THE INFLUENCE OF MULTI-SHIFT SCHOOLING ON THE QUALITY OF PRIMARY AND SECONDARY EDUCATION IN ULANANBAATAR

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ABSTRACT

In the paper, the authors analyze the multi-shift schooling and its impact on the quality of education in the city of Ulaanbaatar. The paper shows the features, advantages and weaknesses of multi-shift schooling, satisfaction of parents and students quality education, student achievement in high school. The authors studied the opinion of teachers, students and parents on multi-shift schooling that affects various side of children's education in Ulaanbaatar. According to statistics of the National Statistics Committee of Mongolia in 2015, more than 1.3 million people that equal to 44 percent of country's total population currently live in Ulaanbaatar. In parallel with growth of urban residents, socio-economic problems such as poverty, unemployment and environment pollution are rising. Among them it is lack of schooling facilities in Ulaanbaatar. When a triple-shift of schooling, there very little time is given to students on tutoring than in one or double-shift schools. Three-shift schooling system adversely affects the health of the school environment. There is no time for cleaning in the classroom and the air conditioning, which increases children's vulnerability to various diseases and limits the possibility of prevention. Three-shift schooling system becomes a cause of street violence against children because a classes finish a lately.

Keywords: Multi-shift schooling, the quality of education, students, high school, three-shift schooling, primary and secondary schools

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PART ONE
I. PROBLEM BACKGROUND AND NECCESSITY

According to 2015 statistics of Mongolia[1], more than 1,3 million people that equal to 44 percent of country's total population currently live in capital city Ulaanbaatar. In parallel with growth of urban residents, socio-economic problems such as poverty, unemployment and environment pollution are rising. Among them it is the lack of schooling facilities in Ulaanbaatar.

According to Statistical data in 2015-2016 study year, 175 groups study in third shift, that 18 groups more than previous year.[2] Traditionally, Mongolia has a multi-shift or double-shift system of middle schools. During the socialist development period, multiple-shift schooling has helped Mongolia to move towards universal primary and secondary education increasing school enrollment among children up to 97 percent. The main purpose of multiple-shift schooling is to increase the supply of school places while avoiding serious strain on the budget and allows a single set of buildings and facilities to serve more pupils. In Mongolia, in a two-shift system the first group of pupils usually attends school from early morning until mid-day, and the second group usually attends from mid-day to late afternoon. Each group uses the same buildings, laboratory equipment and other facilities. The two groups are taught by different teachers. During that time triple-shift schooling were introduced first time in few schools which had evening school or officially named school of working youth for adults whom had not middle education certificates.

After the collapse of the socialist system, huge migration from rural areas to Ulaanbaatar took place, as a result population mechanic growth increased. Then state policy on involvement all children of 6 years old in schools, also the process of transferring from 10 year's schooling to system of 11 and 12 year's system increased loads on middle schooling. On the other hand, many schools experience a lack of facilities, teachers and educational equipment. To cope with this, schools look for different forms of solutions. Some of them increase number of pupils in one classroom up to 45 or even more and other school authorities promote a triple-shift system of schooling due to increasing number of pupils. So triple-shift schooling for children has been introduced and became usual practice for many middle schools in Ulaanbaatar.

Internationally, both above named forms are not new practice, in fact they were introduced

1 National Statistical Office of Mongolia. http://www.nso.mn.
2 Ministry of education, science, culture and sport: www.meds.gov.mn/data/1609/EBS_2015_2016.pdf.

in many developing or less developed countries to increase school enrollment and access to educational facilities. According to some authors, this is best practice and may resolve many educational challenges in developing world and they consider multiple-shift schooling is undoubtedly a good case in point. It is being practiced widely and in a variety of models, both in poorer countries and in better-off school systems where demand for school places often outstrips available capacities. Raising enrolments while containing costs and maintaining quality of teaching and learning is, indeed, an overriding practical concern of educational practitioners the world over.[3]

Based on Mongolian experience, we have examined the positive aspects of multi-shift schooling in terms of double shift system. Double-shift schooling gave access to education for a huge number of citizens from different social groups and strata. The experience shows that Mongolia could win in-literacy for a comparatively short period of time and high literacy rate was a crucial measure to enhance nation's human capital. Social stratification studies reveal that literate people can be trained less expensively than illiterate people, generally have a higher socio-economic status and enjoy better health and employment prospects.[4]

