

**Swedish Committee for Afghanistan (SCA)
Education Technical Support Unit (ETU)**

Do Children Learn in Afghan Schools?

**- Assessment of math and language achievements of students
at the end of grades 3 and 6 in SCA supported schools**

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Finally, I would like to thank the regional staff of SCA and others who facilitated this study and contributed through their suggestions

Preface

Besides its long term support to education in Afghanistan, the Swedish Committee for Afghanistan (SCA) is continuously making efforts to generate research based knowledge and to share experiences in the field of education with other actors within this sector. One of such endeavor is the current study on assessment of learning achievements of students in schools by Dr Amir Mansory. The main purpose was to acquire knowledge of children learning levels in schools and to find insights into how quality inputs influence the process and product of learning.

This study, though small in size, can be seen as an attempt towards different aspects of assessment of learning achievements and as a general picture of students' performance at the primary level. The study focuses on language and math at primary school level, i.e. end of grades 3 and 6.

The much dispersed student test results (ranging from 0 to 100) and the low average scores of students indicate a relatively low level of achievements. The finding that students in SCA supported schools did better compared to government schools is not surprising but is also giving some idea of how to learn from what makes the difference. The study report that girls, though not much, have achieved better results is a promising finding.

The slightly surprising finding that there is no particular correlation between, on the one hand, quality inputs in terms of class size, in-service teacher training, availability of classrooms, etc, and, on the other, students' performances, might be an indication that the quality of teaching or rather lack thereof is a very influential factor. The author reports and argues that the effects of quality inputs might be neutralized by low standard of teaching in schools.

Another interesting and promising finding of the study is that students in Community Based Education (CBE) classes did better and even excelled over the students in the larger SCA Model Schools. An explanation for this surprising finding is given as good teacher-students relation as a unique characteristic of CBE classes. This and some other surprising findings of the study require further deeper analysis in future.

SCA thanks Dr Mansory for his valuable work and do believe that the findings of this study hopefully can help planners and implementers in their efforts of support the education of children in Afghanistan – not the least with regard to the paramount importance of improved education of teachers.

Kabul, 22 May 2010

Anders Fange
Country Director
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Executive Summary

The results of the yearly end grade examinations in the country cannot easily be translated into statements about students' performance in relation to the curriculum. Very little is known about issues such as: What and how much do children learn in schools? Are their learning needs met in schools? What kind of variations are there and, if so, what can these variations be explained by? Do the worldwide acknowledged determinants on students' performance in schools produce similar results in Afghan cultural context? Do the inputs produce expected learning outcomes? What lessons can be drawn from existing experiences, e.g. of SCA experiences of Model schools? Etc.

This study, though small in size, can be seen as an attempt towards varied aspects of assessment of learning achievements and as a general picture of students performance in primary level of schools. The study focuses on language and math at primary school level of schools i.e. end of grades 3 and 6. A test based on national curriculum and textbooks (of language and math) for the related grades has been elaborated and used. Additionally, a simple questionnaire was used to collect data about the students, the school and the teachers. Data was collected from cold climate schools at the end of the school year (beginning of November). Totally 1175 students (21 % from government schools) of grade 3 taught by 39 teachers and 837 (15 % from government schools) of grade 6, taught by 64 teachers participated in the study.

The much dispersed student test results (ranging from 0 to 100) and the low average scores (average scores 52 of grade 3 and 53 of grade 6) of students indicate a relatively low level of achievements in primary level, which might be caused by, among others, short school year. Children of grade 3 were found to be weaker in math than in language (average scores 57 and 48 respectively), while this difference was found to be smaller in grade 6. However, the result of SCA supported schools were found to be remarkably better in both grade 3 and 6 compared to government schools (average scores 57 and 55 compared to 36 and 43 respectively). The difference might be explained by combined effects of slightly better teachers' working conditions and regular supervision of schools. No statistically significant differences, though girls' scored slightly better, have been observed between boys and girls.

No particular correlation between quality inputs such as class size, in-service teacher training, availability of classrooms, etc and students' test results been observed. Similarly, no pattern of special magnitude has been traced between teachers' education background and students' scores. These somehow surprising findings might be explained by the fact that actual teaching in classrooms do not differ between these categories of teachers and learning conditions, hence effects of such inputs could have been neutralized by low standards of teaching.

The highest average scores have been observed in Community Based Education (CBE) classes, which excel the average scores of children in all SCA's supported schools (68 compared to 57). The only explanation grounded in data can be found in good teacher-students relation as a unique characteristic of CBE classes. This and some other surprising findings of the study require further deeper analysis in future. More detail account of the findings are provided in the rest of report. .

