PRIMARY AND SECONDARY EDUCATION SUB-SECTOR STUDY REPORT

Project Title and No: MON 51103-001, TA SUPPORT FOR DEVELOPMENT OF EDUCATION SECTOR MASTER PLAN PROJECT

Report Content: Results and findings of Primary and Secondary Education Sub-Sector Study, and related slides and handout materials

Developed by: Tsetsegjargal, Kh - Expert
               Zokhikhsuren, P - Expert

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CHAPTER ONE: COUNTRY AND PRIMARY AND SECONDARY EDUCATION CONTEXT

1.1 Social, humanity and demographic context

1.1.1 Evolution of population and school-aged population

Mongolian Government Policy on the population is, first time, approved in 1996 and amended in 2004. By the policy, an aim is stated to ensure sustainable growth of the population and provide auspicious environment for the citizen to have longer, healthier and creative life and individual development. Moreover, in the chapter of “Improving the quality of people’s life”, it is set to “establish optimum environment in pre-primary, primary and secondary education and eliminate the disparities in the access and quality of the education services”. This literally indicates a solution to improve the quality and accessibility of the education services. Moreover, 4th goals of the Global SDG 2030 directs to ensure the equity and provision of quality education and life-long learning by 2030. Therefore, first step of this study is to identify development trend of the population and social development of Mongolia based on how it has evolved for past ten years. Because these are the factors likely to impact on the sub-sector development in coming years.

Since 1950, Government of Mongolia has been implementing a policy to sustain the growth of the population and promote healthier nation; as a result, during 1960-1990, an annual growth has sustained 2.6-2.9%; and the population has increased by 2.2%. This duration is perceived as “golden period” for the population growth. However, during 1986-2002, the annual growth is decreased to 1.4%; and the migration from rural to urban areas is intensified. This migration is still happening today.

From Figure 1, during 2008-2019, the population has absolutely grown from 2,623,483 to 3,186,347, and the annual growth is estimated as 2.18%. The population aged 6-18 has increased from 641,963 to 704,026, and the annual growth is 1.03%. If the annual growth of the population is maintained at 1.5%, by 2030, the population is likely to be 3.9 million. If this tendency is maintained in coming 10 years, by 2030, a number of school-aged population is likely to be 884-976 thousand. This increase will pressure on the provision of primary and secondary education services and resource allocation.

By Figure 2, the annual growth of the population in Ulaanbaatar is estimated as 2.8%; and it is higher than other geographical locations.

By the prediction of the population during 2015-2045 done in 2017, the annual growth of the population in Ulaanbaatar is assumed to be 2.34% by 2025-2035 and will be 2,116,799 in 2030. By 2018-2019

1 Хүн амын 2015-2045 оны шинэчилсэн хэтийн тоо, Монгол Улсын Улсын статистикийн хорооны зөвлөгөө, УБ 2017, х37
statistics, the share of the school-aged population in total population in Ulaanbaatar is evolved 16.4% to 18.2% during 2008-2019. Based on this estimation, it is predicted that the school-aged population in Ulaanbaatar is likely to be 385,227 in 2030. It indicates that primary and secondary education load will be, at least, as 31.8% increase, and at maximum, as 46.2% increase as current load.

Figure 2. Evolution of the population as of regions (2009-2018)

Growth and decline of the school-aged population has direct effect on the access; and the NER of primary and secondary education during 2009-2018 is illustrated in Figure 3.

Figure 3. Evolutions of school-aged population and attendance of children in PSE (2009-2018)

By Figure 3, a number of children aged 6-18 has declined since 2011; however, it has gradually risen up. As for the primary and secondary education access, 2012-2013 academic year was the lowest.

For example, by Mongolia Country Background Report 2019, the NER and GER of senior secondary education were 44.0% and 26.1% during 2012-2013 academic year. This decline can be interpreted as a fact that the schooling is extended to 11 years; and first 11-graders enrolled in senior secondary education.
In 2009, a share of school aged population in total population was 22.2%; however, it decreased and reached at 20.6% in 2018. Therefore, if we assume this growth tendency will be sustained in coming 10 years, by 2030, a number of school-aged population would be 954,480. It indicates that this growth assumption will bring a lot of burden on resource allocation in primary and secondary education sector (see Figure 3). In detail, a number of primary school students in 2030 will be increased by 1.1%, junior secondary by 3.6% and senior secondary education by 5.7%. In other words, there will be more increase in secondary education.

Figure 4. Prediction of school-aged population by 2030 by education levels

The above Figure 4 represents that in 2025, there will be 891700 student in grades 1-12; and in 2030, this number will increase and reach 954400. It means that in 2025, primary and secondary education needs 298700 more seats; and in 2030, 361300 more seats. It indicates that from not on, primary and secondary education sub-sector needs to implement policies to allocate the resources based on these estimation.

Figure 5. Prediction of school-aged population by 2030 by grades (thousands)²

1.1.2 Indexes of social composition

Although 2009 and 2010 country development indexes, produced by National Development and Innovation Committee (former name), were not sufficient to represent all the relationships, the following relationships were estimated to describe aimag and city context using a simple correlation.

Table 1. Relationship between education services and other variables

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² Эх сурвалж: Боловсроньын бодлого төвлөлт, өгөгдөл мэдээллийн дүн шинжилгээний экспертийн боловсруулсан төвлөлт
Note: Бүлэг хоорондын хамаарлыг илэрхийлэх корреляцийн коэффицент (r)-ийн утга 0 ≤|r|<0.5 бол сул, 0.5≤|r|<0.75 бол мэдрэхүйц, 0.75≤|r|<0.9 бол нягт, 0.9≤|r|<1 бол хүчтэй, |r|=1 бол төгс хамааралтай гэх үнд.

By Table 1, there are slight relationships between infrastructure development and education services in western, Khangai and eastern aimags. For example, the rate of education access of aimags with well infrastructure is estimated as higher. However, there are aimags such as Zavkhan andUvs where education access is high even though its infrastructure development is weak.

The relationship between social and economic development and access of education service in Western and Khangai aimags, where poverty index is high, is estimated as observable in 2009 and dense in 2010. For eastern aimags, finance is densely related with the access of education service. 86% of the primary and secondary school budget is dedicated for salary, social insurance and fixed cost, and in average, 1.7% of the allocated budget is for teaching and learning related cost. Therefore, in order to improve the efficiency of the budget allocation and spending, it is necessary to determine the school structure and location effectively.

There is a weak relationship between the access of education service and development resource and merits; and so it is between in the access and agriculture and natural environment in locals. The relationship is varied for culture and health. For example, eastern culture has strong relationship with the access; yet, weak relationship for health in 2009, and observable in 2010.

1.1.3 Population under the poverty line

The concept of the “below poverty line” was introduced in 1998 and has been used to set up the country economic and social development. The following Table 2 represents a share of population under the poverty line in total population by locations.

Table 2. A share of population under the poverty line by regions and area (in thousands)

<table>
<thead>
<tr>
<th>Region</th>
<th>2014 Number</th>
<th>A share</th>
<th>2016 Number</th>
<th>A share</th>
<th>Change by Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>634.0</td>
<td>21.6</td>
<td>907.5</td>
<td>29.6</td>
<td>8.0</td>
</tr>
<tr>
<td>Urban</td>
<td>367.8</td>
<td>12.5</td>
<td>563.8</td>
<td>18.4</td>
<td>5.9</td>
</tr>
<tr>
<td>Rural</td>
<td>260.1</td>
<td>8.9</td>
<td>343.7</td>
<td>11.2</td>
<td>2.3</td>
</tr>
<tr>
<td>Western</td>
<td>98.1</td>
<td>3.3</td>
<td>150.1</td>
<td>4.9</td>
<td>1.6</td>
</tr>
<tr>
<td>Khangai</td>
<td>143.5</td>
<td>4.9</td>
<td>189.6</td>
<td>6.2</td>
<td>1.3</td>
</tr>
<tr>
<td>Central</td>
<td>105.8</td>
<td>3.6</td>
<td>127.6</td>
<td>4.2</td>
<td>0.6</td>
</tr>
<tr>
<td>Eastern</td>
<td>63.9</td>
<td>2.2</td>
<td>97.1</td>
<td>3.2</td>
<td>1.0</td>
</tr>
</tbody>
</table>

Table 2. A share of population under the poverty line by regions and area (in thousands)

3 Ашигласан эх сурвалж: Монгол Улсын статистикийн эмхээтэл, УСХ, УБ 2017
During 2010-2016, the poverty level in rural has been, in average, 34.9 and 27.1 in Ulaanbaatar; and in 2016, 29.6% of the population were living under the poverty line. Last years, the poverty level has accelerated due to actual decline of the family income. During this time, student drop out has decreased from 0.75% to 0.09%. Globally, the rise of poverty level usually causes a decline in opportunity to access education. In contrast, Mongolia could sustain and decrease the student drop out during the difficult period. This could be interpreted as:
- During the economic difficulty, government of Mongolia has prioritized education sector
- Social welfare policy during this time has played a crucial role to keep children in schools (to get social welfare benefit, children should stay in family and access school)

1.1.4 Urbanization

In Mongolia, urabination has rapidly taken place during second half of the last century. By 2018 statistics, almost 46% of the population reside in Ulaanbaatar; and the second most occupied area is aimag centers that is considered as semi-urban area.

**Figure 6.** Percentage of the urbanization and urban and rural population in aimags and regions 2018

Figure 5 shows that 56% of the Ulaanbaatar population are people migrated from rural areas. As a result, density of population in Ulaanbaatar is estimated 286 residences in one square kilometers. This result is 150times from national average. Due to this urbanization, Ulaanbaatar city has been facing several challenges in air pollution, traffic, infrastructure, social service. In particular, it causes a lot of pressure in primary and secondary education.

By Swiss Development Agency, by 2018, majority of the migrated population usually resides in suburbs of the city; thus their children faces a challenges to access primary and secondary schools located in distance, in average, 6.8kms from their homes. Other hand, families who stay in rural areas need to go

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4 Монгол Улсын ядуурын чиг хандлагад нөлөөлөн үндсэн хүчн зүйл, Дэлхийн банкны ахлах эдийн засагч Самуэль Фрейже-Родригес, 2017
5 Ашигласан эх сурвалж: Монгол Улсын хүн ам зүйин статистикийн мэдээ, УСХ, 2018
14.9 kms to access social services. However, the access of children aged 6-15 still maintained in this distance condition. Even so, it should be noted that there is still a tiny number of children out of schools; and a main reason of the drop is the distance between school and home.

Table 3. School distance by migrated and non-migrated population 2018

<table>
<thead>
<tr>
<th>School distance in kms</th>
<th>Migrated</th>
<th>Non-migrated</th>
<th>Non-migrated</th>
<th>Migrated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Access rate of children aged 6-15</td>
<td>97.8</td>
<td>99.2</td>
<td>99.4</td>
<td>99.6</td>
</tr>
<tr>
<td>Reasons of drop out:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Too distant</td>
<td>25.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Poor, no money</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>50.0</td>
</tr>
<tr>
<td>Not registered</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>50.0</td>
</tr>
<tr>
<td>Other</td>
<td>75.00</td>
<td>100.0</td>
<td>100.0</td>
<td>50.0</td>
</tr>
<tr>
<td>A number of families</td>
<td>180</td>
<td>121</td>
<td>180</td>
<td>520</td>
</tr>
</tbody>
</table>

Internal migration is usually due to lack of work place, opportunity to access quality social service, infrastructure development, natural disaster and changes in rural areas. Therefore it is very important to allocate resources based on predicted estimation of the migration and other social and economic development indicators. For some other countries, the migration may help to eliminate inequity in social and economic development of a country; yet, it reversely affects the development of Mongolia. Too much urbanization in Ulaanbaatar causes difficulties to provide social and cultural services to rural people, decrease in students’ number in soum schools, challenges to operate the schools with full capacity and struggles to estimate numbers of children who access primary and secondary education.

1.1.4 School aged children with disability and from vulnerable families

By 2017-2018 academic year, there are 6 schools and kindergartens for children with special needs. There are 26 Life-long Education centers and 326 units in aimags and districts; and 1716 disabled children access education in these centers and units.

In 2018-2019 academic year, almost 78% of children with disability was accessing education; and a percentage of disabled children who cannot access education has been decreasing for last years.

Figure 1. Percentages of school aged children with disabilities 2013-2018

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6 Эх сурвалж: Монгол Улс: Хүн амын дотор өнөөж хооллогийн судалгаа
7 “Ерөнхий боловсролын сургуулийн бүтэц, байршил, хзв шинг” тослийн судалгааны тайлант, 2011-2012 он, Боловсролын хүрээлэн
8 Ашигласан эх сурвалж: БСШУСЯ-ны Боловсролын салбарын статистикийн зөвлөл
In 2018, Minister of Education, Culture, Science and Sports of Mongolia approved Order No. A155 to deliver individual training program for children with disabilities. Moreover, the minister ordered (Order No. A491) the instructional plans and curriculum for children with mental, hearing and vision disabilities. Likewise, MECSS approved and implemented several policies to support education access of children with disabilities.

However, there are still some challenges to fully support children with abilities to access quality education and succeed in their learning:

- Early identification of children disabilities, develop a comprehensive tools and measures and establish its system
- Definition and classification of the disabilities in line with international trends and integrate with the education information system
- Establishment of special education teacher pre- and in-service training systems and develop school teacher and staff skill and attitude to work with these children

1.1.5 Literacy level of the population above 15 years old

By 2010, the literacy level of the population was estimated as 98.3% and 98.5% in 2017. This is indeed significant achievement.

1.1.6 Health

At national level, by January 2019, infant mortality was 112; and this actually dropped from previous year. Up to 5 year old child mortality was decreased by 23% and counted as 139.

Figure 8. Age groups of womane who gave birth 2019
Within the mothers, 1.8% are uneducated, 5.8% completed from primary schools and 15% completed junior secondary schools. By national statistics, infection rate of deseases (mainly chickenpox, dysentery, tuberculosis, sexually transmitted desease) increased by 10%; and 333 incidences are reported.

One of the significant challenge for teenagers of Mongolia is identified as reproductive health. By survey of Mongolian Youth Association, in 2018, 87% of the teenagers have less understanding of reproductive health and sexuality. By survey of Ministry of Health, a percentage of teen-moms has increased for last 10 years and reached out 33%. 40 out of 100 girls, some extent, affected by unwanted-pregnancy. This number is doubled in rural areas.

1.1.7 Crimes

By Policy Authority of Mongolia, 3.4% of victims of the crimes is children up to 18. Major crimes against children are sexual and physical harassment. Child protection system has been weak; and in particular, children who victimized by the crimes cannot receive proper support and help.

1.2 Primary and secondary education context

1.2.1 Policy and legal environment

In 1991, Education Law of Mongolia regulated that education system was structured as pre-school, primary and secondary and vocational education; and it is considered as deserving reform in education sector.

This laws is amended in 1995 by Parlimanet of Mongolia. The amended law states that education system of Mongolia is a combination of formal and informal education, and compromises from pre-school, primary, secondary and higher education. This statement changed the public perspective to view the education system as merely consisting of school and kindergarten, and enabled to define the education system much broader view. As a result, Mongolia has established the legal environment for education aligning with international tendency.

Therefore, the policy development and legal environment of the sub-sector are analyzed at national and sector levels.

1.2.2 National Development Policy

Three documents were analysed as national development policies:

- Millennium Development Goals of Mongolia (2005)
Sustainable Development Goals of Mongolia-2030, developed in 2016

National Development Comprehensive Policy, based on Millennium Development Goals of Mongolia, has phases; and first phase (2007-2015) formulated key strategic objectives related to primary and secondary education (see Table 4).

Table 4. National Comprehensive Policy (Primary and Secondary Education)

<table>
<thead>
<tr>
<th>First phase (2007-2015)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Strategic objective 1. Provide equal opportunity to students to acquire accessible, quality and relevant education</strong></td>
<td>Balance gender ratio in students and teachers at all education levels</td>
</tr>
<tr>
<td></td>
<td>Promote education access of all 6 year children</td>
</tr>
<tr>
<td></td>
<td>Implement a programme to improve boys’ education</td>
</tr>
<tr>
<td></td>
<td>Establish favourable dormitory environment and increase a number of children staying in the dormitory by 2.1</td>
</tr>
<tr>
<td><strong>Strategic objective 2. Comprehend education standards and curricula in line with student needs and social requirements</strong></td>
<td>Specifically set the criteria of education standards based on science and technology achievements</td>
</tr>
<tr>
<td></td>
<td>Revise content of all education levels forming students to be aware and proud of national history and culture, have respect for not only own culture but also other’s culture, value intelligence, possess creative thinking skills and morals, and promote selective opportunities of students</td>
</tr>
<tr>
<td></td>
<td>Have school curricula and syllabus in line with international standards of education</td>
</tr>
<tr>
<td></td>
<td>Establish laboratory school structure to pilot and adapt the education reforms, here, promoting reform initiatives constructing or selecting up to 10 laboratory schools in Ulaanbaatar, up to 2 schools in each aimag</td>
</tr>
</tbody>
</table>

Although this policy has reflected in Government Action Plan and Sector Policy documents, the implementation of the policy has not been evaluated.

Millennium Development Goals of Mongolia, approved by the Parliament resolution (this resolution is amended in 2008) in 2005, set the goal to promote universal primary education for all; and this goal stated an objective as, by 2015, all children would have accessed primary education. This objective intends to achieve 100% in the following 3 key indicators:

- GER of primary education
- Survival rate of primary education
- Literacy rate of youths aged 15-24

Thereafter, measurement criteria of the indicators and how these indicators would related to other goals and objectives are developed in detail.

Implementation of Millennium Development Goals of Mongolia have been reported every 2 years – in 2004, 2007, 2009, 2011 and 2013. By fifth report, it is concluded that results of the above 3 indicators had been improving since 2000, yet some interventionas were needed.

By 2018 evaluation of the implementation, GER of primary education is estimated as 96.4%, survival rate as 96.9%. Gender ratio is 0.95 at primary education and 1.039 at secondary education.

By Mongolia SDV 2030, approved by Resolution No 19 of Parliament of Mongolia, within a scope of the goal of “Knowledge-based Society and a skillful Mongolian”, an objective to develop primary and secondary education in line with international benchmark and verify the capacity is set to promote skillful Mongolian citizen. Mongolian SDV 2030 is planned to be implemented in 3 phases as:

First phase (2016-2020): Arrange for the preparations to be evaluated by the Program for International Student Assessment (PISA), build an environment to ensure that all general education schools have two shifts, develop and implement an education program that (also) fits the traditional nomadic lifestyle, and assure that every child with high school education has career guidance.

Second phase (2021-2025): Have the evaluation carried out by the PISA, decrease the number of general education schools having two shifts by up to 30 percent, and decrease the national average of students in a class to no more than 25 per class.

Third phase (2026-2030): Improve the rank in the PISA score by five places, supply all schools with laboratories, equipment and technical facilities, decrease the number of general education schools having two shifts by up to 50 percent, and decrease the national average of students in a class to no more than 20 per class.

Regarding the phase 1, some indicators (in particular, build an environment to ensure that all general education schools have two shifts, develop and implement an education program that (also) fits the traditional nomadic lifestyle, and assure that every child with high school education has career guidance) will be discussed in detail.

