the passage. The teacher asks them to read by themselves, which they do, rocking back and forth. He then asks for the words that had been new or difficult, and writes these seven words on the board. He asks the girls who had not known the words to come to the front and write their meanings.

Next he divides the girls into two groups and asks each group to develop questions on the lesson that they can ask the other group. Then one girl from A group picks a girl from B group and asks the question. After she answers it is her turn to pick a girl from A group and ask her a question. So it goes until each girl has asked and answered a question. One shy girl makes a mistake and the others laugh. The teacher encourages her until she gets it right. When this finishes a student again reads the entire passage, and then everyone takes turns reading line by line.

The teacher starts a new Pashto lesson using the BCL book (instead of the GTZ guide). The lesson is on "*jirga*," he says although doesn't explain what language competency is involved. He disappears for a moment and comes back with two men (the *chowkidar* and someone else) who put on an impromptu show of having a disagreement and starting to fight over one man's sheep getting into the field of the other. The teacher intervenes and they sit down (to hold a *jirga*) to negotiate a settlement. They shake hands and the two men leave. The teacher asks students about the meaning of a *jirga*. Afterwards the teacher puts 4 words in a box and writes sentences that are definitions of the words. Students connect definitions with words. They then give synonyms of words. The gong rings and the same teacher begins teaching a history lesson.

In this second pattern the teacher uses techniques not observed elsewhere. He assigns a group task that later requires individual girls to show they have participated in developing the questions to ask the opposite group. Later the "skit" provides a concrete example of the lesson topic. The lesson is lively and engages the attention of the students fully.

## **VII. Teacher support personnel--supervisors and resource room facilitators.**

A school system cannot achieve quality standards without a support system for its teaching staff. As practiced, this support service usually has two functions: to see that school staff meet certain system standards (administrative responsibility) and to work with teachers to improve their teaching capacity (in-service training). The personnel who perform these duties also have a role to play in collecting information on system performance. Although most systems collect this information in one form or another, most do not use this data effectively to improve program performance.

## A. Supervision

**Relevance.** Supervision is one way of ensuring that the academic program meets general expectations. Research has shown that:

- Supervision can have more impact on teacher performance than other kinds of in-service training.
- Supervision can be carried out effectively by external supervisors or by school head teachers
- Regular supervision and training of teachers in classrooms, and regular in-service training can help overcome the fact that pre-service training does not always have a long-lasting effect on student learning.

In general, although the idea of regular supervision may be sound, its practice around the world has often not met expectations. Some of the problems include the confusion between "inspection" and "quality improvement" roles, a lack of understanding of how support can be provided, the use of observation techniques that misidentify critical factors, the large number of schools and teachers that are assigned, and the difficulty of finding and cost of transport. These difficulties do not take away from the fact that supervision and support for quality improvements are important functions.

**Supervision in SC schools.** The role of the Field Education Supervisor (FES) appears to have evolved from the time that SC/US took over the administration of Afghan refugee schools from UNHCR in 1995. Overtime more schools, children and responsibilities have been added to their oversight activities. There is no doubt that the FES should be given a large share of the credit for the positive characteristics of SC/US schools that have been described elsewhere. This contribution should not be under-estimated for it provides a fine foundation upon which to build future improvements.

In considering the FES role it is important to note the special conditions of education in Afghan refugee camps. Resources are scarce and consequently the budget only allows for a limited number of supervisors. Qualified female supervisors who can travel are difficult to find. The schools are widely scattered and demands on the time of supervisors for salary payment, distribution, reporting, and other administrative tasks limit the time they can spend on academic improvements. Of 13 RV teachers interviewed, 10 reported one or more FES visits to their classes in the previous month and of these 7 out of the total 15 visits were reported to be for the purpose of classroom observation. The rest involved taking attendance, and distributing stipends and other supplies. The greatest number of FES visits occurred to classes in Muslim Bagh and Saranan, and the fewest to Loralai.

Indeed the time that can be spent on teaching-learning improvement by this relatively small staff of FES is so limited that this reality should be recognized and a more feasible means devised to accomplish program improvements and the other functions they routinely carry out. At this time

rather than a critical review of their current activities, it may be more appropriate to do a full review of SC/US program needs and work out how the present staff might more realistically play a part in an improved schooling program (see suggested School Improvement Program in Annex). In short this staff may in future be well-placed to take on a leadership role in managing the resources available for quality improvements, including such resources as training, assessment, communication and on-going program support to respond to needs identified at the local level.

## **B. Resource Room Facilitators**

**Relevance.** In schooling systems that provide only the most basic forms of education it may be important to enrich the program with expanded learning opportunities. Many school systems do this with conveniently located, comparatively more-resourced centers for learning. A facilitator either arranges special presentations in the center or visits a set of nearby schools to bring programs to children. When done well these services can appreciably add to the learning of children.

Some of the problems that have been faced in other parts of the world with these services are difficulties in coordinating presentations on certain topics with curriculum requirements, the distance, transport costs, and numbers of schools, grades and children that a facilitator must serve, limitations in the availability of instructional aids, and a lessening of enthusiasm for such programs over time. After time passes the lack of a well-defined niche in the schooling program often reduces the effect of such programs.

**Resource room facilitators (RRF) in SC/US schools.** The RRFs are more highly qualified (in academic terms) than most other local staff and receive higher salaries. The ones we met were creative and enthusiastic about their work. The resource centers themselves were usually fairly large rooms with posters and other learning materials displayed around the room. In some cases the posters (shapes, colors, alphabets and numbers) might have been more useful if displayed permanently in the relevant-age classrooms. In other cases some of the anatomical diagrams seemed too complicated for most students (although they could well be used to address these topics at a general level). The display suggested that the range of materials was dictated more by what was available in the big-city markets, than the needs of the curriculum. Some creative hand-made aids of locally available materials had the same drawback of probably reflecting some other reality than the needs of the program. Logistically it seemed an impossible task for an RRF to present appropriate materials to all the classes studying any particular topic, or even to coordinate the majority of his programs with the topics being studied. Some seemed so distant from the schools that they serviced that it was questionable how often they could actually visit the schools.

