



# Access to School Education in Armenia

**Exploratory Research** 

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## **Executive Summary**

The exploratory study, presented in this report, combines four methods of primary data collection: (1) observation of schools, (2) surveys of pupils, (3) in-depth interviews with school principals, government officials and experts, and (4) focus group discussions (FG) with teachers and parents of pupils. Secondary data (statistical data, previous surveys, legislative documents, international organizations' reports) are used to support the findings. Primary data collection time-frame: August – October 2012.

Armenian legislation on school education is assessed as fairly advanced on paper, though lacking in implementation. Politicization of schools because of a principal's political affiliation is among the major concerns that could be addressed through improvement of the legislative framework.

The current system of state financing per number of pupils enrolled in a given school creates incentives for some schools to perform better, but creates problems for smaller schools that struggle to maintain a minimum level of operations. The burden of providing for school needs not covered by the state budget is often placed on parents' shoulders.

Overall, schools are physically accessible to the population; most of them are within walking distance. However, school accessibility is not entirely unproblematic. During the course of the research two villages could not be reached because of detrimental road conditions. One-fifth of the schools observed had poor conditions of main roads leading to schools, one-fourth of school children surveyed reported sometimes being unable to get to school because of bad road conditions. There are great discrepancies between overall conditions of school buildings: from freshly renovated to decaying. Among support premises (i.e. libraries, labs, workshops, cafeterias) conditions of gyms are perceived as most problematic and in need of improvement.

Conditions of computer labs in Yerevan are significantly better than those in the regions; village schools are particularly disadvantaged. Most pupils (89%) would like to use computer labs more often. Lack of equipment in labs prevents pupils' proper understanding the subject matter taught during classes. There is a widespread dissatisfaction with textbooks among children, parents and teachers.

Overall, pupils are satisfied with the work of their teachers and support personnel at school. Insulting and physical abuse by teaches are rare. However, some teachers approve of slapping a child: there is a belief that it is the only way to temper some pupils. Implementation of new methods of teaching is hindered by lack of proper re-training for teachers.

Poverty impedes school performance: children with better home conditions and availability of some resources, such as nutrition, have better school grades. Teachers in regions, particularly in the villages, are more aware of difficulties poor children face at school. Solutions are often sought on community level, and there is a perception that communities help to alleviate the problem. Poverty of teachers impedes their status and respect in the eyes of their pupils, as well as creates corruption risks.

One third of pupils think that teachers treat children with poor academic results worse than the rest of the class. Religious minorities are the group that is treated worst by classmates.

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#### 1. Introduction

Education is the foundation for a healthy and developed society, as well as a vital determinant of civic culture and participation in democratic politics. The sphere of education in Armenia is emphasized by the government of Armenia as one of prerequisites for sustainable development of the country, preservation of human capital and its reproduction (Government of the Republic of Armenia, 2011).

Currently Armenia is completing its transition from the Soviet-era system of 10-year schooling to a 12-year education cycle composed of a three-tier scheme including primary, medium and high schools. In 2012, 1441 general education schools are operating throughout the country. The number of students of general education schools is 386.5 thousand (data requested from the RA Government in June 2012).

Despite recent reforms in education with the purpose of assurance of equally accessible and qualified education for all, the overall quality of school education remains a problem in the country. According to UNICEF (UNICEF, 2012) approximately 25 percent of school entrants do not reach high school, while the majority of children with disabilities have limited access to basic education. Public expenditure on education in Armenia from 2006 to 2009 was 4.7 % of GDP according to the Human Development Statistical Index (UNDP, 2011). The ratio of educational expenses to the GDP in Armenia still remains considerably low in comparison with the countries of Organization of Economic Cooperation and Development (OECD), as well as with countries of Central and Eastern Europe (CEE) and CIS countries (Government of the Republic of Armenia, 2011). The economic crisis of 2008 left its impact on the quality of school education, creating additional barriers for the poor (@unqlunujuû, 2011). While there have been no major recent studies on school wastage, the data on drop-outs and absenteeism in 2008 was discouraging in that it portrayed growing trends in both spheres (Hua, 2008). It remains to be seen whether these trends were reversed or at least halted.

The Armenia Millennium Development Goals 2005-2009 report indicates that there are considerable shortcomings related to the quality of secondary education in the country. Students are forced to seek private tutors (instead of attending classes at school) in order to obtain the knowledge fitting the standard requirements and gaining entry to the next level of education (RA Government & UN Country Team in Armenia, 2010).

## 1.1. Overview of Major Changes in School Educational System

The Armenian school education system underwent several reforms which to some extent disrupted the daily educational routines. The consequences of the changes can still be felt. Three major areas of reform can be identified: extension of schooling years, change of grading system and creation of separate high schools<sup>1</sup>.

One aspect of the reform was the extension of the schooling years. The old system was that of school education of 10 years. It was changed to 11 years in 2001 and to 12 years in 2006

<sup>&</sup>lt;sup>1</sup> In addition to these numerous changes in textbooks and curricula occurred though the years. The issue of textbooks is discussed in Material and Technical Access to Education section of this report.

(National Assembly of the Republic of Armenia, 1999). The current National Curriculum for General Education is based on a twelve-year general program, which consists of compulsory primary (grades 1 to 4), compulsory lower secondary (grades 5 to 9) and upper secondary (high school, grades 10 - 12) education. Vocational and technical-professional schools are an alternative to high school (UNESCO, 2011).

Another major change in the educational system was the shift from five to ten point grading system, effective since September 2006, with the aim of increasing the accuracy and authenticity of the pupils' assessment results (RA Government & UN Country Team in Armenia, 2010).

The most recent change in school education system is the establishment of high schools as separate schools that bring together pupils from various schools. The decision made in 2008 is effective since September 2010. This is an entirely new experience for the Armenian society accustomed to the idea of the child generally attending one school from the first to the last grade.

#### 1.2. Previous Surveys

<u>Caucasus Barometer</u> by Caucasus Research Resource Centers (CRRC) is a yearly country-wide representative survey carried out in Armenia, Azerbaijan and Georgia. The surveys conducted in 2010 and 2011 included a question on perceived trends in quality of school education. A large and growing group of respondents think that the quality of education in Armenia's secondary schools had worsened during the five years preceding the survey (Caucasus Research Resource Centers, 2010, 2011). See Figure 1 for more details.

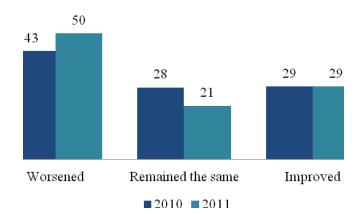


Figure 1: During the last 5 years, quality of secondary education has ... CB 2010 and 2011, %

There are statistically significant differences between respondents from Yerevan and other towns and villages in their perceptions of the trends in quality of education<sup>2</sup>. The residents of Yerevan are the most critical, followed by residents of other urban areas, while respondents from the villages report less negative trends (see Table 1).

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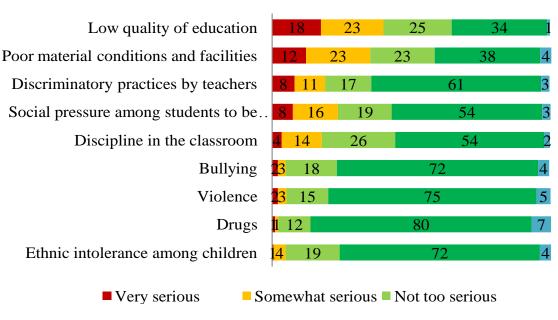
<sup>&</sup>lt;sup>2</sup> One-way ANOVA for CB 2011: F(2,2017) = 25.555, p < 0.001

Table 1: During the last 5 years, quality of secondary education has ... CB 2010 and 2011, %

	2010			2011		
	Capital	Urban	Rural	Capital	Urban	Rural
Worsened	51	43	36	56	51	40
Remained the same	29	25	31	22	18	24
Improved	20	32	33	22	31	36

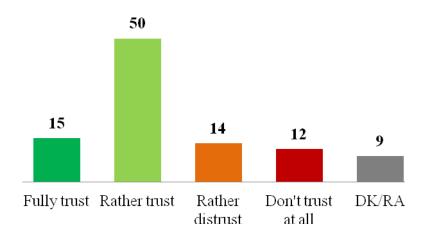
Another nationwide representative survey on levels of social cohesion in Armenian society (Caucasus Research Resource Centers - Armenia, 2011) includes a number of questions related to school education. According to the survey 17% of the population say they can "never" afford buying school materials and books for every child in their household; another 10% can seldom afford it. Respondents are concerned with the low quality of education, poor material conditions and facilities at school, social pressure among students to be popular (i.e. necessity to show off, to have a modern phone, or brand new clothes, etc.) and with discriminatory practices by teachers. Issues such as violence, drugs and ethnic intolerance among children are of almost no concern (see Figure 2).

Figure 2: How serious is each of the following problems at the school, attended by your oldest child/you? Social Cohesion Survey 2011, %



Schools enjoy a fairly high level of trust: 65% express trust towards the schools (see Figure 3). Despite high levels of trust the majority of respondents (72.8%) express no willingness to participate in solutions to various issues in their local school. Those willing to participate, mentioned school building repair (6.2%), organization of school events (5.6%), school budget (5.6%), and subject syllabi/learning programs (3%).

Figure 3: Overall how much do you trust schools? Social Cohesion Survey 2011, %



## 2. Methodology

The study combines four methods of primary data collection: (1) observation of schools, (2) surveys of pupils, (3) in-depth interviews with school principals, government officials and experts, and (4) focus group discussions (FG) with teachers and parents of pupils. The fieldwork timeframe was August-October 2012. Secondary data (statistical data, previous surveys, legislative documents, international organizations' reports) are used to support the findings. This study does not claim representativeness. It is of an exploratory nature, aimed at highlighting the most problematic aspects of access to school education in Armenia.

#### Sampling of Schools

A list of all schools, containing 1441 entries, was obtained from the Armenian Ministry of Education. After narrowing it down to Yerevan and four marzes (Shirak, Lori, Tavush and Syunik)<sup>3</sup> the sampling frame consisting of 799 schools was obtained. A total of 30 schools were selected, based on the sampling strategy requested by OSF: six schools from Yerevan and six schools from each marz were selected. From each marz two town schools and four village schools were selected; each village school was selected from a corresponding category of "up to 30 pupils", "31-60 pupils", "61-100 pupils" and "101 and more pupils." It was ensured that at least three high schools were selected, one in Yerevan, one in a regional town and one in a village. The schools from the corresponding subgroup (e.g school villages of Tavush with 31-60 pupils) were selected via random number generation. The original sample of 30 schools had to be modified during fieldwork in Yerevan as there were seven refusals by school principals disallowing observers' access to school premises. In the regions five schools from the original sample were replaced due to inability to contact school officials (two cases), a personal family

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<sup>&</sup>lt;sup>3</sup> These five territorial-administrative units were the preferred targets of research, as requested by OSF-Armenia

emergency of a school principal (one case) and detrimental road conditions preventing the research team to reach the required village (two cases).

#### Observation

Thirty schools were visited by TCPA staff; observers used observation score cards (see Appendix 1) to assess various aspects of school conditions and collect basic information on school personnel. In some cases written comments were provided as a supplement to quantitative scores.

### Survey with Pupils

A total of 450 anonymous self-administered questionnaires (see Appendix 2) were distributed to pupils at the schools visited, as well as in the streets of the settlements and neighborhoods of sampled schools. The lower age limit was set to 12 years<sup>4</sup>. The questionnaires were filled by respondents in the presence of research team members, who were trained to give clarifications, should children have difficulties in comprehending a specific question.

#### In-depth Interviews

A total of 29 in-depth interviews were conducted with school principals (17), government officials at various levels such as member of National Assembly, municipality education department head, village community head (5) and education experts (7). The interview guides (see Appendix 3) had a common set of questions as well as questions pertaining to the relevant target group. Interviews were voice-recorded and later on transcribed (in Armenian).

#### Focus Group Discussions

A total of 10 Focus Groups were conducted with teachers (5) and parents of pupils (5) both in Yerevan, in towns of the selected marzes and in villages. The focus group guides (see Appendix 4) had a common set of questions as well as questions pertaining to the relevant target group. All FGs were moderated by a single moderator (TCPA staff member) with assistant note-taker. The discussions were voice-recorded and later on transcribed (in Armenian). See Table 2 for the overview of FGs composition.

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<sup>&</sup>lt;sup>4</sup> There were 20 respondents with age lower than 12 (10 and 11). These children studied with their older peers in the classes where questionnaires were distributed.

**Table 2: Composition of Focus Groups** 

FG#	Date	Participants	Location	Number of participants
1.	18.07.2012	School Parents	Yerevan	8
2.	21.07.2012	School Teachers	Yerevan	7
3.	16.08.2012	High school Parents	Yerevan	7
4.	21.08.2012	High school Teachers	Yerevan	10
5.	07.09.2012	School Teachers	Shirak, town	6
6.	20.09.2012	School Parents	Shirak, village	7
7.	27.09.2012	School Teachers	Lori, town	7
8.	28.09.2012	School Parents	Lori, village	6
9.	29.09.2012	School Teachers	Tavush, town	8
10.	05.10.2012	School Parents	Syunik, town	9

## 3. Legal Access to Education

The documents regulating the sector of education in the republic of Armenia include the Constitution of the Republic of Armenia (1995), the law on education of the Republic of Armenia (2009) as well as other laws and legal acts regulating the field. Article 39 of the chapter on fundamental human and civil rights and freedoms of the Armenian Constitution indicates that everyone shall have a right to education and that the secondary education in state educational institutions is free of charge (Constitution of the Republic of Armenia, 1995).