1.2.3 Education Sector Development Policies

In 1995, Government Policy on Education is approved by Parliament resolution No.36. Prior to this policy, in 1994, Social Security Vision was developed; and this vision basically guided the policy development. Introduction part of the policy highlights that a foundation of existence and development of Mongolia and a Mongolian citizen is stated as “Education”; thus, common rationale of the policy emphasizes education as a resource of nation’s security, a proof of independence and wealth. The policy also sets the aims of education and its principles. There are 10 principles for human rights to receive education and 6 principles for implementing the policy. Moreover, the policy signifies a role of education in individual life and social development; thus Government of Mongolia highlights education as a priority sector.

After the Government Policy on Education was developed, Education Laws are approved and amended in 1998, 2002, 2006, 2008, 2012, 2016 due to the changing needs of individuals and social development. In order to implement the amended laws, the following 3 Master plans are developed and implemented:

2. Education Sector Strategies of Mongolia for 2000-2005
Table 5. Comparison of strategic objectives of these three plans

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Activity 1. Support and maintain basic and general education</td>
<td>Strategy 1. Improve teacher pre-service and in-service trainings</td>
<td>Objective 1-Access: Reduce disparities in unequal opportunities to obtain quality education among students and support to enjoying right to study</td>
</tr>
<tr>
<td>Project 1. Support variety of education structure</td>
<td>Strategy 2. Improve school facilities, classrooms, laboratories and equipment</td>
<td>Objective 2-Quality: Create environment and conditions to provide the quality services of primary and secondary education</td>
</tr>
<tr>
<td>Project 2. Prioritize preparation, printing, distribution and use of textbooks and learning materials</td>
<td>Strategy 3. Refine curriculum, methodology and content</td>
<td>Objective 3-Management: Improve and develop policy and management to support school development</td>
</tr>
<tr>
<td>Project 3. Improve teacher use</td>
<td>Strategy 4. Develop quality assurance system</td>
<td></td>
</tr>
</tbody>
</table>

By Country Background Report (2019), first Master Plan was developed and implemented during the social transition period of Mongolia; and during this period, legal and policy context of the sector development were just being refined due to the social shift. Moreover, refinement of policy and legal context demanded to revise education goal, content, methodology and evaluation emphasizing student-centered approaches, to make solid reforms in fundamental theories, perspectives and didactical approaches, to plan the education based on output, to initiate standard-based education reform to assure the quality in open environment of education services. These refinement and reforms enabled to establish a new system of Education for All (EFA) that emphasizes education access, quality, relevance and equity.

During the end of Second Master Plan implementation, Sustainable Development Education was valued; and it was integrated to education curriculum and approaches. It also emphasized every child development. This period is connected with the beginning of EFA system strengthening. Later on, it caused to raise the following legal and social needs to develop Third Master Plan for 2006-2015:

- Amendments in Primary and Secondary Education Law, for example, by amendment in 2002, the schooling year is extended as 11 years; and school entry age is changed to 7. It also legalized to implement new standards in primary and secondary education.
- Thereafter, by Primary and Secondary Education Policy (2006), the schooling is extended again as 12 years, and the entry age became 6.
- 12-year schooling curricula are developed and related textbooks are also provided. Teacher in-service training is institutionalized.
- Several significant policies and programs, such as Government Policy on Education (2015), National Program of Education (2010), National Program of Mongolian Scripts II (2008), and Right Mongolian Child (2013), were developed.

In conformity with the integration of the master Plan, goals and objectives of fundamental segments of primary and secondary education - legal and management arrangement, education access and equity, teacher-human resource, quality, content, curriculum and evaluation, instructional environment - were formulated and planned within the specified timeline.

Second time, Government Policy on Education for 2014-2024 is also developed. The policy aims to prioritize education as a leading sector, identifies education as a key factor for ensuring the quality of life, and social, economic, science and technology development of Mongolia, and sets it as a foundation for national independence and security. Besides, in 2018, National Program on Sustainable Education Development is approved by the Government. All criteria to evaluate the implementation of the program have been developed. These criteria could serve as a legal foundation and methodological solution for Education Sector Master Plan 2030.

**Figure 9. Implementation status of the ESMPs’ objectives**

<table>
<thead>
<tr>
<th>Master Degree III</th>
<th>Master Degree II</th>
<th>Master Degree I</th>
</tr>
</thead>
<tbody>
<tr>
<td>Чанар, агуула, хөтөлбөр, үнэлэгэ</td>
<td>Чанар, агуула, хөтөлбөр, үнэлэгэ</td>
<td>Чанар, агуула, хөтөлбөр, үнэлэгэ</td>
</tr>
<tr>
<td>Багш-хүний нөөц</td>
<td>Багш-хүний нөөц</td>
<td>Багш-хүний нөөц</td>
</tr>
<tr>
<td>Эрх зүй, удирдлага зохион байгуулах</td>
<td>Эрх зүй, удирдлага зохион байгуулах</td>
<td>Эрх зүй, удирдлага зохион байгуулах</td>
</tr>
</tbody>
</table>

**1.2.4 School context** (category, types, public and private, geographical locations)

By the Clause 12, Education Law of Mongolia (2006), it is regulated that primary and secondary education shall be provided by general secondary schools; and it shall be classified as primary, junior secondary and senior secondary. All levels can be formed as a complex school.

In 1963, first time, school No.2 in Ulaanbaatar city was decided to be math-specialized school; and since this decision, several times, school type and classification are changed as:

- By Education Law 1995, it was regulated that general secondary school could form primary and secondary, and have mainstream, special, advanced and clustered classes.
- By the amendments in 2002, 2006, by the Clause 12.3, primary and secondary education could have mainstream, vocational, advanced and special forms of schools.
The above changes implicate some mis-understanding of the school type and classification.

By Education Law (2002), it is defined that a legal entity that implements the education goal shall be an education organization; and a legal entity that deliver content of different education levels shall be an education and training organization. Moreover, based on the “profit making” and “non-profit” legal entity definitions in the Citizen Law of Mongolia, education organizations should be non-profit making entities. It implies that all private and public education organizations should not deliver profit making services.

Taking into consideration of a difference between education organization and education and training organization, in Education Law of Mongolia, it is stated that education organizations of pre-school, primary and secondary education shall be kindergarten, general secondary schools and vocational training–production centers. For higher education, it shall be university, tertiary institute and college”. It also regulated classification and types of the above education organizations. For instance, by amendments to Primary and Secondary Education law, in addition, general secondary school is classified as primary. Junior and senior secondary; and categorized as types such as mainstream, vocational, advanced and special training schools.

Having precise locations and types affects to education service access and quality positively; and it is very significant to improve the efficiency for economic benefit.

In order to deliver accessible, quality and effective education services, economically-efficient allocation and planning of the resources are critical. By international experiences, success of the implementation of this planning depend upon various factors.

For Mongolia, rural to urban migration, loads in urban schools, demographic context, and a new development trend depending upon mining sites demand education sector to have an effective policy for school structure, location and type. In 2011-2012 academic year, by MECS (former name)-given assignment, MIER conducted a study to determine school structure, location and type. This study recommended that a policy on the school structure, location and type ought to identify key factors related to demographic context, education context, geographical, political, human resource and local economic activation features taking into account of region-based development perspective of the country. In Mongolia 5-Region Development Programs, in order to improve education and culture level of the nation, priority strategies until 2010 are set based on the following challenges and problems:

1. Low access and drop outs in Western, Khangai and Eastern regions
2. Lack of instructional environment, equipment and materials, textbooks in central and Eastern regions
3. Insufficient classrooms, dormitory and their environment in Central, Khangai and Eastern regions
4. Teacher quality, supply and in-service training in Central, Khangai and Eastern regions
5. Insufficient financing in Khangai regions

For example, in western area, 80% of children aged 8-15 attend in primary and secondary schools. It indicates that there are still drop outs. In terms of the drop outs, Western area is ranked second, after Khangai area. Drop-outs are high in Zavkhan, Uvs and Bayan-Ulgii aimags. Causes of the drop outs are not only related to poverty but also attitudes to signify agriculture, and lack of dormitory in rurals. (Government, 2005)

10 Ундэслэл нь бодит байдал, тодорхой хэрэгцэнд тулгуурлах нь дэвшүүлж буй зорилтууд асуудлыг хангахын тушин хандуулсан байх боломжийг нэмэгдүүлэх юм.
From today’s point of view, let consider how these problems and challenges are solved, and what are supply and demand characteristics of primary and secondary education.

As of 2018-2019 academic year, in total, 803 (public 656, private 147) school are operating; and out of them, 558 are in rural, 245 are in Ulaanbaatar. Compared to 2009-2010 academic year, 12 schools are newly opened in rural and 36 schools in Ulaanbaatar. This is due to facts that the population in Ulaanbaatar have increased (in general, 2 people settle down in 1sq.km, yet, in Ulaanbaatar, it is 311 people\(^{11}\)), and the rural to city migration has been ongoing. These are main factors for the mechanical growth of the city population. 30% of all schools locate in urban areas, while, 55.4% of all students go to urban schools. It implies extent of school load in urban areas. By 2018-2019 academic year statistics, 8451 students are attending at 3\(^{rd}\) shifts in 28 schools and 212 classess. Out of 28 schools with 3 shifts, 25 schools are in Ulaanbaatar. 7743 students are studying at 3\(^{rd}\) shift in 25 schools and 188 classes in Ulaanbaatar. It indicates that how school location and student load are imbalanced in urban and rurals.

**Figure 10.** School numbers as of location

By Country Background Report 2019, for last 12 years statistics, as of ownership, a number of public schools has increased 0.8, in contrast, a number of private schools has decreased 0.3. As of school classification, a number of primary schools has decline by 1.2; secondary schools by 3.5; yet, high schools have increased by 1.2. In terms of location, for last years, aimag center schools have increased by 1.2; and bag school have declined by 0.9. By these statistics, numbers of private schools, primary schools and bag schools have declined, in contrast, there is a tendency in urban, in particular, aimag centers, to increase schools, specifically high schools.

### 1.2.5 Syllabus and school year structure

Primary and secondary education syllabus is a main document to implement education and training activities. It presents content capacity, learning hours, and allocation of other resources; and should be strictly pursued in schools during academic years.

In order to plan the syllabus, subject content or standards at each education level and grade need to be developed; and in conformity with the syllabus, what to be learned in each subject and teaching hours per quarter and week are defined. The syllabus is a kind of learning hour network; and it has a requirement to meet common needs of students from different age groups. The syllabus is not only a rationale for

\[^{11}\text{Монгол Улсын статистикийн эмхэлтэл, 2017 он}\]
learning but also teaching load, planning the instruction and delivery the trainings. School budget, funding, teacher pre and in-service trainings also rely on this syllabus.

School syllabus and curricula have amended several times due to changes in school entry age, schooling years and school structure.

**Table 6. Changes in school syllabus during 2014-2018**

<table>
<thead>
<tr>
<th>Ministry order No, year</th>
<th>Level</th>
<th>Elective subjects</th>
<th>Instruction supporting activity</th>
<th>Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>A/240, 2014</td>
<td>Primary (10)</td>
<td></td>
<td>- Citizen education (moral education) - Out of class activity - Life skill learning</td>
<td>By A/240 order, the syllabus, curricula and team of experts are approved</td>
</tr>
<tr>
<td>A/335, 2015 (Laboratory school)</td>
<td>Junir secondary (16)</td>
<td></td>
<td>- Citizen education (moral education) - Out of class activity - Life skill learning</td>
<td>By A/335 order, the syllabus for laboratory schools is approved</td>
</tr>
<tr>
<td>A/488, 2014 (Laboratory school)</td>
<td>Junior secondary (18)</td>
<td></td>
<td>- Citizen education (moral education) - Out of class activity - Life skill learning - Elective learning hours</td>
<td>By A/488 order, the syllabus for laboratory schools is approved. In relation the approval of this order, A/335 was invalidated.</td>
</tr>
<tr>
<td>A/220, 2015</td>
<td>Junior secondary (18)</td>
<td></td>
<td>- Citizen education (moral education) - Out of class activity - Life skill learning</td>
<td>By A/220 order, the syllabus for primary and secondary school is approved.</td>
</tr>
<tr>
<td>A/320, 2015 (Laboratory school)</td>
<td>Senior secondary (8)</td>
<td>Compulsory Electives 8 subjects 15 subjects</td>
<td>Electives 6 subjects 18 subjects +1 (For sport and art specialized schools)</td>
<td>This order partially invalidated the syllabus in Appendix 7 of Order A311, 2013 (Syllabus part for 10-12 grades)</td>
</tr>
<tr>
<td>A/275, 2016</td>
<td>Senior secondary (14)</td>
<td>Compulsory e-electives 8 subjects 11 subjects</td>
<td>Elective School managed hours 8 areas 23 subjects 1 hour</td>
<td>As a result of the approval of this order, Appendix 2 of the order A/311, 2013, is partially invalidated (parts for grades 10-12)</td>
</tr>
<tr>
<td>A/103, 2016</td>
<td>Senior secondary (11) Grade 10 syllabus</td>
<td>Electives 6 areas 14 subjects</td>
<td>School managed hours 70 hours</td>
<td>As a result of the approval of this order, Order A320 2015, A103 2016, Appendix 2&amp;3 of Order A/275, 2016, are partially invalidated</td>
</tr>
<tr>
<td>A/61, 2017</td>
<td>Senior secondary (13)</td>
<td>Electives 6 areas 14 subjects</td>
<td>- Citizen education (moral education) - Out of class activity</td>
<td>As a result of the approval of this order, Appendix 1 of Order A/240, 2014, A/220, 2015, and A/61, 2017 are invalidated</td>
</tr>
<tr>
<td>A/453, 2018</td>
<td>Primary (11)</td>
<td></td>
<td>- Citizen education (moral education) - Out of class activity</td>
<td>As a result of the approval of this order, Appendix 1 of Order A/240, 2014, A/220, 2015, and A/61, 2017 are invalidated</td>
</tr>
</tbody>
</table>

*Note: Referenced from “Country Background Report 2019”*
1.2.6 Primary and secondary education structure and type

By Primary and Secondary Education Law 2002, previous structure of 4+4+2 (primary 5 years, compulsory education 9 years and complete secondary education 11 years); and school entry age is lowered at 7-year old.

By the amendment in 2006, structure of primary and secondary education became 6+3+3; and the schooling year for primary education is 6, compulsory 9 and complete secondary 12 years. School entry age is regulated as age of 6. These changes in short period are although considered as the aligning with international standards, however, changes in the school structure changes have happened even before.
CHAPTER TWO: PRIMARY AND SECONDARY EDUCATION ACCESS AND INTERNAL EFFICIENCY

2.1 Primary and secondary education access

2.1.1 Evolution of the student number

The access can be interpreted as a sector response to education needs of the population; in other words, the access is a outcome of the relationship between demand and supply. As for primary and secondary education, access is characterized as enrollment, coverage and graduation.

In order to analyze the evolution of the students’ number for last 10 years, students’ number need to be clustered as by education levels, location, and ownership. This clustering enables to reveal how the students’ number is related to the levels, location and ownership of the schools.

As mentioned earlier, school education is structured as 5+4+3. During 2009-2018, students’ number has evolved as shown in Figure. Average annual growth of primary education is estimated as 1.8%, junior secondary education as 0.3% and senior secondary education as 1.7%.

Figure 11. Evolution of students’ number (2009-2018)

For 2015-2016, grade 10-12 students’ number was drastically increased as 20359; meanwhile, during 2016-2017, students in primary and junior secondary education has risen up, but senior secondary students’ number has decreased. This change could be related to the school-aged population evolution.

As for the location of schools, students’ number has increased as 3.03% in urban areas and decreased as 0.27% in rural areas.

Figure 12. Evolution of students’ number by location (2009-2018)
Regarding to the school ownership, public school students’ number has increased as 1.2% and as 3% for private schools. It is related to increase of share of private schools in public schools (from 5.3% to 6.1%).

Figure 13. Evolution of students’ number by school ownership (2009-2018)

Evolution of students’ number is strongly related to 12-year schooling shift occurred during 2008-2013 academic years. During the shift some grades did not have students; and some grade students almost doubled.

Figure 14. Evolution of students’ number by grades (2009-2018)
Note: * 12-year schooling shift ended in 2013-2014 academic year

### 2.1.2 Evolution of enrollment, school coverage and completion (2009-2018)

The GER and NER are very important parameters for quantitative aspect of education. However, GER tends to overestimate, in particular there are more numbers of drop outs; while, NER has a tendency to underestimate the reality. In order to analyze the primary and secondary education access, evolution in enrollments, school coverage and completion must be investigated.

**Enrollment**

During 2010-2014, primary education access rate was over 100%; yet, it has decreased during 2015-2018 academic years. It indicates a decrease of a number of pupils who enrolled earlier or later than school age. In otherhand, the highest GER of primary education was 99.3% in 2013-2014 academic year; yet, the lowest was 92.8% in 2016-2017 academic year. In 2015-2016 academic year, the GER has declined; meanwhile, the NER has maintained. It has positive and negative implications. Positive one is that it gap between the GER and NER is narrowed; in other words, late and early enrollment has decreased. Negative implication indicates that there are still dropped out students.

**Figure 15. GER by education levels**
By the above Figure 15, the least GER (81%) of secondary education has estimated in 2013-2014 academic year; while, the peak GER (119.8%) is observed in 2012-2013 academic year. The least GER in 2013-2014 academic year can be interpreted as that the 12-year schooling shift completed in 2013-2014 academic year; thus, there was any skip in grades. Moreover, Figure 16 illustrates that in addition to 2013-2013 academic year, the GER has declined in 2016-2017 academic year.

Figure 16. Primary and secondary education NER by education levels

Figure 16 indicates that during 2010-2019 academic year, the least NER is observed; however, compared to the GER, the tendency of the NER is a quite stable.

2.2 School coverage

*Primary and junior secondary grade access rate:* By 2017, primary education gross access rate was 97.6%, and net rate was 96.2%. Meanwhile, secondary education gross access rate was 100.3% and net rate 92.1%. For last 12 years, annual growth level of primary education gross access rate is progressed by 0.16 points; and net rate 1.09 points.

Figure 17. Gross and net access rate of primary and junior secondary (2006-2018)
Completion

In 2017-2018 academic year, a number of students who completed primary education is estimated as 53,048; and it weights 114.3%. Meanwhile, a number of students who completed junior secondary education is counted as 44,573 and weighted 103.2%. A number of students who completed senior secondary education is 40,537; and it weights 84.9%.

Figure 19. Completion rate by education levels 2006-2018
Students in private schools

Figure 1. Төрийн болон хувийн сургуульд суралцагчдын тоо

A number of schools by location, ownership, type and grades

During 2009-2018, a number of schools has escalated from 755 to 803; and a number of public schools increased by 51 and private schools declined by 3. A number of primary schools increased by 11, high schools by 81; yet, junior secondary schools decreased by 42.