We met but did not see an RRF at work in classrooms. Of the 13 RV teachers we interviewed, 8 said there was a resource room nearby. Only 3 teachers said their class had been visited by an RRF

in the previous month, and during these visits the RRFs taught a health lesson, a science lesson, and in one case observed a class. The remaining teachers said that they usually visited the resource room themselves when they needed teaching materials. Since the RRF role was originally intended to support grades 7 through 10, especially with science education and later expanded to add child-focussed health education and monitoring of library box use, it may not be appropriate for them to spend much time teaching primary classes. The Quetta office also reports that the RRF sometimes take a role in community-school relations and other local matters where their higher status is useful. It was our impression that the RRFs were under-employed, and consequently that they might be able to play a useful role in coordinating local school improvement programs, in conjunction with head teachers and FES staff. (See Annex on School Improvement Program)

### **Concluding note:**

This study has looked primarily at what exists in SC/US refugee schools, how education services are currently delivered, and what factors may be impinging on the learning outcomes of that delivery.

The intent in this study is not to prescribe specific teaching behaviors for the SC/US schools. Each class has different needs and each teacher feels comfortable with different methods and kinds of learning tasks. The intent instead is to describe what was observed in the SC/US classes as a take-off point for discussion, and to hold up for consideration world-wide research findings and conventional wisdom about the implications of specific teaching practices for student learning. If students show poor performance on achievement tests, it will be important for FES, head teachers, RRF and teachers to reflect on these findings to determine what steps to take to ensure children will learn what is expected of them.

### **Postscript:**

This study has looked at what exists and not at what does not exist in the SC/US school system. The two most serious gaps in Afghan refugee education must be mentioned. They relate to the external relevance of the current education program (i.e. the extent to which the program meaningfully connects with follow-on programs and/or children's needs in the future). The two gaps include, first, that there is no meaningful program available now for children to continue their education after the primary level. The existing post-primary grades use an out-dated curriculum that is known to be of inferior quality. SC/US should be commended for making post-primary grades available and doing the best it can with available resources. Given its limited resources and focus, however, SC/US cannot under the circumstances be asked to do more. Consequently there is a gap that makes the post-primary years an educational emergency for Afghan children. This gap needs to be addressed by the larger assistance community as soon as possible.

The second gap is one of second and foreign language learning. The reading and writing of Pashto will not confer more than modest advantages on Afghan children. It will not increase their employability nor make them eligible for expanded learning opportunities. However modest the effort, SC/US and the assistance community in general should make opportunities available for Afghan children to learn other languages starting at the primary level. Even though English, Dari, and Urdu are taught in SC schools starting in Grade 7 the quality of that teaching-learning is said to be weak. At present there are technologies available to teach English at primary and higher levels, that do not depend on teachers being strong in that language. The matter of which languages to teach should be determined based on which languages parents and educators feel would be most useful for Afghan children and on the availability of resources to teach the languages.



الف : ح ، و ، ا ، ن

ب : بن ، و ، و ، ن ، ح ، ی

ج : ا ، ف ، غ ، ا ، ن ، س ، ت ، ا ، ن

Write words in the correct order to make sentences.

۷ - لاندی نامنطی کلبی درکر شوی دی . تاسی کلبی په داسی ډول ولیکی چې

سسی جهلی کینی جوړی شی .

الف : د سلیم ، نومبزی ، مشر ، ورور ، حامد

ب : مرسته ، سره ، ستا ، زه ، کوم

Write the sentences in the correct order.

۸ - لاندی بی ترتیبه جهلی په ترتیب سره ولیکی .

حلیه چای چینی .

دی چای خان ته په پیاله کینی واچوی .

دا د چایو د پاره اوبه ایشوی .

لومړی حل حلیه په چاینکه کینی اوبه اچوی .

۹ - د لاندی جهلو تش کایونه په مناسبو کلبو ډکی کړی . Write the correct verbs.

الف : احمد دهره ورخ بنوونجی ته

ب : پښتنه د ماما کور ته تللی

ج : زده کوونکی د لوپو په میدان کې لوبی

Change the words to their plural form.

۱۔ لاندی مفردی کلبی پہ جمیع کلبو سره واری ،

الف : هلك \_\_\_\_\_

ب : نحر \_\_\_\_\_

ج : لاس \_\_\_\_\_

د : کتاب \_\_\_\_\_

Change the words to their feminine form.

۱۱۔ لاندی مذکری کلبی پہ مونت کلبو واری :

الف : هلك \_\_\_\_\_

ب : معلم \_\_\_\_\_

Change the words to their masculine form.

لاندی مؤنثی کلبی پہ مذکر کلبو واری :

ج : چرگه \_\_\_\_\_

د : ظالمه \_\_\_\_\_

Punctuate the sentences.

۱۲۔ دلاندی جہلو پہ پای کی سہی ننبی (علائی) ولیکی .