On the other hand, some scholars express their deep concern regarding multi-shift schooling. They consider multi-shift schooling as temporary measure for increasing student enrollment and literacy rate among poorest strata of society but in permanent base it will provide inferior low quality of education and bring children out to streets. Multi-shift schooling system mostly designed for poor households, undoubtedly provides social discrimination. Toby Linden argues in this effect as follows:

> ... these schools provide an inferior education... What is often true is that double shift schools enroll predominantly poorer students and, as a consequence, are seen as inferior schools. Therefore, double-shift schools are often also seen as a temporary measure where financial resources (of the government and/or parents) are constrained. However, what starts out as a temporary expedient may develop into a permanent feature, as happened in Zimbabwe.[5]

Another big issue related to multi-shift schooling is justification of budget cut for

3 M. Bray. *Multi-shift Schooling: Design and Operation for cost Effectiveness* (Hong Kong: University of Hong-Kong, 1989).
4 O. Munkhbat. *Sociology of Social Structure* (Ulaanbaatar: National University of Mangolia Publication, 2000).
5 T. Linden. *Double-shift Secondary Schools: Possibilities and Issues* (Washington D.C.: The World Bank, 2001).

education. In other words, policymakers, government officials in developing countries use multi-shift system as efficiency method of use of human and capital resources (i.e., teachers can teach more pupils and there is a reduced need to build more schools) justifying an expenditure, employment rate cut in educational sector.

All above named facts show that multi-shift schooling system is controversial, full of challenging issues. This system solves some issues but creates some others. But if not taking few cases as Mongolia as country experienced multi-shift schooling can contribute a lot in examination of this problem, if would conduct scientific research on. Moreover, such research outcomes would be useful for development of national strategy for education and solution of educational access, school enrollment issue in remote area of Ulaanbaatar city. However, there are many researches which examined education quality, challenging issues in educational sectors have been conducted, but independent researches and surveys that focused on multi-shift schooling are still not implemented.

II. RESEARCH PROBLEM, GOAL AND OBJECTIVES

Is there a correlation between multi-shift/triple-shift schooling, educational quality and social inequality? We would like to examine this question within the context of Mongolian educational system. The main goal of our research is to study multi-shift schooling and educational quality and define the correlation between them and to develop policy option for promotion of appropriate school shift in primary and secondary schools in Ulaanbaatar, Mongolia. Moreover, we would like to examine the possible correlation between multi-shift schooling and social inequality. We would like to aim at defining the current situation of multi-shift schooling in primary and secondary schools in Ulaanbaatar, Mongolia, in order to identify advantages and weakness of multi-shift/triple-shift schooling and to develop policy option for problem solution and to implement advocacy activities in decision-making level.

II. RESEARCH METHODOLOGY

Within the framework of the research we can use, in combination, structural-functionalist, phenomenological and exchange theories while doing qualitative and quantitative analyses. Due to the specifics of the research topic a commonly used methods such as questionnaires would be used in wide contexts, focusing also, on methods of interviews, observations, text

analysis. The topic has been researched by the following mix of research instruments:

- Desk research/ Literature review and Secondary data analysis. In relation with this, we have analyzed several policy documents as Master plan for Ministry of Education, Culture and Science 2006-2015, Government action plan regarding to education and Anti-corruption strategy in educational sector (draft);
- Semistructured indepth focus group interviews with experts. Within this method, the research team has been conducted 10 focus group discussions among school teachers and 10 educational experts were interviewed;
- Fully-structured quantitative survey with students and their parents, selecting respondents by means of multistage random probability sampling. According to this, the team has surveyed 980 parents and 966 school students from first grade to 11th grades.

III. RESPONDENTS BY AGE AND GENDER GROUPS

As mentioned early, the sampling groups consisted into two different groups. First group is adults/parents who have school children attending our target schools. In our research sampling there were parents up to 35 years old is 44.8%, between 36-45 years old is 41.7% and 13.2 percent who are over 46 years old. Total number of sampling of first group is 980 adults/parents. Second group is pupils who attend the project target schools from first to 11th grades. In the sampling 1-5th grade students/pupils is 37,9 percent, 6-8th grade students is 27.1 percent and 9-11th grade students is 35.0 percent. Total number of second group is 966 students/pupils.