Table 7. Schools by ownership and type
Figure 21. Schools by location and levels

Table 8. Schools by type 2009-2019

<table>
<thead>
<tr>
<th>Academic year</th>
<th>Total</th>
<th>Urban</th>
<th>Rural</th>
<th>Total</th>
<th>Mainstream</th>
<th>Vocational</th>
<th>Specialized</th>
<th>Special need</th>
<th>International curriculum</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009-2010</td>
<td>755</td>
<td>209</td>
<td>546</td>
<td>755</td>
<td>209</td>
<td>546</td>
<td>206</td>
<td>14</td>
<td>100</td>
</tr>
<tr>
<td>2010-2011</td>
<td>751</td>
<td>206</td>
<td>545</td>
<td>751</td>
<td>206</td>
<td>545</td>
<td>207</td>
<td>13</td>
<td>100</td>
</tr>
<tr>
<td>2011-2012</td>
<td>752</td>
<td>206</td>
<td>546</td>
<td>752</td>
<td>206</td>
<td>546</td>
<td>207</td>
<td>13</td>
<td>100</td>
</tr>
<tr>
<td>2012-2013</td>
<td>755</td>
<td>207</td>
<td>548</td>
<td>755</td>
<td>207</td>
<td>548</td>
<td>208</td>
<td>14</td>
<td>100</td>
</tr>
<tr>
<td>2013-2014</td>
<td>756</td>
<td>203</td>
<td>553</td>
<td>756</td>
<td>203</td>
<td>553</td>
<td>204</td>
<td>14</td>
<td>100</td>
</tr>
<tr>
<td>2014-2015</td>
<td>762</td>
<td>214</td>
<td>548</td>
<td>762</td>
<td>214</td>
<td>548</td>
<td>215</td>
<td>14</td>
<td>100</td>
</tr>
<tr>
<td>2015-2016</td>
<td>768</td>
<td>215</td>
<td>553</td>
<td>768</td>
<td>215</td>
<td>553</td>
<td>216</td>
<td>14</td>
<td>100</td>
</tr>
<tr>
<td>2016-2017</td>
<td>778</td>
<td>226</td>
<td>552</td>
<td>778</td>
<td>226</td>
<td>552</td>
<td>227</td>
<td>15</td>
<td>100</td>
</tr>
</tbody>
</table>
Class size

Table 9. Numbers of grades in schools by level, shift

<table>
<thead>
<tr>
<th>Academic year</th>
<th>Total</th>
<th>Primary</th>
<th>Junior secondary</th>
<th>Senior secondary</th>
<th>I shift</th>
<th>II shift</th>
<th>II shift</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009-2010</td>
<td>17,626</td>
<td>9,199</td>
<td>5,980</td>
<td>2,447</td>
<td>10,697</td>
<td>6,771</td>
<td>158</td>
</tr>
<tr>
<td>2010-2011</td>
<td>17,683</td>
<td>9,175</td>
<td>5,928</td>
<td>2,580</td>
<td>10,836</td>
<td>6,668</td>
<td>179</td>
</tr>
<tr>
<td>2011-2012</td>
<td>17,591</td>
<td>9,027</td>
<td>5,841</td>
<td>2,723</td>
<td>10,878</td>
<td>6,431</td>
<td>138</td>
</tr>
<tr>
<td>2012-2013</td>
<td>17,619</td>
<td>8,890</td>
<td>5,334</td>
<td>3,396</td>
<td>11,052</td>
<td>6,496</td>
<td>141</td>
</tr>
<tr>
<td>2013-2014</td>
<td>17,960</td>
<td>8,774</td>
<td>5,767</td>
<td>3,419</td>
<td>11,323</td>
<td>6,496</td>
<td>141</td>
</tr>
<tr>
<td>2014-2015</td>
<td>18,521</td>
<td>9,132</td>
<td>5,739</td>
<td>3,650</td>
<td>11,734</td>
<td>6,630</td>
<td>157</td>
</tr>
<tr>
<td>2015-2016</td>
<td>19,304</td>
<td>9,554</td>
<td>5,429</td>
<td>4,321</td>
<td>12,058</td>
<td>7,071</td>
<td>175</td>
</tr>
<tr>
<td>2016-2017</td>
<td>19,677</td>
<td>9,795</td>
<td>6,171</td>
<td>3,711</td>
<td>12,215</td>
<td>7,238</td>
<td>224</td>
</tr>
<tr>
<td>2017-2018</td>
<td>20,211</td>
<td>10,214</td>
<td>6,553</td>
<td>3,444</td>
<td>12,705</td>
<td>7,320</td>
<td>186</td>
</tr>
<tr>
<td>2018-2019</td>
<td>20,574</td>
<td>10,518</td>
<td>6,746</td>
<td>3,310</td>
<td>13,240</td>
<td>7,122</td>
<td>212</td>
</tr>
</tbody>
</table>

Table 10. Class size of schools that has more students than approved norms 2017-2019

<table>
<thead>
<tr>
<th>№</th>
<th>Location</th>
<th>School No.</th>
<th>2017-2018</th>
<th>2018-2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Chingeltei district</td>
<td>23</td>
<td>53.7</td>
<td>54.4 ↑</td>
</tr>
<tr>
<td>2</td>
<td></td>
<td>5</td>
<td>46.3</td>
<td>46.2 ↓</td>
</tr>
<tr>
<td>3</td>
<td></td>
<td>24</td>
<td>42.3</td>
<td>42.9 ↑</td>
</tr>
<tr>
<td>4</td>
<td></td>
<td>50</td>
<td>38.4</td>
<td>38.4 ↓</td>
</tr>
<tr>
<td>5</td>
<td></td>
<td>1</td>
<td>50.7</td>
<td>53.9 ↑</td>
</tr>
<tr>
<td>6</td>
<td></td>
<td>3</td>
<td>45.0</td>
<td>47.3 ↑</td>
</tr>
<tr>
<td>7</td>
<td>Sukhbaatar district</td>
<td>31</td>
<td>41.6</td>
<td>42.6 ↑</td>
</tr>
<tr>
<td>8</td>
<td></td>
<td>2</td>
<td>39.6</td>
<td>41.5 ↑</td>
</tr>
<tr>
<td>9</td>
<td></td>
<td>45</td>
<td>37.9</td>
<td>38.4 ↑</td>
</tr>
<tr>
<td>10</td>
<td></td>
<td>58</td>
<td>37.4</td>
<td>38.0 ↑</td>
</tr>
<tr>
<td>11</td>
<td>Khan-Uul district</td>
<td>18</td>
<td>50.3</td>
<td>50.8 ↑</td>
</tr>
<tr>
<td>12</td>
<td>Ulaanbaatar</td>
<td>52</td>
<td>46.4</td>
<td>45.2 ↓</td>
</tr>
<tr>
<td>13</td>
<td>Buyant-Ukhaa Complex School</td>
<td>41.5</td>
<td>42.9 ↑</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td></td>
<td>118</td>
<td>37.2</td>
<td>39.2 ↑</td>
</tr>
<tr>
<td>15</td>
<td></td>
<td>84</td>
<td>46.3</td>
<td>46.7 ↑</td>
</tr>
<tr>
<td>16</td>
<td></td>
<td>33</td>
<td>43.5</td>
<td>44.6 ↑</td>
</tr>
<tr>
<td>17</td>
<td>Bayanzurkhi district</td>
<td>44</td>
<td>40.3</td>
<td>41.3 ↑</td>
</tr>
<tr>
<td>18</td>
<td></td>
<td>111</td>
<td>39.7</td>
<td>42.9 ↑</td>
</tr>
<tr>
<td>19</td>
<td></td>
<td>14</td>
<td>37.7</td>
<td>41.8 ↑</td>
</tr>
<tr>
<td>20</td>
<td></td>
<td>48</td>
<td>37.0</td>
<td>46.7 ↑</td>
</tr>
<tr>
<td>21</td>
<td></td>
<td>53</td>
<td>-</td>
<td>38.1 ↑</td>
</tr>
<tr>
<td>22</td>
<td>Bayangol district</td>
<td>Shavi Complex School</td>
<td>-</td>
<td>39.1 ↑</td>
</tr>
<tr>
<td>23</td>
<td></td>
<td>133</td>
<td>-</td>
<td>41.2 ↑</td>
</tr>
<tr>
<td>24</td>
<td>Erdmiin Urguu Complex School</td>
<td>20</td>
<td>42.4</td>
<td>42.7 ↑</td>
</tr>
<tr>
<td>25</td>
<td></td>
<td>93</td>
<td>41.8</td>
<td>42.5 ↑</td>
</tr>
</tbody>
</table>
Except Arvaikheer 1, the above over-class size schools are in urban areas. It can be reasoned out that this situation is due to the un-controlled urbanization mentioned earlier in this report. Ulaanbaatar school are usually oversized in classes. It causes a lot of challenges for teachers to work with individual students and support their learning.

**School shift**

School shift coefficients were estimated for all schools in Mongolia by the EMIS team and shown in Table 1.

<table>
<thead>
<tr>
<th>Shift coefficients</th>
<th>Number of schools</th>
<th>Exceptional schools</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less 0.4</td>
<td>124</td>
<td></td>
</tr>
<tr>
<td>0.5 – 0.9</td>
<td>250</td>
<td></td>
</tr>
<tr>
<td>1.0 – 1.5</td>
<td>237</td>
<td></td>
</tr>
<tr>
<td>1.6 – 2.0</td>
<td>108</td>
<td></td>
</tr>
<tr>
<td>2.1 – 2.5</td>
<td>47</td>
<td></td>
</tr>
<tr>
<td>2.6 – 3.0</td>
<td>24</td>
<td></td>
</tr>
<tr>
<td>3.1 – 5.2</td>
<td>11</td>
<td>Bayanzurkh district school No.120 – 4.1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Khuvsgul, Renchinkhume school – 4.4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Tuv, Undurshireet school – 5.2</td>
</tr>
</tbody>
</table>

Table 11 represents that 719 schools have less than 2 shifts; and they do not operate in full capacity. It literally implies that budget spending is not efficient in these schools. It is usually discussed to decrease a number of schools with 3 shift; indeed, it also crucial to pay attention on schools with shiftst below 0.5.

**2.2 Internal efficiency**

**2.2.1 Student/teacher and non-teaching staff ratio by levels, location, ownership, type and grades**

By 2017, student/teacher ratio was estimated as 19.6 at national level. At primary level, the ratio is 32.3, while, the ratio of secondary education is 13.4.

**Figure 23.** Evolution of student/teacher ration by levels 2006-2018
Figure 23 presents that the ratio at primary education is comparatively higher than secondary education. It literally indicates the extent of work load of primary school teachers. There were slight declines during 2010-2015 academic years; and this is due to the growth of the population.

2.2.2 Internal efficiency coefficient\(^{13}\)

Table 12. Promotion, repetition and drop out rate of primary education 2016

<table>
<thead>
<tr>
<th>Indicators</th>
<th>Grade 1</th>
<th>Grade 2</th>
<th>Grade 3</th>
<th>Grade 4</th>
<th>Grade 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Promotion</td>
<td>99.0%</td>
<td>99.5%</td>
<td>99.3%</td>
<td>99.5%</td>
<td>97.3%</td>
</tr>
<tr>
<td>Repetition</td>
<td>0.6%</td>
<td>0.1%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.1%</td>
</tr>
<tr>
<td>Drop-out</td>
<td>0.5%</td>
<td>0.4%</td>
<td>0.6%</td>
<td>0.5%</td>
<td>2.7%</td>
</tr>
</tbody>
</table>

The promotion rate below 100% is usually related to inefficient spending of budget, lack of teacher competence, scarcity of classrooms and others. Internal efficiency coefficient was 0.96 in 2016, and 0.94 in 2015. However, this coefficient cannot be estimated because there were a lot changes and shifts happened during the reform of 12-year schooling.

2.2.3 School drop-out

Figure 24. Numbers of 6-14 aged children dropped out from the school

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\(^{13}\) ДУАК-ийн талаар Боловсролын суурь мэдээллийн тайланаас авч ашигла.
CHAPTER THREE: PRIMARY AND SECONDARY EDUCATION MANAGEMENT, QUALITY AND CAPACITY

3.1 Primary and secondary education management

3.1.1 Syllabus and curriculum

The following instructional plan approved and being implemented by MECSS in 2018 as Order No.A453.

Table 13. Instructional Plan

<table>
<thead>
<tr>
<th>Level</th>
<th>Grade</th>
<th>Schooling week</th>
<th>Total learning hour</th>
<th>Weekly learning hour</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary</td>
<td>Grade 1</td>
<td>32 weeks</td>
<td>727</td>
<td>22.7</td>
</tr>
<tr>
<td></td>
<td>Grade 2</td>
<td></td>
<td>736</td>
<td>23</td>
</tr>
<tr>
<td></td>
<td>Grade 3</td>
<td></td>
<td>759</td>
<td>23</td>
</tr>
<tr>
<td></td>
<td>Grade 4</td>
<td></td>
<td>792</td>
<td>24</td>
</tr>
<tr>
<td></td>
<td>Grade 5</td>
<td></td>
<td>891</td>
<td>27</td>
</tr>
<tr>
<td></td>
<td>Grade 6</td>
<td>33 weeks</td>
<td>1015</td>
<td>29</td>
</tr>
<tr>
<td></td>
<td>Grade 7</td>
<td></td>
<td>1225</td>
<td>35</td>
</tr>
<tr>
<td></td>
<td>Grade 8</td>
<td></td>
<td>1225</td>
<td>35</td>
</tr>
<tr>
<td></td>
<td>Grade 9</td>
<td></td>
<td>1225</td>
<td>35</td>
</tr>
<tr>
<td>Junior secondary</td>
<td>Grade 6</td>
<td>35 weeks</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Grade 7</td>
<td></td>
<td>1225</td>
<td>35</td>
</tr>
<tr>
<td></td>
<td>Grade 8</td>
<td></td>
<td>1225</td>
<td>35</td>
</tr>
<tr>
<td></td>
<td>Grade 9</td>
<td></td>
<td>1225</td>
<td>35</td>
</tr>
<tr>
<td>Senior secondary</td>
<td>Grade 10</td>
<td>Compulsory</td>
<td>945+70</td>
<td>35</td>
</tr>
<tr>
<td></td>
<td>Grade 11</td>
<td>Elective</td>
<td>910+70</td>
<td>35</td>
</tr>
<tr>
<td></td>
<td>Grade 12</td>
<td></td>
<td>525+70</td>
<td>35</td>
</tr>
</tbody>
</table>

For grades 1-2, the learning hour is 35 minutes, and for grades 3-12 40 minutes. Grade 10 students learn 4 subjects per week; and the learning hour for each subject is 1-2. Grade 11 students learn 3 subjects per week; and each subject has 3-4 learning hours. Grade 12 students study 3 subjects per week; and each subject has 3-4 hours. Total learning hour for primary students is 3905 annually, junior secondary 4690, and senior secondary 3675 hours. Compared to OECD countries, primary and junior secondary students’ learning is 844 more hours.

Figure 25. Annual learning hours of students by grades 2018

In average, primary school students are annually allocated 781 hours, junior secondary 1172.5 hours, and senior secondary 1225 hours. For OECD countries, average learning hour of primary and secondary students were 7533 in 2018.
As for OECD countries, in 2011, primary school students learn, in average, 802 hours annually; and however, it declined in 2018 to 799 hours. In junior secondary students learn 122 more hours than primary students in 2011; and 114 more hours in 2018.

Table 14. Subject learning hours by grades 2018

<table>
<thead>
<tr>
<th>№</th>
<th>Subject</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Mongolian language, traditional scripts and literature</td>
<td>I</td>
</tr>
<tr>
<td></td>
<td></td>
<td>203</td>
</tr>
<tr>
<td>2</td>
<td>Math and IT</td>
<td>116</td>
</tr>
<tr>
<td>3</td>
<td>Science</td>
<td>87</td>
</tr>
<tr>
<td>4</td>
<td>Social science</td>
<td>33</td>
</tr>
<tr>
<td>5</td>
<td>Foreign language</td>
<td>99</td>
</tr>
<tr>
<td>6</td>
<td>Art and technology</td>
<td>116</td>
</tr>
<tr>
<td>7</td>
<td>Physical and health education</td>
<td>58</td>
</tr>
<tr>
<td>8</td>
<td>Learning supporting activities</td>
<td>87</td>
</tr>
<tr>
<td></td>
<td>Total learning hours</td>
<td>727</td>
</tr>
</tbody>
</table>

Figure 27. Percentages of learning hours of primary and junior secondary students by subjects
By Figure 27, grade 1-6 students mainly learn Mongolian languages, literature including traditional scripts and mathematics; while grades 7-9 students study more science, Mongolian languages, literature including traditional scripts and math, IT. From grade 5, students are likely spend more time on foreign language.

3.1.2 Subject Curriculum

By the emendment to the Education Law, the core curriculum is defined as a document that indicates the level student knowledge, skills and formation and arrangement of comprehensive teaching and learning activities to achieve this level at a particular education level. By the law, it is obliged that all education providers shall pursue the curriculum.

The core curriculum was developed in stages. Firstly, in 2014, grades 1-6 were introduced the core curriculum; in 2015, grades 7-9, and in 2016, 10-12 grades were introduced the core curriculum. The implementation of the curriculum is also disseminated in stages as follow:

- In 2014-2015 academic year, primary grades
- In 2015-2016, junior secondary grades
- In 2016-2017, grade 10
- In 2017-2018, grade 11
- In 2018-2019, grade 12

Primary and junior secondary education core curriculum intends to equip students with scientific knowledge, skills as well as skills to sense own potential, cooperate with others, inquire science, develop continuously, be aware of surrounding environment, be determine. These objectives are strongly related to SDG 2030 of Mongolia.

Whereas, senior secondary education core curriculum enables students to choose the learning based on their talent, interest and career orientation. In addition, this curriculum has intention to develop high schools in Mongolia.

The implementation of the core curriculum demands school leaders to manage the instructions more effectively, school teachers to update their teaching and professional competence, school social workers
and parents be more supportive to children to choose the electives, arrange classes efficiently, utilize the resources effectively and reflect local and students’ diverse needs. However, the actual implementation of the curriculum faced a lot of struggles and challenges, and raised issues.

1. The implementation has commenced without proper preparation. Rural schools have less number of students, electives can not compromise one class because of few students in soum schools (one elective class should have over 22 students)
2. Senior secondary schools are prepared to teach more advanced topics, in particular, math and science subjects
3. Student textbooks were not developed or updated and in line with the curriculum and distributed
4. Schools lack of science labs and equipment to conduct various experiments in classrooms
5. School facilities are not well equipped to handle classroom experiments and learning activities
6. Students and parents are not well informed regarding the elective subjects
7. Student assessment and evaluation system does not reflect the objectives of the core curriculum
8. Majority of the content are very difficult to teach
9. Teachers lack of teaching and learning materials to support students

By the curriculum implementation assessment report of MIER, it is concluded that the core curriculum has unsuccessfully implemented; and students have not learned the intended skills and knowledge. During 2008-2018, 252 curriculum were developed; nevertheless, 70% of them have invalidated.

Validation assessment of the core curriculum

MECSS has received a lot of complaints regarding too much load of the curriculum on students. In order to respond to the complaints, MECSS assigned MIER to conduct validation assessment on the curriculum content and identify possibilities to lessen the load. The assessment revealed the following results and findings:

Regarding the curriculum itself:

- There are too many subjects and some subject content is overlapping.
- Some subject content is too much for the dedicated learning hours
- Some subject content are too difficult
- Content of some subjects is not evenly distributed
- Some learning objectives are too general, difficult to understand even for teachers and too broad.

The assessment recommends:

- Update of the curriculum must be in line with social, economical and legal reforms, and reflect variations between urban and rural schools
- The curriculum must be disseminated after school teachers are trained how to implement curriculum perspectives, content and methodology
- Teachers lack necessary knowledge and skills to teach the core curriculum; thus they need more training and capacity building

3.1.4 School monitoring and evaluation

There is a regulation to monitor and evaluate school performance. The regulation sets several monitoring and evaluation criteria which is shown in Table. School monitoring and evaluation is externally conducted by local Education Departments.