Do Children Learn in Afghan Schools

Assessment of math and language achievements of students at the end of grades 3 and 6

Introduction

During the recent years the country has experienced a very rapid expansion in regard to enrolment rate – at least on primary school level. Currently around 7 million children are said to be registered in schools in the country. In spite of recent expansion of schooling facilities, still almost half of the school age children (around 40 % and 58 % boys and girls respectively) are not enrolled in schools (MoE, 2009, European Union, 2007/8¹). Considering the number of out of school children, it is not surprising that access to education still is the goal for MoE and other stakeholders. Though the quantitative success is appreciated, there are many concerns about the quality of education. The recent quantitative expansion of schooling opportunities has been accompanied by low learning quality in Afghanistan, but also worldwide (UNESCO, 2000). Therefore, the quality of education is a top priority at the policy agenda in the country.

The last years, quality inputs such as construction of school buildings, training of teachers, improved textbooks etc have been in focus to improve the quality of education. In spite of the progress and efforts made, all the input indicators of a quality education are lower than in many other developing countries. More than 6 000 (almost half) of the schools have no proper building. There are serious problems with the available workforce in education in Afghanistan - only 22 % of the teachers employed by the Ministry of Education (MoE) meet the minimum qualifications needed to teach in primary schools. There is a severe shortage of female teachers, who make up 28 % of all teachers (MoE, 2009). Evidently, such measures are perquisites to influence the quality of education also in Afghanistan. However, the mentioned inputs are proxy indicators, while the actual student learning outcomes in school is the real “bottom line” of quality education. There is very little knowledge at hand on the relation and the extent of influence of such inputs (qualified teachers and school buildings) on learning achievements in the country’s context.

Primary education is intended to develop basic learning skills, reading, writing, and arithmetic and life skills, necessary for the children to survive and improve the quality of life. Primary level of schooling is in fact the foundation for the development of basic competencies and is a “corner stone” of quality education. It is

¹ Ministry of Education, (2009) *National Education Strategic Plan Draft*
European Union *National Risk and Vulnerability Assessment 2007/8-A profile of Afghanistan*

expected that the lower primary school level should equip children with basics of literacy and numeracy and prepare them for further studies. Leavening achievements of children in school is the main indicator of quality education and knowledge about it is of value for improving of education quality in the country.

SCA has been involved in support to education in Afghanistan since three decades. Since 2005, SCA has launched the idea of support to “Model Schools” as one way to contribute to education development in the country. The aim with support to model schools is to introduce “learning institutions (of basic and compulsory education), which will guarantee outputs of high standard against minimum inputs in the context of Afghanistan and in a sustainable manner” (SCA Education Directives (EDs) 2006). SCA’s Model Schools are expected to be well equipped schools with basic teaching and learning facilities. Currently, SCA support 45 Model schools. Additionally, SCA provides support to around 1100 classes of CBE, where more than half of the students are girls. For many of the students in CBEs three years education in the CBE classes is the only option and continuation might only rarely be a possibility for many rural girls. Therefore, it is very important to find out something about the learning situation and the quality of education in these two types of institutions.

Background of the problem

In Afghanistan, the public examination system is based on the yearly final grade exam results, which provide information on whether students have passed or failed and the absent rates of students during the school year. The results of such examinations cannot easily be translated into statements about students’ performance in relation to the curriculum. Since the examinations are elaborated and marked by individual teachers and not by provincial or national examination authorities, comparisons cannot be made even within a particular year from school to school, even less of district to district, or province to province. There is very little known about issues such as: What and how much do children learn in schools? Are their learning needs met in schools? What kind of variations are there and, if so, what can these variations be explained by? Etc.

There is abundant evidence that there are many factors, only some of which are school-based, which affect student learning in schools. To improve the quality of education and to use the scarcely available resources in more effective ways, knowledge on determinants on learning achievements is useful and required.

SCA supported Model Schools (MS) are assumed to have a child friendly environment and higher levels of learning achievements are expected. Very little is known so far about the results of the quality inputs in model schools. Do the worldwide acknowledged determinants on students’ performance in schools produce similar results in Afghan cultural context? Do the inputs produce expected learning outcomes? What lessons can be drawn from SCA experiences of MS? These and other similar issues have not yet been profoundly studied in the country.

Moreover, capacity to assess learning achievements in the country is another aspect which deserves more attention to be paid to. The country has not participated

in any of the international assessment studies and no training has been provided to Afghan educationist in the field of learning assessment.