Analysis of legal framework pertaining to school education, presented in this report, draws heavily on expert opinion, as well as on hands-on experience of practitioners in the field, interviewed during the course of the research. Speaking about gaps in the legislation on school education and possible ways to improve it, experts described the current laws as good but in need of improvement. Implementation of the laws rather than the laws themselves is a major current problem in the school education system. The current legal framework is assessed by experts as fairly advanced; however problems arise when it comes to implementing those accordingly. There seems to be a huge disconnect between the laws and the way those are being applied.

The main point of criticism was the issue of politicization of schools. The national policy on the general education of the law of education of the Republic of Armenia states that it is prohibited to implement political activities or advocacy in educational institutions (Article 4, Law on General Education of RA, 2009). However, the research demonstrated high levels of concerns among experts and school administration regarding high levels of politicization of the educational sector in Armenia, with abundant concrete examples. There was a vast amount of indication on the unproductiveness of the educational system due to an increased political party membership of the school principals. This factor was highlighted many times when speaking about the regulations, laws and their implementation. Experts and school principals alike voiced the necessity of separating the school system from any kind of political affiliation. Schools have to be independent. The principals' leadership position in schools is highly dependent on their political party membership which immediately reminded the reality of the Soviet time. The problem of politicized educational system was identified as one the major impediments in achieving better student performance, addressing the needs of the teachers and pupils as well as generating a positive working environment at schools in general.

Politicization of the education system affects the access to education in terms of children becoming indirectly involved in the political process by being informed about the situation where they are forced to make their parents vote and become dependent. This process gets all the parties involved including principals, teachers, parents and pupils. We are witnessing an operating system of politicized principals responsible for getting votes for a given political party. The indication of political involvement in the law on education is very broad. It does not strictly regulate the actual ongoing processes in schools.

The Armenian Labor Code regulates collective and individual working relations, defines the bases for the establishment, modification and termination of these relations, as well as foresees the conditions for providing the security and maintenance of the health of employees [in general] (Armenian Labor Code, 2004). However it does not provide specific references to teachers and anything pertaining to the teacher – principal relationship. The FG discussions with teachers have revealed some disappointment in terms of a full authority exercised by the principals of some of the schools. Asked if they think there is a need of changes in the legal framework regulating the school education, opinions were heard on possible introduction of a specific appendix that would regulate the principal – teacher relationship. Teachers would like to see some changes in the mechanism regulating principal – teacher relations.

Order on the formulation of the school boards at state secondary institutions provides that a principal of a given institution cannot be member of the board of the same institution. The board shall be composed of 8 members, including representatives of the government of the republic, local government bodies, teachers and parents (Order on the formulation of the collegial governing body in the "state secondary institution" non-profit organizations of the Republic of Armenia, 2010). One of the main reasons in the introduction of the school boards system was to organize the school governance through local school boards by ensuring community participation and developing a practice of democratic school management with communities and parents expected to become more involved in the process of school management (Satenik Mkrtchyan and Ruzanna Tsaturyan, 2008). During FG discussions, some teachers voiced their concerns about being unprotected and left at the mercy of principals notwithstanding the introduction of boards in schools aimed at generating democratic governance in the school education system of the republic. The idea to involve representatives from different levels of governance in school boards was aimed at generating a democratic decision-making environment and with the purpose of exercising open and objective solutions for the problems that schools may encounter. The research has shed light on the difference between the legislation pertaining to the role of the boards and how they actually operate. The introduction of boards was a step forward in terms of exercising a more democratic form of school governance, however according to the answers received on their operation disappointments were heard due to their formal nature. There are cases/schools where decisions are simply made by the principal as opposed to a joint participation. Teachers are said to be unprotected in their schools, and may be fired at a simple discretion of the principal.

In fact this kind of authority on behalf of the principals generates nervous and unsatisfied environment on behalf of the teachers of a given school which, in its turn, leads to limited access of education regarding pupils. With the abovementioned conditions developing in schools teachers become unprotected - a condition psychologically leading them to perform their work unwillingly that in fact results in an unfriendly behavior towards the pupils.

"Out of 1400 schools principals of 1150 are political party members. This is a scandal. Such a school is no longer a school. The principal forces teachers to join the party as well; they don't want to, he/she fires them. The village mayor orders the school principal to secure parents'

votes. Children are forced to ask their parents to vote for the sake of getting their grades." Expert

There were also examples of positive nature regarding the changes in the school legislative framework. One of the school principals interviewed provided an example of initiating a policy change in school legislation. Article 16 on the admission, transfer and dismissal of pupils of the Law on General Education of Armenia provides a 120 – 200 class threshold of absences from school (Law on General Education of the Republic of Armenia, 2009). This threshold was achieved due to extensive complaints on behalf of the school administration efforts with the aim to amend the previous regulation according to which a child had to pass exams for 5 subjects in case of 120 – 160 absences. The basis for the change served a justified example of a child becoming sick of a chickenpox, a situation that would inevitably lead the pupil to be absent for such a period of time.

The research questions posed for this section of the study were: Can the Armenian legal framework be improved towards better access to education? If yes, how?

While the current Armenian legal framework pertaining to school education is fairly well developed, it falls short of proper implementation and there is room for improvement. Political affiliation of school principals is a major concern, leading to a suggestion of taking legal steps to prevent its negative impact on school environment. Educational sector should be totally separated from the political pressures on behalf of governmental authorities. This should be strengthened by an additional legal document clearly highlighting that no interference shall be allowed on behalf of governmental bodies, and tolerated on behalf of school staffs. The need of a legal document strictly separating political from the education sector was raised several times during the study.

#### 4. Financial Access to Education

According to the RA Government e-government website interactive budget data, the budget of 2012 envisioned for general secondary education is 49 billion AMD. The amount of money allocated to general secondary education is more or less stable (it was 45 billion in 2011 and 47 billion in 2010). That amounts to roughly 35 million AMD per school. This is a very crude estimation; currently school funding is being allocated by the state based on the number of pupils enrolled at the school.

The financing of all public secondary educational institutions in the Republic of Armenia is implemented according to the number of students based on the following formula:

 $\mathcal{L}q = U_{\overline{P}} \times Uq + \mathcal{I}q$  where:  $\mathcal{L}q$  is the total amount allocated per year to the institution,  $U_{\overline{P}}$  is the number of students in the institution, Uq is the sum of the annual amount per pupil, and  $\mathcal{I}q$  is the minimum amount for maintenance costs of the institution (Order on the calculation of financing of the public secondary educational institutions, Republic of Armenia, 2006).

According to succeeding joint order of the Ministers of Finance and Economy and that of Education and Culture the coefficients of the abovementioned formula should be read as follows: The annual amount per one pupil is 66,956 AMD, the minimum amount for maintenance costs of the institution is 11,450,000 AMD. The calculation is done by taking into account several additional factors, such as school location and number of pupils in a given school. The annual amount pertaining to one pupil in a school is multiplied: -for the schools located at high-mountainous areas by 1.2 coefficient; -for the schools of mountainous areas by 1.02 coefficient; -for the only schools in the area having more than 400 pupils by 1.2 coefficient. As a total number of pupils in a given institution the average annual pupil number is taken into consideration which is subject to check in the beginning of the school year taking into account the facilitation of actual classes (Joint Order of Ministers of Finance and Economy and Education and Culture, Republic of Armenia, December 2006).

The funding mechanism in the public secondary institutions of Armenia based on the exploratory research done in 30 schools of the republic can be divided into three types with the state budget financing as the main and mandatory source; support from private donors and international organizations however not all schools have such privileges; as well as the support of parents, again depending on the mentality/culture and availability of resources in a given area.

There was a common answer uniting all the interviewed parties of the research that the more funding a school receives the more it will be able to operate in a more effective way. Considerable amount of school principals are left disappointed because of the new funding system introduced based on the number of children at school. Almost all the principals interviewed indicated that there is a gap between what the school receives from the state budget and the actual needs of the school. The opinions on the non-applicability of the current school financing procedure based on the number of pupils contained disappointment on behalf of many school principals based on various concerns. During the research it became obvious that some of the schools observed and interviewed, especially those in the villages have too small numbers of pupils a factor that creates large financial gaps within the school administration, and the principals are forced to minimize the costs such as electricity, and heating. Tying the budget to the number of pupils per school is controversial, as the qualitative data collected in the course of this research demonstrates. While some schools are motivated to perform better in order to attract more students and improve their financial base, those schools that do not manage to maintain a certain minimum of enrolled pupils face serious problems in maintaining a minimum needed level of operations. This problem is particularly felt in areas with a more pronounced demographic decline.

"Funding per pupil destroyed the Armenian School. High schools should not go ask for more pupils from the basic schools. Obviously, this impacts the quality [of education]." Principal, town

According to the observations of schools and interviews of school principals there is a tendency of principals referring to various donors for the purpose of getting additional funding for the school since the state budget was said to be not enough to satisfy all the needs that schools usually exercise. Most of the schools' principals interviewed were well aware of the opportunity to search for an additional, private funding for school. In eight out of 30 schools visited there were signs or plates recognizing donations. The cases of securing donor funding were also reported during in-depth interviews with principals.

Some 32% of pupils surveyed say that they pay a fee for school (monthly, annually, or a fee collected by parents' council in general); another 19% are unsure if they do. Contributions by parents are the main way of compensating for budget shortages. These range from small non-official "fees" for ongoing expenses to larger one-time payments for specific purposes, such as renovation. There is a mixed feeling among parents regarding their financial contribution to the school. While some think it is normal to support the school attended by their child to at least some extent, many parents question this practice, find it annoying, unjust, a "most painful issue" and so on. Collecting money from parents for the "school fund" seems to be a widespread practice.

"For me the worst thing about the school is the circulation of finances in it. Not to mention buying presents for teachers. I consider it a shame that you can give 5000 AMD to a teacher and he/she will take it, and this is very common." Female parent, 44 years old, Yerevan

The research questions posed for this section of the study were: What is the average funding per school? Is there a gap between what the school receives in terms of finances and what it considers as necessary to insure proper access to education? The state secondary education institutions in Armenia are funded based on the number of children in a given school and taking into consideration various factors such as the number and the location of schools. A very crude estimate based on the calculation of the total budget amount of 2012 foreseen for the general secondary education sector and the number of schools in the republic is 35 million AMD per school. There clearly is a gap between what schools receive in terms of finance and what they need in order to provide quality education. Some schools are successful in attracting additional resources, but overall the burden of providing for basic things like minimal renovation, or cleaning facilities is often placed on parents' shoulders.

# 5. Physical Access to Education

This section of the report explores issues related to physical access to school, transportation costs in terms of time and money, overall conditions of school buildings as well as existence and condition of support premises such as library, gym, laboratories, workshops, cafeteria, etc.

#### **5.1.** Availability of Schools and Teachers

According to official statistics the ratio of teachers to pupils in the schools of general education is currently 1:9 (National Statistical Service of the Republic of Armenia, 2011). In this regard Armenia is similar to other post-Soviet countries and is doing better than many developed countries where teacher/pupil ratio is higher (UNESCO Institute for Statistics, 2012).

Existing survey data shows that 95% of population reports having a school in their residential area<sup>5</sup> (Caucasus Research Resource Centers - Armenia 2011). The pupils' survey conducted within the framework of this research generally confirms overall availability of schools within walking distance: 75% of children report going to school by foot, 12% get to school by family owned car, 9% use public transport, 3% use a taxi and there are 2 pupils (0.4%) who report using a school bus. The average time to get to school is 12 minutes, 92% of respondents spend 20 minutes or less to get to school, the longest time is 45 minutes (2 pupils, 0.4%). Those who have to pay to get to school (12%) pay on average 260 drams. See Table 3 for more information on costs of reaching the school.

Table 3: [If you have to pay] how much do you pay to get to school? TCPA OSF Survey

	N	%	Valid %
50-100 AMD	30	7	54
150-500 AMD	18	4	32
600-1000 AMD	8	2	14
Total	56	12	100

One-third of schools observed in the course of this research have fairly poor overall conditions of main roads leading to the schools: one a five point scale where 0 means "non-existent" and 5 means "excellent" the road conditions of four schools received a score of one, another six schools received a score of two. This is a problem of the rural areas, where the overall score for this observation parameter is 2.47 as compared to 3.71 for Yerevan and other towns. Some 23% of pupils surveyed report that sometimes they cannot get to school because the road is in a bad condition; another 3% say it happens "often" or "very often."

### **5.2. School Building and Overall Conditions**

Observations revealed great discrepancies between overall school building conditions: from freshly renovated and well equipped schools to decaying buildings. While the main purpose of observation was to produce numerical scores, in some cases observers provided written comments, such as:

The school is decaying because of humidity; the floor is in terrible condition ... Pupils have to sweep the classroom after the classes. The classrooms are dusty, everywhere the smell of humidity can be felt (Observation card 8, Village school)

<sup>&</sup>lt;sup>5</sup> Survey refers to general schools with no indication on the differentiation between basic and high schools.

Heating is by diesel fuel. The gas pipeline goes right above the school. School has the boiler house, but it is not provided with gas. (Observation card 13, Village school)

Overall 12% of pupils surveyed do not consider their school to be a comfortable place. Some of the explanations given by the children were: "bad conditions/need for renovation" (15 answers), "no heating" (7 answers), and "tailing dump in front of the school" (5 answers). Similarly 11% of survey respondents considered the overall physical condition of their school as either "bad" or "very bad." On the positive side 33% of children surveyed consider the overall physical condition of their school to be "very good." See Table 4. Children from the villages report their schools being less comfortable<sup>7</sup> and are less satisfied by overall physical conditions of their schools<sup>8</sup>.