IV. THE TARGET SCHOOL'S GENERAL INFORMATION

For the selection of target schools, we have used "cluster sampling" method. Cluster sampling is an example of 'two-stage sampling' or 'multistage sampling': in the first stage a sample of areas is chosen; in the second stage a sample of schools *within* those areas is selected.

For first stage, we had defined the areas which should be selected by using following criteria 1) main destination districts of migration from country side and 2) types of housing.

According to this, we have selected Songinokhairkhan district, Sukhbaatar district and Bayanzurkh districts. Most residents of all these three districts live in *Gers* which is the Mongolian traditional dwelling\house. Ger is heated by coal\wood during heating season and mostly do not have any utility system; such as water, electricity and natural gas. In urban areas, households with low income also live in *gers*. Apartment areas represented by Khan-uul and Chingeltei districts.

In second stage, we have selected 1) schools where triple shift schooling, 2) schools where double-shift schooling. First group represented by Middle Schools[6]# 12 and 53. Second group represented by Middle Schools #4, 24 and 18.

PART TWO
MULTI-SHIFT SCHOOLING SYSTEM AND EDUCATION QUALITY: STAKEHOLDER'S PERCEPTION AND SATISFICATION

I. DEFINITION OF THE MAIN TERM

As we mentioned in Part one, double- shift schooling was in the past and remains today main organizational form of schooling in primary and secondary schools in Mongolia. In this study, we have focused on two following main terms as multi-shift schooling and educational quality. First of all, let consider the term "multi-shift schooling system".

Under this term, we understand the "end-on" type schooling system i.e. the one group of pupils completes its lessons and vacates premises before the next group arrives. In some cases, the shifts are overlapping or more than one group of pupils on the school compound together. In our cases, first type or when one group of pupils leaves before arriving the next one, we name as double-shift schooling. When shifts are overlapping or two or more groups of pupils on the school in same time, we name as triple-shift schooling system. Each group uses the same buildings, laboratory equipment and other facilities.

Traditionally, single shift schooling system was not familiar for the Mongolian primary and secondary education institutions. Just with appearance of private schools after 1990s, this sort of schooling has been introduced to Mongolian education system.

6 In Mongolia, traditionally primary and secondary schools are named "middle schools".

Until 1990s, double-shift schooling system has been only form of schooling in both primary and secondary schools of Mongolia. Under that system, senior grade pupils (8th, 9th and 10th grades) have been attended school from 8.00 am to 1.00 pm or in morning shift and junior grades (starting from first grade up to 7th) were attending 1.30 pm 6.00pm or in afternoon shift. In some schools, there were different combinations of grades for morning or afternoon shifts. During that time, primary education is compulsory and lasted four years. Schools for the primary, lower secondary and upper secondary levels generally did not exist separately. There are only 79 schools were offering just primary education in Mongolia (mostly in remote rural areas), and 232 eight-year schools were offering both primary and lower secondary education. Secondary education is divided into two cycles: lower secondary and upper secondary. Lower secondary education is the final stage of compulsory schooling and lasted four years (ages 12-16), followed by two years of upper secondary education (ages 17-18). Graduates from grades eight through 10 are eligible to enter technical and vocational training schools. Upper secondary school (not compulsory) is divided into general education and vocational/technical education. Defending on academic performance and entrance examination, graduates of upper secondary schools went to universities and institutions and vocational/technical schools or to work. There were a number of technical and vocational schools that enroll lower and upper secondary school graduates. These schools provide secondary vocational education programs to train skilled workers and technicians.[7]During this period of development of Mongolia, school enrollment in both primary, secondary schools was very high up 90 percent and school- drop out was much low.

Since 1990s, school enrollment fallen down due to the economic crisis in Mongolia and it lasted until 2000. In some places, during that time, mostly in rural area due to decreasing number of pupils, schools have been worked as single shift. But in urban areas, in Ulaanbaatar capital city specially, the situation was quite different. Due to huge migration from rural area to Ulaanbaatar, natural and mechanical growth of the city population, schools were overloaded and overcrowded. To cope with this, many schools in Ulaanbaatar mostly in remote horoo (urban administrative unit) started to practice triple shift schooling.