It is against this background that SCA decided to undertake a learning achievement study in primary level of its supported schools. The current study is an attempt to put light on some of the mentioned issues and to prepare the ground for further studies in this area.

Aim and Objectives of the study

The overall aim of the study is to contribute to a quality education through improving knowledge about the determinants of learning outcomes in the Afghan context.

The main objectives are:

1. To explore what students in SCA supported schools know and understand - compared to curricula and compared to contextual factors and quality inputs;
2. To compare students' learning achievements in SCA supported schools with other public schools;
3. To explore what disparities, if any, exist between students' learning achievements and identify factors for improvement that can be addressed;
4. To contribute to capacity building of stakeholders in regards to assessment of learning achievements. ..

Although the study aim to assess learning achievements of students in SCA supported schools, it is an attempt to gather knowledge and experiences of general use for education in the Afghan context.

Research questions

Below is a list of questions that the study was designed to response. They are the kinds of questions that education planners and policy analysts might pose and are relevant to policy making and to maintaining and improving education quality.

1. What do students know and what can they do in relation to curriculum objectives in language and math?
2. Are student scores highly correlated across these two domains?
3. Is there any association between school related factors (size, teacher training, etc) and learning achievements?
4. What are the effective inputs on children performance in Afghan schools?
5. Is there any association between parents' level of education and occupation and student performance?
6. Is there any evidence of gender disparity in student performance, and if so, is that consistent across school types?
7. Do the above hypothesized relationships apply to both Grades 3 and 6 of primary schools?
8. Is there any difference between learning achievements of students studying in Model Schools, other public schools and in Community Based classes? ;

Methodology

The study focuses on primary-school-age children and the transitional grades at primary level i.e. end of grades 3 and 6. The activity involved developing of measuring instruments, confirming the quality of those instruments, implementing the test in schools, analyzing data, developing in-organization skills in the testing and analysis processes, exploring variability in outcomes and reporting.

A test based on national curriculum and textbooks for the related grades has been elaborated and used. When elaborating the test questions, the learning standards called “Basic Learning Competencies of Math and Languages for primary level”; a document developed by a group of NGOs under the leadership of UNICEF in 2000 was consulted. Moreover, assessment reports and test questions from Trends in International Math and Science Study (TIMSS) and East Asia Learning Achievements Study (EALAS) were consulted, in order to make comparison, if possible, at least with other studies in future. The Structure of Observed Learning Outcomes (SOLO) taxonomy recommended by UNICEF for EALAS was also considered when making the questions, in the way that the same cognitive skills were covered in grades 3 and 6 questions with increasing levels of complexity.

The test question in math consisted of four main cognitive skills: **Numbers; Calculations** (operation on whole as well as fractional numbers, knowing facts and procedures); **Geometry and measurements** (use of geometrical concepts); **Problem solving** (use of math concepts and solving routine problems). The language tests covered: **Reading comprehension** (answering question about a text); **Structure and writing** (completing sentences, writing correct word in blank spaces, selecting right phrase and words for a blank space, spelling words correctly); **Grammar** (punctuation and grammatical rules); **Vocabulary**; and **Composition** (putting sentences in a logical order). There were totally 10 questions in language where each one has 5 or 10 parts and 20 questions for math for each of grades 3 and 6. Multiple choice questions were made, where students were asked to mark the right response among them.

A simple questionnaire was used to collect data about the students, the school and the teachers teaching the subjects to the tested students. Tests questions and other data collection instruments were pilot tested before being used in the study. Intact classes were used for sampling purposes, meaning that all students in a selected class were tested. The data was collected by SCA School Consultants (SCs), who received required instructions and training about the procedures. Data was collected from cold climate schools at the end of the school year (beginning of November). The study was conducted in 22 (out of all 44) SCA supported Model Schools (MSs) 12 SCA supported CBE classes (including 2 Girls’ Annex (GA) schools) and in 5 government schools in the neighborhood of MS (as controlled group). The selected schools are scattered along the all the 12 provinces in which SCA support education. Totally 1175 students of grade 3 taught by 39 teachers (one teacher per class) and 837 students of grade 6, taught by 64 teachers (one teaching language and one math) participated in the study. Simple instructions were written for administration of the

tests, including data entry. Data collection and testing have been administered by trained SCA SCs.

Data entry of student responses has been done into EXCEL spreadsheets. Individual responses to all test questions, students', teachers' and school background information have been entered into computer file separately for grade 3 and grade 6. The average scores of students have been analyzed in relation to students sex, teachers' and schools' background. Excel sheet have been used for descriptive statistics, while Univariate analysis have been computed by Statistical Package for Social Sciences (SPSS). Considering the small size of the study, no efforts were made to compute advanced multivariate analysis of the data and simple objective related findings were computed and reported in this paper.