Table 4: What is in your opinion the overall physical condition of your school (Building, walls, classroom, light, heating etc.)? TCPA OSF Survey

		Frequency	Percent	Valid Percent
Valid	Very bad	7	1.6	1.6
	Bad	43	9.6	9.7
	Good	250	55.6	56.2
	Very good	145	32.2	32.6
	Total	445	98.9	100.0
Missing		5	1.1	
Total	450	100.0		

Government of Armenia planned to renovate all general education schools (including proper heating mechanisms) by 2012 spending 8-10 percent of the total public expenditures in the sector for capital expenditures over the medium-term (Republic of Armenia Government Plan, 2008).

In the framework of the "high school rebuilding" expenditure program a reconstruction work was implemented in 8 high schools in the republic spending 267,163,500 AMD (Article 6, Construction, Armenian Ministry of Urban Development, 2012 Activities report).

The disparities between schools' physical conditions were also visible through qualitative aspects of the research. During in-depth interviews all three target groups often mentioned physical conditions (specifically need for renovation in many schools) as an issue that needs to

<sup>&</sup>lt;sup>6</sup> One of the schools surveyed has a tailing dump on its territory; all the answers are from this school. The observers were told that males from this village have health problems (documented through conscription procedures).

<sup>&</sup>lt;sup>7</sup> One-way ANOVA F (2, 443) = 22,746; p < 0.01. Mean values (on a scale from 1 "not at all" to 4 "absolutely yes"): Yerevan 3.16, town 3.54, village 2.99.

8 One-way ANOVA F (2, 442) = 13,570; p < 0.01. Mean values (on a scale from 1 "very bad" to 4 "very good"):

Yerevan 3.15, town 3.43, village 3.04.

be addressed. For school principals it was often mentioned as the main burning problem. On the other hand, the physical condition was often mentioned as the main recent success story in a specific school or in the sector of school education in general. One things was common - both parties, having their schools renovated or not, viewed school renovation as the most important aspect for school operation in general.

"The first success is that as a disaster zone we have normal schools with the heating system and conditions according to the norms, stone-building, light... Schools are not housed in temporary shelters anymore." Village community head

"The most burning problem is school's renovation. The school has seen no renovation since 1970 (since the establishment)." School principal, Yerevan

"We need to find sponsors as the school is in need of renovation. If the problems of village were solved, if it had gasification, the heating of school would also become easier. If the building conditions of our school improve, we will preserve it, and protect the border as well." School principal, bordering village

#### 5.3. Availability of Support Premises

Observations conducted in 30 schools show that availability of support premises (laboratories, gym, cafeteria, arts and crafts workshops, medical room) is the most problematic dimension of the physical aspect of access to school education, except for the IT lab and the library, which seem to be less problematic. There were 12 schools with no medical room, 11 schools where there was no gym; 11 schools with no arts and crafts workshop, 10 schools had no laboratories, and 8 schools lacked a cafeteria. The mean scores for these support premises are the lowest scores compared to other aspects observed; this holds true both for urban and rural schools (see Appendix 5).

Survey data shows a similar pattern: while libraries and computer labs are less of a problem in terms of availability and quality, the gym is available to 84% of respondents, while its overall condition is described as "very bad" by 5% and as "bad" by 13% of the respondents. Some 20% of children never use any additional equipment during physical education classes. There are statistically significant differences in children's assessments of overall conditions of gyms in Yerevan, other towns, and villages: Yerevan is in the best position, followed by towns and villages. When asked, what is the main thing they would like to change about their school, "improved gym" is the most frequent answer (mentioned by 38% of students), followed by school physical condition (35%) and textbooks (33%). See Figure 4 for children's expressed wishes for a change.

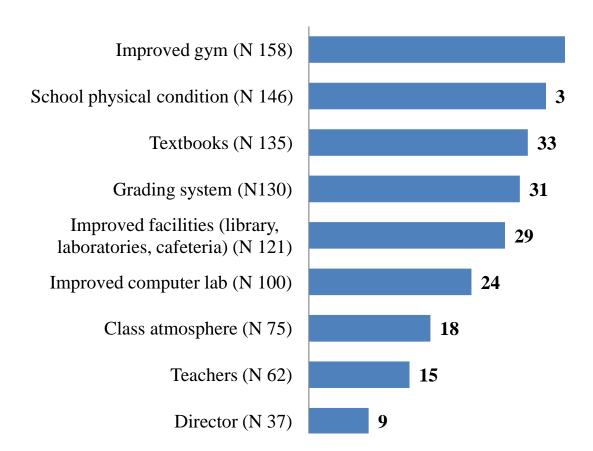
63

 $<sup>^9</sup>$  One-way ANOVA F (2,380) = 13,456; p < 0.01. Mean scores (on a scale from 1 "very bad" to 4 "very good") are 3.11 for Yerevan, 2.79 for towns and 2.72 for villages.

Table 5: Availability and condition of support premises. TCPA OSF Survey

Do you have a	N of	% of	Overall condition on a scale from 1 (very
-	"Yes"	"Yes"	bad) to 4 (very good)
Library	436	97	3.05
Computer lab	430	96	3.16
Internet access in the	310	69	
computer lab			
Gym	378	84	2.91

Figure 4: What is the main thing you would like to change about your school? TCPA OSF Survey, multiple response, (N of answers, % of cases)



Conditions of gyms were mentioned during the in-depth interviews and FG discussions as well.

<sup>&</sup>quot;I will speak for our village school. We have no gym, the sports classes are conducted on the asphalt and in the school corridor in winter. It is not the right quality." Village community head

<sup>&</sup>quot;I wish we had a good gym. This is the most valued pleasure." Female teacher, 60 years old, town

During FGs negative comments were made regarding cafeterias. Schools either have no cafeterias, or those do not correspond even to the basic desired criteria, i.e. the food that is being sold is not checked for quality. One of the parents indicated that school administration has no control over the quality of the food being sold by the organization contracted.

People link the physical condition of schools with the pupil-performance, seeing that one inevitably leads to another. It has become a necessity to exercise the existence of modern, state of the art schools in order to have the opportunity to keep pace with the fast changing environment and developments in current educational sector.

Gyms are recognized as the most needed, desired and missing facility of the schools observed. Interestingly enough, not only pupils, but also teachers and parents assess the necessity of having a gym as one of the most important aspects for good school operations. One of the schools observed was in a very bad physical condition, including classrooms, teacher's room, corridors, windows, lavatories. However they had a newly renovated gym which was standing out with its fresh and cleaned view.

The research questions posed for this section of the study were: What is the most problematic aspect of physical access to education in Armenia? What is least problematic? Availability and condition of support premises such as gyms, cafeterias, arts and crafts workshops and medical rooms are the most problematic aspects of physical access to school education. Availability of schools (in the neighborhood, within walking distance or reachable by transportation in a reasonably short time) as well as the ratio of teachers per pupil are the least problematic aspects. Physical conditions of school buildings are very diverse, so for many schools this also remains a serious limitation to a proper educational process.

#### 6. Material and Technical Access to Education

This section addresses the issues of availability and quality of teaching equipment in the schools, such as computers, internet, audio-visual equipment, illustrative materials (maps, posters, models, etc.). It builds upon the discussion of physical access to education section, where availability and general quality of support premises was discussed. The quality of textbooks is also addressed in this section.

### 6.1. Computer Labs

According to the Armenian Government plan it has foreseen to follow up by equipping all schools with the necessary amount of computer equipment, a large part of which will be connected to an inter-school network (Republic of Armenia Government Plan, 2008).

The spread of computer technology to Armenian schools was mentioned among success stories and recent changes by experts and principals interviewed during the research project. However, this aspect of access to school education is not uncontroversial either.

School observations show big discrepancies in conditions of IT labs: it is the third best observed criterion for Yerevan and other towns with the mean score of 4.14 (on a five point scale) while the mean for village schools is 2.64.

Pupils surveyed report using computer labs fairly often: most of respondents use it once or twice a week. Interestingly, pupils in Yerevan use computer lab less often, as compared to other towns and villages (this applies to those schools that do have computer labs), and this difference is statistically significant <sup>10</sup> (See Figure 5). Some 44% of pupils say there are not enough computers in the lab for all the pupils in their class. Pupils from villages are less likely to report having enough computers <sup>11</sup>; 85% said they would like to use it more often.

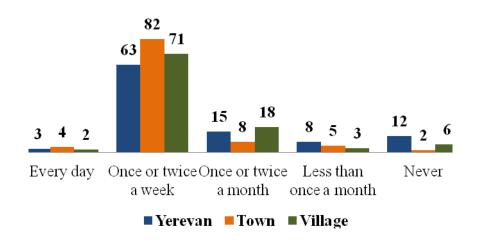


Figure 5: How often do you use the computer lab in your school? TCPA OSF Survey, %

When asked why they are not using the computer lab as often as they would like to, the most frequently given reason is lack of time, however 82 pupils (24% of those who provided an answer) say the room is closed most of the time and another 80 children report being discouraged from using it. See Table 6.

Table 6: Reasons for not using the computer lab as often as one would like to. TCPA OSF Survey

	N	Valid %
I have no time	105	31.1
The room is closed most of the time	82	24.3
The room is open but we are discouraged from using it	80	23.7
Other	65	19.2
I don't know how to use it	6	1.8
Total	338	100

<sup>&</sup>lt;sup>10</sup> One-way ANOVA: F(2,431) = 9,566; p < 0.01

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Responses from villages differ significantly from Yerevan and other towns (One-way Anova F (2,436) = 6,844; p < 0.01). Mean values on a scale from 1 "not at all" to 4 "absolutely enough" are Yerevan 2.63, town 2.18, village 2.38.

The observation visits to schools have also revealed that just having a good computer lab is no guarantee that pupils have access to it. One of the observation cards contains the following remark:

"Overall the school is in perfect condition, but we saw that students come to a local NGO after classes to use computers and internet, meaning that they have limited access to computers and internet at school – something that the head of the local NGO was also stating." (Observation card 26, town)

The conditions and the availability of computer labs were also commented upon during FG discussions.

"They said on the TV that our school has a good computer lab, but my daughter hasn't been there even once. It is four years that they are having informatics class but they haven't entered the lab yet." Female parent, 44 years old, Yerevan

### 6.2. Other Labs and Teaching Equipment

Survey shows that 16% of pupils never conduct experiments during natural science classes. Among those who do, about 80% use the equipment themselves. Principals, parents and teachers alike are concerned about absence of hands-on experience in natural science classes due to shortage of proper equipment.

Examples were brought on how teachers take care of problems such as non-availability of needed equipment so that to provide children with a full understanding of the subject/s they learn.

"Now we are learning Aram Khachatryan and not to hear his Gayane, Spartak ballet music, it's kind of abstract. So I promised to bring [the equipment] so that children can listen to it." Female teacher, 60 years old, town

"They don't conduct any chemistry experiments. My son, who loves the subject, always says what kind of chemistry is that if we never see those experiments that are written in the book?" Female parent, 43 years old, Yerevan

#### 6.3. Textbooks

Textbooks seem to be one of the most burning issues of current Armenian school education. As mentioned in Figure 4 above it is the third item on the list of things children would like to change about their school. The complaints from parents and teachers regarding textbooks were repeatedly voiced during FG discussions. The problems are numerous: from the sheer weight of books leading to health problems for children who have to carry a heavy load every

day to quality of content (some books being too simplistic while others being written in a language that even teachers find hard to comprehend), to inconsistency, mismatch between official programs and the content of textbooks, mismatch between the content of textbooks and the knowledge children require to enter higher education institutions, impracticability from pedagogical point of view and so on. It was also widely mentioned that working exercise books are an unnecessary and expensive new burden for parents as well as teachers who are not allowed to copy the textbooks for their students and who often are just not able to cover the material because of insufficiency of class time.

"I had to tell the principal that I do not allow my daughter to bring 10 textbooks to school every day." Female parent, 33 years old, Yerevan

"In the History textbook you read that the Armenian territory is 330.000, in another one it is 300.000, and you don't know what to say anymore. One author decided that the king had a different name." Female teacher, 31 years old, town

"The terminology is such that they open the book and get scared. And they ask to tell their lesson based on our explanations only. But they don't want to open the textbook." Female teacher, 53 years old, Yerevan

"There is a physical education textbook for the second grade. Why did they spend money on that? It says how to stand aligned, or when commanded 'attention.' Well, we show that." Male teacher, 61 years old, Yerevan

The research questions posed for this section of the study were: What is the most problematic aspect of material and technical access to education in Armenia? What is least problematic? The most problematic aspect of material and technical access to education are textbooks. The situation with the textbooks is bleak: there is a widespread dissatisfaction with their quality among children, parents and teachers alike. An overwhelming amount of answers was received due to complaints with the content of the textbooks introduced. There is great dissatisfaction with the textbooks of almost all the subjects, with even parents having difficulties in understanding these.

The formal availability of computers seems to be the least problematic aspect. The majority of schools observed in the framework of this research showed the availability of computer room with a certain amount of computers. However, not all the schools showed a regular practice of their usage. The number of effectively working computers differed from one school to another. A minimum number of 2-3 working computers were available in the labs. According to the survey results pupil complain about having not much free time to use these. Or they are being discouraged from using them. Cases were revealed when children are not allowed to use computer labs, or simply don't have any access to them.

The research has shown that there are more computer labs in Yerevan and their condition is better, but they are used less often. In towns, and especially in villages there are less labs, their condition is poorer, but for those schools that do have labs, pupils use it more often. Pupils in towns seem to have enough computers per class size, while pupils from villages are the most disadvantaged group in that respect. Sometimes computer labs are there but are not being used by pupils, because they are locked up or children are discouraged from using these. Natural sciences labs are absent or underequipped, most children have no opportunity to observe or practice experiments. Teachers complain about lack of teaching materials, some solve these problems by brining whatever they need from home. Developing an internal legal document that would regulate the process of using the computer rooms for all the pupils would definitely improve the access to school education in the country, mainly in the towns and village schools.