الف : ستا کور چیری دی

ب : زما کور پہ کہپ کی دی

# د دریم ټولگی د ریاضی د مضمون پوښتنی

Write the missing numbers  
۱ - نامعلوم عددونه ویکلی؟

$$\begin{array}{r} \underline{\quad\quad} \quad \underline{\quad\quad} \quad \underline{\quad\quad} \quad \underline{\quad\quad} \quad \underline{\quad\quad} \quad \underline{\quad\quad} \quad \underline{\quad\quad} \quad \underline{\quad\quad} \quad \underline{\quad\quad} \quad \underline{\quad\quad} \\ 1001 \qquad\qquad\qquad 998 \\ 998 \end{array}$$

۲ - د هغه عدد مقامی قیمت ویکلی چی کرښه تر لاندی نیول شوی ده؟ ۴ ۹۵  
What is the value of the underlined digit? 564

۳ - عدد د مقامی قیمت په جدول کښی ویکلی؟  
Write the number on the table

Thousands زریر	Hundreds سلیز	Tens لسیز	Ones یویز

۵-۷۴  
5074

۴ - عدد ته انکشاف ورکړی؟  
Expand the number

$$\begin{array}{l} \text{زریر} \quad \text{سلیز} \quad \text{لسیز} \quad \text{یویز} \quad = \quad 1104 \\ \text{Thousands} \quad \text{hundreds} \quad \text{tens} \quad \text{ones} \end{array}$$

- ۵

$$\begin{array}{r} 4098 \quad \text{ب} \\ + 144 \\ \hline \end{array}$$

$$\begin{array}{r} 6598 \\ + 144 \\ \hline \end{array}$$

$$\begin{array}{r} 3742 \quad \text{الف} \\ + 1147 \\ \hline \end{array}$$

$$\begin{array}{r} 3762 \\ + 1147 \\ \hline \end{array}$$

There are 1131 girls and 956 boys in school. How many students altogether.

۶- په یوه ښوونځی کېښی ۱۱۳۱ تنه نجونې او ۹۵۶ تنه هلکان دي.

د ټولو زده کوونکو شمیر څو تنه دي؟

$$\begin{array}{r} 7435 \\ - 2147 \\ \hline \end{array}$$

$$5388 \quad \text{ب.}$$

$$\begin{array}{r} 7435 \\ - 2147 \\ \hline \end{array}$$

$$\begin{array}{r} 4306 \\ - 1145 \\ \hline \end{array}$$

$$3161 \quad \text{الف.}$$

$$\begin{array}{r} 4306 \\ - 1145 \\ \hline \end{array}$$

A school receives 2850 books. 550 books are distributed. How many books remain in

۸- یوې ښوونځی ته ۲۸۵۰ کتابونه ورکول شوي دي. ۵۵۰ کتابونه

ویشل شوي دي. څو کتابونه پاته دي؟

$$6 \times 8$$

$$48 = 4 \times 12 \quad \text{ب.}$$

$$49 \div 7$$

$$7 = 49 \div 7 \quad \text{الف.}$$

Habibullah gives nine walnuts each to six children. How many walnuts altogether?

۱۰- حبیب الله د خپلو شپږو ماشومانو وهر یوه ته ۹ دانې چارمغز ورکړي.

ټولې څو دانې چارمغز د لاسونو کې دي؟

There are 64 flowers. Share the flowers equally between 8 vases.

۱۱- ۶۴ گلان موجود دي. هغه په مساوي توګه په ۸ ګلانیو وویشي. هر

ګلانی ته څو گلان ولري؟

$$\begin{array}{r} 1145 \\ \times 5 \\ \hline \end{array}$$

$$5725 \quad \text{ب.}$$

$$\begin{array}{r} 1145 \\ \times 5 \\ \hline \end{array}$$

$$\begin{array}{r} 242 \\ \times 3 \\ \hline \end{array}$$

$$726 \quad \text{الف.}$$

$$\begin{array}{r} 242 \\ \times 3 \\ \hline \end{array}$$

Use a ruler to measure the length of the line. Remember

۱۳- دیوه خط کش په مرسته لاندی خط اندازه او جواب پی ونیکی .  
to write the measuring unit with your answer.  
په یاد ولری چی دانلازی واحد د جواب سره ونیکی ؟



Complete the sentence (with the correct unit of measurement.)

۱۴- لاندی جملی دانلازه کولو په ستم واحد ستره بشپړی کړی .

الف . ستاسی د لویشتی او ز د والی تقریباً ۱۴ \_\_\_\_\_ دی .

ب . دیوی بڼخی وزن تقریباً ۶۰ \_\_\_\_\_ دی .

$$6 \overline{)36}$$

$$4 \overline{)48}$$

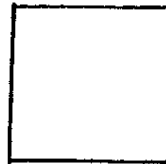
-۱۵

$$6 \overline{)36} \quad \text{ب .}$$

$$4 \overline{)48} \quad \text{الف .}$$

Shade  $\frac{1}{4}$  of the square.

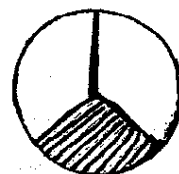
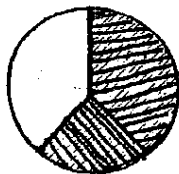
۱۶- د مربع  $\frac{1}{4}$  برخه توره کړی ؟



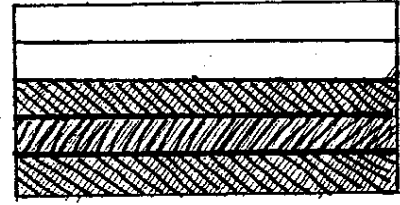
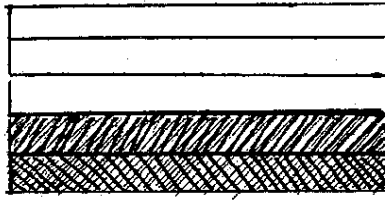
Write the fraction that is shaded.  
۱۷- د توری سوی برخی کستر ونیکی ؟



-۱۸



$$\underline{\hspace{2cm}} = \frac{2}{3} + \frac{1}{3}$$



\_\_\_\_\_ =

 $\frac{2}{5}$ 

-

 $\frac{3}{5}$ 

Circle the bigger fraction.

۲- دلوی ترین کسٹر پر شاوخوا کرښه راتا وکړی؟

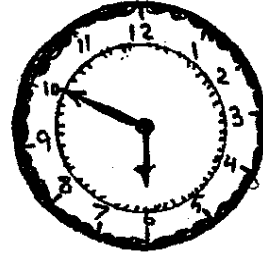
 $\frac{4}{5}$  $\frac{1}{5}$ 

Najeeba's mother has 76,000 Afz. She buys oil for 28,500 Afz and flour for 21,000 Afz. How much money is left?