The test was conducted in autumn, hence cold weather session and students were placed in small classrooms, which may have caused some students to cheat.

Findings

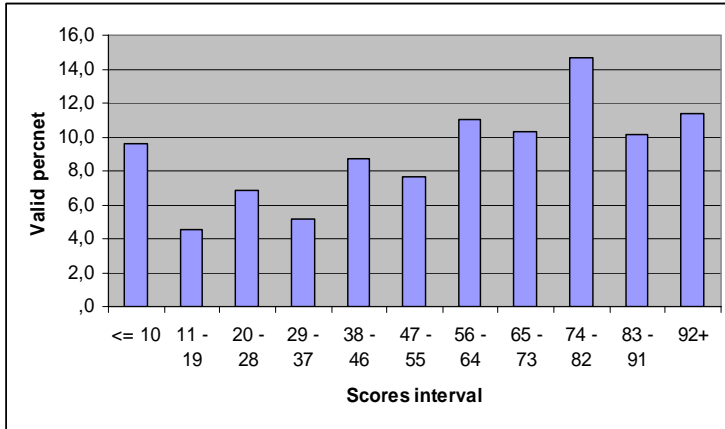
In the coming pages findings of grade three and grade six are reported separately. Detailed discussions are provided on results from grade 3, while differences and comparisons are reported on grade 6.

Results of grade 3 students

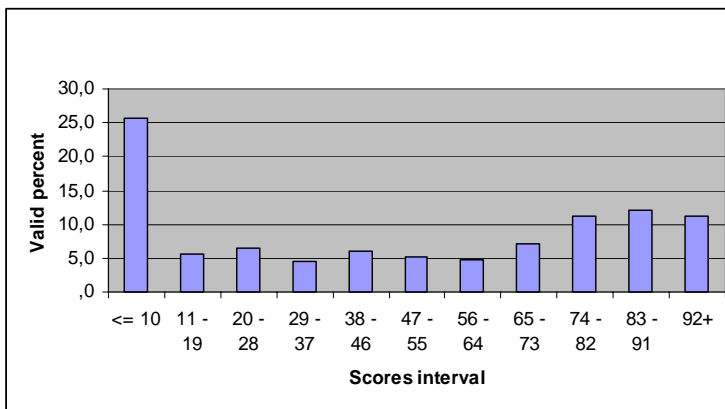
The findings are organized in two parts: General test scores; and results of students' scores in relation to school and teacher related factors.

General findings

The distribution of average scores of students covered the entire range from 0 to 100 per cent. As seen in the below able, the average scores of grade 3 students was found to be 52 % (57 % and 48 % in language and math respectively). The results indicate that students performed better in language than in math. 25 % of students scored less than 10 % and 51 % scored more than 50 % in math, while this figure was only 10 % and 62 % for language (see chart 1& 2). Moreover, the relatively higher standard deviation 35 of math average scores compared to 28 of language indicates a diverse learning achievements level of students in math. Whether the comparatively lower level of achievements in math compared to language is due to quality of teaching, traditional views on math as a theoretical subject, content of the subjects or other reasons can not be grounded in the data. One explanation might be that during the test, students got tired and or spent most of the time on solving language questions and less time was left for them to solve math questions, which were placed after language.



Graph 1: Language score distribution of grade 3 students



Graph 2: Language score distribution of grade 3 students

In the below table 1, test results (average scores) for language and math of students in grades 3 for each category of schools are shown.

Table 1. Results of Language and Math test of students in grades 3

Schools	Type of school	Students' Average test scores in grades 3 (%)		
		Language	Math	Overall Average
SCA schools	MS	56	49	53
	GA	58	46	52
	CBE	69	67	68
	All SCA schools	60	53	57
Gov school	Gov School	46	25	36
	All surveyed Schools	57	48	52
Gender differences	Boys	55	47	51
	Girls	59	48	54

The result of students in MS (53 %) is slightly above the average (52 %). However, the result of MS students compared to control group (average scores 36 % - 46 % and 25 % in language and math respectively), is much higher and was proven to be statistically significant. This wide gap indicates comparative advantages in absolute terms of MS compared to control group. Overall, the averages scores (52 %) indicate a low level of achievements in general. This year, first due to the election and then due to the fears of Swine influenza, schools remained closed for a long period and the school time was unusually short. Probably less than half of the text books have been taught by school teachers, which may explain the low level of achievements in general. The fact that students in our schools are not much familiar with multiple choice questions might be another explanation for low level of achievements.