Although the least problematic aspect of material and technical access to school education can be considered the usage of the computer labs in schools, based on the survey findings of school children it can be concluded that a lot of children are simply not allowed/discouraged from having an access to computer labs in their schools. Recommendation concerning the usage of computer labs in schools would follow that a governmental decision is made for the principals of all schools to provide reports in a certain period of time to an authorized body by an established procedure to make certain that the computers provided to all the schools of the republic does not stand new on the tables (and are not used only by teachers and principals) but are being used by the pupils of various classes on a regular basis.

#### 7. Access to Education Personnel

This section discusses availability of teachers, administrative staff and support personnel, problems and challenges related to teachers' professionalism, access to modern methods of teaching, teachers' abilities to engage with pupils and so on. It also addresses issues of teachers teaching several subjects at once, readiness to explain the lesson again, teachers' behavior in case of a misbehavior of pupils, staff availability in schools as well as children's satisfaction on certain behavioral dimensions related to teachers and the school support staff.

# 7.1 Overall Availability and Quality of Personnel

According to "National Center of Educational Technologies," (2012) total number of teachers working in the secondary educational institutions of the republic of Armenia is 41,757. Out of the total number of teachers in the republic 91% have teacher (pedagogical) education. Some 26% of the total amount of teachers works in Yerevan, whereas 74% are based in marzes of Armenia (See Table 7). Female teacher representatives comprise 89% of the total number of teachers working in Yerevan. In the regions the following picture can be observed: 82% are female teachers while 18% represent male teacher population (See Table 9). Thus, the overwhelming majority of teachers in Armenia are female, though in regions there are somewhat more male teachers, as compared to Yerevan.

**Table 7: Number of Teachers in Armenia** 

	N	%	N with teacher	% with teacher
	11	70	education	education
Yerevan	10,832	25.9	9,594	23
Regions	30,925	74.1	28,465	68
Total	41,757	100	38,059	91

Table 8 Number of male and female teachers per Yerevan and regions of Armenia

	Male (N)	Female (N)	M (%)	F (%)
Yerevan	1,214	9,618	11.2	88.8
Regions	5,426	25,499	17.5	82.5
Total	6,640	35,117		

Out of the total number of teachers in the republic 86% have higher education, almost 12% incomplete higher education, 1% has vocational education, while 0.1% and 0.4% have graduated from state non-accredited institutions and have a secondary education respectively (See Table 9). As can be seen from Table 10, Yerevan has more teachers with higher education and less teachers with incomplete higher education as compared with the all the marzes in aggregate.

Table 9 Teachers of Armenia per educational level

	N	%
Higher education	36,028	86.3
Incomplete higher education	4,963	11.9
Vocational education	537	1.3
State non-accredited Institution	56	0.1
Secondary education	173	0.4
Total	41757	100

Table 10 Teachers of Armenia based on the educational level and settlement type

		N	%
Higher education	Yerevan	9,940	27.6
Trigiler education	Regions	26,088	72.4
Incomplete higher advection	Yerevan	786	15.8
Incomplete higher education	Regions	4,177	84.2
Vocational education	Yerevan	72	13.4
	Regions	465	86.6
State non-accredited	Yerevan	8	14.3
Institution	Regions	48	85.7
Secondary education	Yerevan	26	15
	Regions	147	85
Total		41757	

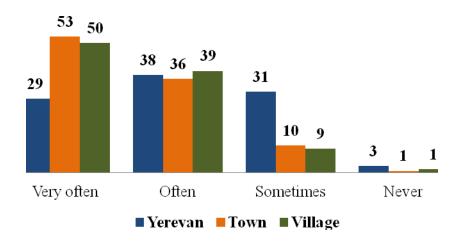
According to the school children survey carried out by TCPA some 67% of pupils report having teachers who teach several subjects. See Table 11 for more details.

Table 11: How many teachers teach several subjects? TCPA OSF Survey

No of Teachers	N	%
0	56	15.7
1-2	126	35.4
3-4	148	41.6
5-10	26	7.3

Children are rather positive about teachers' readiness to explain the lesson once more if it is not understood. There are statistically significant differences between Yerevan, other towns and villages in this respect<sup>12</sup>. Pupils in towns and villages see their teachers as more willing to repeat explanations (see Figure 6).

Figure 6: Are your teachers ready to repeat or explain the lesson once more if it is not understood? TCPA OSF Survey, %



Overall pupils are satisfied with the work of their teachers and support personnel at school. See Table 12 for more details.

 $<sup>^{12}</sup>$  One-way ANOVA: F(2, 426) = 19.092; p < 0.01. Mean values on a scale from one meaning "never" to four meaning "very often" are 2.92 for Yerevan, 3.41 for towns and 3.38 for villages.

Table 12: How satisfied are you with the following? TCPA OSF Survey

	N	Mean on a scale from 1 (not at all) to 4 (very satisfied)
Satisfaction with the overall quality of teaching in your school.	423	3.36
Satisfaction with the ability of your teachers to make the information easily understandable for you.	415	3.36
Satisfaction with the ability of your teachers to make the classes interesting.	423	3.25
Satisfaction with the work of the cafeteria staff.	365	3.04
Satisfaction with the support provided by the librarian.	407	3
Satisfaction with the work of the medical staff of the school.	389	2.89

School observation visits generally revealed a fairly high capacity of teachers to maintain discipline during classes. According to pupils' survey the most common disciplinary measure used by teachers is shouting, followed by a call to parents and a request to leave the classroom. Insulting was reported by 15% of pupils, another 8% report physical abuse (hitting). See Table 13 for more details.

Table 13: Discipline measures used by teachers. TCPA OSF Survey, multiple response

	N of responses	% of pupils
Shouting	168	40.0
Phone call to parents	155	36.9
Asking to leave the classroom	135	32.1
Take to director	98	23.3
Low grade	89	21.2
Insulting	64	15.2
Standing in the corner facing the wall	44	10.5
Hitting	35	8.3
Other, please specify	17	4.0
Total	850	191.7

While the survey showed that physical abuse (such as hitting, or slapping the face) is not that common, instances of children being hit or slapped on the face occur, and there are controversial feelings about these among parents and teachers alike. There is no shared understanding how a teacher who did that should be treated. While among both teachers and parents many said that they find it unacceptable, there were also opinions like:

"There are kids who are used to beating form the family; it is the only way they can be tempered." Female teacher, 22 years old, Yerevan

"By the way nowadays children deserve to be slapped, now it is the only fear that can temper them, there is no other method, impunity is everywhere." Female teacher, 50 years old, Yerevan

During observation visits to schools availability of support staff was also recorded. All schools had watchmen and cleaner staff, most schools had librarian, accountant and secretary staff.

See

Table 14for more details. Table 15 provides information on education of some of the support staff.

Table 14: Availability of support staff at schools. TCPA OSF Observation

	Yes
Watchman	30
Cleaner	30
Librarian	28
Accountant	27
Secretary	22
Cafeteria worker	19
Nurse	17
IT specialist	16
Laboratory assistant	11
Psychologist	6
Manager	5
Cashier	5
Security	1

**Table 15: Education of Support Staff. TCPA OSF Observation** 

#	Education	N
Ps	Psychologist (Mean years of experience: 5)	
1.	Higher education	3
2.	Special inclusive	1
	education	
3.	Teacher education 2	2
To	tal:	6
	Nurse (Mean years of	experience: 13)
1.	Higher education	3
2.	Vocational education	14
To	Total: 17	
	IT specialist (Mean years of experience:	
	<u>13)</u>	
1.	Higher education	9
2.	Teacher education	3
3.	Secondary education	1
4.	Technical education	1
5.	Vocational education	1
To	tal:	15

## 7.2. Teacher Training, Implementation of New Methods and Technologies

During in-depth interviews it was often mentioned that the overall success of reforms in school education very much depends on the performance of teachers as "the main bearers of the reforms." Most of the interviewees highlighted the high need for the change of teaching methods which should be in accordance with the existing environment, new criteria and programs implemented.

During FG discussions teachers complained about lack of resources needed for proper teaching, specifically if new methodologies were to be implemented. Some say that they are forced to teach according to the new methods but these methods are designed without due consideration of class realities; re-trainings are formal and non-informative.

The majority of those who participated in focus group discussions complained about the current teachers' training system, however considering that there is always a need for training. The organization of seminars was indicated to be of an artificial nature, conducted for the sake of money. The areas of complaints included the repetition of the seminars, topics and especially referring to the nature of the trainings being mandatory and not tailored to teachers' needs. Overwhelming majority complained about contents of seminars stressing the fact of gaining little or no knowledge. Teachers would like to see seminars organized in a more specialized way, on contemporary topics, which will provide concrete knowledge about new methods, textbooks etc. They would like to have professors and experts invited in order to receive the answers they need.

"You ask them a question and they don't know what to answer. What kind of re-trainer is that?" Female teacher, 53 years old, Yerevan

There were complaints about the period that seminars are being organized: teachers are taken to seminars during their leave/vacation. Dissatisfaction due to the settlement type was heard: teachers are called to Yerevan, but they are not provided with housing. Thus they stay either in their friends' homes, or rent places for the seminar-period.

The availability of a simple encouraging factor such as certificate of gratitude or a small salary increase would be a desirable development. It was also suggested to provide books as an additional material to complement the training.

Most of the teachers who participated in focus group discussions express their dissatisfaction regarding new teaching methods, highlighting the absence of relevant conditions.

Applying new methods in schools has created many problems as working with the new methods requires the availability of didactic equipment in schools. The computer room was mentioned as an example. The implementation of new methods depends on the improved condition of the classrooms. Otherwise (in case schools do not possess all the needed equipment), problems arise and teachers start having difficulties in presenting the educational material the way they would like to.

The teachers who work with large classes point out that new methods (such as group work) are not well suited for big groups. Smaller groups or separate classes would help teachers raise the productivity. There was a positive feedback related to the flexibility and freedom given to teachers.

"Let those who created, adopted these new methods, let them come once and try it out. Can they keep the class with this new method?" Female teacher, 44 years old, Yerevan

Overall pupils have positive perceptions of their teachers' willingness to explain the material, make it understandable and interesting. They are satisfied with the quality of their teachers and support personnel and report few incidents of hitting being used as punishment, though 15% of children report their teachers using "insulting" as a disciplinary measure. Some

teachers justify slapping a child by saying that with some pupils that is the only way to make them behave. Teachers complain about pressure to implement new methods of teaching, which are, according to them, often unrealistic to implement given the conditions. Re-trainings that are organized for them are perceived as largely waste of time, due to low quality and lack of specific content.

The research questions posed for this section of the study were: What is the most problematic aspect of access to education personnel in Armenia? What is least problematic?

Some 126 pupils out of 450 indicated having 1 to 2 teachers teaching several subjects at once, while 148 pupils said there are 3 to 4 teachers teaching several subjects. One of the problems related to the 'shortage' of teachers in schools are financial problems that schools with limited budgets exercise. This can be indicated to represent the most problematic aspect of access to education personnel in the country. Schools develop practice of having several teachers teaching several subjects at once.

It is obvious that a better quality of education can be achieved with separate teachers for every subject: when a person can concentrate on his/her specialization instead of becoming flexible due to a necessity and become responsible for curricula of several subjects at once.

Another problematic aspect of access to education personnel is the availability of nurses in schools. Most of the schools visited, especially in the towns and villages do not have a vacancy of nurse. Only 17 schools from the 30 observed had nurses. Most town and village schools share one nurse in the region. They were said to mainly visit schools for an hour in the mornings. No cases were observed of an urgent nurse necessity however it can be considered to be a problematic aspect in terms of pupils' health issues that may suddenly arise.

The least problematic aspect of access to education personnel is the availability of other support staff, such as watchman, cleaner and librarian.

# 8. Poverty Limits of Access to Education

This section discusses impact of poverty on school performance, in terms of grades and overall involvement in school life. It looks at perceptions of community support towards poor children. The impact of poverty on teachers' work and status is also mentioned.

## 8.1. Overall Assessment of Poverty among School Children

Most of the children surveyed report having at least basic conducive environment for studying at home: 81% have a desk of their own at the apartment/house they live in. Those who do, tend to have a higher average school grade. Almost 90% report being comfortable at home

 $<sup>^{13}</sup>$  For the purpose of exploring the link between poverty and school performance children were asked about their final grades in math, Armenian and foreign language at the end of previous school year. These grades were averaged to create an overall school performance measure. The mean school grade for those who do have a desk is 7.8, for those who do not have a desk it is 7.3. The difference is statistically significant: T-test t(335) = -2.744, p < 0.01. A

when concentrating on their homework, 12% report having to miss school "always" or "often" because they have to do things to help their family. This problem is more visible in villages<sup>14</sup> (See Figure 7). Majority of children also report having enough basic commodities (such as nutrition, clothing, time, etc.) to keep up with their studies. See Figure 8.

Figure 7: Do you have to miss school because of things you have to do to help your family? TCPA OSF Survey, %

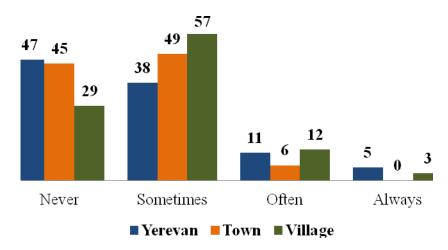
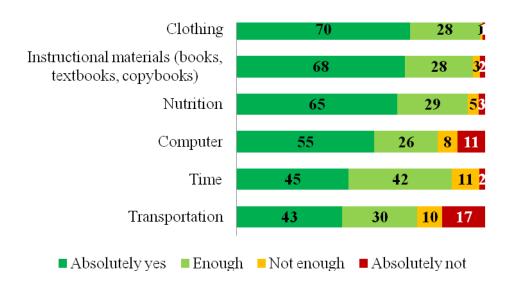


Figure 8: Do you have sufficient amount/quality of the following factors to keep up with your studies? TCPA OSF Survey, %



major limitation of such measure is that it is teacher specific. However, the attempts at obtaining state administered standard countrywide tests during the course of the research were unsuccessful.