14 Referenced from Country Background Report 2019
Table 16. School monitoring and evaluation criteria

<table>
<thead>
<tr>
<th>Quantitative criteria</th>
<th>Quality indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Access rate</td>
<td>1. Organizational management</td>
</tr>
<tr>
<td>2. Teaching and learning quality, outcomes</td>
<td>2. Curriculum, methodology</td>
</tr>
<tr>
<td>3. Teaching resource</td>
<td>3. Teacher development and evaluation</td>
</tr>
<tr>
<td>4. Financial and physical resource</td>
<td>4. Education service deliver</td>
</tr>
<tr>
<td></td>
<td>5. Child rights and participation</td>
</tr>
<tr>
<td></td>
<td>6. Finance and resource management</td>
</tr>
<tr>
<td></td>
<td>7. Partnership with parents, public and other entities</td>
</tr>
</tbody>
</table>

Every January, local Education Departments submit the school monitoring and evaluation report to MECSS. However, this monitoring and evaluation mechanism is not effective because:

- There is not consolidated system to reflect results of school monitoring and evaluation
- Monitoring and evaluation criteria are not effective and feasible. It does not align with job profiles of school staffs.

3.2 Primary and secondary education quality
3.2.1 Quality assessment and evaluation

Primary and secondary education quality is determined by students’ achievement. There are several evaluation and assessment for primary and secondary education. These evaluation and assessment are presented in the following Table.

Table 17. National level primary and secondary student evaluation

<table>
<thead>
<tr>
<th>Evaluation</th>
<th>Scope</th>
<th>Aim</th>
<th>Responsible body</th>
</tr>
</thead>
<tbody>
<tr>
<td>National exam</td>
<td>V, IX, XII</td>
<td>Vet instructional arrangement and methodology evaluating student learning progress and achievement, support schools and teachers to improve the quality based on results extracted from grade progressing and school leaving exams, identify education quality conducting student assessment and support the policy planning</td>
<td>EEC</td>
</tr>
<tr>
<td>Quality evaluation study</td>
<td>V, IX, XII</td>
<td>Identify student knowledge and skill levels at national level, reveal factors that affect this quality, and evaluate the policy implementation</td>
<td>EEC</td>
</tr>
<tr>
<td>HE entrance exams</td>
<td>XII</td>
<td>Identify general knowledge and skills of individuals to progress to higher education</td>
<td>EEC</td>
</tr>
</tbody>
</table>

Table 18. National exams by education levels 2014–2018

<table>
<thead>
<tr>
<th>Education level</th>
<th>Grade</th>
<th>Exams</th>
<th>Subject</th>
<th>Quality assessment study</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary</td>
<td>V</td>
<td>3</td>
<td>1. Mongolian language</td>
<td>1. Mongolian language</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>3. Human and environment</td>
<td>3. Natural studies</td>
</tr>
<tr>
<td>Junior secondary</td>
<td>IX</td>
<td>4</td>
<td>1. Mongolian language, scripts and literature /integrated content /</td>
<td>1. Mongolian language, scripts and literature /integrated content /</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>3. Optional: /student choose one of them/</td>
<td>3. Science integrated content</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>a. Science integrated content</td>
<td>4. Social science integrated content</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>b. Social science integrated content</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>4. Foreign language /choose one of English and Russian/</td>
<td></td>
</tr>
<tr>
<td>Senior secondary</td>
<td>XII</td>
<td>4</td>
<td>1. Mongolian language, scripts and literature /integrated content /</td>
<td>5. Mongolian language, scripts and literature /integrated content /</td>
</tr>
</tbody>
</table>
3.2.2 Primary education national evaluation

**Figure 28.** National averages of primary school leaving exams 2016-2018

By Figure 28, it is shown that students performed more than 70% of the assignments in math, Mongolian language and natural studies subjects; and still 30% of the content has not learned by students. However, there is not any inquiry about the remaining 30% and what factors could have influenced in not learning 30%. This is an actual picture of the school leaving exam in primary and secondary education. The exam merely provides information about who performed 65% or 56%. But it does not provide information and feedback what a particular group of students did not perform well and why. All exams have the similar picture.

**Figure 29.** Average marks of student performance in primary education quality assessment 2016-2018
Figure 29 presents a quite different results from Figure … Students performances in math, Mongolian language and natural studies are lower than the school leaving exam results. During 2016-2018, the performance has been lowering. Indeed, it could be influenced by many factors; and to provide the exact feedback, more investigation is needed.

Moreover, from Figures 28 & 29, it is seen that there are performance differences in school leaving exams and quality assessment exams. These differences are caused by a fact that school leaving exams are conducted by schools; and he quality assessment exams are administered by Education Evaluation Center.

**Table 19.** Average marks of students performance in primary education quality evaluation exam 2018

<table>
<thead>
<tr>
<th>№</th>
<th>Subject</th>
<th>Student number</th>
<th>Mark interval</th>
<th>Raw mark average (%)</th>
<th>Performance average (%)</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Math</td>
<td>4890</td>
<td>2471 1870 549</td>
<td>20.6</td>
<td>41.2</td>
<td>20.5</td>
</tr>
<tr>
<td>2</td>
<td>Mongolian language</td>
<td>4892</td>
<td>2655 1891 346</td>
<td>15</td>
<td>37.5</td>
<td>20.2</td>
</tr>
<tr>
<td>3</td>
<td>Science</td>
<td>4841</td>
<td>1470 3069 302</td>
<td>18.6</td>
<td>46.4</td>
<td>15.15</td>
</tr>
</tbody>
</table>

**Figure 30.** Numbers of students whose performance falls in the indicated mark interval: Primary education quality assessment 2018

3.2.3 Early Grade Reading Assessment (EGRA) and Early Grade Mathematics Assessment (EGMA)

The learning outcomes and skills of students in early grades in Mongolia were measured using Early Grade Reading Assessment (EGRA) and Early Grade Mathematics Assessment (EGMA) tools. EGRA and EGMA provide a basis to understand whether children are acquiring the necessary basic skills in literacy and numeracy. The early grade literacy and numeracy/mathematical abilities are foundational skills upon which all other critical literacy and numeracy/mathematical skills and subsequent knowledge are developed. Without basic literacy/numeracy skills, children are unable to learn, and over the years, the accumulated skills deficit snowballst to negatively affect their chances of succeeding in school and beyond. Thus, children who are not able to learn foundational skills early on are more likely to lag behind their peers with the literacy and numeracy skills over the years, repeat grades and eventually leave the school.

The Mongolian EGRA and EGMA were an adaptation of the RTI’s EGRA and EGMA tools implemented in several other countries and follow the same principles. The adaptation of tools was carried out by an expert team from within the country, facilitated by an international consultant. The tools were adapted in
a consultative process with the Ministry of Education, Culture, Science and Sports (MECSS), EQRP consultants and education specialists in a workshop mode using curriculum materials for grades 1 and 2.

The EGRA and EGMA, carried out on a sample of students in Mongolia aims to address the following questions:

- How well are Mongolian children completing grade 1 and grade 2, mastering the foundational reading skills?
- How well are Mongolian children completing grade 1 and grade 2 learning operational and conceptual skills in mathematics?
- How does the individual, household and school related factors affect children’s acquisition of reading and mathematics skills?

**Overall Results of EGRA**

At the outset, an analysis of overall validity and reliability of EGRA instruments were determined using Cronbach’s alpha. With an α score of 0.87, the EGRA instruments proved to have acceptable internal consistency. Generally, an alpha score over 0.70 is acceptable and a value over 0.80 is considered very good.

The EGRA subtasks –wise mean percentage scores show that on an average, Mongolian children are still in the process of emerging as readers. On an average, Mongolian early graders were able to identify 59 percent of the letter-names, but only 28 percent of letter-sounds and 26 percent of the initial sounds. The students were able to read 2/3rds of the familiar words presented while they could read less than half of the invented words (non-words). The oral word fluency averaged at 50 percent while their reading comprehension was only 27 percent.

Among the timed tasks, Mongolian children were able to identify 59 letter-names per minute, but only 28 letter-sound items during the same time. They were able to read 42 familiar words in a minute, but only 25 invented words per minute. The mean oral word fluency was only 32 words per minute.

**Effect of Grade differences on students’ performance on EGRA tasks**

It is expected that as students move from a lower grade to higher grade, the learning gets firmed up and hence will be faring better. The Mongolian EGRA was done on grade 1 and grade 2 students, and here an analysis of how students at the end of grade 1 is compared with students at the end of grade 2 to see whether grade effects are evident on EGRA performances.
The analysis shows that students in grade 1 and grade 2 in Mongolian primary schools performed not only differently on various EGRA subtasks, but within each subtask, their performance varied by grade they attended. See the graph below. A more detailed analysis of grade wise performance of students is taken up.

**Overall Results of EGMA**

At the outset, the Mongolian early graders’ performance in EGMA is not up to the curricular expectations. The analysis is further classified to look into how much children performed in procedural knowledge (recall from memory) and how much could apply their conceptual understanding. On the procedural knowledge items, while children on an average identified 85 percent of the numbers presented to them, they could do only slightly more than half of the simple additions and even less than half of the simple subtraction tasks. On the conceptual knowledge domain, while the Mongolian students on an average could differentiate between different quantities for 68 percent of the tasks presented, they were able to do only half of the number patterns and level 2 additions and subtractions. They were able to do less than half of the word problems.

**Effect of grade on student performance on EGMA subtasks**

The overall analysis show that students in grade 2 performed far better than students in grade 1 in all subtasks of EGMA.

**3.2.4 Junior secondary education national evaluation**

**Figure 31.** Averages of students’ performance in junior secondary school leaving exams (2016-2018)
By Figure 31, there is not any significant changes in student performances during 2016-2018. The performance level is less than 79.8%; and it means that students do not learn more 20% of the content. 

**Figure 32.** Averages of junior secondary education quality assessment 2016-2018

Averages in Figure 32 indicates the same issues as primary education. First of all, students performance is very low. Merely 50% of the content has been learned by students; and the remaining half has not. This implies that junior secondary education quality is question marked. In this case, more investigation is needed to reveal actual causes of this poor quality of education.

From Figure 32, again there are performance differences in the school leaving and quality assessment exams. The same as primary education, schools are responsible for the school leaving exams. It raises a question that which exam is valid.

**Table 20.** Averages of student performance in junior secondary education quality assessment 2018

<table>
<thead>
<tr>
<th>№</th>
<th>Subject</th>
<th>Candidates</th>
<th>Average of raw mark</th>
<th>Performance average</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Math</td>
<td>4093</td>
<td>20.9</td>
<td>27.8</td>
<td>14.1</td>
</tr>
<tr>
<td>2</td>
<td>Mongolian language</td>
<td>4282</td>
<td>29.7</td>
<td>49.4</td>
<td>19.6</td>
</tr>
<tr>
<td>3</td>
<td>Biology</td>
<td>3986</td>
<td>11.48</td>
<td>49.92</td>
<td>17.1</td>
</tr>
<tr>
<td>4</td>
<td>Chemistry</td>
<td>3986</td>
<td>7</td>
<td>27.3</td>
<td>14.4</td>
</tr>
<tr>
<td>5</td>
<td>Physics</td>
<td>3986</td>
<td>7.9</td>
<td>29.3</td>
<td>16.406</td>
</tr>
<tr>
<td>6</td>
<td>Geography</td>
<td>3986</td>
<td>7.2</td>
<td>31.3</td>
<td>15.456</td>
</tr>
</tbody>
</table>
Figure 33. Numbers of students whose performance falls in the indicated mark interval: Junior secondary education quality assessment 2018

3.2.5 Senior secondary education national evaluation

Figure 34. Averages of student performance in senior secondary school leaving exams 2016-2018

Figure 35. Averages of student performance in senior secondary education quality assessment 2016-2018
3.2.6 Higher education entrance exam

**Figure 37.** National averages in higher education entrance exams 2014-2018

By Figure 37, in overall, students do not perform well in all subject exams. The lowest performance is observed in math, English, geography, physics and chemistry. Students perform comparatively well in Mongolian language and Russian language.

However, during 2014-2018, student performance has been improved in math, social science, Russian language, geography, and biology subjects.

### 3.3 Education quality factors

Results of the student assessment and evaluation leads to an inquiry on factors that could affect on the low achievement of students. EEC conducted investigation to reveal influencing factors on the student achievement. The following factors have investigated:

- Students’ family background and income sufficiency
- Pre-school attendance
- School environment and context
- Teacher education level and professional ranks

Among the above factors, there were mild correlations between pre-school attendance, school location and student performance.
3.4 Primary and secondary education capacity

3.4.1 School teacher capacity

Legal environment

Education Law of Mongolia (2002) firmly ensures the teacher social security, roles and responsibilities. There are 9 clauses for the social security, 7+8 statements for the roles and responsibilities. It also clearly regulates the teaching job as a profession; and presents the required skills and competences. Moreover, Primary and Secondary Education Law (2002) regulates teacher pre- and in-service trainings in 6 clauses; and teacher roles and responsibilities in 11 clauses.

The above laws regulate the labour arrangement for teachers stating that teachers in primary and secondary education providers must have the teaching certificate and hold the professional rank.

In conformity with the related legal enactments, officials in the responsible entities approve and implement the following policy and procedures for teacher job profile, professional development, renumeration, morality and social security.

Legal regulations related to teachers

2007-2011 years (Phase that established the legal environment for teaching based on constructive theories and principles of learning)

Teacher main obligations are replaced by “manager”-teacher due to a shift from teacher-centered to learner-centered methodology in teaching; and a perspective to create a new knowledge through constructive learning of students. Moreover, there was a need to enlarge an measurement unit for teacher performance and consider the planning, evaluating and rewarding of teacher performance comprehensively.

Box . Legal reform in teacher (2007-2012)

<table>
<thead>
<tr>
<th>Parliament Resolution</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Government Policy on Education: Chapter V; 1995 (36)</td>
</tr>
<tr>
<td>• Civil Servant Law: 2002;</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Government Decree</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Category and ranking of the civil servants 2007, 354 (236)</td>
</tr>
<tr>
<td>• Salary network and minimum wage of the civil servants 2010 (239), 2007 (351 (237))</td>
</tr>
<tr>
<td>• Additional wage of the staffs in education sector 2007(219), 2010, (148)</td>
</tr>
<tr>
<td>• National Program on Teacher pre- and in-service training 2008 (316)</td>
</tr>
<tr>
<td>• Quarterly Renumeration for Teacher Performance 2008 (54)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Minister Order</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Moral regulation for school and kindergarten teachers 2007 (41)</td>
</tr>
<tr>
<td>• A Framework for Teacher Job Profile 2007 (351 (179))</td>
</tr>
<tr>
<td>• A Procedure for “Honour Teacher of the Year” 2007 (440)</td>
</tr>
<tr>
<td>• Teacher In-Service Training Regulation 2008 (72)</td>
</tr>
<tr>
<td>• Regulation on Teacher Professional Rank 2008 (73)</td>
</tr>
</tbody>
</table>
Therefore, a joint order of MECSS and MoLSP, MoF was produced in 2007, as Order No. 307/91/237, to change the 30-45 mins teaching hour for per lesson. The joint order regulated to measure the teaching hour as an unit lesson which consists of several lessons with 30-45 minutes. In addition, by MECSS Order No.371 in 2007, a teacher job profile is modified as having responsibilities to develop curricula to implement competence-based education standards, utilize the curricula in actual classrooms, and assess the learning results. These 2 orders are considered as a basic change that reforms content and nature of the teaching principally; and other related regulations and decisions are also refined in conformity with these 2 orders. As a result, a updated and comprehensive legal environment for the teaching was established.

In April 2007, the MECSS, first time, organized a teacher forum at national level. During the forum, participant teachers initiated a proposal to have an Independent Program to support preparation of teachers with skills to implement competence-based education standards and open curricula and approach the set objectives to ensure professional and methodological development of teachers. To reinforce the initiative, in 2008, Government of Mongolia approved a resolution of National Program for Kindergarten and School Teacher Pre- and In-service Trainings. The program has planned 55 activities under 12 target objectives within a scope of 2 goals, and been implemented during 2008-2015 to:

- Establish and develop an open, flexible and sustainable system for teacher preparation aligning with revised aim and content of Teacher Education and needs of continuous improvement of primary and secondary education quality, a structure, capacity and type of the schools, and orienting demand and supply characteristics of teacher labour market.
- Develop school-based, open, optional and sustainable system for teacher in-service training in line with social ad life culture and in response to realistic needs of teacher continuous professional development at workplace.

Besides, in 2010, Government of Mongolia passed the resolution No.31 for National Education Program 2010-2012 with aims to improve the quality and efficiency of education, to align national education system with the international levels. The program set up the strategic objectives to resolve all issues related teacher professional and methodological development, renumeration and social security, and to increase the amount of investment and its benefits. The following actions are planned:

- Ensure gender equity of teachers at all education levels
- Develop preparation and in-service training for teachers and managers and enhance the engagement of government and non-government professional organizations
- Provide scholarship for students who successfully study in primary and secondary school teacher institutions
- Build the capacity of educators from teacher pre-service higher education institutions
- Spend more than 15% of the education sector investment for teacher professional development, and create a dedicated expenditure category in school budget
- Reform VET teacher preparation system
- Develop and implement a special program to strengthen capacity of university teachers
- Investigate and conclude an issue related to special circumstance-renumeration taking into account of remoteness of all level schools, weather condition and life cost in locals

Related Regulations

- A Regulation for School and Kindergarten Teacher Workload Norms and Wage for some other Officials 2007 (307/91/237)
- Criteria for Providing Additional Incentives for teachers and some staffs of kindergartens and schools, 2010, Order No 362/112/183

- Teaching Certificate Regulation 2008 (74)
- Standards for “Teacher Development Hall/Center” 2008 (114)
- Planning and Evaluating Teacher Performance 2009 (561)
• Supply local schools with qualified teachers and improve legal and economical environment to ensure their retention

During the period, in order to improve teacher workplace environment and support professional development, several regulations have approved. For instance, workplace requirements and norms for kindergarten and school teachers, teacher performance evaluation, renumeration and incentives, ethical and moral requirements, awarding teaching certificate and professional rank, and winning the best teacher honour of the year requirements. Common requirements for teacher position in higher education institutions, and professional standards (MNS 5323-95:2009, 2009) for HE and school teachers were set up in 2016.

2012-2018 on (Phase that recovered the institution-based teacher professional development system)

The most critical challenges in methodological development of teachers were to establish and develop an institutionalized system for teacher professional development. Therefore, by Government Decree No.180, in 2012, Institute for Teacher Professional Development, previously liquidated in 1990, was re-established as an independent organization. By the rule of the institute, the following roles and responsibilities were set as:

- Deliver compulsory and non-compulsory (specialized and chartered) in-service trainings to teachers and other staffs in pre-school, primary and secondary education training organizations
- Improve teacher professional skills
- Award teaching certificate and professional ranks

The above activities shall be operated at national and local levels utilizing the advancement of Information Technology and Communication.

In 2012, Minister of Education, Culture and Science approved a program\textsuperscript{15} titled “Teacher Development” to establish optimum environment enabling teachers to identify challenges and problems faced during the teaching with emphasis on development of every child and select a suitable methodology to overcome the identified challenges and problems, to mature teachers who develops children, to share best experiences and lessons throughout the country and improve the status of teaching job. The program was set the following 3 objectives with 16 activities; and 8 outputs were expected:

1. Identify challenges and problems faced during the teaching with emphasis on development of every child and figure out the solutions to overcome (5)
2. Establish condition and provide an opportunity to teachers to develop their professional skills
3. Mature teachers with the methodology that develops every child

Apart from that, starting 2013, the legal context, that was built during 2007-2012, was partially changed several times in disconnected manner; even now, the legal coordination for teaching job has been distorted.