۲۱- دنجیبې مور ۷۶۰۰۰ افغانۍ درلودې. هغې د ۲۸۰۰۰ افغانیو غوړې او د ۲۱۰۰۰ افغانیو مور ۷۶۰۰۰ افغانۍ وپاته دي؟

Write the time.

خوږجی دی؟ وی لیکي.



Ali goes to the bazar at 9.25. He returns home 35 minutes later.

۲۳- علی پر ۹:۲۵ بجو و بازار ته ځي. هغه ۳۵ دقیقې وروسته کور ته راځي. هغه پر څو بجو کور ته راغلی دی؟

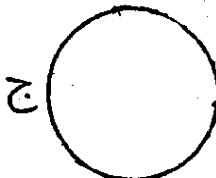
Draw a line from the name to the shape.

۲۴- هر رسم ستوی شکل دهغه د نوم سره دیوی کرښې یواستپه وښلولی.



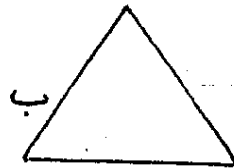
د

مربع



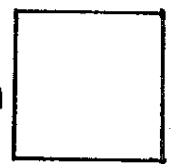
ج

دایره



ب

مستطیل



الف

مثلث

## Test\_2

د دريم ټولگي د رياضي او پښتو د ازمويني پوښتنې

نوم :  
 عمر :  
 جنس : هلک - انجلی  
 مورني ژبه : دری  
 پښتو  
 نورې

د ښوونکي نوم :  
 د ښوونځي نمبر :  
 د " ډول : HBGS  
 کپ :  
 نېټه : / /  
 FES :  
 Shift : Am - Pm

RV(Boys) mix      RV(Girls)

This is identical to test 1  
but using different numbers etc.

۱ : نامعلوم عددونه ولیکی :

$$1002 \quad \underline{\hspace{2cm}} \quad \underline{\hspace{2cm}} \quad 499 \quad \underline{\hspace{2cm}} \quad 997$$

۲- دهغه عدد مقامی قیمت ولیکی چې کرسنه تر لاندې لیکل سوی ده  $23\frac{1}{2}$

۳- لاندی عدد د مقامی قیمت په جدول کښې ولیکی .

یونیز	لسیز	سلیز	زرین

۲۳.۶

۴- لاندی عدد ته انکشاف ورکړی .

$$\text{یونیز} \quad \underline{\hspace{2cm}} \quad \text{لسیز} \quad \underline{\hspace{2cm}} \quad \text{سلیز} \quad \underline{\hspace{2cm}} \quad \text{زرین} = 1.16$$

۵-

$$\begin{array}{r} 7285 \\ + 1416 \\ \hline \end{array}$$

ب :

$$\begin{array}{r} 3264 \\ + 165 \\ \hline \end{array}$$

الف :

۶- په یوه ښوونځی کښې ۱۱۴۱ تنه ځوی او ۹۵۶ تنه هلکان دي . دپولو زده کوونکو شمېر څو تنه دی ؟



۷ :-

$$\begin{array}{r} 47.8 \\ - 1175 \\ \hline \end{array}$$

ب :

$$\begin{array}{r} 6327 \\ - 2178 \\ \hline \end{array}$$

الف :

۸ :- یوی بنوونجی ته ۱۷۵۰ کتابونه وړل سوی دی . ۸۵۰ کتابونه ویشل سوی دی . نو کتابونه پاته دی ؟

۹ :-

$$\text{_____} = 7 \div 49 \quad \text{ب :}$$

$$\text{_____} = 6 \times 8 \quad \text{الف :}$$

۱۰ :- یو کیک پنخونکی په هر کارتین کسبې ۸ کیلونه اېږدی . هغه اوه کارتینه ډک کوی . د ټولو کیلونو شمېر خودی ؟

۱۱ :- ۴۲ دانې شیرینی د ۷ ماشومانو تر مینځ ویشل سوی دی . هر ماشوم ته نو دانې شیرینی رسیدلي دي ؟

۱۲ :-

$$\begin{array}{r} 142 \\ \times 4 \\ \hline \end{array}$$

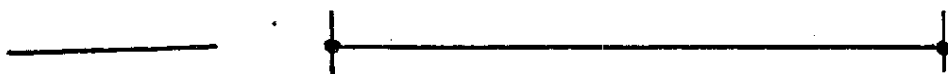
ب :

$$\begin{array}{r} 1234 \\ \times 4 \\ \hline \end{array}$$

الف :

۱۱- د یوه حه س په مرسنه دندې حه اندره او جواب پ وینئ .

په یاد ولری چې د اندازی واحد د جواب سره ولیکی :



۱۴- لاندې جملې د اندازه کولو په سم واحد سره بشپړی کړئ .

الف : ستاسې د گوتی اوږدوالی تقریباً ۷ — دی .

ب : دیوې ښځې وزن تقریباً ۶۰ — دی .

۱۵-

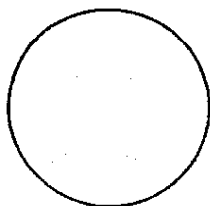
$$\sqrt[3]{63}$$

ب :-

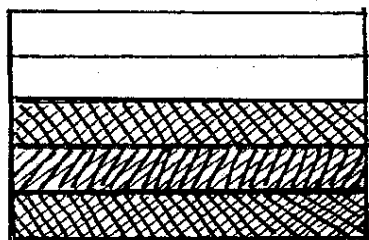
$$\sqrt[3]{25}$$

الف :

۱۶- د دایرې  $\frac{1}{4}$  برخه توره کړئ :

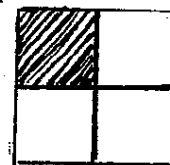
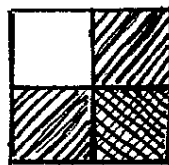


۱۷- د توری سوی برخی کسر ولیکی :