<sup>&</sup>lt;sup>14</sup> One-way ANOVA shows statistically significant differences between regions: F(2,434) = 5,108; p < 0.01; mean values 3.26 (Yerevan), 3.39 (town), 3.11 (village).

## 8.2. Impact of Poverty on School Performance

The survey of schoolchildren provides some evidence regarding the link between poverty and school performance. There are statistically significant correlations between self-reported average end-of-the-year grades and perceptions of home conditions, overall well-being and availability of basic commodities. Children with lower average grades also report being less comfortable at home to concentrate on their homework<sup>15</sup> and having less time for their homework. 16 Children with lower grades also report lower amounts/quality of the following factors to keep up with their studies: nutrition, <sup>17</sup> transportation, <sup>18</sup> computer <sup>19</sup> and time <sup>20</sup>.

Qualitative data collected through the research adds content to these findings of the relationship between limited resources and low school performance. Teachers, particularly from poor regions and villages, are often keenly aware of harsh living conditions of some of their pupils and its impact on studying.

"...A child is sitting there and thinking about bringing wood from forest as he/she is the only elder child in the family. I have a sixth, seventh grade pupils, when you ask them why haven't they done the homework, you see that they have no interest at all in the Russian language. They are tired, broken and hungry; you don't know whether they have eaten today or not. We have a quite big number of such pupils." Female teacher, 44 years old, town

"Instead of being busy with lessons the child is burdened with his/her family worries. One is looking after younger brother, the other helps mom processing wool. The kid doesn't have time to prepare for the lessons, and the 40 minute class taught by the teacher is not enough to fully prepare the child for the class without spending some time on it at home." Female teacher, 37 years old, town

FG participants of both teachers and parents generally mentioned that any financial assistance to schools, such as regular contributions to the school fund, are difficult especially for those parents who have more than one pupil at school. Less well-off parents speak about resources that they are not always able to provide to their children to enhance educational opportunities.

"That is why I told to my kids 'either computer, or daddy stays with us', they chose daddy." Female parent, 36 years old, village

 $<sup>^{15}</sup>$  Pearson correlation:  $r=0.191,\,N=342,\,p<0.001$  (two tailed)  $^{16}$  Pearson correlation:  $r=0.122,\,N=346,\,p<0.05$  (two-tailed)

<sup>17</sup> Pearson correlation: r = 0.145, N = 316, p < 0.01 (two-tailed)

<sup>&</sup>lt;sup>18</sup> Pearson correlation: r = 0.033, N = 321, p < 0.01 (two-tailed)

<sup>&</sup>lt;sup>19</sup> Pearson correlation: r = 0.160, N = 322, p < 0.01 (two-tailed)

Pearson correlation: r = 0.123, N = 323, p < 0.05 (two-tailed)

Poor children have difficulties buying copybooks that are required for the class and paying the small "rent" that is required to borrow the textbooks from the school library.

Psychological problems of poor children were also mentioned: pupils who are socially disadvantaged are likely to have inferiority complexes if they study in the same class with wealthier children.

"I had a girl who was shy to show her phone, I noticed that she was switching off her phone without taking it out from her bag...It is not only the phones, clothes, shoes, and many other accessories". Female teacher, 50 years old, Yerevan

Experts mention the problem of child labor in the family or elsewhere as one of the reasons of school absenteeism. Children from poor families are particularly vulnerable in this respect. There is also an opinion that boys are more vulnerable than girls.

"It is a criminal offence on behalf of a parent; it is a violation of a child's right to education which means that the given parent should be subjected to criminal responsibility regardless the economic benefits they receive through child exploitation." Expert

"Unlike many countries where gender issues occur because girls go home, get married and/or sit at homes, in Armenia boys do not go school, they go to work with their parents, to help. It is not true that poor study well. There were exceptions, some geniuses. But that was in the past." Expert

Both parents and teachers were also often stating that poverty does not necessarily mean poor performance and that sometimes poor children are among the best pupils in the class.

#### 8.3. Search for Local and Informal Solutions

The impact of poverty on school performance is acknowledged by all adult groups of respondents (experts, public officials, school principals, teachers and parents). The solutions are mostly sought at the community and/or individual level.

School principals claim that children with hard social conditions are in the center of their attention. Most of them believe that school atmosphere is fairly conducive and does not create psychological barriers for poor children.

"I wouldn't say limits but it [poverty] definitely impacts and has consequences... Each year we try to clarify the number of kids having trouble visiting school due to lack of school-clothes, books. We try to solve such problems by assisting financially." Village community head

"There was a case when a child did not come to class in autumn. I will not elaborate, I will only say the child had no shoes, I bought those from my private money, and I raised the question that

there should be no child in our school who would not come to class because of social conditions". Principal, town

While being aware of difficulties faced by poor children, many FG participants think that community is able to ameliorate the problem on a case-by-case level. There is a belief that often financial needs of poor children are being taken care of by parents, teachers, school administration, or classmates in a way that nothing is suspected by the poor kids themselves.

#### **8.4.** Poverty among Teachers

Poverty limits access to education not only in terms of underperformance of poor children, but also inasmuch as it affects the performance and the prestige of teachers, who are struggling to make a living, thus overburdening themselves.

Low salaries also increase corruption risks; some parents stated that poor teachers take more bribes while those with better social conditions behave according to the norms and are more objective. Other parents objected to such statements and brought counter examples of excellent poor teachers or corrupt wealthy ones. Besides the salary, there is also a question of teachers' status. Teachers complain that they are often perceived as 'losers' because they are not making good money.

Poverty impedes education in a number of ways. Children with lack of proper home comfort and resources such as nutrition, time, and access to computer report having lower grades. Teachers also notice that impoverished pupils are unable and unwilling to concentrate on their studies, as they are preoccupied with their families basic survival needs. While there is some support from the community (principals, teachers, parents of better-off pupils) there is a belief that internal arrangements help mitigate psychological impact, which might not necessarily be true. Poverty of teachers affects quality of education as it harms their status and reputation in the eyes of their pupils and because it increases corruption risks.

The research questions posed for this section of the study were: Is there a difference in school performance based on children's socio-economic status? Is there a difference in school-related perceptions of children based on their socio-economic status?

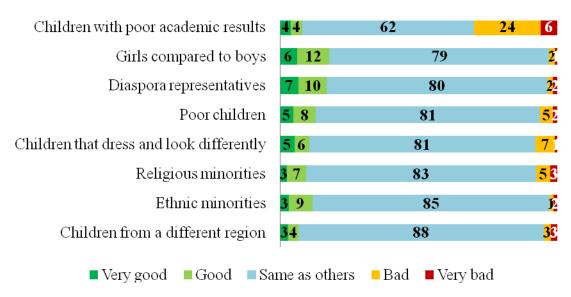
The research found solid evidence (both qualitative and quantitative) of difference in school performance based on children's socio-economic status. Children from poor families tend to have lower school performance. The research shows no difference in school-related perceptions of children based on their socio-economic status.

#### 9. Attitudinal Limits of Access to Education

This section discusses differential treatment of schoolchildren by teachers and peers, based on gender, socio-economic status, religion, ethnicity, and school underperformance.

In general, pupils think that teachers' treatment of various groups (poor children, religious minorities, ethnic minorities, girls compared to boys, children that dress and look differently from the rest, Diaspora representatives, children from a different region in Armenia and children showing poor academic results) is fairly even: an overwhelming majority of survey respondents think that these groups are treated the same as the rest of the class. The only group where there is a noticeable amount of negative responses is children showing poor academic results: 30% of respondents said that they are treated badly or very badly. See Figure 9.

Figure 9: How do you think teachers treat the following groups as compared to the rest of your class? TCPA OSF Survey, %



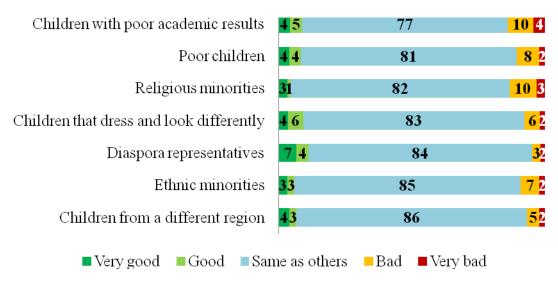
If we rank these groups according to the mean value (on a scale from 1 "very bad" to 5 "very good") according to surveyed children's perceptions, girls get the best treatment, followed by Diaspora representatives. See Table 16.

Table 16: How do you think teachers treat the following groups as compared to the rest of your class? TCPA OSF Survey, mean values

	Mean (on a scale from 1 "very bad" to 5 "very
	good")
Girls compared to boys	3.2
Diaspora representatives	3.18
Poor children	3.1
Ethnic minorities	3.1
Children that dress and look differently	3.07
Religious minorities	3.02
Children from a different region in	3.02
Armenia	
Children showing poor academic results	2.76

A similar question was asked to assess perceived treatment of these groups by their peers. The overall picture is similar: there is a strong sentiment that these groups are treated the same as the rest of the class. However, in the case of religious minorities, 13% believe they are treated badly by their peers, as compared to 8% of those who believe they are treated badly by the teachers. See Figure 10.

Figure 10: How do you think your classmates treat the following groups as compared to the rest of your class? TCPA OSF Survey, %



When ranked according to the mean value (on a scale from 1 "very bad" to 5 "very good") Diaspora representatives are perceived to be treated best by their peers, while religious minorities are at the bottom of the list. See Table 17.

Table 17: How do you think your classmates treat the following groups as compared to the rest of your class? TCPA OSF Survey, mean values

	Mean (on a scale from 1 "very bad" to 5 "very good")
Diaspora representatives	3.12
Children that dress and look differently	3.03
Children from a different region in Armenia	3.02
Poor children	2.99
Ethnic minorities	2.98
Children showing poor academic results	2.95
Religious minorities	2.91

Qualitative data provides insights into cases of perceived negative attitude towards some of these groups. In general interviewees and FG participants mention that teachers do not have enough opportunities to develop individualized attitudes towards each and every student because

the number of students in the classroom is usually twenty and more. That often brings to indifference towards specific needs of some of the pupils. However examples of negative attitudes towards poor kids at schools have also been mentioned. Not only are poor children treated will less respect by some teachers, children from wealth and/or influential families are treated with more privileges and attention.

"The pencil gets a bit shorter, and [the teacher] says 'you found this in the garbage bin' offends the child." Female parent, 42 years old, town

"Our class teacher told one of the kids whose mother is a saleswoman 'study well so that you don't become a saleswoman like your mother". Female teacher, 50 years old, Yerevan

Opinions were also present on certain attitudinal differences based on gender: the requirements towards girls are stricter than those for boys. Cases were voiced where teachers get primary angry with girls in a situation where both a girl and a boy are involved in misbehaving during a class.

Prejudice against ethnic minorities is not expressed directly, but is covertly conveyed through some remarks like.

"There have been, but like Armenians, clean, attended the school normally, you could not feel at all that they were yezidis." Female parent, 29 years old, village

Children that stand out of the crown might attract undue attention and even negative remarks from teachers.

"For example our family is Russian speaking, but we are not Russian, but my daughter is told at school that she is Russian, born in Russia. She used to dress somewhat differently, the teacher was calling me and telling that my daughter is different from the rest, it's necessary to restrict her... And she is not liked in her class. The teacher tells me that she is a white raven." Female parent, 33 years old, Yerevan

"One pupil has got a long hair and is a very interesting boy. The whole school, starting from the principal was giving the kid rebukes for his long hair... The kid was forced to change the school." Female parent, 43 years old, Yerevan

Some 30% of children think that teachers treat those with poor academic results worse than the rest of the class. Teachers often state that because of large class size they do not have the ability to focus on needs of those underperforming in class, and focus on a few good pupils instead. Children believe that girls are treated somewhat better than boys by the teachers, while parents relate a few stories where their daughters were treated more strictly, because they as girls they were supposed to "behave." Some indications of intolerance towards ethnic and religious

minorities can be seen in the fact that these groups are believed to be treated worse than others by their classmates and through some of the remarks of FG participants.

The research question posed for this section of the study was: Is there a perceived difference in treatment of children at school, based on their socio-economic status?

Although with several examples of certain privileged treatment of pupils from wealthy families on behalf of certain teachers, overall it can be stated that there is no perceived difference in treatment of children based on their socio-economic status in schools. Both teachers and children in schools consider themselves to be tolerant and well aware on some inevitable conditions that of low-economic status of certain pupils, and claim to behave in a supportive, attentive and caring manner.

## 10. High Schools

This section addresses specific issues related to introduction of high schools as separate institutions, as this is both new and fairly specific aspect of access to school education in Armenia.

The interviews and focus group discussions have revealed various attitudes of respondents regarding the high school system in Armenia. Most people see the creation of high schools as a good idea that was not implemented properly. There were many concerns and negative comments related to the high school reform in Armenia.

During in-depth interviews respondents evaluated the creation of high schools as positive for providing pupils with the opportunity to specialize in a chosen field and learn preferred subjects in more detail. Also high school introduction contributed to technical enrichment of schools which were provided by specific equipment to be used by pupils of higher classes.