In 2015, Government Policy on Education during 2014-2024 was revised and approved by Parliament Resolution No.12. The following statements were set to support the human resource development:

• Improve the legal context for training organizations of teacher preparation and provide all-round support
• Scale up teacher professional skills, reputation, morality, requirements and accountability, and establish a authentic remuneration system for teacher labour
• Establish the working condition to prepare, train, practice and maintain retention of the qualified managers and other staffs in conformity with human resource policy planning

\textsuperscript{15} Order No.A136
In 2018, first time ever, Teacher Development Support Law was approved by the Parliament of Mongolia. The law became effective in 2019. The law has some peculiar provisions on supporting system for teacher development and strengthening the ethics and status of teachers. For example:

- Spend up to 2% of the budget variable cost for teacher development centers in kindergartens, schools and VET providers
- Supply assistant teachers to grades 1-2 with class size more than 44 pupils
- Higher education graduates from teacher institutes to be justified as certified

However, few statements in this law contradicts with some provisions of Education Law. For example, by Pre-School, Primary and Secondary Education Law, teachers shall be requested to hold the teaching certificate. Nevertheless, by Teacher Development Support Law, higher education graduates with teaching qualification shall be justified as certified. Moreover, the law states that higher education graduates who do not hold the teaching qualification can take an exam to extend the validity of the teaching certificate or award the certificate. This provision does not state education level; as a consequence, it could be misunderstood that anyone who are not qualified as a teacher, but passed the exam could have the teaching certificate.

The approval of the law made previous regulations on teachers to be modified; and in 2018, the regulation\(^\text{16}\) for ethical requirements for teachers, managers and staffs in primary and secondary school, kindergarten, informal and life-long education centers has modified and been implemented. There is a critical need to modify other regulations related to teacher in-service training, awarding and extending the validity of the teaching certificate.

Legal requirements and criteria for teachers in kindergarten and schools are the same. Indeed, the requirements suit more with school teachers, and does not fit with characteristics of kindergarten teacher work. There are incidences that some criteria could not be measured for kindergarten teachers. It implies that kindergarten teachers need to have a separate policy and legal coordination. Besides, there is an urgent need to consider professional development of VET, in particular, senior secondary subject\(^\text{17}\) teachers the same as mainstream school teachers.

**Box…** Legal reforms related to teachers during 2013-2018

<table>
<thead>
<tr>
<th>Parliament Resolution</th>
<th>Government Decree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Government Policy on Education: Chapter V; 2005 (12)</td>
<td>Quarter Incentive Regulation for Teachers Performance Outcome</td>
</tr>
<tr>
<td>Civil Service Law: 2017</td>
<td>“Quarter Incentive Regulation for Performance Outcome of Teacher, Assistant Teachers, Staffs of public and local kindergarten, schools and VET providers</td>
</tr>
</tbody>
</table>

**Minister Order**

- Regulation for Kindergarten, Primary and Secondary School Teacher Professional Development: 2013
- Regulation for Teacher Performance Evaluation: 2013
- Directions to be Pursued in the Evaluation of School Teacher and Staffs: 2013
- Regulation for Issuing and Suspending Teaching Certificate and Professional Rank: 2013
- Requirements and Criteria for Issuing and Suspending Teaching Certificate and Professional Rank to kindergarten Teachers and Methodologists: 2014
- Directions to be Pursued in the Evaluation of Kindergarten Staff Performance: 2014

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\(^{16}\) БСШУС-ын сайдын А/243 дугаар тушаал, 2018)

\(^{17}\) Math, chemistry, physics, etc
Numbers of teachers, by gender, age, experience, qualification, subject, professional rank, education level, school ownership, and type

As of 2018-2019 academic year, there are 49,400 staffs in 803 operating schools. Here, out of 49400 staffs, 30900 teachers, 3000 managers and 15400 non-teaching staffs. 81.8% of total teachers, 24900, are female; and the remaining are male teachers. Primary school teachers occupies 35.3% of total teachers; and the remaining is secondary school teachers.

By 2018, 10397 primary school and 20014 secondary school teachers work in schools The following Figure illustrates numbers of teachers by subjects they teach.

Figure 38. Secondary school teachers, by subjects (2018/19)

Depending upon the teaching hours in the primary and secondary education syllabi, numbers of subject teachers are varied. For example, there are 60 kazakh language teachers in Bayan-Ulgii, but one teacher in Khovd aimag.

Since 2013, double-qualification for teaching job (math-IT, Math-Physics, History-Geography) has been suspended; as a result, a number of double qualification teachers has reduced.

Teachers by gender and subjects (2018-2019)
By 2018, the gender balance of school teachers is not equal. Merely, 4% of total primary school teachers is male, meanwhile, male Mongolian language, literature and foreign language occupies less than 8% of total secondary school teachers. Percentage of male teachers in physical education, fine art and technology subject is higher than other subjects. It may be due to career choice of male students.

Figure 39. Gender ratio of school teachers, by ownership

Teachers by teaching experience (2018-2019)
In 2006, there were 742 schools. However, in 2018, a number of schools is added up by 61. By 2018-2019 academic year, there are 803 schools with 15177 novice teachers.

57.5% of school teachers have 1-10 year teaching experience; and it is reasonable to interprete that it is due to new opening of 61 schools.

Teachers, by age (2018-2019)

A ratio between teachers with more than 50 years old and less than 30 years old equils to 0.44. By OECD (2014), the balanced ratio between senior and junior teachers is very sustainable if the ratio equils 0.5.

Evolution of a ratio between senior and junior teachers has been quite maintained for last 13 years, however, difference between 2006 and 2019 is 0.11.

Teacher age groups (2006-2019)
By 2018 statistics, a percentage of male teachers aged 40-49 is 12%. Meanwhile, this percentage a bit bigger (20%) for teachers aged less than 39. Still, a percentage of male teachers in total school teachers is small.

**Teachers, by their education background (2018-2019)**

By 2018-2019 academic year statistics, 0.1% of total teachers have earned PhD degree, 14.3% Master degree, 73.3% bachelor, and the remaining 9.5% have diploma.

**Figure 41. Education background of school teachers**
Out of 19 teacher hold PhD degree, 3 teachers teach Mongolian language and literature, 2 teach primary, history-social study, physics and chemistry respectively, and the remaining teachers teach other subjects. Out of 4347 Master degree teachers, 19.2% teach in primary schools, and the remaining teachers teach in secondary schools.
Figure illustrates that a number of Master degree teachers has evenly increased during 2007-2010, however, decreased by 272 teachers in 2013. In 2014, there were 799 with Master degree; and the peak is in 2015 as 1214 teachers with Master degree. There was a slight increase in a number of teachers with Master degree in 2010. It can be assumed that this increase is due to a fact that in 2010, Government of Mongolia distributed stock share of the state-owned mining company to citizens through study fee.

National Program “Right Mongolian Child”, approved by Government Decree No. 295 in 2013, sets to add a number of teacher with Master degree. Moreover, it can be interpreted as some higher education institutions in Ulaanbaatar recruited Master students and delivered Master studies.

By the education background of teachers, a share of teachers who hold diploma of higher education has been decreasing as 17.5% since 2006. Meanwhile, teachers with bachelor degree has been increasing by 17.4%; and Master degree teachers by 7%. It can be assumed that a decline of teacher with diploma is due to a legal requirement for schools teachers.
By the above Figure, in 2017-2018 academic year, out of 19 teachers with PhD, 13 of them are working in Ulaanbaatar, 2 in Uvs; and the remaining PhD degree teachers are in Darkhan-Uul, Dornogobi, Khovd and Mongolian school in South Korea. Majority of Master degree teachers (31.3%) work in rural schools. It can be resulted from that during last years, some of the private universities allowed school teachers to earn Master degree submitting some research and teaching related publications. Moreover, teachers from rurals where higher education institutions are in. For example, Khovd, Zavkhan, Orkhon aimags.

Teachers, by professional ranks (2018-2019)

By 2018-2019 academic year statistics, 51% of total school teachers have professional ranks; and within the percentage, 0.9% are Advisors, 29.1% are Leader, and 70% are Methodologists. Almost half of the total teachers do not have the professional ranks.

Figure 43. School teachers by professional ranks 2018-2019)

By Figure 43, 38.6% of teachers have less than 5 years teaching experience, 61.4% of them have more than 6 years teaching experience. There are plenty of teachers (49%) who do not hod the professional ranks. Indeed, one of the criteria for earning the professional rank is the teaching experience. It means, if a teacher has taught more than 5 years in schools, he or she fulfills one of the citeria for Methodologist rank.

42.4% of the total teachers have been teaching more than 11 years in schools; nevertheless, only 14.8% of them are ranked as Leader-Teachers. 1.8% of teachers with more than 16 years experience hold Advisor teacher rank. This simple analysis may imply that teachers are not eager to earn the rank even though it is tiedly linked with their incentives.
Teachers’ possession of the professional rank is investigated by school locations as it is shown in Figure 43. By Figure 43, distribution of teachers with the professional ranks look quite diverse. More than half of the teachers in Ulaanbaatar and aimags, right lines of the graph, are Methodologists; while, majority of the leader-teachers are in Dornod and Sukhbaatar. At national level, there are merely 146 Advisor-Teachers. Majority of them teach to schools in Ulaanbaatar.

There could be many reasons because the awarding of the professional rank is decided locally. There are some assumptions that officials with responsibility to make decisions on the awarding could have misconception about the criteria, or the regulation itself may have a problem to make reliable judgement.

By definition, the advisor teachers have an significant responsibility to disseminate the best teaching and mentor other teachers in particular those who struggle. Therefore, it is understood that all aimags need to have advisor-teachers to strengthen capacity of local teachers and encourage work-place professional development.
Teachers with professional rank by subject (2018-2019)
Annual growth of teachers (2006-2018)

**Figure 44.** Annual growth of teachers is analyzed investigating its evolution during 2006-2019 academic years.

<table>
<thead>
<tr>
<th>Year</th>
<th>Male Teachers</th>
<th>Female Teachers</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006/07</td>
<td>22,891</td>
<td>23,879</td>
</tr>
<tr>
<td>2007/08</td>
<td>25,453</td>
<td>25,670</td>
</tr>
<tr>
<td>2008/09</td>
<td>26,358</td>
<td>26,492</td>
</tr>
<tr>
<td>2009/10</td>
<td>26,863</td>
<td>26,863</td>
</tr>
<tr>
<td>2010/11</td>
<td>27,205</td>
<td>27,459</td>
</tr>
<tr>
<td>2011/12</td>
<td>27,490</td>
<td>27,490</td>
</tr>
<tr>
<td>2012/13</td>
<td>28,490</td>
<td>28,889</td>
</tr>
<tr>
<td>2013/14</td>
<td>29,242</td>
<td>30,411</td>
</tr>
<tr>
<td>2014/15</td>
<td>30,411</td>
<td>31,580</td>
</tr>
<tr>
<td>2015/16</td>
<td>31,580</td>
<td>32,749</td>
</tr>
<tr>
<td>2016/17</td>
<td>32,749</td>
<td>33,918</td>
</tr>
<tr>
<td>2017/18</td>
<td>33,918</td>
<td>35,087</td>
</tr>
<tr>
<td>2018/19</td>
<td>35,087</td>
<td>36,256</td>
</tr>
</tbody>
</table>

**Note:** The data for 2019 is not available.
There is a gradual growth in school teachers since 2006, even though, there was a decline in students' number in 2012-2013 academic year. This gradual growth can be explained as every academic year, schools are newly constructed. Once there is a school, a number of teachers are needed to be recruited as school capacity.
Evolution of clusters of newly appointed teachers during 2007-2019

- 2018-2019: 1927, 626, 518, 278, 244, 129
- 2016-2017: 2087, 552, 646, 367, 220, 136
- 2015-2016: 2215, 484, 710, 298, 336, 143
- 2014-2015: 2561, 598, 716, 450, 375, 214
- 2013-2014: 2867, 1127, 839, 262, 231, 247
- 2012-2013: 2825, 803, 953, 306, 343, 238
- 2011-2012: 2839, 802, 968, 293, 323, 297
- 2010-2011: 3033, 890, 1034, 270, 393, 236
- 2009-2010: 3283, 938, 1021, 332, 522, 298
- 2007-2008: 3657, 742, 2218, 295, 345

Legend:
- 用地: 2007-2008
- 用地: 2009-2010
- 用地: 2010-2011
- 用地: 2011-2012
- 用地: 2012-2013
- 用地: 2013-2014
- 用地: 2015-2016
- 用地: 2016-2017
- 用地: 2017-2018
- 用地: 2018-2019

2007-2019

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%

- 用地: 2007-2008
- 用地: 2009-2010
- 用地: 2010-2011
- 用地: 2011-2012
- 用地: 2012-2013
- 用地: 2013-2014
- 用地: 2015-2016
- 用地: 2016-2017
- 用地: 2017-2018
- 用地: 2018-2019
Share of subject-qualified teachers by level, subject, school ownership, type

In general, schools have supplied 100% subject-qualified teachers. However, there are some teachers who do not have teacher qualification.

**Figure 45.** Supply of school teachers, by schools and education level (2006-2018)
By 2018-2019 statistics, there are 209 un-qualified subject teachers in schools. The following Figure 46 presents a category of these un-qualified teachers by subjects.

![Figure 46. Number of unqualified teachers by subjects](image)

In 2017-2018 academic year, supply of trained teachers in qualifications such as chemistry-biology, math-physics, music, IT, history-geography is estimated as 95.4-96.8%; meanwhile, a percentage of teacher supply in math-IT, physics, social study, chemistry, history-social study, biology, natural science, fine art, geography, Russian language, technology is 97.3-98.7%. Other subjects such as Mongolian language, literature, English language, primary, history-geography, Russian-English languages, physical education are supplied 99.2-99.8% qualified teachers.

**Teacher shortage**

Teacher shortage is analyzed by education level, subject, school ownership and type as it is shown in Figure 47.

![Figure 47. Evolution of teacher shortage during 2006-2016](image)

By Figure 47, a percentage of teacher shortage is estimated as 1% since 2014-2015 academic year, and reached at 4.1% in 2016-2017 academic year.

**Teaching hours in 2018-2019 academic year syllabus**

<table>
<thead>
<tr>
<th>Subject</th>
<th>Weekly hours</th>
<th>A number of teachers in need</th>
<th>A number of teachers /Full time -100+ dual subject - 50/</th>
<th>Average teaching hour per week</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mongolian language, scripts and literature</td>
<td>53700</td>
<td>2826</td>
<td>2675</td>
<td>20</td>
</tr>
<tr>
<td>Math</td>
<td>38811</td>
<td>2043</td>
<td>2298</td>
<td>17</td>
</tr>
<tr>
<td>Information technology</td>
<td>10056</td>
<td>529</td>
<td>754</td>
<td>13</td>
</tr>
</tbody>
</table>
Figure 48 shows that fine art and health subject teachers teach more per week. It is regulated that standard teaching hour per week for any subject full-time teacher is 19 hours. Nevertheless, by Figure 48, Mongolian language, music, technology for male students, fine art and health subject teachers teach more than the standard hours. More teaching hours than 19 implicate that schools need to pay more to teachers. It also implicate that there is more than 1 teacher for subjects mentioned earlier.

**Figure 49. Student, teacher ratio by level 20062018**
By Figure …, student, teacher ratio has steadily decreased since 2006; yet, there is a variance in primary and secondary education level. At primary level, student, teacher ratio has declined from 23.7 to 19.6; meanwhile, at secondary level, this ratio has decreased from 19.8 to 13.4 during 2006-2018. Although this ratio looks smaller, depending on the location, the ratio has drastic difference.

Teacher recruitment, work condition and evaluation

Teacher recruitment is managed at local level and selected by a commission approved by Education Board director order or school principal. Appointment of teacher is decided by school principal\textsuperscript{18}. By a joint order No307/91/237 of MECS, MoLSP and MoF in 2007, teacher work norm is regulated as follow:

Teacher work norm

<table>
<thead>
<tr>
<th>Developing subject curriculum</th>
<th>Supporting instructional activities or learning</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Cooperate with peer teachers in the same Methodology unit</td>
<td>1. Build classroom, laboratory, school environment</td>
</tr>
<tr>
<td>2. Study education standards, curriculum and syllabus at all levels</td>
<td>2. Take notes in training documents such as student attendance journal, research, student profile, etc</td>
</tr>
<tr>
<td>3. Investigate learning needs and interests of students</td>
<td>3. Organize and participate in subject Olympiads and competitions</td>
</tr>
<tr>
<td>4. Select, plan and develop teaching and learning content</td>
<td>4. Work as watchman</td>
</tr>
<tr>
<td>5. Choose appropriate teaching approaches and develop methodology</td>
<td>5. Conduct research</td>
</tr>
<tr>
<td>6. Research, select and prepare teaching materials</td>
<td>6. Develop presentations, books, guides and handbooks</td>
</tr>
<tr>
<td>7. Assess students’ learning and discipline behaviour, choose and develop suitable assessment methods</td>
<td>7. Attend in professional development training and deliver trainings to peer teachers</td>
</tr>
<tr>
<td>8. Develop formative and summative assessment schedule and carry out the assessments</td>
<td>8. Ensure the professional development at workplace continuously</td>
</tr>
</tbody>
</table>

By the above norm, a majority of teaching work is dedicated to education standards or curriculum implementation; and out of 34 hours, 19 hours for teaching subject and 15 hours for preparing for and reviewing lessons, assessing students’ work, checking homework, etc. Moreover, 6 hours per week are to be spent on attending school meeting, consulting to parents, etc.

In 2007, Minister of Education, Culture and Science approved an Order No351, and regulated teacher job profile with activities on:

<table>
<thead>
<tr>
<th>Teach according to the curriculum</th>
<th>Contribute to discipline and development of citizens and students</th>
</tr>
</thead>
<tbody>
<tr>
<td>10. Arrange lessons</td>
<td>10. Communicate with parents and public</td>
</tr>
<tr>
<td>11. Make notes and observe student learning, improve the curriculum based on the observation</td>
<td>11. Perform administrative assignments</td>
</tr>
<tr>
<td>12. Analyze own and peer teaching</td>
<td>12. Collect required data and statistics</td>
</tr>
<tr>
<td>13. Analyze student behavior and advise</td>
<td>13. Organize and participate in cultural and sport activities</td>
</tr>
<tr>
<td>14. Assess and diagnose student learning progress</td>
<td></td>
</tr>
<tr>
<td>15. Analyze curriculum and improve</td>
<td></td>
</tr>
</tbody>
</table>

Table 22. Teacher evaluation and incentives are regulated as follow:

\textsuperscript{18} МУ-ын Бага дунд болюслын тухай хууль
The document contains information on wage and incentive regulations for teachers. It includes the following:

1. **Basic salary**
   - Joint order No307/91/237 of MECS, MoLSP and MoF in 2007
   - Implement education standards (34 hours)
   - Other work (6 hours)

2. **Regulation on teacher evaluation /2013/**
   - Student development and formation of behaviour
   - Level of acquired skills, progress in learning and achievement
   - Success and experience of how student talent is recognized and developed
   - Customer satisfaction
   - Student health
   - 5 indicator with 12 criteria for the evaluation

3. **Teacher job profile /2007/**

4. **Additional salary**
   - Calss teacher regulation /2007/ 10% of monthly basic salary

5. **Methodology unit leading /2007/** 5% of monthly basic salary

6. **Laboratory managing /2007/** 5% of monthly basic salary

7. **Incentives**
   - Professional rank incentive /2007/ Shared percentage of monthly basic salary
     - Advisor-20%
     - Leader-15%
     - Methodologist-10%

8. **Local incentive /2001/** 8-10% of monthly basic salary

9. **Skill incentive /1995/** No less than 30% of monthly basic salary

10. **Special training incentive /1999/** 10-30% of monthly basic salary

11. **PhD degree incentive /1995/** 15% of monthly basic salary

12. **Bonus**
    - Quarterly performance bonus /2013/ 10, 13, 15% of monthly basic salary

13. **Pay for extra teaching**
    - Extra teching /2007/ The salary shall be added by 1.5 times as the salary rate for one teaching hour. Max shall be 10% of teacher norm and 4 hours per week

14. **Allowance**
    - Long term working in locals Every 5 years, equils to amount of 6 month basic salary

15. **Allowance for pension**
    - UB teacher – 1 months basic salary, soum and village – 18 months basic salary

By above Tables..., in addition to the basic salary, teachers are paid extra incentives. Гэвч багш бүр дээрх нэмэгдэл хөлс болон урамшууллыг авах боломжгүй байдаг

By third column of Table..., it seems there are variety of incentives and additional paying for teachers.