As seen in the above table, no statistically significant differences, though girls' scored slightly better, have been observed between boys and girls in grade 3. The highest average scores have been observed in grade 3 of CBE classes (68 %), which excel the average scores of children in SCA's supported school (57 %), even of MS (53 %). The only visible evidence in the collected data, which may explain the variation in results of children in CBE and other schools, is the low number of children per class in CBE. A well educated guess supported by classroom observations, is that teachers of CBE classes usually come from the same villages, hence possess better knowledge of their students. This may influence the student-teacher relations in classroom. Whether this alone or in combination with other factors, explain the variations cannot be found in this study. The high level of achievements of students in CBE classes is promising, especially that some students, especially girls, may not continue in grade 4, which means that the end of CBE is the end of school for these children.

Factors which may explain the variations

Parents' background

Fourthly three per cent of students' fathers' and 13 % of their mothers have some kind of education, which is higher than national average and probably does not represent the real picture of the society, at least in regard to fathers' education. Though no correlation has been observed between parents education and students achievements, however students whose fathers have Islamic education scored higher than others. Students whose fathers have higher education, though small in number, scored lower than average, which is difficult to be explained. However a well educated guess might be that those with higher education may have jobs outside or even far from homes and thus be away from homes, so their children do not benefit directly from their support at home. It might also be that people with higher education do not possess skills and knowledge on how to teach and support small children (basics of writing and arithmetic) while they might be of use for older children. This was confirmed when searching correlation between fathers' occupation and students' achievements

(see table 4 below). These two findings, though dealt with care, might be interpreted that fathers' education level has no direct correlation, but their types of education may influence their children. This in turn contradicts Bourdieu's concept of "cultural capital"² i.e. a father's education as an asset for his children.

On the other hand the finding that children of shopkeepers secured high scores in both language and math, might be due to their practicing gained knowledge while working with their parents (fathers). This finding seems to be in line with the concept of "community of practice"³ or situated learning and could be considered for recommendation in schools, teacher training programs and textbook developers.

Table 2: Students' scores and parents' education level

Parents' education	Students' scores in relation to mother education		Students' scores in relation to father education	
	Language scores	Math scores	Language scores	Math scores
Higher than grade 12	55	57	49	32
Grade 12	61	54	58	50
Less than grade 12	56	48	59	48
Islamic education	71	72	72	69
No formal schooling	56	46	55	45
Overall	57	48	58	48

Majority of the fathers of the tested students has one of the occupations listed in the below table. As seen in the table, children of fathers with small business and of teachers' scored higher than others in both language and math. Children of shopkeepers probably practice more what they learnt of math, for example, than others, which may have contributed to the variations. In case of teachers' children, it might be due to their support in homes but also one can not eliminate the role of "social capital", in Bourdieu's words, that teachers have- at least on school level, which has resulted that their children get higher scores.

² Bourdieu P., (1990) *The Logic of Practice*. Stanford: University Press

³ Lave I & Wenger E (1991) *Situated Learning: Legitimate Peripheral Participation*. New York: Cambridge University Press.

Table 3: Father’s occupation and students’ scores

Father occupation	Frequency %	Language scores	Math scores
High status jobs (Doctor, Eng)	2%	39	21
Teaching	8%	61	47
Farming	62%	53	44
Skilled labors (driver, tinsmith)	6%	54	37
Small business (Shopkeeper)	19%	64	56
Imam	3%	46	35
Total	100%	51	37

All mothers, except less than 2 %, have jobs at homes as house wives and mothers, hence not possible to relate their children’s scores to their occupations.

Teachers’ background and students achievements

Among the teachers related background, teacher’s sex, their formal education level and the training they receive in jobs i.e. ins-service teacher training have been considered.

Students taught by female teachers excelled those taught by male teachers, though not proven to be statistically significant. Such a finding is confirmed by other studies as well⁴.

Table 4: Students’ scores and teachers’ sex

Teachers sex		Language scores	Math scores
Female	Mean	62,	55
	N	439	439
Male	Mean	54	44
	N	736	736
Total	Mean	57	48
	N	1175	1175

Teacher education level was categorized into three types: grade 14, grade 12 and lower than grade 12 (averaged to grade 10). As seen in table 5, no correlation has been observed between teachers’ education and student performances in schools, however higher results (in both language and math) were secured by students taught by teachers with higher education level i.e. with grade 14, mostly it meant teacher

⁴ Master Program in Educational Research and Development (2009) Field work study reports by candidate students., Amir Mansory (2000) *Math Achievement Among Primary school children in Afghanistan*. Stockholm: IIE.

training college. In addition, test results of such students have been characterized by lower standard deviation (see below table).