"When a child already studies in his/her chosen discipline in a high school, it allows them to concentrate on any subject, gives an opportunity to have a better idea about their future profession better orient themselves." Expert

"By a separately operating high school program we have got the biology and chemistry laboratories, each one with its specific table with special equipment, properties on them: including measuring devices, voltmeter, and ammeter." School principal, Yerevan

High school was also seen as a negative development. Negative opinions were voiced regarding textbooks, methodology and approaches to teaching process, transportation issue in marzes for the pupils from villages, and ideas of a general kind referring to Armenia being not ready for this change. Another procedural concern that the high school education caused is the decrease in teachers working time, leading to decreased salaries. A teacher works in a certain school for many years, and then due to introduction of high schools the pupils of higher classes are gone, and teachers remain with no or less hours to teach.

"Our schools do not conform to being high schools. Everything is artificial." Expert

"...new school personnel should have been selected, new criteria, new programs... but nothing is on a right track until today. Everything is approximate." Expert

"By establishing high schools we have also created inequality. A pupil learning in a village, where there is no high school, cannot go to school." Expert

Two focus group discussions were organized with teachers of high schools and parents of the children currently enrolled in high schools. All the ten focus group discussions contained a part on the high school elaborations. Here also, opinions were different, but overall a lot has been said about the negative impact that the high school system has played related to different aspects of pupils' development. Both teachers and parents have reflected about incorrect operations and certain expectations that were not met by the current high school educational system.

"We expected that there will be a better education, but it turned out the reverse: they neither do classes nor anything." Female teacher, 50 years old, Yerevan

"For me - high school is an important institution; it is just that mechanisms have to be developed within on how it should operate." Female teacher, 37 years old, Yerevan

"When a high school was established, it was as if they decapitated our school, they should have made programs easier, but made them more extensive and complex instead. There are things that children don't understand no matter the amount of examples provided, explanations made, they need to read to comprehend. I think high school doesn't fulfill its role." Male teacher, 46 years old, town

"There is a huge difference between the program and demand. Huge topics have been left out of textbooks, the ones on which a pupil has to pass an examination." Female teacher, 44 years old, town

High schools allow for specialization and acquiring of better knowledge within the chosen field. However, their introduction in Armenia has its problems. Children from remote areas have access problems. Schools and teachers face loss of pupils of higher classes leading to financial constraints. Specificities of teaching at high schools were often overlooked, proper personnel training did not take place to the extent needed, the programs were not harmonized with existing school programs so that pupils entering high schools sometimes lack necessary background or, on the contrary, find themselves repeating things they already know.

### **Conclusion and Recommendations**

Armenian school education sector has been undergoing major reforms that have disrupted the routine of school education for an entire generation of pupils by now. The process of transformation is not yet complete, and the final assessment of the overall outcome of the reform is yet to be seen. At this stage a few points of concern can be stated with confidence. Previous surveys demonstrate that half of the Armenian population thinks the quality of education in schools has decreased over the past five years. The exploratory pilot research presented in this report sheds light on a variety of problems that impede access to school education.

While legislative framework pertaining to the school education in Armenia provides basic guarantees and is accessed as fairly developed on paper, practical implementation often falls short of what is required to maintain proper school education processes. School politicization is a particular concern, where strengthening the legislative system of checks and controls could improve the situation.

Schools are struggling financially to make ends meet, often shifting some of the burden onto parents' shoulders. The current system of calculating school budgets based on number of enrolled pupils (with some modifying coefficients) makes it particularly hard for small schools to survive, disregarding the international experience of advocating for the support of small schools that are shown to provide better education (see for example Herbert J. Walberg, 2010). Instead, schools are encouraged to compete for pupils to increase their budgets.

Despite numerous renovation projects and efforts to equip schools with modern materials, physical conditions of school buildings remain problematic in many schools, some of which are housed in decaying buildings deprived of basic heating and sanitation systems. While nominally available in almost every school, computers are often locked up or pupils are otherwise discouraged from using them. Lack of equipment in labs prevents pupil's proper understanding of the subject matter taught in classes. There is a widespread and very pronounced dissatisfaction with textbooks of almost any subject. What is particularly remarkable: this dissatisfaction is expressed by all major stakeholders. Pupils, parents and teachers alike find them cumbersome, useless, containing errors and contradictions and so on.

The following recommendations can be formulated, based on the data analyzed in the course of this research project.

- i. Establishing a law for the secondary education sector that would by all means separate the school education sector from any involvement with political developments in the country on any level. This will lead school management to be independent and regulated in a more effective way.
- ii. Lobbying for more financing of schools especially in remote areas, the ones that exercise minimum amounts of pupils, and receive a corresponding minimum. This strategy leads

- to the shortage of teachers, and energy resulting in lack of heating, a problem that is felt extensively especially during a winter time.
- iii. Paying a specific attention to the availability and conditions of gyms in schools, including all settlement types: capital, towns and villages. Gym stands to be the most desired facility for pupils in order to spend their time in school more enthusiastically, and with better mood, which in its turn will lead to a more effective school performance in general.
- iv. As the usage of computers is not an event but a constant process, a recommendation would be implementing the provision of surveys once or twice a year: schoolchildren of randomized schools to be surveyed to see if the computer labs, as well as other specialized rooms that have been equipped for educational purposes are being used by the pupils. This kind of strategy would be a strict controlling mechanism over the work of teachers and principals with a purpose of providing pupils access to the facilities and equipment available in schools.
- v. More transparency is needed in the process of creation and selection of new textbooks, as there have been cases of breach of proper conduct and biased decisions in textbook tenders (Human Rights Defender of the Republic of Armenia, 2011) which jeopardizes quality of textbooks produced. An initial pre-test phase for any new textbook would also allow teachers to familiarize themselves with the new materials and provide feedback before a textbook goes into full print and countrywide distribution. Translating good textbooks instead of producing original ones is also an option.
- vi. Teacher re-training sessions should be designed based on a more needs-tailored oriented approach. Teachers' needs and requests should be assessed prior to training and considered when designing the re-training agenda. Feedback on re-trainings should be collected after the training, as well as few months into the teaching process, to enable the teachers to reflect on the practical usability of newly learned material. The feedback should be collected, thoroughly analyzed and utilized in the design of the next series of re-training.

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To be filled by observer				
Card ID Date	Time (start	z/end) S	School Number/Name	
Settlement type: 1. Yer	evan 2	2. Town	3. Village	
Marz: 1. Yerevan	2. Lori	3. Shirak	4. Syunik	5. Tavush
Observer		_		

## **APPENDIX 1: Observation Score Card**

## **Observation Card**

Observer: Circle the corresponding number on scale from 0 (non-existent) to 5 (excellent).

Phy	<u>vsical aspect</u>						
1.	Condition of the main road leading to school	0	1	2	3	4	5
2.	Condition of green zone surrounding school	0	1	2	3	4	5
3.	Overall condition of the building /outside view/	0	1	2	3	4	5
4.	Overall condition of the building /inside view/ (Walls, windows, stairs, corridors, doors, fire extinguisher)	0	1	2	3	4	5
5.	Overall condition of heating/ventilating/ air conditioning	0	1	2	3	4	5
6.	Overall condition of building in terms of cleaning (Looks clean, garbage bins availability, etc.)	0	1	2	3	4	5
7.	The overall condition of the WCs in school (Lavatories and washbasins in the toilets/water closets, soap, paper, tissue, hand dryer, towel, running water etc.)	0	1	2	3	4	5
Ove	erall quality of support premises						
8.	Library (availability and condition of books, chairs, working space)	0	1	2	3	4	5
9.	Gym (availability and quality of sports goods, overall conditions)	0	1	2	3	4	5
10.	Laboratory/ies (availability and quality of supplies and materials, overall conditions)	0	1	2	3	4	5
11.	IT laboratory (availability and quality of computers, internet, other equipment such as printer, scanner)	0	1	2	3	4	5
12.	Cafeteria (overall condition, cleanness, looking neat, sitting space, diversity of menu)	0	1	2	3	4	5
13	Arts and Crafts/Housekeeping working room (availability and quality of workin tools)	0	1	2	3	4	5
14.	Medical room (overall quality of the room, cleanness, availability of medical supplies)	0	1	2	3	4	5

Ma	terial and technical aspect							
Cla	ssrooms (visit several classrooms, average your observations)							
15.	Availability of sufficient classroom space (classes overcrowded, enough space for pupils, combined class)	0	1	2	2	3	4	5
16.	Overall condition of walls, ceiling, and floors in classrooms	0	1	2	2	3	4	5
17.	7. Enough light in the classrooms (windows and electricity)		1	2	2	3	4	5
18.	Classrooms heating/ ventilating/ air conditioning	0	1	2	2	3	4	5
19.	Overall condition of desks and chairs in classrooms	0	1	2	2	3	4	5
20.	Overall quality of teaching equipment in classrooms (Boards, audio/visual equipment, maps, posters etc.)	0	1	2	2	3	4	5
Ava	ilability of other equipment							
21	Availability of additional equipment anywhere in the school where students have free access (Printer, scanner, copy machine, overhead projector, electronic smart-board)	0	1	2	2	3	4	5
<u>Per</u>	<u>sonnel</u>							
Ava	ilability of service staff							
22.	22. Watchman Yes (1) No			(0)				
23.	Cleaner(s)	Yes (1) No (0)						
24.	Security	Yes (1) No (0)						
25.	5. Cafeteria worker(s)  Yes (1) No (			(0)				
Ava	ilability of medical and psychology staff							
	Doctor Education							
26.	Years of work experience	Yes (1) No (0)					(0)	
	Phone number in case he/she is not present	165 (1) 110 (0)				` /		
	Psychologist Education							
27.					Yes (1) No (0)			
	Phone number in case he/she is not present							
	Nurse Education							
28.	Years of work experience		Ye	es (	(1)	]	No	(0)
	Phone number in case he/she is not present							
Ava	ilability of teaching support staff							

29.	Librarian	Yes (1) No (0)	
	IT specialist Education		
30.	Years of work experience	Yes (1) No (0)	
	Phone number in case he/she is not present		
31.	Laboratory assistant	Yes (1) No (0)	
Ava	ilability of administrative staff		
32.	Manager	Yes (1) No (0)	
33.	Accountant	Yes (1) No (0)	
34.0	Secretary	Yes (1) No (0)	
35.	Cashier	Yes (1) No (0)	
Oth	er personnel related		
36.	Overall condition of the staff room of the school	0 1 2 3 4 5	
37.	Capacity of teachers to maintain discipline during classes (Silence during classes)	0 1 2 3 4 5	
<u>Fin</u>	ancial aspect		
38.	Availability of signs/plates recognizing donations	Yes (1) No (0)	
39.	Visibility of rented space in school (school premises used for business purposes)	Yes (1) No (0)	

Comments:			

To be filled by interviewer			
Questionnaire ID Date _	Time (start/e	nd) School N	Number/Name
Settlement type: 1. Yerevan	2. Town	3. Village	
Marz: 1. Yerevan 2.	Lori 3. Shi	rak 4. Syun	ik 5. Tavush
Interviewer			
APPEN	NDIX 2: Pupils'	Survey Question	nnaire
S	chool Children Sui	vey Questionnaire	
Please, circle the number of the otherwise specified, we expect of			responding cell. Unless
<ol> <li>How do you get to sch</li> <li>By foot</li> <li>Public transport</li> <li>Taxi</li> <li>Own car</li> <li>Other, please sch</li> </ol>			
2. Do you pay to get to s	chool? Yes	(1) No (0) (C	Go to Question 4)
3. If yes, how much?	(in Armenia	n drams)	_AMD
4. How long does it take	to get to school? Pl	ease, indicate time i	n minutes
5. Does it happen that yo	ou can't get to schoo	l because the road is	s in a bad condition?
1	2	3	4
Very often	Often	Sometimes	Almost never
6. Do you consider your	school to be a comf	ortable place to be in	n?
1	2	3	4
Not at all	No	Yes	Absolutely yes

7. If no, why? Please specify\_\_\_\_

8.	What is in your opinion the overall physical condition of your school? (Building, walls
	classroom, light, heating etc.)