According to data from Department of Education of Ulaanbaatar, currently in the capital

7 Since 1990s, many of the schools, which are subsidized by the government, have been closed down due to the economic crisis in Mongolia. In 1990, there were 46 such schools, but by 1996 their number had dropped to only 33. The total number of students enrolled in technical and vocational schools is 11,308. In recent years, due to government policy and subsidies, numbers of these schools and their students increasing.

30 middle schools have triple-shift schooling.[8] In parallel with this process, such stake holders like academic scholars, teachers and parents began their discussions on multi-shift schooling, its influences for educational quality, and children's right for education access. Let us consider the opinion of some different authors.

According to Mark Bray (1989) multi-shift schooling has both positive and negative sides. He considers the positive side mentioning multiple-shift schooling's positive functions as:

- Expansion of the number of school places broadens access and helps governments *to* achieve goals of social equity;
- Where there is a shortage of teachers, staff may be encouraged to teach in more than one session. Multiple-shift schooling may enable the authorities to make better use of scarce human resources;
- When staff teach in more than one session, they usually have higher earnings. Multiple-shift schooling allows teachers to increase their incomes, and reduces the political tension that arises from low basic salaries;
- In many societies, children are too poor to spend the whole day in school. They cannot afford the school fee and multiple-shift schooling reduces costs, so can also reduce school fees. It also allows children *to* work for few hours in the day, and thus *to* earn money to support themselves and their families while also enrolling in a school;
- Systems which have evening shifts can cater for children who have to work during the day;[9]
- If enrolment rates are already high, multiple-shift schooling may be introduced to reduce overcrowding. The system can permit reduction of class size, and can also decrease pressure on sports facilities, libraries, school canteens;[10]

But Multi-shift schooling also has many negative factors. As mentioned Mark Bray in his book "Multi-shift schooling: Design and Operation for cost effectiveness (1989)"

- The school day, especially in triple-session systems, is often shortened. This implies that quality is being sacrificed for quantity and pupils are losing some classroom teaching and extra-curriculum activities;
- If teachers *work* in both sessions, they are likely to be tired. This can cause a further deterioration in quality. And multi-shift systems are sometimes accused of causing social problems because children are only occupied school for shorter periods and so have more time to roam around the streets and cause trouble.

8 Department of Education of Ulaanbaatar city. www.mesc.mn 2015.

9 See M. Bray, op. cit.

10 M. Bray. *Double-shift Schooling: Design and Operation for Cost-Effectiveness*, 2nd ed. (London: The Commonwealth Secretariat and IIEP/UNESCO, 2000).

In Mongolian case, as we mentioned early, multi-shift schooling in term of two-shift day brought many advances. But public opinion and many stake holders like teachers, educational scholars and researchers are getting critical to multi-shift schooling specially, in three-shifts. According to this sort of opinion, multi-shift schooling is influencing a negatively on education quality, satisfaction of pupils and parents. Before consider this, we have to clarify the term "education quality". Usually, education quality characterized by following characteristics:

- Learners who are healthy, well-nourished and ready to participate and learn and supported in learning by their families and communities;
- Environments that are healthy, safe, protective and gender-sensitive, and provide adequate resources and facilities;
- Content that is reflected in relevant curricula and materials for the acquisition of basic skills, especially in the areas of literacy, numeracy and skills for life, and knowledge in such areas as gender, health, nutrition, HIV/AIDS prevention and peace.
- Processes through which trained teachers use child-centered teaching approaches in well-managed classrooms and schools and skilful assessment to facilitate learning and reduce disparities.
- Outcomes that encompass knowledge, skills and attitudes, and are linked to national goals for education and positive participation in society.

This definition allows for an understanding of education as a complex system embedded in a political, cultural and economic context. (This paper examines research related to these dimensions). It is important to keep in mind education's systemic nature, however; these dimensions are interdependent, influencing each other.

But according to research goals, we have limited the definition "education quality" within school facility availability and teaching staff access. In our understanding, education quality means environments that are healthy, safe, and protective and provide adequate resources

and facilities. We would like to introduce our research outcomes starting from school choice among school pupils and their parents.