Table 5: Students' scores and teachers' education level

Teacher Education Level		Lang scores	Math scores
Less than grade 12 (average 10)	Mean	67	59
	N	317	317
Grade 12	Mean	49	38,
	N	700	700
Grade 14	Mean	73	65
	N	158	158
Total	Mean	57	48
	N	1175	1175

Association between teacher training and students' performances are shown in below table 5. As seen in the table, no correlation between length of training and students test scores been observed, however students taught by teachers who received one month training scored higher then others. To my knowledge the content of the said training course is about subject teaching competencies, which include basic on teaching and basic of content of textbooks. Those who participate in more trainings are probably those who don't benefit from training but just to get certificates for training courses. It might be that the content of such training courses is not relevant to teachers' needs..

Table 6: Students' scores and teachers' SCA In-service training

SCA In-service teacher training (months)		Lang scores	Math scores
No training	Mean	55	48
	N	102	102
One moth	Mean	69	56
	N	90	90
Two month	Mean	59	51
	N	379	379
Three month	Mean	58	48
	N	516	516

School related factors

As most of the SCA supported Model Schools possess similar teaching and learning facilities and equipment (laboratory, library, sport facilities, etc), only type and size of schools (measured by grade size) have been taken into consideration when searching associations between school related factors of influence on student learning outcomes.

As seen in table 7 below, children studying in schools with both boys and girls section (co-education schools) scored higher than in other schools.

Table 7 Students' scores and schools type

Schools type		Language scores	Math scores
Boy school	Mean	56	49
	N	499	499
Girl school	Mean	58	48
	N	373	373
Co-education school	Mean	64	51
	N	301	301
Total	Mean	57	48
	N	1175	1175

As said previously, only one section, in case of many sections of grade 3 and 6 in the schools, has been selected for data collection. There is not possible to check whether a good or a weak class have been the one tested. Most of schools, with exception of CBE classes have been found to be big schools with many sections in each grade. When CBE classes were excluded, no specific pattern was found. Mostly big schools with many sections decrease along the grades due to high drop out and repetition, hence not the class size but the students' talent has been in action and as such no difference was observed between small, middle and big size classes. It might be true as teaching style is similar in big as well in small size of classes.

Table 8: Students' scores and grade size

Grade size		Language scores	Math scores
<= 40	Mean	53	49
	N	169	169
41 - 88	Mean	55	42
	N	584	584
89 - 136	Mean	63	58
	N	276	276
184 - 231	Mean	86	83
	N	40	40
232+	Mean	55	51
	N	65	65

Similarly, when CBE classes have been excluded, it was clear that children who are

not taught in classrooms (in open air) indicated to be weaker in their achievements but very few (only on class). Consequently no specific correlation has been observed between classroom availability and learning achievements, hence no appropriate specific size can be found. This contradictory findings might be due to the fact that even in classrooms the teaching and learning situation is not much better than in open air, due to high number of children in small size classroom hamper children movement.

Table 9: Students' scores and availability of classroom

In classroom		Total language scores	Total math scores
No classroom	Mean	32	11
	N	17	17
25 % in classrooms	Mean	57	48
	N	759	759
Half in classroom	Mean	71	60
	N	62	62
75 % in classrooms	Mean	54	48
	N	273	273
Total	Mean	57	48
	N	1111	1111

Results of grade 6 students

Similar variables have been analyzed as for grade 3. Detailed account is only provided when a deviation of results compared to grade 3 has been observed and related tables for grade six are provided as annex. The findings are organized in two parts: General test scores; and results of students' scores in relation to school and teacher related factors.