\_\_\_\_\_

۱۸-

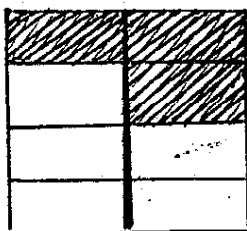


$$\frac{2}{4} + \frac{1}{4} = \frac{3}{4}$$

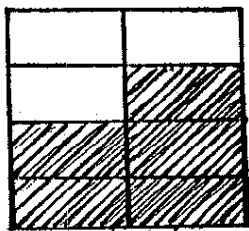


\_\_\_\_\_ =  $\frac{2}{5}$  -  $\frac{4}{5}$

۱۸- د غټ کسر پرشاونخوا کرښه را تاوکړي :



$\frac{2}{8}$

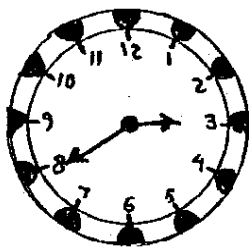


$\frac{2}{8}$

۲۱- د فتيح پلار ۶۶۰۰۰ افغانی درلودلی. دغه د ۲۶۵۰۰ افغانیو غوري او د ۷۵۰۰ افغانیو اوبه را نیول. نومره پیسی وریاته دي ؟ \_\_\_\_\_

۲۲- نجیبه پر ۸:۱۵ بجو د ښوونځي خوا ته حرکت کوي. دغه ښوونځي ته ۴۵ دقیقې وروسته رسېږي. دغه څه وخت ښوونځي ته ورسیدله ؟ \_\_\_\_\_

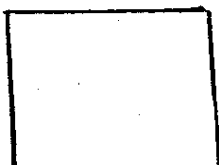
- ۲۳



خوبجی دی؟ وټی لیکي.

۲۴- هر رسم سوی شکل دهغه دنوم سره دیوی کرښې په واسطه وښلوی.

دايره



مثلث



مستطیل



مربع



different examples.

۱- دلاندي بکس نخه هغه لغاتونه غوره کړي چې يو ډول معنا ولري او دخپل يو ډول معنا لغاتو په څنگ کښي ئي وليکي .

الف : ضرر \_\_\_\_\_  
ب : گټه \_\_\_\_\_

تيز ، تاوان  
فائده ، ښکلې

۲- دلاندي لغاتونو ضد وليکي :

الف : ورځ \_\_\_\_\_

ب : ناپوهي \_\_\_\_\_

۳- دلاندي بکس نخه ښمگري جملې د سهو کليو په ليکلو سره بشپړي کړي :

الف : دا احمد پلار د هغه نه ..... دی .

ب : موټر تر آس ..... دی .

زور ، زورور

۴- دلاندي قصه په غور سره ولولې او پوښتوته ئي سم جوابونه وليکي .

### سوی او سویه

کمال یوسوی او سویه لري . هغه د خپلو سویو له پاره په کور کې جلا کڅای جوړ کړي دی . هغه سوی ډېر ځیرک دی . کله کله کڅان د خږ کانه شاته پټوي . سویان چې لوږې کوي او ټوپونه وهي ، کمال ورته ډېر خوښېږي او ننډاره ئي کوي . جباله د کمال مور یوه مهربانه ښځه ده ، هغه هر سهار او ماښام د کمال سویانو ته شنه واښه اچوي .

الف :- دلاندينيو لغتونو سې معنای په ښه کړي .

ټوپونه :

- تگ

- خپرونه

- راتلل

ب :- ننداره :

- کتل

- تئل

- خورل

لاندينې سې جېلې په (ص) او غلطي جېلې (غ) توري سره په نښه کړي .

ج : — هغه د خپلو سويانو له پاره په کور کې جلاځای جوړکړي دي .

د : — دکمال سوي کله کله ځان په خاورو کې پټوي .

ه : — دکمال سويان چې لوبې کوي او ټوپونه وهي ، هغه خفه کېږي .

و : — دکمال مور هر سههار او ماښام دهغه سويانو ته شنه واښه اچوي .

ز :- دلوستل شوی متن اساسی موضوع څه ده ؟ پر صحیح جواب کړسېنه راناوکړي .

- دکمال مور

- دکمال کتابونه

- دکمال سويان

۵- په لاندې جملو کې لومړي دهغه کلبي چې املايي غلطی لري په نښه کړي او

بيايې صحیح شکل وليکي .

الف : گيدري ډېره خوندوره ښوروا پيڅه کړي وه . —

ب : په يوه گول نه پسرلي کېږي . —

ج : غوماشته د بېچ نه هم زرناکه ده . —

۶- د لاندې تورو څخه سېلې کلبي جوړي کړي :

الف :- ک ، ت ، ا ، ب —

ب :- د ، ر ، خ ، ت ، ه —

ج :- ر ، و ، غ ، ت ، ی ، ا —

چې سې جملې ځنې جوړې شي .

الف : زده کړم ، زه ، غواړم ، ترکانې

ب : ستیم ، د ، ومنله ، خبره ، حامد

۸- لاندې بې ترتیبه جملې په ترتیب سره ولیکې .

تر کالو اغوستلو وروسته هغه چای وچینلې .

هغه ښوونځی ته ولاړ .

احمد سهار وختی د خوبه پاڅیدی .

هغه خپل لاسونه او مخ ئې پرېمنځل او کالی ئې واغوستل .

---

---

---

---

۹- نیمگړې جملې په صحیح کلمو سره پوره کړې .