II. SCHOOL CHOICE AND THE PARENT AND PUPIL SATISFACTIONS

Mostly parents have chosen school for their children because it locates near from their home or 60.0 percent parents answered so. And 20.0 percent answered that choice made according to recommendation of friends and relatives. Just 14 percent of parents considered the school's performance for entrance examination to universities or national unified test. Also, third (35,4 %) of pupils answered that they chose their school because it near from the homes and 30,2 % of them chose according to parents decision. While 69.6 percent of students intend to admit in university or colleges after high school, only fifth of them (13.1 %) and 14.0 percent of the parents made their school choice taking in account school's availability for entrance examination to high education institution.

For such outcome, there are several reasons. First, according to the rules, pupils have to go to schools according to school enrollment districts which divided by residential addresses. Second, the parents cannot allow themselves to send their children to private or public schools with admission and tuition fees. Most of respondents who participated in our survey belong to low level income group. 62,2 percent of them have up to 300.000 Tugrugs monthly income which is 220 USD. Third, the parents have no free time because both parents are breadwinners. If parents send their children to far away schools than they have to bring to and pick up the children every time when they go to schools.

15.1 percent of respondents very satisfied by their kid's school performance while 57.0 % are satisfied. But 27,9 percent of parents little or not satisfied. These people are not satisfied in term of student number in one class (35%), in term of schooling shift (31%) and in term of school environment (29%) and in term of additional training (25%).

Despite number of primary and secondary school students significantly expanded during the last years, the building of new schools has often not kept pace with the increase in the student population. In these cases, schools have often had to expand class sizes, as well as the ratio of students to teachers, to accommodate large numbers of new students.

A UNICEF/UNESCO survey conducted in 1995 in 14 least developed countries found

that class sizes ranged from fewer than 30 students in rural and urban Bhutan, Madagascar, and the Maldives, to 73 in rural Nepal and 118 in Equatorial Guinea.[11] The study has found a relationship class size has not consistently been linked to student achievement. This may be due to the fact that many schools and classrooms have not yet adopted the more demanding but higher quality student-centered learning practices. In Mongolian case, unfortunately, most teachers teach in traditional way "teacher's monolog and passive acceptation of students". It affects a negatively on development of critical thinking and creative learning skills of students.

Moreover, quantitative relationships between class sizes and academic achievement rarely take other key quality factors into account, such as teachers' perceptions of working conditions and their sense of efficacy. Despite 72.1 percent of parents are satisfied with school performance of their children, almost one of two of parents (48%) said they would be to change the children's school with another if they will have a better option. Among positive answerers (51.3%) more than 75 percent are parents whose children attend the schools of ger areas. They explain this, claiming that schools in the ger areas have a less quality than the schools in apartment areas do. During the quantitative survey, we asked the parents to assess educational quality in their children's school by each following main curriculum discipline. Let us see the table below:

	Name of discipline	Very good in %	Good in %	Average in%	Bad in%	Very bad in%
1	Math	20.9	50.1	18.5	10.0	0.5
2	Natural sciences	9.3	56.3	30.5	3.5	0.4
3	Foreign language	13.4	38.8	37.8	7.9	2.1
4	Information Technology and Computer	11.6	35.2	38.5	8.6	6.2
5	Social Science	10.3	42.5	43.4	3.2	0.6
6	Technical knowledge	9.6	38.9	43.5	7.5	0.5

From the table 1, we see that only one of fifth of parents assesses the educational quality a bad or very bad. Most of parents assess very positively but with increasing of kid's grade the positive answers are declining. Pro example, among parents who have from 1st to 5th grade's

11 N. Postlewaithe. "The Conditions of Primary Schools in Least-Developed Countries", *International Review of Education*, 44 (4) (1998), 289-317.

children, the positive assessment reaches almost 70 percent. It might be explained that just in high school, the parents are getting more critical to their kid's academic performance and do not trust bluntly in their scores. It is common practice in middle schools of Mongolia kids get scores higher than in reality they perform. And parents got shocked when their kids fail during entrance exams to universities.

We have asked the parents to assess their children's school environment by following dimensions. There are: 1. School external envorinment; 2. School's educational equipments; 3. Socio-psychological condition; 4. Classroom's comfortability and 4. Others.

Also, we asked the parents to assess the schools by development of critical thinking, team work skills and socialization for children. In term critical thinking skills, the parent assess that the school develops this kind of skills very good (14.6%), good (42.4%), average (7.8%), bad (7.8%) and very bad (1.5%). In term of self-development and team work skills, in first place "Good" (44.8%), in second "Average" (33.6%) and in third "Very good"(14.6%).