1	2	2 3	
Very bad	Bad	Good	Very good

9. Do you have a library?

Yes (1)

No (2) (Go to Question 10)

10. If yes, what is the overall condition of the library of you school? (physical condition, quality of furniture, condition of books)

1	2	3	4
Very bad	Bad	Good	Very good

11. Do you have a gym?

Yes (1)

No (0) (Go to Question 12)

12. If yes, what is the overall condition of the gym of your school?

1	2	3	4
Very bad	Bad	Good	Very good

13. Do you use any additional equipment during your Physical Education class?

1	2	3	4
Never	Sometimes	Often	Very often

14. Do you conduct experiments during natural science classes? (chemistry, physics etc.)

1	2	3	4
Never (Go to Question 16)	Sometimes	Often	Very often

15. If yes, do you use the equipment yourself?

1	2	3	4
Never	Sometimes	Often	Very often

16. Do you have a computer lab in your school? Yes (1)

No (0) (Go to Question 23)

17. If yes, what is the overall condition of it?

1	2	3	4
Very bad	Bad	Good	Very good

18. How o	ften do yo	ou use it?
1.	Every da	y

- 2. Once or twice a week
- 3. Once or twice a month
- 4. Less than once a month
- 5. Never

19. Are there enough computers in the lab for all the pupils in your class?

1	2	3	4
Not at all	Not enough	Enough	Absolutely enough

20. Is there access to internet? Yes (1) No (2)

21. How often do you have classes at the computer lab?

1	2	3	4
Never	Sometimes	Often	Very often

- 22. Would you like to use it more often?
- Yes (1)
- No (0) (*Go to Question 24*)
- 23. If yes, why are you not using it as often as you would like to?
  - 1. I have no time
  - 2. I don't know how to use it
  - 3. The room is closed most of the time
  - 4. The room is open but we are discouraged from using it
  - 5. Other, please specify \_\_\_\_\_

24. Are the desks, chairs and other furniture in your class comfortable for studying?

1	2	3	4
Not at all	No	Yes	Absolutely yes

25. Are you satisfied with the overall condition of the toilets?

1	2	3	4
Not at all	No	Yes	Absolutely yes

- 26. What is the best thing you like about your school? (*Please, select up to 3 choices.*)
  - 1. Classmates
  - 2. Teachers
  - 3. Director

4.	The school building itself
5.	Availability of computer
6.	Availability of internet
7.	Availability of gym
8.	Availability of other facilities such as library, laboratories, cafeteria etc.
9.	Being away from home for several hours
10.	I like learning new things in general
11.	Obtaining up-to-date information about subjects studied in school
12.	Other, please specify
	s the main thing you would like to change about your school? (Please, select up to
3 choic	<i>'</i>
	Class atmosphere
	Teachers
	Director
	School physical condition (walls, windows, light, heating etc.)
	Textbooks
	Grading system
	Improved computer lab
	Improved gym
	Improved other facilities such as library, laboratories, cafeteria etc.
10.	Other, please specify
28. Why d	o you want to change it/these?
<b>2</b> 0. Have a	and the short too short and subjected Division in the sta
49. поw n	nany teachers teach several subjects? <i>Please, indicate</i>
30. Are yo	our teachers ready to repeat or to explain the lesson once more if it is not
1	. 10

30. Are your teachers ready to	repeat or to	explain the	lesson o	once moi	re if it is not
understood?					

1	2	3	4
Never	Sometimes	Often	Very often

31. Using your personal opinion, please tell me how satisfied you are with the following.

Not	Somewhat	Somewhat	Very	Tunalaryan4
satisfied at	dissatisfied	satisfied	satisfied	Irrelevant

		all				
31.1	The overall quality of teaching in your school.	1	2	3	4	
31.2	The ability of your teachers to make the classes interesting.	1	2	3	4	
31.3	The ability of your teachers to make the information easily understandable for you.	1	2	3	4	
31.4	The support provided by the librarian.	1	2	3	4	-1
31.5	The work of the medical staff of the school.	1	2	3	4	-1
31.6	The work of the cafeteria staff.	1	2	3	4	-1

	32.	What discipl	ine measures do	your teachers	usually use in	case of misbehavior?
--	-----	--------------	-----------------	---------------	----------------	----------------------

- 1. Shouting
- 2. Insulting
- 3. Asking to leave the classroom
- 4. Call to parents
- 5. Take to director
- 6. Low grade
- 7. Hitting
- 8. Standing in the corner facing the wall
- 9. Other, please specify \_\_\_\_\_

33. Do you pay	any fee for school?	(monthly/annual,	or fee collected	by the parents'	council
in general)	Yes (1)	No (0)	Unsure (-1)		

34. If yes, approximately how much? \_\_\_\_\_(AMD)

35. Do you have a desk of your own in the apartment/house you live in? Yes (1) No (0)

36. Do you feel comfortable at your home/house to concentrate on your homework?

1	2	3	4
Not at all	No	Yes	Absolutely yes

37. Do you have enough time for your homework?

1 2		3	4	
Never	Sometimes	Often	Always	

38. Do you have to miss school because of things you have to do to help your family?

4 3		2	1	
Never	Sometimes	Often	Always	

38.1 If yes, please specify

39. Do you have sufficient amount/quality of the following factors to keep up with your studies?

		Absolutely	Not	Enough	Absolutely
		not	enough	Enough	yes
39.1	Nutrition	1	2	3	4
39.2	Clothing	1	2	3	4
39.3	Instructional materials				
	(books, textbooks,	1	2	3	4
	copybooks etc.)				
39.4	Transportation	1	2	3	4
39.5	Computer	1	2	3	4
39.6	Time	1	2	3	4

40. How do you think your teachers treat the following groups as compared to the rest of your class?

			Bad	Same as	Good	Very
		bad	Dad	others	Good	good
40.1	Poor children	1	2	3	4	5
40.2	Religious minorities	1	2	3	4	5
40.3	Ethnic minorities	1	2	3	4	5
40.4	Girls compared to boys	1	2	3	4	5
40.5	Children that dress and look	1	2.	3	4	5
	differently from the rest	1	2	3	4	3
40.6	Diaspora representatives	1	2	3	4	5
40.7	Children from a different	1	2	3	4	5
	region in Armenia	1	2	3	7	3
40.8	Children showing poor	1	2	3	1	5
	academic results	1	2	3	<del></del>	3

41. How do you think your classmates treat the following groups as compared to the rest of your class?

		Very bad	Bad	Same as others	Good	Very good
41.1	Poor children	1	2	3	4	5
41.2	Religious minorities	1	2	3	4	5
41.3	Ethnic minorities	1	2	3	4	5
41.4	Children that dress and look differently from the rest	1	2	3	4	5
41.5	Diaspora representatives	1	2	3	4	5
41.6	Children from a different region in Armenia	1	2	3	4	5
41.7	Children showing poor academic results	1	2	3	4	5

42.	Did	it happen	that	a pupil left	your	school	because	of a	teacher	's attitude?

Yes (1) No (2)

Unsure (-1)

43. Have you ever been encouraged by any of your teachers' attitude?

1 2		3	4	
Never	Sometimes	Often	Always	

44. Have you ever been discouraged by any of your teachers' attitude?

1 2		3	4	
Never	Sometimes	Often	Always	

Thank you! We would like to ask the last questions about you.

Gender: M (1)	F (2)	Age _		Grade			
Your end of the year	scores for May	y 2012 fo	or the following	subjects:			
Math Arm	enian		English	_			
Home telephone number (area code)							
Parents' mobile num	ber (	)					

## **APPENDIX 3: In-Depth Interviews Guides**

#### **Interview Guide for Experts**

Introduction: Good afternoon, my name is \_\_\_\_\_\_. Thank you for agreeing to talk to me about school education in Armenia. This interview is a part of a larger research project conducted by American University of Armenia. The goal is to assess overall situation in Armenian schools. You have some very valuable expertise in the matter, so your opinion is important for us. I assure you that whatever you say here will remain strictly confidential. The interview is being recorded to make sure that we don't miss something important, but no one except myself and my research colleagues will have access to this record and it will be destroyed as soon as it is analyzed. No names will ever be mentioned.

- 1. What do you think are some of the recent successes in Armenian schools?
- 2. What do you think is the most burning problem in Armenian schools? How would you address this problem?
- 3. What can you say about Armenian society's current demand on education? Have things changed recently? In what way?
- 4. How would you characterize the overall quality of Armenian school education nowadays? What are the trends?
- 5. Do you think current school education in Armenia is in line with higher education? (*Probe: provides knowledge and skills needed for entry to universities*)
- 6. What do you think about the recent changes in the school system? (*Probe: high schools as a separate schools, changes in textbooks and curriculum related to that*)
- 7. What do you know about the major programs of international organizations to improve school education in Armenia? (*Probe for World Bank programs and policies, other major donors*). What would you do differently?
- 8. Do you think there are any gaps in the legislation on school education? Is there anything that can be improved?
- 9. Do you think there are any problems with implementation of policies, laws, decisions etc.? How would you address this problem?
- 10. What is your perception of the quality of teaching? What is the trend for the last 4-5 years?
- 11. What do you think about parent-teacher relationship in Armenian schools? Is there a room for improvement?
- 12. What do you think about the physical aspect of school education in Armenia. By physical aspect we mean: condition of school buildings, classrooms, libraries, availability of gyms, cafeterias, sport areas, and so on.
- 13. Do you think poverty impedes access to school education? (*If yes*) How is it manifested? Is it a problem in all of Armenia, or are there differences in terms of villages, towns and Yerevan? How would you address this problem?

- 14. Do you think there is any biased type of treatment of school personnel towards any groups of children (probe: socio-economic status, religion, disabilities, gender, ethnic minorities)? (If yes) How serious is that. How would you address this problem?
- 15. Assuming you were the top official responsible for school education what would be your top three action items for the improvement of schools in Armenia?

Thank you for your time. You have been a great help. If you have any questions, concerns or something to add, do not hesitate to contact us at AUA TCPA. Here is our contact information.

#### **Interview Guide for Government Officials**

Introduction: Good afternoon, my name is\_\_\_\_\_\_. Thank you for agreeing to talk to me about school education in Armenia. This interview is a part of a larger research project conducted by American University of Armenia. The goal is to assess overall situation in Armenian schools. You have some very valuable expertise in the matter, so your opinion is important for us. I assure you that whatever you say here will remain strictly confidential. The interview is being recorded to make sure that we don't miss something important, but no one except myself and my research colleagues will have access to this record and it will be destroyed as soon as it is analyzed. No names will ever be mentioned.

- 1. What do you think are some of the recent successes in Armenian schools?
- 2. What do you think is the most burning problem in Armenian schools? How would you address this problem?
- 3. What do you think about the recent changes in the school system? (*Probe: high schools as separate schools, changes in textbooks and curriculum*)
- 4. What do you think about the major efforts/support of international organizations to improve school education in Armenia? (*Probe: WB programs and policies, other major donors*) What would you do differently?
- 5. According to your perceptions, who is the main driver of education policy in Armenia? (*Probe: government, WB, USAID, EU*). What makes you think so? What impact does it have on the policy?
- 6. How is the Armenian Government making its decisions on education policy? How does it gather information for such decisions? How are policies implemented?
- 7. Do you think there are any gaps in the legislation on school education? Is there anything that can be improved?
- 8. Do you think there are any problems with implementation of policies, laws, decisions etc.? What are they and why? How would you address these problems?
- 9. What is your perception of the quality of teaching in Armenian schools? What is the trend for the last 4 5 years? (*probe: professional development, teacher qualifications, teaching load etc.*)
- 10. What is your perception of the quality of assessment in Armenian schools? What is the trend for the last 4-5 years? (probe: standardized exams, test development and administration etc.)

- 11. What do you think about the physical aspect of school education in Armenia. By physical aspect we mean: condition of school buildings, classrooms, libraries, availability of gyms, cafeterias, sport areas, and so on. What do you think is being done to improve the physical aspect of school education in Armenia?
- 12. Do you think poverty impedes access to school education? (*If yes*) How is it manifested? Is it a problem in all of Armenia, or are there differences in terms of villages, towns and Yerevan? How would you address this problem?
- 13. Do you think there are any disadvantaged groups of children that have problems with education? (probe: religion, disabilities, gender, ethnic minorities etc.)? (If yes) How would you address these problems?
- 14. Assuming you were the president of Armenia what would be your top three action items for the improvement of schools in Armenia?

Thank you for your time. You have been a great help. If you have any questions, concerns or something to add, do not hesitate to contact us at AUA TCPA. Here is our contact information.

#### **Interview Guide for School Principals**

Introduction: Good afternoon, my name is \_\_\_\_\_\_. Thank you for agreeing to talk to me about school education in Armenia. This interview is a part of a larger research project conducted by American University of Armenia. The goal is to assess overall situation in Armenian schools. You have some very valuable expertise in the matter, so your opinion is important for us. I assure you that whatever you say here will remain strictly confidential. The interview is being recorded to make sure that we don't miss something important, but no one except myself and my research colleagues will have access to this record and it will be destroyed as soon as it is analyzed. No names will ever be mentioned.

- 1. What do you think about the recent changes in the school system? (*Probe: high schools as a separate schools, changes in textbooks and curriculum related to that*) How did these affect your school?
- 2. What do you think are some of the recent successes of your school?
- 3. What do you think are the most burning problems in your school? How would you address these problems?
- 4. Do you think there are any gaps in the legislation on school education? Is there anything that can be improved?
- 5. Do you think there are any problems with implementation of policies, laws, decisions etc.? How would you address this problem?
- 6. How is your school budget drafted? What is your personal role in that? (*probe: top-down vs. bottom-up*)
- 7. What are your school income sources except for the state budget? (*probe: donors, parents ,international organizations, NGOs, benefactors etc.*)
- 8. What is the financial gap between what your school has and what it needs to provide good education?

- 9. What is your relationship with the School Board? What role does the Board play in the management of the school? Can you mention a recent example of how the Board was/is involved in matters of importance for the school?
- 10. What is a typical process of selection and hiring of new staff? How could that process be improved?
- 11. How would you describe the relationship between the school and the community? Are there any inspiring stories? Any difficulties or disappointments? How could the relationship between your school and the community be improved?
- 12. In your opinion what is good quality school education?
- 13. To what extent you think your pupils have access to good education? What are the barriers limiting their access to education?
- 14. What is your perception of the quality of teaching and assessment in your school? What is the trend for the last 4-5 years? (probe: professional development, teacher qualifications, teaching load, fairness of assessment etc.)
- 15. How do you like the physical condition of your school? (probe or explain: classroom, gym, cafeterias, sport premises, condition of classrooms in terms of heating, electricity, powerplug availability).
- 16. Do you think poor children face specific problems in your school? If yes, please elaborate. What can be done to help them?
- 17. What about children from different backgrounds such as ethnic or religious minorities? Do they face specific problems in your school? If yes, please elaborate. What can be done to help them?
- 18. Do you think there is any biased type of treatment towards any groups of children in your school? (*probe:* socio-economic status, religion, disabilities, gender)? (*If yes*) How would you address this problem?

Thank you for your time. You have been a great help. If you have any questions, concerns or something to add, do not hesitate to contact us at AUA TCPA. Here is our contact information.