الف : زرین هر سهار خپل لاسونه او مخ \_\_\_\_\_

ب : گلالي ښوروا و \_\_\_\_\_

ج : زرین هر سهار لوهرې ډوډی \_\_\_\_\_ او بیا ښوونځی ته \_\_\_\_\_

۱- لاندې مفردې کلمې په جمع کلمو واړوی :

الف : هلک \_\_\_\_\_

ب : خور \_\_\_\_\_

ج : لاس \_\_\_\_\_

د : کتاب \_\_\_\_\_

۱۱- لاندې مذکرې کلمې په مؤنثو کلمو واړه وی :

الف : هلک \_\_\_\_\_

ب : ناروغ \_\_\_\_\_

لاندې مؤنثې کلمې په مذکر کلمو واړه وی :

ج : غوا \_\_\_\_\_

د : چرگه \_\_\_\_\_

۱۲- دلاندې جملو په پای کې سبې نښې (علامې) وليکي :

الف : ملانصرالدين د يوه کلي ترڅنگ تيريده

ب : سپين بيري سړي چېرې ولاړ

## **Annex F: Outline of a School Improvement Program (SIP)**

The study findings suggest that a reasonable base has been created in SC/US to establish a quality schooling program. Over the years, a SIP would require the continuing efforts of all personnel. Quality is something to strive for, not to achieve. Ultimately further improvements can always be made. Rather than seek some kind of ultimate "perfection," it is better to develop long-term mechanisms that are sensitive to the evolving needs for and definitions of quality. Such mechanisms include a routine process to collect relevant information, to analyze and reflect on it, and to correct weaknesses. The comments below take into consideration the results of the testing, observations in schools, and the resources and personnel available to SC/US.

**SIP Purpose:** The aim of SIP would be to establish a uniformly high quality teaching-learning program for Afghan refugee children. The initial definition of quality could be high ratios of students achieving 80% or higher on Basic Competency tests in all villages, schools, and classes of the SC/US system. SC/US staff would set annual targets for the accomplishment of this objective. Over time, the school directors and teachers should take more of the initiative in setting and achieving improvement goals, in concert with SC/US staff.

### **Phase One**

Any SIP would require a phased approach if it is not to prove overwhelming. In Phase I, SIP efforts would focus directly on learning the Basic Competencies in math and Pashto in Grades 1 through 6 (UNO subjects would also continue). To accomplish this goal, Quetta SC/US staff would need to provide leadership for what will be a new approach, including some practical training for the local staff in their new responsibilities. Their other main assignment would be to implement a system for continuous assessment of learning results and develop ways to address any learning problems that arise. This narrow approach (which educators may justifiably criticize if it is not "enriched" over time) is necessary at first to make a fundamental change in the way teachers view teaching, moving them away from a focus on teaching behaviors to a more creative focus on helping students learn. In fact, the approach gives greater flexibility to teachers because it allows them to apply their intellects to the question of how their students might learn better. This approach also clarifies to supervisors, head teachers, teachers and students what children are expected to learn--no tricks or uncertainties in these matters.

### **Phase Two**

In Phase Two, when BCL Supplementary Materials become available, these would be incorporated into SC/US schools in whole or in part, and the focus would turn to how these materials could be used and supported to produce good learning results. Because they specifically address competencies in a format designed to expand children's knowledge of life skills, these materials will not only make it easier for teachers to teach specific competencies but will broaden and make more relevant the information available to children.



### **Phase Three**

By Phase Three, efforts to develop a quality program for Afghans will (if current proposals are implemented) introduce "enrichment" materials to improve learning in subjects now taught using UNO materials SC/US will be able to incorporate these materials into its program to broaden the focus again and improve the general learning of children. As in all phases SC/US staff should reflect not only on what children are learning but on how they are learning it, and decide what is the best way to improve learning in specific subjects for specific sets of children.

#### **Roles and responsibilities of current personnel**

In SIP, five groups of people would be held responsible for learning outcomes: supervisors, resource facilitators, head teachers, teachers, and students. Below are a list of the responsibilities they might be assigned during the first phase (in addition to their other duties). Each group (except the students) will need specific training in their responsibilities. Students need also to be told at the beginning of the year and as often as necessary that they are ultimately responsible for their own learning of the BCL. The groups below form a chain of responsibility; each will be held accountable within their own area for the learning of every child. In effect, each level manages the resources that can be brought to bear to improve learning. Together they compose teams of those who are locally or centrally responsible. At the center are supervisors and managers of SC/US, and at the local level the SIP team consists of resource facilitators, head teachers and teachers.

#### **Supervisors.**

Realistically it is not possible for supervisors to provide the daily support necessary for significant quality improvements in schools--distances are too far and their administrative responsibilities are too numerous. Supervisors should be given the managerial function of ensuring that the center in Quetta provides the appropriate resources and supports required for SIP activities at the local area. Supervisors would plan the concerted steps needed to introduce and sustain SIP. They will conduct the focused training that will introduce the new roles and responsibilities to local staff. Once areas of particular need are identified they may work with resource facilitators to develop general training programs and other remedies for weakness in teaching-learning. They, however, should encourage local initiatives to solve local problems. An important role for supervisors will be to communicate good solutions discovered by local staff in one area to other areas where they are needed.

#### **Resource Room Facilitators (RRF).**

The RRF will be responsible for local implementation of SIP. They will hold training sessions for head teachers and teachers to draw up the list of competencies that can be posted conspicuously in classrooms, and will make them aware of materials and other resources that can be used to assist learning. They will also describe how teachers, head teachers and supervisors can assess student progress by administering brief tests.

Through assessments, observations and/or interviews with members of the local SIP team (head teachers, school managers, and teachers) in their areas, RRF would identify difficulties arising with regard to student learning. They would determine the likely source of the problem and potential solutions. The RRF would then develop alone or in collaboration with other RRF and/or supervisors, specific programs such as training, focused practice exercises, etc to remedy the problems, and would then implement and follow-up on them as appropriate. RRFs should also develop banks of test items on specific competencies that could be used by school staff to determine the progress of students.