Teacher salary is increased as several stages during 2007-2019.


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<tr>
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<tbody>
<tr>
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<td>TUBD -4</td>
<td>TUBD -4</td>
<td>TUBD -4</td>
<td>TUBD -4</td>
<td>TUBD -4</td>
<td>TUBD -3</td>
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<td>654193</td>
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<td>3</td>
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<td>667449</td>
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<td>577826</td>
<td>624052</td>
<td>701075</td>
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<td>5</td>
<td>269351</td>
<td>350157</td>
<td>430157</td>
<td>608475</td>
<td>657134</td>
<td>738589</td>
</tr>
</tbody>
</table>

This network has 5 year-scales. At the end of every 5 year, the salary is scaled up. is estimated as every 5 years. By 2019, monthly basic salary is 648980MNT; as MNT to USD exchange rate on 1 January 2019, it equils to 245.48USD. Evolution of teacher basic salary in MNT and USD is presented in Figure …

Figure 50. Evolution of teacher basic salary during 2007-2019
By Figure 50, the basic salary in MNT looks as increased for last years; yet, in USD, it goes down because of swinging exchange rate. Compared to other sector staff salary rate at national level, average monthly salary of staffs in education sector has been decreasing since 2009.

**Figure 51.** Evolution of average salary rate at national and sector level during 2006-2017 (thousand MNT)

Even though there are many incentives and bonus for teachers, staffs including teachers in education sector have paid less than staffs in other sector entities. The figures of education sector salary includes salary of university staffs those who are comparatively well paid compared to school teachers. If university teachers are excluded, this results would be much lower.

Teacher salary has increased several times. By Government decree No351, in 2007, the salary is added up as 39.7% than 2006 year salary; by Government Decree No78, in 2012, it increased by 44.6$ as of 2006; and by Government Decree No75, in 2014, increased by 33.2% as of 2006. By 2017, teacher salary has increased by 15600MNT as of 2014.

**Figure 52.** Evolution of teacher basic and average salary during 2007-2017
By Pension and Allowance from Social Insurance Fund Law (1994), the insurer, who worked as a teacher, has a right to receive one-time allowance before the pension; and this allowance is represented in the following Figure 53.

**Figure 53. One-time allowance for insurer who is set to go on pension**

- **Setting the pension**
  - Male insurer
  - Female insurer
  - 60 years old
  - 50 years old if she has more than 4 children
  - 55 years old if she has less than 4 children

- If the insurer has paid 10-20 years, the pension shall be estimated as equilizing the share
- 45% of the average income of 5 working years within last 20 years
- If the insurer paid more than 20 years, additional pension shall be estimated 1.5% of the pension amount for every year after 20th

A teacher, worked more than 25 years, shall have allowance equils to 24 month basic salary before the pension, out of these 25 years, if she worked in soum, village and bag school, allowance equils to 36 month basic salary.

**Teacher pre-service training**

All individuals, who hold secondary school or related education certificate, wish to major in teaching profession, and pass the entrance exams, can enter in teacher universities. Almost 50% of all teachers in schools and kindergartens are graduated from Mongolian State University of Education, a leading teacher pre-service institute of Mongolia.

In 2014, in order to enhance the quality of new entrants in teacher pre-service institutions, scholarship system for higher education student is established and regulated by Government Decree No71. By the regulation, those who marked 650-750 in higher education entrance exams are exempted 70% from the tuition fee; if marked more than 751, the tuition fee is completely exempted. It contributed to the quality of teachers. As of 2017-2018 academic year, 6774 students from 4 pre-service institutions received; and in total, 13.7 billion MNT has spent as scholarship.
Moreover, besides the above regulation, since 2006, 90 students, who enrolled in overseas higher education institutions, have received funding in amount of 2.56 million USD as student loan. In 2013, President of Mongolia also signed on the resolution for granting scholarship for 9 students majoring in education field. In total, 554000USD has granted. As 2018, average amount of annual tuition fee of higher education institutions was 2283400MNT; whereas, annual tuition fee of pre-service institutions was 2031000MNT.

In 2004, teachers standards for Mongolian language, literature, social study and fine art were developed based on perspectives and theories of teacher education. Moreover, in 2009, school teacher standards are developed and being disseminated since 2010. The standards are for verifying basic requirements for education content, evaluation, training term and instructional environment at bachelor degree studies at teacher pre-service institutions.

The standards guide compulsory and elective subjects of school teacher pre-service trainings. The following Table… presents education curriculum and content for school teacher pre-service trainings

<table>
<thead>
<tr>
<th>General subjects</th>
<th>Compulsory</th>
<th>Elective</th>
<th>Qualification related subject</th>
<th>Compulsory</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compulsory</td>
<td></td>
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<tr>
<td>• English language</td>
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<td></td>
<td>• Health education</td>
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<tr>
<td>• IT</td>
<td></td>
<td></td>
<td>• Psychology</td>
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<tr>
<td>• Physical education</td>
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<td></td>
<td>• Pedagogy</td>
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<tr>
<td>Humanity subjects</td>
<td></td>
<td></td>
<td>• Professional didactics</td>
<td></td>
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<tr>
<td>• Foreign language</td>
<td></td>
<td></td>
<td>• Pedagogy practice-internships</td>
<td></td>
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<tr>
<td>• Philosophy</td>
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<tr>
<td>• Mongolian history</td>
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<td></td>
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<tr>
<td>• Basics of cultural study</td>
<td></td>
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<td></td>
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<tr>
<td>• Ecology and environment preservation</td>
<td></td>
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<tr>
<td>• Human development</td>
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<td></td>
<td></td>
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<tr>
<td>• Mongolian grammar and linguistics</td>
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<tr>
<td>Social study subjects</td>
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<tr>
<td>• Economics</td>
<td></td>
<td></td>
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<tr>
<td>• Basics of political science</td>
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<tr>
<td>• Sociology</td>
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<tr>
<td>• Management</td>
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</tbody>
</table>

Every year, in average, 31000 students graduate from higher education institutions of Mongolia; and 16.3% of them (5000 students) major in teaching profession. For example, in 2017, 30301 students graduated from HE institutions; and 1732 of them are qualified teachers. Merely, 37.8% of them are recruited as school teachers.

Figure 54. Percentage of graduates with teacher qualification

Although a share of graduates with teacher qualification has been increasing for last years, employment rate has been still low. It implies a need to have effective policy planning for teacher qualification. A share of female graduates from higher education institutions is estimated as 62.4%; and this figure is estimated 83% for graduates with teacher qualification.
Figure 55. Evolution of male and female graduates with teacher qualification during 2012-2017

Figure 55 represents that for last 5 years, there has not been changes in gender of graduates with teacher qualification.

**Teacher In-Service Training**

By the amendment of Education Law in 2012, all teachers in schools and kindergartens are obliged to attend incompulsory in-service training every 5 years; and related expenditure is born by public budget. Therefore, in 2012, Institute for Teacher Professional Development (ITPD) is re-established. Such as this, a system, that once managed and coordinated by donor projects and programs, has legally established, institutionalized and developed as an independent institute financed by state budget. It enabled to assure systematic development of teachers. Along the establishment of the institute, school and kindergarten teacher professional development regulation was approved in 2013; and all inservice trainings arhamonized by the regulation. By the regulation, teacher in-service trainings are categorized as face-to-face, distance and online forms at national, local and school/workplace levels.

ITPD is a training and methodology organization with a responsibility to deliver teacher in-service trainings at national level. Aimag and district Education Boards are units that provide management and professional support to kindergartens and schools its areas, and help principals, managers, teachers, citizens to attain education achievement, professional development and carry out research. In a report produced by ITPD and Sustatinabel Development Project in 2013, teacher needs and demands of continuous professional development were identified. The report illustrates teacher development needs and demands, engagement and roles of bodies such as Local Education Boards, ITPD as following Figure 56.

---

19 БШУ-ны сайдын А/315 дугаар тушаал, 2013
Within the teacher continuous development activities, in-service trainings are coordinated by the Teacher In-Service Training Regulation. Current paths of teacher-inservice trainings are illustrated in the following Figure…

**Figure 57. Teacher Career Path**

- **National level** /ITPD/
  - ITPD is responsible for organization of the national level training for the teachers working for 1, 5 and 10 years at the kindergarten and the general secondary education.
  - Online training for 35 days /50 hours/
  - Classroom training -5 days /50 hours /
  - Total of 40 days of training with a 100 hours

- **City, local level** (City Education Department, Aimag ECD)
  - The Aimag ECD will organize local level basic training for the teachers working in kindergarten and general secondary education teacher on their 2, 3 and 4 year
  - Classroom training -3 days /30 hours/
  - Main direction of the training needs to be based on the teacher’s needs specifically on the theory and methodology of the organizational training management.

| Years of teaching | 1 | 2 | 3 | 4 | 5 | 10 |

- **National level**
  - Ministry of Education, Culture, Science and Sports
  - Institute of Teacher’s Professional Development
  - Other education institutions

- **Local level**
  - Department of Education and Culture, Higher education institution, NGO and other training organizations

- **Organizational level**
  - Schools, kindergarten, Department of education and culture, NGO and other training organizations

- **Interest groups**
  - MECS. Professional Educational Institutions, Independent training organizations on teacher’s development are allowed to organize specialized training activities. The aim of the specialized training is to improve the skills of the education policy and directions, implementation ways, introducing of the educational didactics, human development
National level compulsory in-service training

ITPD has been delivering national level in-service training for teachers who have been working at 1st, 5th and 10th year since 2013. For 5 years, in total, 27499 school teachers have attended in compulsory in-service trainings.

Figure 60. Numbers of teachers attended in compulsory in-service trainings during 2013-2017
During 2013-2017, 26190 school teachers and non-teaching staffs have attended in the compulsory trainings; and in total, 7 billion MNT has spent from the state budget.

**Figure 61.** Amounts of funding used for the compulsory trainings during 2013-2017 (mill, MNT)

Figure 61 indicates that compulsory training expenditure has decreased for last years; and training expenditure for one teacher has declined 2 times in 2017 compared to 2013. This is due to a fact that one hand, ITPD made effort to deliver training within the approved budget, and other hand, the institute lacks of budget for training materials and others.

**Figure 62.** Training expenditure evolution for one teacher during 2013-2017

Curriculum for training at 5th and 10th year has planned consisting of 5 sets of content related to the implementation of education quality reform policy, education theories and didactics, pedagogy, psychology and online lessons. The trainings are facilitated using instructional theories, holding methodology seminars, transferring lecture-information, delivering practical sessions, sharing and exchanging experiences, and carrying discussion and debates.

1st year-training content emphasizes to support teachers how to operate main responsibilities in the job profile and plans to help them to handle with official documents and parent-teacher communications enhancing required skills at teacher workplace.
On the contrary, 5th year-training content focuses on developing teacher methods and technology to ensure every child development; furthermore, supporting them to acquire skills to assure their workplace development, and plans content emphasizing professional methodology.

10th year-training content captures how to enable teachers to exchange and share their experiences, support mutual learning and possess skills to conduct experimental research and to advise peer teachers.

Teacher compulsory in-service training have been delivered in 15 subjects including school managers, social workers, methodologists, principals, school librarians, doctors, dormitory teachers and defectologists taking into account of different roles and responsibilities of these staffs.

**Specialized/chartered trainings**

Specialized trainings are delivered by not only ITPD, Local Education Boards but also Teacher Pre-service Institutes, Government and Non-Government organizations. Even individuals are able to initiate the trainings.

This training aims to introduce education policies, enable teachers to learn ways to implement the policies and specialized didactical methods, support individual development and knowledge, skills. ITPD delivers this training in cooperation with MECSS, professional organization curriculum authors’ teams

**Figure 63. A number of teachers and staffs attended in trainings delivered by ITPD (2013-2017)**

In 2013, ITPD organized trainings on every child development methodology and technology to 23,871 teachers and staffs. During 2013-2017, to support primary and secondary education curriculum reform implementation, ITPD delivered a methodology training on new curriculum implementation to 48,671 teachers, 1205 school principals and managers, 4324 non-teaching staffs. In addition, ITPD carried out the monitoring and advising visits to 220 schools cooperating with MECSS, MIER, and a dedicated implementation support team funded by state budget, GIZ and other donors.

**School Leaders**

**Government policy on school teachers and leaders**

Government Policy on Education for 2014-2024 highlight to build capacity of school leaders – principals and managers- as the Clause 5.3:

“Train and re-train school leaders in conformity with education sector human resource policy planning, enable them to be practiced, and ensure their retention”

Other education programs also reflect significance of capacity building of school leaders. For example, Teacher In-Service Compulsory Training Regulation emphasizes the capacity building of the leaders as:
3.1.3. Accredit training curriculum or programs for school leaders and teachers
3.12.2. Develop, verify and register module-based training programs for the leaders and teachers

In addition, Education Program, approved by Government decree No31 in 2010, plans the following support activities:

- Ensure gender balance in students, teachers and non-teaching staffs
  - Take actions to ensure gender balance at decision level in education
- Develop teacher and school leader in-service training system and engage more professional, government and non-government organizations:
  - Establish a system for school leader professional development training;
- Set up evaluation criteria for quality and outcomes of teacher and leader work, add up the wages and incentives and resolve the social security issues:
  - Constitute teacher and school leader workload precisely, comprehend evaluation criteria and methods for their work planning, progress and outcomes of performance;
- Scale up the education policy planning and enhance capacity, leadership and skills of principals and managers;
- Comprehend education sector administrative and professional management:
  - Establish legal environment to appoint and dismiss kindergarten and school principals taking into account of participation of professional organizations;
- Strengthen school level management and improve its legality

Hence, Government of Mongolia has implementing policies and programs to re-train the leaders, enable teachers to career up, ensure their retention. In particular, for last 2 decades, in relation to changes in social development perspectives, Mongolia has making effort to reform education theories and methodologies; and one of the reforms is related to teacher development.

**Supporting school teachers and leaders’ development**

By the Cause 40.8 in Education Law, teachers in all kindergartens and schools, whatever the ownership, shall be trained using the public budget for every 5 years. Under this clause, all in-service trainings are managed and organized. Professional development activities are based on principles to be delivered using participatory approach. Teacher in-service training has the following categories:

- **COMPULSORY TRAINING** for school leaders and teachers – aims to equip them to advance related knowledge and skills
- **SPECIALIZED/CHARTERED TRAINING** – aims to disseminate education policy and orientations, and equip with specialized didactical skills,
- **WORKPLACE TRAINING** - aims to develop at workplace.

Teachers need development training after they appointed at certain position rather than needs-based programs. In order to be more qualified in education management and leadership, teachers have an opportunity to level up their education, attend in more specialized training delivered by universities and other education organizations to

There are some organizations and institutes that deliver trainings to level up teachers’ education to prepare them for school leader’s position. Can name the following trainings:

- Specialized training /7 days/

---

20 Монгол Улсын Засгийн газрын 2010 оны 31 дүгээр тогтоолоо батлаагдаан “Боловсрол” ўндсний хотболб /2010-2021 он/
21 Монгол Улсын Боловсролын тухай хууль
• Master study /1.5-2 years, 33-35 credits/
• Ph.D study /3 years, 60 credits/

By 2015, the following school leaders’ capacity building training programs are approved by ITPD and delivered to school and kindergarten leaders:

• Education administration and management by MIER
• School managers as close helpers by MEA

In 2015, 74 specialized training programs were submitted by 22 government and non-government organizations and approved by ITPD. Here, only 2 trainings were dedicated for school and kindergarten leaders.

There are several government and non-government organizations that provide training services such as lectures and seminars and produces handbooks for school leaders. For example, MEA NGO has delivered the following services:

• Education reform and school management
• Art of leadership and let leaders do their job to do more
• Leading organizational culture
• Methodology to build a team
• Influence of leaders on teacher development

“Education management knowledge academy” NGO delivered the following training in 2014:

• Modern trends in education management and education study
• Human resource management in education
• Legal coordination of education organizations
• Information system management of education organizations
• Organizational management, governance and leadership
• Partnership in education organizations, communication strategy and tactics

Education leader are not particularly prepared; however, specialization training is dominant. It indicates that there is not system of public service that prepares education leaders.

School teachers attend in the following trainings:

- 1st, 5th and 10th year training – national level, compulsory training
- 2nd, 3rd and 4th year training – locally organized trainings

The above trainings are formed as combination of online and face-to-face trainings; and face-to-face training continues for 5 days. When a teacher attends in face-to-face training, school managers arrange the classes and enable trainee teachers to focus on the training. By survey conducted with teachers, school teachers have opportunities to level up his/her education, attend in specialized trainings.

22 http://www.mea.org.mn/
23 https://www.facebook.com/www.ifc.edu.mn
24 БШУ-ын сайдын 2013 оны А/287 дугаар гүйг, Сургуулийн омnhөө болохөө болон бага, дунд болохөөлөн сургалтны байгууллагын багш, ажилтны мэрээжил дээшлүүлэх жүрэм
Teacher work-place professional development takes into account of teaching methodology, communication with parents, classroom management, reflecting student characteristics on the teaching and use of IT in teaching and learning.

Teacher development and social issues are stated in the work contract; and every year, this contract is evaluated. By principals’ note in school reports, every school has a respective policy for teacher development. Schools make effort to resolve teacher social issues depending upon their capacity and resource.

Roles and responsibilities of school principal

A school principal delivers a function of administrative management. By primary and Secondary Education Law, principals perform obligations in the job profile. Main objectives of the principal position are to:

1) Implement education laws, regulations and policy decisions at school level
2) Manage the implementation of primary and secondary education standards in conformity with school type
3) Ensure the school human resource development and form healthy and creative team
4) Ensure school financial and physical resource development, establish healthy, safe and proper environment for student learning and living in school; and for assuring the teacher development:
   - Recruit teachers and non-teaching staffs, form the team, resolve staff labour and work issues and support professional development
   - Evaluate teacher performance outcomes, support their performance and arrange

Although school principals, in general, fully support the professional development of teachers and non-teaching staffs, a system that enables principals to engage and voice in career promotion of teachers has not yet established.

Current Situation of Career Path for School Teachers

School teachers have opportunities to gain career promotion at local and national level organizations. By Labour Law of Mongolia, employers have rights to appoint and dismiss employees. Civil Service and Education Laws of Mongolia regulates how to recruit education employees and what are required to be promoted at certain education positions. Teacher career is mapped in the following Figure 64.