The survey shows that according to parent's assessment, the school develops sense of self-responsibility very good (12.2%), good (41.5) average (35.8%), bad (9.4%) and very bad (1.0%).

Also, parents assess the teacher's knowledge and quality very positively. According to the survey, more than 67.0 percent evaluate their children's school teachers as "Good" and 20.0 percent of them as "Average". In last years, trainings among school teachers are increasing and it gives a lot of advantages for their qualifications and teaching skills.

III. MULTI-SHIFT SCHOOLING SYSTEM AND ITS CHALLENGES

We have reviewed above a briefly the past history of Mongolian educational system describing its double-shift schooling, the advances and challenges. In this time, with help of research date, we have examined current multi-shift schooling and the challenges. Within our research project, we had conducted both qualitative and quantitative analysis among teachers, parents and pupils, focusing on multi-shift schooling in term of triple-shift system. The research shows that teachers and parents opposite actively for triple-shift schooling. According to teacher's opinion, triple-shift has negative influences on educational outcomes, safety and healthy environment.

Parents also admit the negative influences on the educational quality. The survey shows

that 56.0 percent of parents blame for their children's performance failure not enough additional instructional hours, out-classroom's training. Among main reasons, they name absence of classrooms, lack of teachers and overcrowded schools. Assessing a negative influences of multi-shifting, the respondents were capitalizing triple-shift schooling. According to their opinion, double-shift system does not have such strong negative influences.

In accordance with international experience, there are also, no connections between double-shift schooling and educational quality. As mentioned in the World Bank publication "there is a significant lack of good evidence about the cognitive achievement in double-shift schools. The available evidence shows no consistent significant cognitive disadvantage to pupils in double-shift schools. A recent study of night schools at the secondary level in Brazil found that the fact of attending day or night school did not appear to have a significant effect on achievement.[12] But according to our research, the triple-shift schooling affects negatively on student achievement by several reasons. By respondent's opinion, triple-shift schooling has a several weakness. In accumulation of those, we can summarize in following points:

First point: Triple-shift schools have less instructional hours than single or double shift schools for the pupils. More than half of pupils who attends the school with triple-shifts says that they do not participate in classroom training or instructional hours. According to focus group discussions and documentation analysis, in the schools where triple shift students get 20 percent less instructional hours than in the schools with double-shifting.

In remote district of Ulaanbaatar people live mostly in traditional houses or gers, where really difficult to study for pupils due to lack of study space. Also, because of domestic violence, abuse from drunken parents, children do not have chance to study at home. So if pupils are not able to have additional instructional hours at the schools, their performance is badly affected.

According to parent's opinion, they also not satisfied with their children's out class room study activities. Also, the research finding confirms that the number of pupils in one class affects the total hours of classroom training. The table below shows correlation between two variables as number of pupils and instructional hours.

12 World Bank. *Brazil Secondary Education in Brazil: Time to Move Forward* (Washington D.C.: World Bank and Inter-American Development Bank, 2000), 46.

Number of pupils	Less than 1 hours per week	Less than 2-3 hours per week	Less than 4-5 hours per week	Do not have such activity	Other
Up to 25 pupils	20	25.7	20	31.4	2.9
From 26-to 35 pupils	8.7	28.2	22.1	35.4	5.6
From 36 to 45	23.8	23.1	11.5	30.8	10.8
46 and more	0	75.4	0	24.6	0

Results of focus group interviews among teachers confirm that triple-shift schooling creates following challenges:

- Impossible to work face-to-face with students
- There is enough class rooms for consultations and instructions;
- There is a high work load for teachers and impossible go any further than curriculum requirements;

There is not enough time and financial resource for teachers to sophisticate themselves.

Second point: Triple-shift schooling affects negatively on school's healthy environment. According to interviews and focus group discussions, there is no time for classroom cleaning and air conditioning that increases vulnerability of children before different diseases and limits prevention availability.

School health environment contributes to learning in important ways first by reducing Absenteeism and inattention. Sick children cannot attend school, and evidence from China, Guinea, India and Mexico shows that children's illness is a primary cause for absenteeism.[13] Our research outcome also confirms this conclusion.