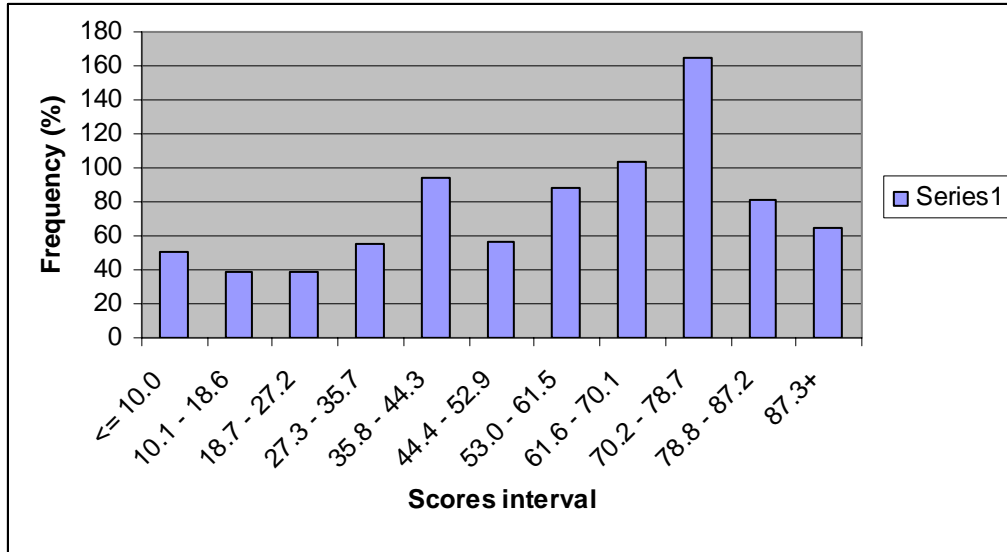
General findings

When analyzing the data from grade 6, similar patterns have been observed as those in grade 3. As seen in the table 10 below, students did relatively better in language than in math (average scores 56 % and 50 % respectively). Students in CBE classes, though small in number, showed the best results compared to students in all other types of schools, even the gap is wider than in case of grade 3 (average scores 78 % compared to 68 % in grade 3) .Similarly, girls did not differ compared to the boys, though girls in girls annex schools excelled their colleagues in co-educated schools-at least in math (60 % of GA results compared to 46 % of girls' results)..

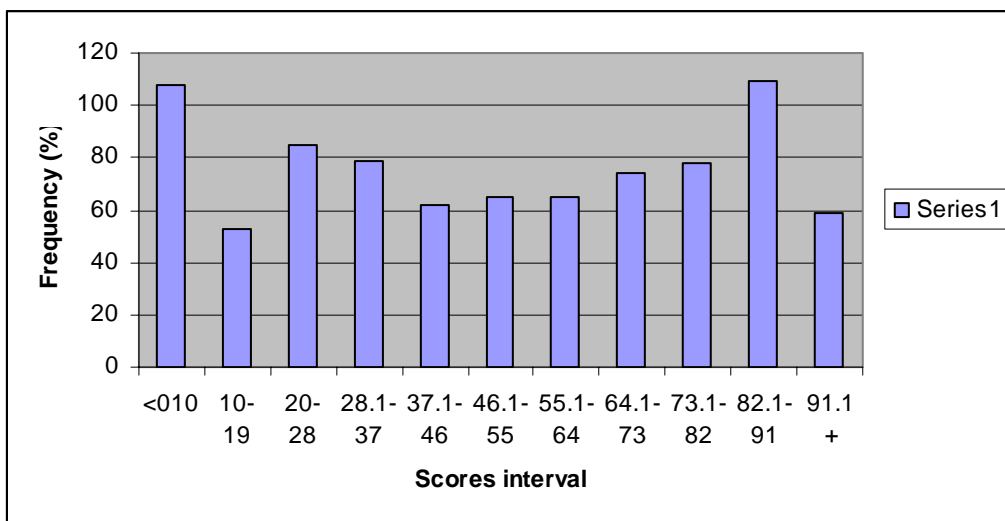
Table 10. Results of Language and Math test of students in grades 6

Schools	Type of school	Students' Average test scores in grades 6 (%)		
		Language	Math	Overall Average
SCA schools	Model School	55	49	52
	Girl Annex schools	61	60	61
	CBE classes	75	80	78
	All SCA schools	57	52	55
Gov school	Gov Sch (control group)	51	34	43
	All surveyed schools	56	50	53
Gender differences	Boys	53	52	53
	Girls	59	46	52

Further analysis of students' scores show that students' language score are skewed (Mode 72 and Median 60), while their math scores are widely dispersed (zero and 82 as Mode and 50 as Median) around their mean scores (see graphs 3 and 4 below)..



Graph 3: Distribution of language scores of grade 6 students



Graph 4: Distribution of Math scores of grade 6 students

The test results of students in grade 6, do not differ much from the above reported results of students in grade 3. Similar average scores in both language and math but with a higher degree of difficulty for grade six than for grade 3, indicate that children obtained knowledge in the tested discipline is in accordance with grade progress i.e. children have been able to get similar average scores in the same cognitive skill but with increasing levels of complexity.