## **APPENDIX 4: Focus Group Guides**

#### Focus Group Discussions with Teachers: Focus Group Guide

<u>Introduction:</u> Good afternoon, my name is
Thank you for agreeing to participate in our focus group discussion. Today we will talk about school
education. You are an experienced teacher, and your opinion is valuable for us. This discussion is a part
of a larger research project conducted by American University of Armenia. The goal is to assess overall
situation in Armenian schools. It is crucial for us to hear what teachers have to say on this topic. I can
assure you that whatever you say here will remain strictly confidential. The discussion is being recorded
to make sure that we don't miss something important, but no one except myself and my research
colleagues will have access to this record; it will be destroyed as soon as it is analyzed. No names will
ever be mentioned.

During the discussion I would like us to follow a few simple rules. Let's make sure we all listen to each other, respect each other's opinion and talk one at a time.

I would like to begin with an introductory round: starting from the person on my left and going clockwise, (can you please tell us how long have you worked as a school teacher and what subject(s) you teach in school...)

- 1. In your opinion what is good quality school education? To what extent you think your pupils have access to good education? What are the barriers limiting their access to education?
- 2. What do you think are some of the recent successes in your school? Have you observed any positive developments/improvement in your school?
- 3. Have the recent changes in the educational system affected your teaching experience? If yes, in what way? (probe: shift from 10 to 12 year education, curriculum, grading system, textbooks, , teacher training sessions).
- 4. What do you think about the assessment practices and materials in your school? (*probe: grading rubrics, tests, teacher trainings*) Do you feel you have enough support and practical experience to provide fair assessment? What do you need to further improve your assessment strategies?
- 5. How do you like the physical condition of the school where you teach? (probe or explain: classroom, gym, cafeterias, sport premises, condition of classrooms in terms of heating, electricity, power-plug availability).
- 6. Do your pupils have to pay or make any financial contribution to school? (*If yes*) What physical items do they have to pay for that the school doesn't provide? What else do they end up paying for and how often? Do they have to pay to get textbooks? If yes, and there are people who can't afford it, what happens then? How would you solve this problem?
- 7. What do you think about the quality of textbooks you use? What are, in your opinion, the best and the worst textbooks? (*probe for subjects*). Why so?
- 8. Do your pupils have access to computer at school? Do they use it and how often? How about other equipment, such as internet access, VCR or other visual aids for teachers, basic laboratory equipment?

- 9. Have your students participated in any regional, national or international educational events? Have your students been competitive on any of those levels? If yes, please elaborate, if no, please state why you think it could not happen.
- 10. Do you have opportunities for professional development? If yes, please elaborate. How could these opportunities be enhanced? (probe or explain: conferences, incentives to develop materials, workshops, attend professional events, promotion schemes etc.). Have you participated in any training? What was it like?
- 11. What kind of interaction do you have with parents? Is there a room for improvement? What would you do differently in teacher parent relationship? (*probe or explain: parents teachers conferences, reports, phone calls etc.*)
- 12. How would you describe your interaction with administrative and managerial personnel of school? (probe: two-way communication vs. top-down, teacher involvement in decision-making, faculty meetings etc.)
- 13. What do you think about the general class and school atmosphere? (*probe or explain: friendship, good/bad relationship, social pressure/bullying, discipline issues etc.*)
- 14. Do you think children from different backgrounds interact well? (*probe: marginal groups, ethnic/religious minorities, poor vs. rich etc.*)
- 15. Do you think poor children face specific problems in school? If yes, please elaborate. What can be done to help them? What about children from different backgrounds we mentioned in the previous question?
- 16. If you learn that a teacher in your school (one of your colleagues) slapped one of the pupils, what would be your reaction? Please elaborate.

#### **Focus Group Discussions with Parents: Focus Group Guide**

Introduction: Good afternoon, my name is\_\_\_\_\_. Thank you for agreeing to participate in our focus group discussion. Today we will talk about school education. Each of you have children of various ages attending school, so everyone in this room has some valuable experience and insights that are very important for me to hear. This discussion is a part of a larger research project conducted by American University of Armenia. The goal is to assess overall situation in Armenian schools. It is crucial for us to hear what parents have to say on this topic. I can assure you that whatever you say here will remain strictly confidential. The discussion is being recorded to make sure that we don't miss something important, but no one except myself and my research colleagues will have access to this record; it will be destroyed as soon as it is analyzed. No names will ever be mentioned.

During the discussion I would like us to follow a few simple rules. Let's make sure we all listen to each other, respect each other's opinion and talk one at a time.

I would like to begin with an introductory round. Starting from myself... Now the person on my left and going clockwise, can you please tell us your profession and the age of your child (children) currently attending school.

- 1. What do you think are some of the recent successes in your school? Have you observed any positive developments/improvement in your school?
- 2. Have the recent changes in the educational system affected your children's education? If yes, in what way? (probe: shift from 10 to 12 year education, curriculum, grading system, textbooks)

- 3. How do you like the physical condition of the school that your child/children attend? (probe or explain: classroom, gym, cafeterias, sport premises, condition of classrooms in terms of heating, electricity, power-plug availability). Is there any physical condition that does or may limit your child's school attendance?
- 4. How convenient it is for your child to get to school? (probe or explain: road condition, transportation time, costs, weather in the regions)
- 5. Do you or your child have to pay or make any financial contribution to school? (*If yes*) What physical items do you have to pay for that the school doesn't provide? What else do you end up paying for and how often? On the card you filled in there was a question about paying for textbooks. If there are people who can't afford it, what happens then? How does that affect children's studies and attendance? How would you solve this problem?
- 6. What do you think about the quality of content of textbooks your child uses? What are, in your opinion, the best and the worst textbooks? (*probe for subjects*). Why?
- 7. Does your child have access to computer in his/her school? Does he/she use it and how often? How about other equipment, such as internet access, VCR or other visual aids for teachers, basic laboratory equipment, didactic of support learning materials such as maps, models, etc?
- 8. What do you think about the quality of teaching? (probe or explain: teachers' level of expertise, qualification, ability and willingness to use additional materials beyond textbooks)
- 9. What kind of interaction do you have with teachers? Is there a room for improvement? What would you do differently in teacher parent relationship? (*probe or explain: parents teachers conferences, reports etc.*)
- 10. What do you think about the quality of administrative and managerial personnel?
- 11. What does your child tell you about his/her school? Does he/she like going to school? Why so? What are his/her feelings about the school?
- 12. What do you think about the general class and school atmosphere? (*probe or explain: friendship, good/bad relationship, social pressure/bullying etc.*)
- 13. Do you think children from different backgrounds interact well? (probe: marginal groups, ethnic/religious minorities, poor vs. rich etc.)
- 14. Do you think teachers treat all school children fairly regardless of the above mentioned factors/aspects? Has your child experienced any unfair treatment, or do you know of such cases?
- 15. If you learn that a teacher in your child's class slapped one of the pupils, what would be your reaction? Please elaborate.
- 16. Do you think poor children face specific problems in school? If yes, please elaborate. What can be done to help them?

# **APPENDIX 5: Observation Results, Mean Values**

Mean observation scores: general

	N	Min.	Max.	Mean
Capacity of teachers to maintain discipline during classes (Silence during	21	3	5	4.19
classes)				
Enough light in the classrooms (windows and electricity)	30	2	5	3.90
Availability of sufficient classroom space (classes overcrowded, enough space	29	1	5	3.86
for pupils, combined class)				
Overall condition of building in terms of cleaning (Looks clean, garbage bins	30	1	5	3.80
availability, etc.)				
Overall condition of the staff room of the school	28	0	5	3.50
IT laboratory (availability and quality of computers, internet, other equipment	28	0	5	3.39
such as printer, scanner)				
Overall condition of the building /outside view/	30	2	5	3.37
Overall condition of desks and chairs in classrooms	28	1	5	3.36
Overall quality of teaching equipment in classrooms (Boards, audio/visual	28	1	5	3.32
equipment, maps, posters etc.)				
Condition of green zone surrounding school	30	1	5	3.27
Overall condition of walls, ceiling, and floors in classrooms	30	1	5	3.27
Overall condition of the building /inside view/ (Walls, windows, stairs,	30	1	5	3.17
corridors, doors, fire extinguisher)				
Overall condition of heating/ventilating/ air conditioning	30	1	5	3.17
Condition of the main road leading to school	29	1	5	3.07
Classrooms heating/ ventilating/ air conditioning	30	1	5	3.03
Library (availability and condition of books, chairs, working space)	25	0	5	2.92
The overall condition of the WCs in school (Lavatories and washbasins in the	29	0	5	2.90
toilets/water closets, soap, paper, tissue, hand dryer, towel, running water etc.)				
Laboratory/ies (availability and quality of supplies and materials, overall	27	0	5	2.26
conditions)				
Gym (availability and quality of sports goods, overall conditions)	29	0	5	2.00
Cafeteria (overall condition, cleanness, looking neat, sitting space, diversity of	26	0	5	1.96
menu)				
Availability of additional equipment anywhere in the school where students	27	0	5	1.96
have free access (Printer, scanner, copy machine, overhead projector,				
electronic smart-board)				
Arts and Crafts/Housekeeping working room (availability and quality of	23	0	5	1.74
working tools)				
Medical room (overall quality of the room, cleanness, availability of medical	22	0	5	1.64
supplies)				

## Mean observation scores: Yerevan and other towns

	N	Min.	Max.	Mean
Availability of sufficient classroom space (classes overcrowded, enough space	13	3	5	4.31
for pupils, combined class)	10		ŭ	1.51
Overall condition of building in terms of cleaning (Looks clean, garbage bins	14	3	5	4.14
availability, etc.)				
IT laboratory (availability and quality of computers, internet, other equipment	14	2	5	4.14
such as printer, scanner)				
Enough light in the classrooms (windows and electricity)	14	3	5	4.14
Capacity of teachers to maintain discipline during classes (Silence during	12	3	5	4.08
classes)				1.00
Overall quality of teaching equipment in classrooms (Boards, audio/visual	13	2	5	3.85
equipment, maps, posters etc.)				
Overall condition of the staff room of the school	13	2	5	3.77
Condition of the main road leading to school	14	2	5	3.71
Classrooms heating/ ventilating/ air conditioning	14	2	5	3.71
Overall condition of the building /outside view/	14	3	5	3.64
Overall condition of heating/ventilating/ air conditioning	14	2	5	3.64
Overall condition of the building /inside view/ (Walls, windows, stairs,	14	2	5	3.57
corridors, doors, fire extinguisher)	14	2	)	3.37
Overall condition of walls, ceiling, and floors in classrooms	14	2	5	3.50
Library (availability and condition of books, chairs, working space)	11	2	5	3.36
Laboratory/ies (availability and quality of supplies and materials, overall	12	0	5	3.31
conditions)	13			
Condition of green zone surrounding school	14	2	5	3.29
Overall condition of desks and chairs in classrooms	13	2	5	3.23
The overall condition of the WCs in school (Lavatories and washbasins in the	12	1	5	2.15
toilets/water closets, soap, paper, tissue, hand dryer, towel, running water etc.)	13	1	3	3.15
Cafeteria (overall condition, cleanness, looking neat, sitting space, diversity of	1.1	0	_	2.01
menu)	11	0	5	2.91
Arts and Crafts/Housekeeping working room (availability and quality of	10	0	_	2.00
working tools)	10	0	5	2.90
Gym (availability and quality of sports goods, overall conditions)	13	0	5	2.77
Availability of additional equipment anywhere in the school where students have				
free access (Printer, scanner, copy machine, overhead projector, electronic	14	0	5	2.57
smart-board)				
Medical room (overall quality of the room, cleanness, availability of medical	0	^	_	250
supplies)	9	0	5	2.56

## Mean observation scores: villages

	N	Min.	Max.	Mean
Capacity of teachers to maintain discipline during classes (Silence during	9	4	5	4.33
classes)				
Enough light in the classrooms (windows and electricity)	16	2	5	3.69
Overall condition of building in terms of cleaning (Looks clean, garbage bins	16	1	5	3.50
availability, etc.)	10		3	3.50
Availability of sufficient classroom space (classes overcrowded, enough space	16	1	5	3.50
for pupils, combined class)				
Overall condition of desks and chairs in classrooms	15	1	5	3.47
Overall condition of the staff room of the school	15	0	5	3.27
Condition of green zone surrounding school	16	1	5	3.25
Overall condition of the building /outside view/	16	2	5	3.13
Overall condition of walls, ceiling, and floors in classrooms	16	1	5	3.06
Overall quality of teaching equipment in classrooms (Boards, audio/visual	15	1	5	2.87
equipment, maps, posters etc.)	13	1		
Overall condition of the building /inside view/ (Walls, windows, stairs,	16	1	5	2.81
corridors, doors, fire extinguisher)				
Overall condition of heating/ventilating/ air conditioning	16	1	4	2.75
The overall condition of the WCs in school (Lavatories and washbasins in the	16	0	5	2.69
toilets/water closets, soap, paper, tissue, hand dryer, towel, running water etc.)	10			
IT laboratory (availability and quality of computers, internet, other equipment	14	0	5	2.64
such as printer, scanner)	17			
Library (availability and condition of books, chairs, working space)	14	0	5	2.57
Condition of the main road leading to school	15	1	4	2.47
Classrooms heating/ ventilating/ air conditioning	16	1	4	2.44
Gym (availability and quality of sports goods, overall conditions)	16	0	5	1.38
Availability of additional equipment anywhere in the school where students				
have free access (Printer, scanner, copy machine, overhead projector, electronic	13	0	5	1.31
smart-board)				
Laboratory/ies (availability and quality of supplies and materials, overall	14	0	5	1.29
conditions)	14	U	)	1.29
Cafeteria (overall condition, cleanness, looking neat, sitting space, diversity of	15	0	4	1.27
menu)	13	U	4	1.4/
Medical room (overall quality of the room, cleanness, availability of medical	13	0	5	1.00
supplies)	13	U		1.00
Arts and Crafts/Housekeeping working room (availability and quality of	13	0	3	.85
working tools)	13	U	)	.03