Figure 64. Career path for school teachers

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25 ЕБС-ийн захирлын ажлын байрны үлгэрчилсэн тодорхойлолт гүйцэгдсэн чиг үүргийн хэрэгжилтийн судалгааны тайлан, 2012 он
26 БСШУ-ын сайтын 2010 оны 471 дүгээр тушаал, “Ерөнхий боловсролын сургуулийн үлгэрчилсэн дүрэм”
27 БСШУ-ын сайтын 2007 оны 351 дүгээр тушаал, “Ерөнхий боловсролын сургуулийн захирлын ажлын байрны үлгэрчилсэн тодорхойлолт”
Applying currently valid regulations, a common framework for staff recruitment system in education sector has the following categories and forms:

✓ Managerial positions of formal civil service
✓ Entrants in formal civil services
✓ Managerial positions of public service
✓ Selection of entrants for vacancies in civil services

Education sector positions are classified in next Figure 65.

**Figure 65.** Classification of education sector staff position

<table>
<thead>
<tr>
<th>Organization</th>
<th>Position</th>
<th>Scale</th>
<th>Recruitment body</th>
<th>Appointing official</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local education board level</td>
<td>Director</td>
<td>Methodologist/specialist/researcher/officer</td>
<td>MECSS State Secretary, Director-general, heads of units</td>
<td>MECSS institution vice director, unit staff and officer</td>
</tr>
<tr>
<td>Professional institution level</td>
<td>Director</td>
<td>Methodologist/specialist/researcher/officer</td>
<td>MECSS State Secretary, Director-general, heads of units</td>
<td>MECSS institution vice director, unit staff and officer</td>
</tr>
<tr>
<td>Ministry level</td>
<td>State secretary</td>
<td>Methodologist/specialist/researcher/officer</td>
<td>MECSS State Secretary, Director-general, heads of units</td>
<td>MECSS institution vice director, unit staff and officer</td>
</tr>
<tr>
<td>Sector ministry</td>
<td>State secretary</td>
<td>T3-28-14</td>
<td>Civil service comittee</td>
<td>Prime Minister, Government of Mongolia</td>
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<tr>
<td>Director-general</td>
<td>T3-12</td>
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<tr>
<td>Head of unit</td>
<td>T3-8</td>
<td></td>
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<tr>
<td>Specialist, officer</td>
<td>T3-7</td>
<td></td>
<td>Civil service comittee</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Sector institutions</th>
<th>Director</th>
<th>TУ-13-9/ TУМБ-14-9</th>
<th>Civil service sub-comittee</th>
<th>Minister</th>
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<tbody>
<tr>
<td>Deputy director</td>
<td>TУ-8/ TУМБ-8</td>
<td></td>
<td></td>
<td>Director</td>
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<tr>
<td>Head of unit</td>
<td>TУ-7/ TУМБ-7</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Methodologist, specialist</td>
<td>TУ-6/ TУМБ-6</td>
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<th>T3-12</th>
<th>Civil service sub-comittee</th>
<th>Director appointed selection comission</th>
<th>Director of Education Board</th>
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<tr>
<td>Head of unit</td>
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<td>Director appointed selection comission</td>
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<tr>
<td>Specialist</td>
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<table>
<thead>
<tr>
<th>School</th>
<th>School principal</th>
<th>TУБД-10-7,8</th>
<th>Director appointed selection</th>
<th>Local Governor</th>
</tr>
</thead>
</table>

28 МУ-ын Засгийн Газрын 2007 оны 354 дүгээр тогтоол, Төрийн захиргааны албан тушаалын ангилал, зэрэглэл
29 Монгол Улсын Их Хурлын 2003 оны 13 дүгээр тогтоол, “Төрийн жинхэнэ албаны угдаах ард төрөлд томилогоо ажилтын сонгог шалгаруулах журам”
30 МУ-ын Засгийн газрын тухай хууль
31 Төрийн нарийн бичгийн дарга 2012 оны А/58 дүгээр тушаал, “Боловсрол, шинжлэх ухааны яамны хөдөлмөрийн дотоод журам”
32 Төрийн албаны зөвлөлийн 2009 оны 99 дүгээр тогтоол, “Төрийн жинхэнэ албан тушаалд анх орхой иглэн буудал журам”, Төрийн албаны зөвлөлийн 2013 оны 86 дүгээр тогтоол батласан “Төрийн жинхэнэ албан тушаалд анх орхой мэндийн шалгааны авах журам, заавар”
33 МУ-ын Засгийн Газрын 2007 оны 354 дүгээр тогтоол, Төрийн уйлчилгээний бусад байгууллага болон төрийн байгууллагын хэвийн үйл ажиллагааг хангахад туслах албан тушаалын ангилал, зэрэглэл
34 МУ-ын Засгийн Газрын 2007 оны 236 дүгээр тогтоол, Мэргэжлийн боловсрол олгох сургуулийн төрийн уйлчилгээний албан тушаалын ангилал, зэрэглэл
35 МУ-ын Засгийн Газрын 2013 оны 60 дүгээр тогтоол батласан “Төрийн уйлчилгээний албаны угдаах ард төрөлд томилогдох ажилтын сонгог шалгаруулах журам”
36 Монгол улсын хөдөлмөрийн тухай хууль
37 Улсын Их Хурлын 2003 оны 13 дүгээр тогтоол батлагдсан “Төрийн жинхэнэ албаны угдаах ард төрөлд томилогдох ажилтын сонгог шалгаруулах журам”
38 МУ-ын Боловсролын тухай хууль
39 МУ-ын Засгийн газрын 2007 оны 354 дүгээр тогтоол, Сургуулийн омноо болон бага, дууд боловорөө ээлзсэн сурагчын байгууллагын төрийн уйлчилгээний албан тушаалын ангилал, зэрэглэл
40 МУ-ын Боловсролын тухай хууль
41 МУ-ын Боловсролын тухай хууль
Requirements for the Positions in Schools

Requirements for teacher position:

- Required education, qualification and experience
  - Hold teacher qualification with bachelor and above education degree
  - Have no less than 5 year teaching experience

- Required skills
  - Information and communication technology
  - Processing written documents
  - Processing information and researching
  - Appropriate level of foreign language
  - Leadership and problem solving
  - Team working
  - Communicating
  - Pursuing professional ethics and moral behavior

Depending upon the specific circumstance of the work place, the following requirements could be additionally set:

- Qualified in education administration, management, research fields
- Planning strategies and actions
- Advising teachers and staffs and provide methodological services
- Have education reform-related theoretical and methodological knowledge and skills
- Facilitating, consulting and cooperating in trainings and workshops
- Accountable and carrying the work pressure
- Initiative, creative and innovative
- Self development
- Leadership, decision making, keeping confidentiality of the organization
- Appropriate knowledge and experience about the applied organization
- Communicating and collaborating with citizens from all groups in society and organizations

Once a teachers is appointed as a leader of the methodology unit in school, he or she has additional obligations to advise and plan the methodology unit activities.
The Table 27 illustrates requirements of principal and manager positions.44

**Table 27. Requirements for school principal position**

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Critically required</th>
<th>Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>Education Qualification Specialization Experience</td>
<td>Team working - Problem solving - Decision making - Strategy planning - Leadership - Information technology Knowledge and experience of characteristics of school type</td>
<td>No less than Bachelor degree Education qualification Specialized in education management Practice and experience with teaching and education management - Processing and using information in one of the common foreign languages - Computer application softwares - Processing information - Conducting research - Communicating</td>
</tr>
</tbody>
</table>

1.1. General requirements:

1.2. Special requirements:

**Table 28. Requirements school managers**

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Critically required</th>
<th>Required</th>
</tr>
</thead>
<tbody>
<tr>
<td>Education Qualification Specialization Experience</td>
<td>Developing didactical approaches and analyzing it - Conducting monitoring and evaluation - Leading others - Problem solving - Utilizing IT tools</td>
<td>No less than Bachelor degree School teacher General and specialized didactics More than 5 year teaching experience - Support others - Team working - Communicating in foreign language - Apply computer - Processing written information</td>
</tr>
</tbody>
</table>

1.1. General requirements:

1.2. Special requirements:

- Hold teaching certificate - Professional rank

Depending upon the requirements, school principal may have the following general duties:

- Planning strategy and actions
- Decision making
- Conducting research

In 2018-2019 academic year, 843 principals and 1469 managers are operating. Among total leaders, 27.8% are male; and the remaining are female principals and managers.

---

44 БСШУ-ын сайда 2007 оны 351 дүгээр тушаал, “Ерөнхий боловсролын сургуулийн захирлын ажлын байрны үлгэрчилсэн тодорхойлолт”

45 БСШУ-ын сайда 2007 оны 351 дүгээр тушаал, “Ерөнхий боловсролын сургуулийн сургалтын менежерийн ажлын байрны үлгэрчилсэн тодорхойлолт”
Figure 66. Gender percentage of school leaders (2018-2019)

Figure 67. Evolution of gender of school principals during 2009-2019

Figure 68. Evolution of gender of school managers during 2009-2019
Figure 69. Age groups of school leaders (2018-2019)

Figure 70. Age cohorts of school principals

Figure 71. Age cohort of school managers
Figure 72. School principals' experiences in education sector

Figure 73. School managers' experience in education sector

Figure 73. School principals' experience as principals
Figure 74. School managers’ experience as managers

Figure 75. Numbers of newly appointed school leaders - during 2007-2019

Figure 76. Promotion of school principals during 2007-2019
**Figure 76. Numbers of dismissed school principals**

**Figure 77. Reasons of school principals' termination during 2007-2019**

- **2018-2019**: 73 dismissals due to managerial reasons, 20 due to poor performance, 14 due to financial errors, 12 due to mismanagement, 8 due to other reasons.
- **2017-2018**: 118 dismissals due to managerial reasons, 43 due to poor performance, 27 due to financial errors, 20 due to mismanagement, 9 due to other reasons.
- **2016-2017**: 92 dismissals due to managerial reasons, 37 due to poor performance, 14 due to financial errors, 13 due to mismanagement, 3 due to other reasons.
- **2015-2016**: 90 dismissals due to managerial reasons, 29 due to poor performance, 9 due to financial errors, 16 due to mismanagement, 6 due to other reasons.
- **2014-2015**: 122 dismissals due to managerial reasons, 27 due to poor performance, 33 due to financial errors, 15 due to mismanagement, 6 due to other reasons.
- **2013-2014**: 215 dismissals due to managerial reasons, 50 due to poor performance, 50 due to financial errors, 36 due to mismanagement, 34 due to other reasons.
- **2012-2013**: 75 dismissals due to managerial reasons, 10 due to poor performance, 20 due to financial errors, 12 due to mismanagement, 7 due to other reasons.
- **2011-2012**: 103 dismissals due to managerial reasons, 23 due to poor performance, 24 due to financial errors, 15 due to mismanagement, 12 due to other reasons.
- **2010-2011**: 125 dismissals due to managerial reasons, 28 due to poor performance, 19 due to financial errors, 36 due to mismanagement, 15 due to other reasons.
- **2009-2010**: 157 dismissals due to managerial reasons, 38 due to poor performance, 20 due to financial errors, 37 due to mismanagement, 22 due to other reasons.
- **2007-2008**: 92 dismissals due to managerial reasons, 43 due to poor performance, 19 due to financial errors, 19 due to other reasons.
Figure 78. Reasons of school managers’ termination during 2007-2019

Figure 79. Professional rank of the principals
The policy for textbook provisions have been amended 3 times (1998, 2000, 2009), the regulations for implementing these policies, about writing, analyzing, preprinting, publishing, distributing and using, have been amended 12 times since 1998 (Annex 1.2.6). For example, in 2008 (Minister of Education order №22), it has been decided textbooks to be without different versions, and since 2009 (Minister of Education order №62), the State has the most participation in textbook supply system.
One important step to provide access to shareholders in education sector as per ESD concept, is since 2013, MECSS has set up experts’ teams representing teacher, researcher, citizen and parents, in order to improve textbook quality.

In order to test the methodology and management of new didactic solution model textbooks which meet requirements of the content, methodology, and assessment to implement key competencies-based educational standards, the 3 textbooks "Chemistry-10", "Mathematics-6" and "Mongolian history-8" for learners and teachers were developed and printed out. These textbooks are not only a model of modern textbooks, but also a guideline to develop other textbooks of 11 and 12 year schools, as well as this pilot project on textbook writing, editing, designing and printing has been the basis for the current management of textbook preparation, concluded by the baseline study of Ministry of Environment, Green Development and Tourism in 2015.

The cost of the textbook supply to the general education school is included in the annual state budget and the main annual direction of the socio-economic development of Mongolia and textbook update and re-supply have been organized within the approved budget.

Table 29. Newly written and re-edited printings, supplied textbooks (2014-2018)

<table>
<thead>
<tr>
<th>Number of textbook types</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
</tr>
</thead>
<tbody>
<tr>
<td>Printed and supplied textbooks</td>
<td>96</td>
<td>68</td>
<td>105</td>
<td>89</td>
<td>112</td>
</tr>
<tr>
<td>Cost of textbooks</td>
<td>3,724,887,370</td>
<td>1,844,781,362</td>
<td>1,632,150,024</td>
<td>3,394,724,676</td>
<td>3,858,611,428</td>
</tr>
</tbody>
</table>


In “Requirements on printed textbooks for primary and secondary education”, the requirements for printed textbooks are grouped as follows:

- General requirements
- Requirements for textbook (content, methodology, evaluation, language, design requirements)
- Requirements for printing design
- Requirements for printing
- Receive textbooks from the printing

“The Procedure on textbook writing, printing and distribution for general education schools” covers the issues on textbook writing, printing design, printing and re-printing, distribution, usage and re-supply.

At present, there are 128 types of textbooks including 34 textbooks of 6-8 subjects for grade 1-5, 59 textbooks of 12-17 subjects for grade 6-9 and 35 textbooks of 8-14 subjects for grade 10-11.

In addition, 23 textbooks in Kazakh language for grade 1-5, 9 textbooks of Kazakh language and literature for grade 1-9, 4 textbooks in Tuva language for grade 1, 4 textbooks in Tuva language for grade 1-4 and 16 textbooks for children with disabilities of grade 1-5.

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46 Four textbooks /Art for grades 6-7, Music for grades 6-7, Music for grades 8-9, and The National Script for grades 10-11/ not duplicated for textbooks used for 2 grades.
An electronic textbook and teacher guide for Mongolian language and culture were developed for the children of Mongolian citizens who are residing abroad and posted on the website www.tsakhim.reader.mn. This electronic textbook was prepared by three levels based on primary school curriculum.

In order to improve the usage of the textbooks, all textbook contents were uploaded on the website www.econtent.edu.mn of MECS and also the mobile phone application has been developed. In connection with the reform on the primary and secondary education standard and curriculum, textbook reform is being implemented as well.

In accordance with “General map on primary and secondary education reform” which was approved by the Annex 1 of the Order No A/155 of Minister of Education and Science of 2013, 165 textbooks out of total 184 textbooks used for the general education school have been updated from 2014 within the framework of implementing concept, content, methodology and evaluation of core curriculum.

**Table 30. Age of textbooks**

<table>
<thead>
<tr>
<th></th>
<th>Number of years for textbooks in usage (number, percentage)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>First year</td>
</tr>
<tr>
<td>Primary</td>
<td>1493490</td>
</tr>
<tr>
<td></td>
<td>71%</td>
</tr>
<tr>
<td>Lower secondary</td>
<td>41335</td>
</tr>
<tr>
<td></td>
<td>4%</td>
</tr>
<tr>
<td>Upper secondary</td>
<td>280870</td>
</tr>
<tr>
<td></td>
<td>55%</td>
</tr>
<tr>
<td>Total</td>
<td>1815695</td>
</tr>
<tr>
<td></td>
<td>51%</td>
</tr>
</tbody>
</table>

Based on not providing textbooks for 60 per cent of secondary school students, the pilot project on implementing “Textbook turnover fund-leasing system” which was to rent textbook package by giving for the students at the beginning of the academic year and taking back at the end of the academic year through school library, funded by Asian Development Bank and implemented at 80 percent of all public schools or 406 schools of 21 aimags and 84 schools of suburban area of Ulaanbaatar city from the 2010-2011 academic year to 2013-2014 academic year has a significant impact on improving textbook supply.

With the help of the pilot project, textbook supply and accessibility have been increased up to 45 per cent, particularly, in 2014, textbooks were provided to 85 per cent of lower and upper secondary school students. Teachers concluded the result of the project that “There has been a progress in learning due to availability
of textbooks, more participation of students in class and more students doing homework” (Institute of Education, 2013), and also it has been financial support for parents for renting textbooks from one place.

As a result of the pilot project “Textbook turnover fund-leasing system”, 3.9 billion MNT has been accumulated in the state fund account, but there has been no right to spend. It is not allowed to deposit the amount at the commercial bank which meets non-risky conditions to raise it by its interest rate.

From the 2014-2015 academic year, textbooks have been revised in accordance with the core curriculum, terms for leasing textbook use have expired and textbooks for leasing have not been reprinted. Thus, by 2018, the textbook leasing process stopped and textbook supply for secondary schools has been dramatically decreased and only 16% of total textbooks to be purchased during this academic year was sold out (Table 1.2.15).

Though it has been intended for 60 percent of secondary school students to purchase their textbooks, there has been no textbook selling system available to every customer and therefore, sales and purchase of textbooks have been insufficient. It had been calculated that 159,679 students should purchase their textbooks in the 2018-2019 academic year.

Table 32. Textbook supply for primary and secondary education (2018-2019 academic year)

<table>
<thead>
<tr>
<th>Grade</th>
<th>Required number of textbooks</th>
<th>Number of textbooks supplied by the government</th>
<th>Percentage supplied by the government</th>
<th>Number of textbooks that need to be purchased</th>
<th>Number of textbooks that were purchased</th>
<th>Percentage of the purchase</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>647,258</td>
<td>257,468</td>
<td>40%</td>
<td>389,788</td>
<td>48,215</td>
<td>12%</td>
</tr>
<tr>
<td>7</td>
<td>766,751</td>
<td>293,390</td>
<td>38%</td>
<td>473,361</td>
<td>50,470</td>
<td>11%</td>
</tr>
<tr>
<td>8</td>
<td>728,501</td>
<td>295,910</td>
<td>41%</td>
<td>432,591</td>
<td>73,204</td>
<td>17%</td>
</tr>
<tr>
<td>9</td>
<td>673,968</td>
<td>245,503</td>
<td>36%</td>
<td>428,465</td>
<td>68,063</td>
<td>16%</td>
</tr>
<tr>
<td>10</td>
<td>512,876</td>
<td>242,670</td>
<td>47%</td>
<td>270,206</td>
<td>63,160</td>
<td>23%</td>
</tr>
<tr>
<td>11</td>
<td>404,306</td>
<td>211,170</td>
<td>52%</td>
<td>193,136</td>
<td>50,023</td>
<td>26%</td>
</tr>
<tr>
<td>12</td>
<td>132,808</td>
<td>59,040</td>
<td>44%</td>
<td>73,768</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>3,866,466</td>
<td>1,605,151</td>
<td>42%</td>
<td>2,261,315</td>
<td>353,135</td>
<td>16%</td>
</tr>
</tbody>
</table>

Based on public criticisms related to the quality of textbooks, a working group was established by Order of Minister for Education, Culture and Science and assessed 30 textbooks out of 60 textbooks which were revised in 2014 and 2015 by the following criteria:

- whether it meets needs and requirements for inheriting national traditions, customs and cultures to the students
- whether it ensures compliance with the language, composition and the spelling rules
- whether it ensures the accuracy of history

The assessment results show that inheriting national traditions, customs and cultures to the students is not sufficient and language and spelling rules are not compliant, but ensuring accuracy of history is fulfilled (Minister for Education, Culture and Science, 2016).