Parents education has been found to have similar association with students achievements (scores) as in grade 3, i.e. no correlation was observed but children whose fathers have middle and Islamic education scored higher in test than others. Students whose mothers have some education, though small in number (only 3 % of

students' mothers had some education) did better than children of mother with no education. This confirms that home support and encouragement are of great importance for student learning achievements

It was found that the association between parents' (fathers) occupation and students learning achievements has not been as sharp as in case of grade 3 students. Contrary to grade 3 students, children of fathers with high status job did better than others. Their children might get extra support from private courses, while poorer people can not afford such courses for their children. (see below table 11). Children of Imams did better as well. However to support small children (of grade 3) might be not easy than to support older children i.e. i.e. students of grade 6. Consequently, when children get older, more likely parents, who are able to help their children at homes and children can benefit from their help, but for smaller children parents are not able to do so.

Table 11. Students' scores and fathers' occupation

Father occupation	Frequency %	Lang scores	Math scores
High status (Doctor, Eng)	2	62	52
Teaching	11	51	47
Farming	50	54	50
Skilled labors (driver, tinsmith)	4	54	48
Small business (Shopkeeper)	19	58	46
Imam	2	62	54
Others 172			
Total		56	50

No difference between student taught by male or female teachers was observed, which might be that the teachers' sex influence is neutralized by low level of education of female teachers in grade 6. Similar to grade 3, students of grade 6 taught by teachers with education level of grade 14 scored higher than those taught by teachers with lower level of education.

The influence of in-service teachers training on learning achievements in grades 6 was exactly the same as in grade 3 i.e. students taught by teachers who received one month training did better than others, though the difference is smaller compared to grade 3.

Discussion and conclusion

The study shows that the learning achievements of students in both grade 3 and grade 6 is poor, which can be explained by short school year during this year. MSs have been proven to have better results compared to the control group (government schools), though not clear what the positive factor is which influences learning achievements in MSs. Generally students of grade 3 scored lower in language while students in grade 6 did slightly better while both were weak in math. This finding indicates that there is no clear correlation between the disciplines in our context. It also can be interpreted that commonly math is seen as theoretical subject and children have difficulties to solve math question beyond the one in textbooks. It is probably reinforced by traditional teaching in classrooms.

The quality inputs related to school conditions and teachers' background as well as family factors such as parents' education and occupation have not been found very influential in the MSs. Not even all types of the in-service teacher training have been of specific importance. Rather, there are indicators, which show that the students' talent and the support they get at home - as regards school subjects as well as encouragement - have more influenced learning achievements of student in schools.

That students in CBE have achieved higher levels of learning is promising and requires further studies.

That the parents', especially fathers' education make no difference contradicts the concepts of social and cultural capitals. This might be true or not, but at least a promising venue is that it is not the family background but students own talent that is more influential. That parents, especially fathers' occupation make some difference is not surprising, as such can be substituted by children activities at home. Some practical recommendation can be made from for all involved parties. Most likely, practicing math knowledge in life related problems can be a strategy for improving learning in schools. That shopkeepers' children got better results is an indicator that the theory of "situated learning" and "community of practice" might suit better in our schools. Practical recommendation for teaching in schools and for development of text books can be made from these findings: more practical examples of real life situations and more practice than theoretical teaching should be encouraged and promoted through instruction to teachers and textbook developers.

The findings also indicate that home based support and practice may be as important as teaching in schools. Consequently, adult support at home should be encouraged and promoted.

The textbooks up to grade 3 seem to be on a too abstract level and neither teachers nor parents – even when they have higher education – have the required pedagogical skills to make children understand. In grade six, however, when children's abstract thinking is more developed the textbooks seemed not to constitute any problem and parents with education were also able to assist their children better.

That teachers formal education level has no visible influences on learning of students in grade 3 indicates that more attention should be paid to develop teaching skills for lower grades i.e. how to teach small children in schools.

That students taught by teachers who received one month training did better in the test, indicates that a close look to the content of the said courses is needed and to learn from the experiences of such courses. It might be that the content is more appropriate to the teachers teaching in primary level, while the content of other is not.

Finally, attention should be paid to the length of school year i.e. the time children spend in schools to ensure that, at least, the content of the text books is transferred to students. This require, among other things, strict discipline of schools and implementation of existing rules.

The low level of learning achievements in both language and math and in both grade three and six, is a sign that children do not do well in our schools and their learning needs are not meet. Low level of achievements may jeopardize access and retention to schools as well. The situation of learning in schools may imply to reflect on the balance between quality and quantity in education in Afghanistan and to think about what Prof Mark Bray⁵ once said: “If universal primary education is the answer, what is the question? ”.

⁵ Prof Mark Bray is a famous scholar who published an article in *International Journal of Educational Development*, 6 (3), 147-158. in 1986. His article was titled: *If universal primary education is the answer, what is the question?*

Annexes

1. Test items
2. Table of findings from grade 6.