Third point: Triple-shift schooling is getting the cause of street violence against children. When pupils finish their study it is almost dark time in streets. In *ger* area, there is very few street lighting, no convenient transportation for kids and they go to home by themselves. Due to such reasons, children are getting easy victims of petty crimes and violence. According to interviews and focus group discussions, teenagers or youth people assault school children in the way to school or from schools taking away electronic devices like cellphone, iPod etc.

13 G. Carron and T. N. Chau. *The Quality of Primary Schools in Different Development Contexts* (Paris: UNESCO, 1996).

There is no available exact data on this matter and even some children and their parents do not report to police.

Due to fear to be attacked or abused in streets makes children to refuse schools and increases level of absenteeism and in attendance among pupils significantly.

Fourth point. Triple-shift schooling limits social activity of children. Traditionally, schools in Mongolia play important role in children's socialization and in their cultural, esthetic development. The schools organize among children different kind of cultural activities but triple-shifting does not allow accommodate such measures. During 1995-2000 public places for the purpose of children's activities were closed down and given to other business organizations. For example, a bank took over the children library building, a stock exchange organization took over the children's cinema. Also, many playgrounds were destroyed and turned in to garages or new construction sites. For the present there are very few places for children to attend outside of school. This situation leads many teenagers to hang around aimlessly in the streets, and we can conclude that to a certain extent, there is no children friendly environment in Ulaanbaatar. New entertainment centers require entrance fees and are very costly for teenagers, therefore most children are not covered by their services.

PART THREE
CONCLUSIONS AND RECOMMENDATIONS

As a result of our research and survey we reached the following conclusions. There are:

- Multi-shift schooling system in term of double-shift is gives some advances for school enrollment and education access to concrete part of population in concrete socio-economic period of development.
- The main purpose of multiple-shift schooling is to increase the supply of school places while avoiding serious strain on the budget and allows a single set of buildings and facilities *to* serve more pupils.
- As Mongolian experience shows, the double-shift schooling has helped Mongolia to move towards universal primary and secondary education increasing school enrollment among children dramatically. But after socialist system's collapse, Mongolia had very difficult transition period that seriously hit educational sector. Many teachers

chose to abandon their jobs due to the lack of income and turned to new trades and businesses. With the collapse of local cooperatives parents returned to herding with the few animals they managed to reclaim and their children had to help at home with herding. By the late 1990s the situation in the country's educational system started to improve. The country's double-shift schooling system could cope with huge educational losses for very short time. According to the statistics of 2004, there are 688 primary and secondary schools, with 550,000 children in attendance. The enrolment rate of children aged between 8-15 years is 98 per cent. There were approximately 20,725 highly educated teachers working in Mongolian secondary schools. More than 7,527 of them are teaching elementary classes, and 13,198 teaching secondary and above.

- Despite it, double shift schooling has some serious weakness that affects negatively on education quality, on pupil's academic performance/achievement even some studies do not agree with. If compare with single-shift schooling, double-shift system lacks opportunity of additional non-class learning activity including less social and cultural educational hours for the pupils. Mongolia has not any experience with single-shift schooling system, however, international studies show that double-shift limits seriously spending time of students/pupils at schools. According to Toby Linden it is hard to envisage a school day of much more than 5 hours within a double-shift system (say, 7.30 am to 12.30 pm and 1 to 6 pm)[14] So pupils have to stay out of school most their free time and for do not have chance to get additional learning activities.
- In accordance with socio-economic development of Mongolia, promotion of single-shift schooling in the future will be great advances in offering competitive, high quality primary and secondary education in knowledge-based society.
- The appearance and practicing of triple-shift schooling might be good practice for some developing or less developed countries with low level literacy, numeracy and without serious educational achievement but it will step back for Mongolian educational system.
- Multi-shift schooling in term of triple-shift creates more problems that resolves. According to our research result, all main stakeholders including teachers, parents and pupils themselves think that it influences negatively on education quality and sensitively limits chance of pupils to admit to better higher educational institutions. According to our research findings, in the schools where triple shift students get 20

14 T. Linden. *Double-shift Secondary Schools*, op. cit.

percent less instructional hours than in the schools with double-shifting.