**Head teachers.** Head teachers would be held responsible for ensuring that students in every class are progressing in mastery of the basic competencies for their grade level. They could do this by talking with the teachers, observing classwork, and administering short tests. Head teachers would be responsible for knowing what outside resources (such as those organized by the RRF) are available and they would ensure that the appropriate ones are applied to correct identified areas of teacher or student weakness. Such resources might include programs to orient teachers to the teaching of competencies, training in practices that are known to effect learning, study programs to cover subject concepts and skills needed to understand the competencies, focused exercises for difficult competencies, and opportunities for remedial help for students falling behind. Schools without a head teacher should identify a person responsible for learning needs who can remain the point of contact for supervisors and RRF. In small schools they might be head teachers or more experienced "mentor" teachers or, in HBGS, the teachers themselves.

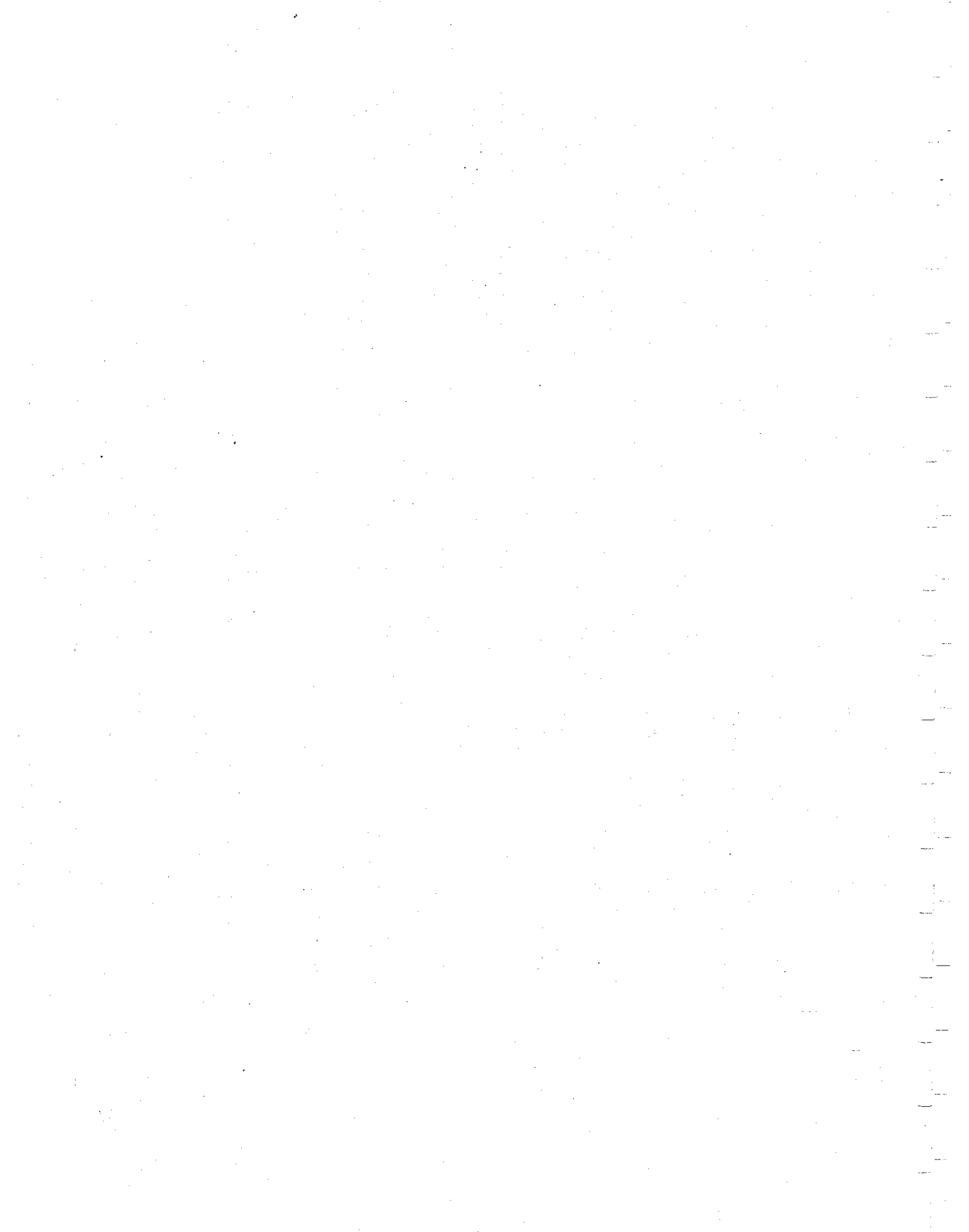
**Teachers.** Teachers are held responsible at the class level for ensuring that every child learns the competencies. They might do this by posting the appropriate list of basic competencies in their classrooms and ensuring that students are aware of what it is they should learn. They would also need to ensure that students are given sufficient practice to develop the required skills. Teachers need to assess student progress in the competencies at periodic intervals and to apply appropriate remedial actions where they are necessary. They would be encouraged to seek methods and approaches that seem to work best in producing expected learning results.

The assessment identified a number of teachers whose students have performed at a high level of mastery of BCL. The expertise of these teachers should be utilized in the design and development of SIP.

- To identify successful teaching practices
- To mentor teachers who are starting teaching or whose students are having difficulty with the BCL
- To assist in training programs

**Students.** Students would ultimately be held responsible for mastering the competencies. To do so would mean that they would need to know specifically what the relevant competencies are and also be given appropriate practice exercises to help them learn.

The basic idea of SIP is to apply layers of responsibility to the task of learning. Each layer is accountable to the next in a logical way and each has its own mandates and resources to apply to the objective. An aim of the SIP is to give the supervisors a realistic role given their many other responsibilities, and to give RRF an influential role at the local level to assess and correct the problems. Given their higher qualifications most RRF should be able to do this. Those who cannot take this creative role may be able to "host" others who can, or implement solutions such as training programs others have developed. In all of this HBGS have special circumstances (with individual teachers, lack of head teachers and access to RRFs) that will require adjustments in the way SIP will need to be carried out. Essentially it will be necessary to involve HBGS teachers individually or collectively (for training) as the activity requires. If it is feasible it may be helpful to designate a female RRF-equivalent in each camp to provide day to day SIP support for all HBGS in the area.



**Annex A Schedules**  
**Schedule for testing in RV schools (mixed)**

Date	School number	Camp	Teacher's name	Girls/ boys	Ranking given by FES	Class en'ment	Number of children tested in Class
25/9	Collate test, clarify instructions, prepare section envelopes						
26/9	36	Md Khail	Anar Gul Mullah Khan Md (pm)	G B	weak weak	40 26	26 11
	37	Md Khail	Murad Khan Murad Khan (pm)	B G	weak weak	19 22	13 14
	38	Md Khail	Md. Hussein (pm)	B	satisfactory	16	13
27/9	16	Pir Alizai	Assadullah	B	satisfactory	41	40
			Said Md (am? pm?)	B	satisfactory	39	32
			Neak Md	G	satisfactory	17	13
21	PirAlizai	Nasreen (pm)	G	satisfactory	16	13	
27/9	40	Chagai	Khan Md. 3-A Mehraban 3B	G B	Good Satisfactory	27 30	20 27
	41	Chagai	Parwin 3A	G	satisfactory	27	28
28/9	13	Saranan	Atta Md Md Wali	B B	satisfactory new hire	38 35	30 28
	23	Saranan	Khashhall (pm) Shakilla (pm)	B G	Satisfactory Satisfactory	30 38	28 30
28/9	44	Chagai	Juma Gul	G	Weak	21	13
	45	Chagai	Adela 3-A Habibullah 3-D	G B	Satisfactory good	19 36	16 33
29/9	9	Surkhab	A. Jalil	G	satisfactory	27	22
	8	Surkhab	Lutfullah	B	weak	21	21
	5	Surkhab	Maazullah	G	satisfactory	28	23
	11	Surkhab	Shafiqullah	G	satisfactory	29	28
2/10	29	Loralai	Majeed (pm)	B	satisfactory	31	22
	31	Loralai	Md. Hashim Abdullah (pm)	G B	satisfactory good	26 34	22 28
	34	Loralai	Hayafullah Smar Gul (pm)	G B	satisfactory satisfactory	34 49	28 40
3/10	33	Loralai	Zafar	G	satisfactory	15	14
			Md Yousuf (pm)	B	satisfactory	45	44
	35	Loralai	Raz Md (pm)	B	satisfactory	29	22
			Md Lal (pm) Mehria	B G	satisfactory weak	27 21	20 17
4/10	24	M. Bagh	Md Raza	G	satisfactory	27	26
			Salam (pm)	B	satisfactory	25	21
	26	M. Bagh	Shoja	B	satisfactory	28	20
	27	M. Bagh	Mera Jan (pm)	B	satisfactory	33	17
25	M. Bagh	Najibullah (pm)	B	satisfactory	21	19	
<b>Total</b>						<b>934</b>	<b>882</b>



a standard grade level programming starting with grade one that may be inconvenient for a number of children. The kinds of programming that may be needed are:

- accelerated learning for older children (older students had higher BCL scores)
- self-instruction programs (with modest teacher supervision) for older girls and children entering higher grades where no full-time teachers are available
- catch-up classes for children who have been absent
- expanded lateral-entry opportunities for children who need to transfer

**Priority actions:**

While most of these recommendations require time to implement, two activities can be initiated immediately to improve learning in the schools in all grades:

1. Teachers need to understand clearly what children are expected to learn (and what will be tested, that is, the BCLs) and supervisors need to check periodically to ensure students are learning.
2. Teacher training can be mounted to develop awareness in teachers of forms of classroom management and teaching strategies known to increase student learning.

Both of these activities are described in more detail in the annexes on Immediate Priorities for Action and Suggested Teacher Training to Focus on Student Learning.





learning. Hastings found that children seated in traditional rows or in pairs and concentrating on their own work improve their on-task time by 16 to 124% over children working in groups. Group work, the authors conclude, may be good for team projects but is not so good when children are expected to accomplish work on their own. The research suggests that group work may be useful for short periods to give some variation in the learning arrangements and for certain tasks but not as the main form of learning.

Several RV and HBGS teachers asked children to form groups for a particular learning task--in one case to develop a set of questions to ask a group across the room (this seemed a useful variation on the usual dry presentation of UNO materials). In another case the RV teacher formed groups and asked children to read the lesson--they did so individually and therefore the group arrangement did not make sense. The same variation took place in HBGS with some of the group work useful and some not.

#### **4. The calling of children to answer questions**

All children should have the same opportunity to answer questions before the group. If some children are systematically excluded then their motivation and capacity for learning is likely to decrease. Teachers in SC/US classes used different techniques for calling on children--both sequential and random order and with patterns that produced limited, substantial or complete coverage of students. If one method is applied consistently it may have disadvantages that eventually lower student learning. If the methods are varied the advantages and disadvantages may compensate for one another. The teacher who calls on students in one obvious order is more easily able to cover all students, but she/he may lose the attention of those who are only engaged when their turn is coming. If the teacher calls students randomly, the advantage is that students stay alert while the disadvantage is that it may be difficult for the teacher to remember which students have been called.

Another issue is the coverage of any single learning task: should every child have a chance to answer a particular type of question? Should only a few answer the questions? Will others learn by simply hearing the answer? Can choral responses ensure that every child knows the answer? The SC/US teachers varied in the way they addressed these issues, although it was not clear they knew the ramifications of what they were doing. Every class we observed had a teacher "blind spot" occupied by students who were not called upon as often as others. Sometimes it was a group occupying a physical location at the front or the back of a class, or a group that sat next to the wall. Sometimes it was a specific group of children: ones known not to answer correctly, ones who didn't raise their hands, or in one case the girl students in a mixed class. The systematically ignored students were generally more passive and less engaged in the learning task (although it is not clear that this was a result or the cause of being ignored).