- Triple-shift schooling system takes place mostly in schools in where attend children from vulnerable social groups. So such practice creates social discrimination and violates children's right for equal, qualified education. The 17.9 percent of respondents who participated in our research, have less than 108.000 thousand Tugrugs per month which equal to 80 US dollars and 5.4 percent of them do not have any incomes.
- The research shows an existence of correlation between triple-shift schooling and quality of education. Due to triple-shift schooling and large number of students in one class, the possibility of involvement in non-class activities, consultations are diminishing.
- Triple-shift schooling affects negatively on school healthy environment increasing number of sick children, causing large absenteeism and in-attendance among them. Such condition decreases significantly the academic performance/achievement of pupils.
- Due to late study time during triple- shift schooling, pupils in remote areas of Ulaanbaatar became a victims of street violence and petty crimes. Due to fear, pupils do not want any more to go to school, increasing absence and in –attendance.
- Regarding to the real correlations between triple-shift schooling and lack of non-class-learning activity, unhealthy school environment and street violence fear, academic performance/achievement of pupils are significantly decreasing which is finally bringing down the educational quality.
- According to the document analyses due to the growth of population, age structure, migration and work orientations of students number of high school students will increase and current load of schools will also become heavier.
- Due to limitedness of financing, investment and insufficiency of space it is impossible to resolve the problem by only expanding the schools.
- To cope with increasing demand of primary and secondary education, to give equal, high qualified, competitive education, Mongolia has to develop a long term educational strategy.

Based on the research outcomes, we propose briefly the following recommendations:

- Reduce the education migration by reducing the educational difference of urban and rural areas. In last years, government tries to stop educational migration by improving local school's capacities and qualities. Government provides additional financial benefits to teachers in rural areas such as higher salary, regular bonus equal to two month's salary in each 5 years and banking loans for housing. In addition to this, local governments can provide other benefits. So thanks to such policy the country could overcome teaching shortage in rural schools a completely.
- It is important to have a sustainable growth of total educational expenditure in each year. According to Master plan to develop education of Mongolia, total educational expenditure is in 2006 is 210,330,686 Tugrugs, in 2008 is 242,830,258 Tugrugs in 2010 is 297,728,974 Tugrugs and in 2015 is 530,871,138 Tugrugs. Estimations of educational expenditures of the Master Plan does not cause any difficulties for the state budget of Mongolia. It will be possible that 86.5% of the total expenditure needed for education in 2006-2010 and 90.7% in 2011-2015 can be covered by the state budget, if the policy in regard to financing education pursued by the Government of Mongolia maintains the same and economic growth of 2000-2004 would not decline and remain the same.
- To reduce the load on upper secondary schools, it is crucial to develop technical education and vocational education system. It is necessary to build new buildings for schools to provide basic and intermediate vocational education with capacity of more seats. According to Master plan, the funds for equipment and training tools for laboratories of TEVT will be increased by 10.0%annually.All subjects to be studied in TEVT will be provided with textbooks and training manuals. Students of vulnerable groups in TEVT will be provided with training materials free of charge.100% of teachers in TEVT will be professional teachers. Student/teacher ratio in TEVT will be reduced from 19.1 to 15.0 in cities and from 17.7 to 15.0 – in rural areas. But the country still needs to have to maintain this policy more strongly.
- To attract youth people for TEVT it is crucial to use financial tools. Currently students in TEVT receive 45.000 Tugrugs monthly stipend but it is shall be increased 108.000 per month that applies to minimal living cost in Mongolia.
- To increase the number vocational education students by maintaining educational

structure that answers the needs of labor market. According to labor market survey, today the market needs in 70% of skilled workers or graduate of technical and vocational schools and 30% of university graduates. In same time current market supply is opposite.
- According to our research result, currently 70 percent of high school students want to enter to universities that shows huge differences with labor market demand.
- It is necessary to systematically educate youth people on work orientations and to illuminate students that there is direct correlation between gaining a profession and availability of work places.
- To relocate freed funds, educational resources to primary and lower secondary schools providing more space, educational equipment and teaching capacities for better, qualified middle education. It is necessary to reduce teacher/student ratio, number of students per class and teacher's teaching load and to increase instructional hours/non class learning activity.
- To support private schools for sharing primary and secondary school's load and to decrease the admission/tuition fees by covering some expenditures by state and municipal budgets. According to 2006 year's data, currently percentage of private schoolteachers among all teachers working in primary education only 5 percent and in secondary is 7.8%. If this percentage both will be increased 10 percent primary education and 15 percent in secondary, than load on middle schools will decrease significantly.