In the 2017-2018 academic year, 118 textbooks of grades 1-11 were uploaded on the website www.mier.mn and an activity to get comments from teachers was organized. Over 12,000 comments were received from a total of 4,060 teachers in duplicated number from over 350 urban and rural general education schools and Institute of Education compiled and analyzed the results. Based on the findings, 97 textbooks which were going to be printed out for re-supply were revised by their spelling in accordance with the Mongolian dictionary and printed.

It is required to train authors, editors, experts and conduct qualified scientific studies and reaffirm responsibilities of the parties in the process of designing, printing and distributing ‘Civil Education (moral textbook)’ textbooks for grade 1 to 5 of the general education schools since the court decision (No 739
of Primary level of Administrative court in the Capital city, 4 October 2016) to the Ministry of Education, Culture and Science (MECS) states that the textbooks should be re-written and distributed in usage due to the reason that textbooks must be consistent with MNS 5418:2008 standard on textbook writing, printing and distribution for the primary and secondary schools

The studies on textbooks

1. **Fundamental and Diversified Study on Standard, Curriculum and Textbooks** (MECS, SDC, 2014)

The Ministry of Education, Culture and Science in 2014 assesses the current status of the ESD concept of elementary and secondary education, the national program and textbooks of the General Education School’s 1-12 grades curriculum and reflect on their implementation and in the future how they will reflect the ideas of the ESD in these training papers and made study do for the purpose of making recommendations. The research was funded by the SDC Office in Mongolia and carried out by the professors of Mongolian State University of Education with the support of foreign advisors’ team of teachers.

The use of internationally accepted methods for ESD standards, programs, and textbook surveys was based on a number of Mongolian features. According to the survey findings, the evaluation has been carried out to analyze the three levels of policy and education related policy analysis, schools, and their implementation at the classroom level, and to establish a relationship between them. It was revealed that the ESD concept in official educational documents "has not been adequately addressed, as well as in the process of school and classroom practice, too”.

In assessing how the ESD views were reflected in the official educational documents according to their chosen methodology, how the standards, curriculum, and textbooks reflect social, environmental and economic issues in the textbooks and 10 relevant behaviors for the ESD, 22 as well as how the skills have been identified as indicators. In this assessment, the three editions of the above-mentioned educational materials emphasize that "... both have the ability to develop skills and capabilities rather than cultivating knowledge and values,” reflecting the future, identifying, negotiating and negotiating the rights of stakeholders, 47 percent and 56 percent in textbooks are relatively low. As well as, "textbooks reflect on the global activities, efforts, and dynamics of the SD in the texts.”.

The biology, geography, English, and social science textbooks in this study indicate how the ESD concept was incorporated into the textbooks, and that these professors are not very good at other subjects, and because of these professors, it may be related to training on ESD and they conducted the training to work with foreign consultants.

2. **Fundamental survey on Mongolia’s ESD, SD, green development policy, legislation, implementation and prospects** (MEGDT, SDC, 2015)

According to the researchers, they do agree with the conclusion of "Multilateral Baseline Survey” (2015), stating that how to integrate the concept of ESD into textbooks is dependent upon the capacity of authors, experts, and editors, however they doubt on overall finding of the survey. In particular, researchers demonstrated that the chemistry textbooks for primary, secondary education have been proved to integrate ESD concepts, in matters of content, methodology, formulating and design, efficiently.

The example in the Box is about the ungrounded classification of the Chemistry textbooks as “very sufficient”.
Box 0.1. Integration of ESD content and concepts into Chemistry textbooks

**Grade 9 textbook “CHEMISTRY-II, 2011”**
- Production of sulfuric acid (pp. 99)
- Tasks on the economic and environmental impacts of copper mining and its consequences (pp. 104), its associated waste and manufacturing issues (pp. 107)
- Specific cases of gold mining issues (pp. 108-110), tasks for solving problem solving methods in gold mining (pp. 120-110)
- Tasks related to fuels, polymers and nutritional issues, their negative consequences and solutions.
- For example, the lack of natural resources in the fuel sector is a result of ecological adverse impacts (pp. 136), polymeric waste (pp. 145-147), food contamination and safety (pp. 159-160)

**Grade 12 textbook CHEMISTRY-V” 2014**
- Section 3.1. Chemical plant and green chemistry (pp. 80-86). In this chapter, SD and ESD present a brief description of the green technology, the history of development, and the specific methods of assessing the relationship between them.
- Section 3.2, 3.3, 3.4, 3.5, 3.6, 3.7 Copper (pp. 94), ammonia (pp. 101), nitric acid (pp. 108), plastics (pp. 114), rubber (pp. 124), fiber (pp. 133) for the students to evaluate the 12 principles of green chemistry.

As part of the above study, the MECSS issued a total of 156 pupils’ textbooks and 59 types of textbooks for each secondary school in accordance with the standard of textbooks for primary and secondary education in 2009-2013 and used for training.

**Table 33. Student textbook and teachers guides, with purpose to fulfill the education inclusivity and equity, by type and number (2009-2013)**

<table>
<thead>
<tr>
<th>Grades</th>
<th>Target groups (by types)</th>
<th>Total quantity (by types)</th>
<th>Teacher guide</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>All students</td>
<td>National minorities</td>
<td>For children with disability</td>
</tr>
<tr>
<td>1</td>
<td>7</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>6</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>6</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>4</td>
<td>9</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>5</td>
<td>11</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>6</td>
<td>12</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>7</td>
<td>17</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>8</td>
<td>18</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>9</td>
<td>18</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>10</td>
<td>14</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>11</td>
<td>13</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>12</td>
<td>12</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>Number 143</td>
<td>8</td>
<td>5</td>
</tr>
</tbody>
</table>

The above Table 33 illustrates the textbooks do account the socio-cultural differences, specific needs of learners and address inclusivity in certain extent. However, it is reported as follows: the types of textbooks for ethnic minorities in the textbook are 5.1% (for grade 1-7, Kazakh language and for grade 1, Tuvan alphabet) and textbooks for children with disability 3.2% (only mathematics and Mongolian language). This implies that the education inclusivity and equity principle is not fully implemented in achieving quality education for learners who are one of the main principles of the ESD.

Furthermore, Figure 13 and 14 below show the textbooks (research conducted in 2015 (Ministry of Environment, Green Development and Tourism, SCO, 2015)), which has been developed within national curriculum, for grades 1-7, their education level, percentage per grade and its deviation. (Figure 1.2.22 and 1.2.23) From here we can see that an average percentage of the number of textbooks per general education school is 8.3. Compared to each class with this average and at each level of education, the primary education grades 1-3 has a negative deviation, and grades 7-9 is equal to the standard deviation, and grades 10-12 is lower than the secondary education. In addition, the average deviation of primary and basic education accounts for approximately 24-36 percent of the average.
As considering that all subjects have textbooks, number of subjects for primary school students or study content is lower than the above average, thus students’ burden is relatively low and uneven among the levels while number of subjects and study contents for secondary school students are higher than the average and the students’ burden is even, but too high. A large difference of the subject deviation for grade 6 might be related to the change of the grade from primary level to secondary level when the school structure changes.

**Figure 83.** Textbooks, which has been developed within national curriculum, for grades 1-7, per level, percentage per grade (2009-2015)

The average percentage of primary and secondary education deviation is making out about 24-36%. If we assume that for each subject the student needs a textbook, primary school students’ subjects/ content is below average, further student load is comparatively low and education level is uneven. Whereas, in basic/lower secondary education, subjects and contents which student need to learn is higher than that average, and the student load is too high within the majority of classes. Also, it is assumed that, the fact that Grade 6 deviation grade varies too much, is because of school system transitioning, this class status has changed from primary education to basic/lower secondary education.

**Figure 84.** Deviation estimated from the average textbook types, by percent (2009-2015)

Moreover, at that time, 16 textbooks of Mongolian language and mathematics for the children with disability and one teacher’s book were newly developed. Textbooks for the children with disability were mostly financed by the projects or programs, but it has been started by financing from the state budget from 2014. The decision on developing and supplying training policy, contents, programs and textbooks of two languages for minority groups in the 2015-2016 academic year was made by Order No A/220 of the Minister for Education, Culture and Science.
3.4 Conclusion

1. Teacher and teaching related development policies have changed focusing on principles of constructive theories for the learning. Nevertheless, due to lack of responsive policies to teacher needs, feasible support, sustainable management and loose of assurance of teacher wage and social security, these policies could not bring substantial achievements in teaching and learning.

2. Under the umbrella of Civil Service and Education Laws of Mongolia, legal environment related to teaching has been developed in certain phases since 1990. This legal coordination is generally based on developmental needs; nevertheless, it has been occasionally facing challenges because of political influences.

3. Frequent changes in education syllabus, curriculum, textbook and assessment regulation interrupt sustainability of school operation and teacher performance.

4. Several teacher profession models are developed; and related standards, syllabus and curriculum have produced and implemented. However, no perspectives for verifying teacher education development theories and methodologies has not been developed. Therefore, teacher development issues are mostly defined by “reform” policies.

5. Although education sector policies and programs reflect gender balance issue in teachers, for last 6 years, the share of male teachers has not exceed 17.8%; and the share of male staffs in education sector has been less than 20%. It implies that the gender balancing policy has not been effectively implemented in the sector.

6. At local, in particular, soum level, invisible shortage of qualified teachers is taking place.

7. Introduction of the students scholarship system for new entrants who pursue higher education in teaching profession has positive impact to improve the quality of entrants, furthermore, to prepare skilled teachers.

8. There is not a national system for teachers who have been teaching for more than 10 years. In-service training for these are decided by themselves.

9. Teacher in-service training funding has been decreasing year by year.

10. There is no database at national level for teachers who attended in specialized and chartered in-service trainings.

11. A number of teachers with professional ranks has been declining for last 6 years. Some aimags do not have Advisor-teachers. It causes disparities among aimags in terms of advising and exchanging ideas.

12. As of 2019, teacher monthly basic salary for 1st scale is 648,980MNT. Compared to the exchange rate on 1 January 2019, it equils with 245.48USD. am.доллартай тэнцэх хэмжээтэй байна. During 2014-2017, teacher monthly basic salary has added by 15,600MNT.

13. Teachers need to focus on teaching and preparing for the teaching. Therefore, a policy, that encourages to add up the basic salary rather than providing incentives for additional non-teaching work, needs to be promoted.

14. There are differences in development policies for teachers who work in schools, vocational training and production centers and life-long education centers.

15. There is no national system for teacher career promotion.

16. Education leaders are not formally prepared, instead their capacity is built via various in-service trainings. There is not national system of public service for training and preparing education leaders and managers.

17. School leaders’ capacity building is organized after the appointment rather than during their teaching service. This capacity building focuses on providing administrative and methodological support for implementing laws, regulations and decisions. Thus, school leaders’ attitude toward education theories and methodology could not be updated; and their workstyle for managing and leading the school team lags behind from needs and requirements of humanity, democratic society.
CHAPTER FIVE: EQUITY

5.1 Equity in enrollment

Figure 85. Gender in primary education GER and NER

Figure 86. Gender in junior secondary education GER and NER

Figure 87. Gender in senior secondary education GER and NER
Share of private school students

**Figure 90.** Numbers of students in private and public schools 2006-2018
5.2 Equity in learning achievement

5.2.1 Primary education: EGRA and EGMA

Gender differences on EGRA and EGMA performance

The gender stereotypes about ability and learning have been there since time immemorial. In many countries, the performances of girls are affected by various socioeconomic and cultural factors. At the same time, in several countries, it has been observed that girls, if they are able to be retained in the system, doing better in learning assessments compared to boys. In this section, an analysis of the performance of girls and boys in EGRA subtasks are taken up. The overall analysis, as displayed in the graph below, show marginal differences between boys and girls, with girls doing better in several tasks compared to boys. A detailed analysis is taken up to understand the magnitude of performance differences between the two.

The analysis of various subtasks disaggregated by gender shows very minute differences between girls and boys in Mathematics skills. However, unlike EGRA tasks where girls outperformed boys in most of the tasks, here, the boys were found to be doing better than girls. A detailed analysis below will throw further insight in to the magnitude of gender variations on EGMA results.

Family differences in EGRA and EGMA
A third of the sample of students in the study is drawn from herder/nomadic families. From an equity point of view, it is important to ensure that children belonging to these socially and economically vulnerable groups are provided with foundational skills in early literacy and numeracy. The analysis below looks at how students from nomadic families performed in EGRA subtasks vis-à-vis that from non-herder families. The students’ performance on EGRA subtasks disaggregated by herder/non-herder family status shows that the children from herder families trailed behind children from other families in all subtasks.

As in the case of EGRA subtasks, children from herder families seems to be trailing behind those from non-herder families. A detailed analysis below shows the magnitude of the variations.

Urban and rural differences in EGRA and EGMA performance

The classification of rural and urban here is mainly in terms of Ulaanbaatar schools as city/urban schools and the rest as rural schools. 89 percent of the students in the sample were drawn from rural areas while 11 percent from urban area schools. A cursory look at the results on EGRA subtasks (as in the graph below) indicates that urban children did relatively better than rural children on all subtasks, though the magnitude of effects might vary between subtasks.
The rural-urban analysis indicates that children from urban areas did slightly better than rural children in EGMA subtasks.

5.2.2 Secondary education: Higher education entrance exams and Education quality evaluation

Female and male students’ performance in education quality evaluation and HE entrance exam are presented in the Figure 91.

**Figure 91.** Grade 12 female and male student performance in the quality evaluation and HE entrance exams during 2016-2018

Figure 91 shows that there is a gender gap in student performance. Female students perform better than boys in the above exams.

**Figure 92.** Grades 5 and 11 female and male student performance in the quality evaluation exams 2016 and 2018

**Figure 92.** Grade 12 female and male student performances in subject exams: The quality evaluation 2016 and 2018
Figure 92 presents a slight gender gap in student performance in some subject exams. Grade 12 girls perform better in Mongolian language, social science, English, biology, and Russian language subjects. In contrary, boys perform better in geography and history of Mongolia. Both gender students perform the similar in other subject exams.

**Figure 93.** Grade 12 student performance in HE entrance exams and the quality evaluation by school ownership during 2016-2018

Figure 93 illustrates that there is a school ownership gap in student performance. Private school students perform better in the exams. In particular, private school students perform much better in English, science, math, Mongolian language and social science.

**Figure 94.** Grade 9 student performance in the quality evaluation by school location during 2016-2018
Figure 94 shows that there are some location gaps in students performance. In particular city school students perform better in majority of subject exams. Soum school students perform lower than their peers in aimag centers and cities.
CHAPTER SIX: CHALLENGES IN PRIMARY AND SECONDARY EDUCATION AND ITS CAUSES

6.1 Primary and secondary education context

1. A structure of primary and secondary education has changed in short interval without a proper justification; and it causes negative consequences in sustainable development of education system of Mongolia.
2. Some provisions of the Teacher Development Law contradicts with the provisions of the Education Law. In addition, for both laws, the accountability mechanism is not reflected.
3. Legal environment for school teacher self-management organization has not established.
4. Sustainable planning, implementation, monitoring system of education policy and management cycle based on the outcome feedback is not being practices.
5. Legal integration and coordination, and management system has not strengthened.
6. There is not a national coordination system for human resource requirements in education sector.
7. Institutional capacity is weak. Key institutions like local education departments, MIER, ITPD, EEC lack of capable human and physical resources. There is not any professional development system for staffs of these institutions.

6.2 Education access and internal capacity

1. Schools where class size is over the specified norms violate child health and safety. By 2018-2019 academic year, 11% of all grades have 41-70 students.
2. Disbursement of the public budget allocated to private schools is not transparent; and there is not any accountability mechanism.

7.3 Education quality

1. Primary and secondary school students’ learning achievement has not exceed 60%; in particular, secondary school students’ achievement is poor.
2. There are great variances in results of national and school assessments. The quality of the evaluation and assessment has been problematic.

6.4 Education capacity and management

1. School structure, category, level, location, capacity, norms and resource allocation are not effectively and efficiently planned. In particular, rural school mapping is not efficient in terms of utilizing the full capacity of schools due to less number of students. It also affects senior secondary students’ elective learning.
2. Renumeration of teaching and non-teaching staffs is low and not linked with the professional rank, incentives and compensations due to lack of legal framework.
3. School management is weak. Local education departments cannot work with schools to improve their quality based on external monitoring and evaluation results in regular basis.
4. Results and findings of national evaluation cannot be reflected in the policy planning and implementation. Link between the evaluation and planning is weak.
5. School leaders are changed frequently. They are not appointed in conformity with the legal requirements for the position. By 2018-2019 academic year, 70% of school principals are appointed within 5 years; and 30% of them do not have teacher qualification.
6. There is not any system or legal environment for school leader training and career promotion.
7. Teachers are not provided opportunity and condition to develop at work place. Teachers with more than 10-year teaching experience cannot access online in-service training.
8. Teacherwork load is too much; yet, majority of the work is dedicated to administrative duties. They spend less time for teaching.

9. There is not any integration between national and local in-service trainings. In-service trainings for teachers with 1, 5 and 10-year teaching experiences are not linked with local training for teachers with 2,3 and 4-year teaching experience.

10. At local, in particular, soum level, teacher invisible shortage exists. Due to lack of teaching hours or subjects teachers, teachers in rural schools teach other subjects. For example, chemistry teachers teach math or physics.

11. There is not any system for career promotion for teachers.

12. Teacher evaluation system is not effective to promote teaching quality and support student learning. Moreover, it does not align with teacher renumeration and incentives.

13. There is not pre-service training system for managers of education organizations. Their professional development is dominantly strengthened via in-service tranings. There is not national system to prepare education managers’ resource.

14. At present, school managers are selected from teachers; and their manager capacity is built after the promotion. It would be effective if they are trained and prepared before the promotion. Due to this in-effective approach, school managers’ way of leading and managing school operation lags behind from current social needs and requirements.

15. Although there are some initiatives to monitor and evaluate the implementation of the curriculum, its cannot be sustained due to lack of supporting system.

16. The structure and design of primary and secondary education curricula are varied; and it affects the quality of the implementation.

17. Student assessment and evaluation system is not in line with the curriculum. The quality of the assessment and evaluation is difficult to assure. Primary and secondary education lack of assessment experts and researchers.

18. Student textbook supply policy has been changed 12 times since 1998. It affects the quality and sustainability of the supply system.

19. Students textbooks are developed in very shor period due to lack of effective textbook planning as well as lack of textbook experts and authors. Textbooks study has not been matured.

20. Provision of school science laboratories and equipments are not standardized; thus, it affects the quality of the supplied laboratories and equipments. Many schools cannot utilize the supplied laboratories and equipment because its instruction is in Chinese, English, Russian or other langauges. In particular, rural schools tend to lock the laboratories and equipment.

21. School internet connection is usually very weak. Computers and internet tools are outdated; and there is no funding for maintenance of these tools and equipment. Schools do not report the technical specifications and utilization status of these equipment.

22. School shifts are varied. Majority of schools have less than 0.5 shifts. There are few schools that have more than 3 shifts.

23. At national level, 18.1% of all kindergarten and school building are aged more than 45 years; and 6.5% of them are outdated by the State Inspection Authority.

24. 282 schools do not have proper sanitation devices. They carry water from distance and have outside toilets. It causes many health and safety risks to children.

25. 71.3% of school dormitories do not have installed water pipes; and 61% of them have outside toilets.

26. There is not any training system for dormitory teachers.

6.5 Equity

1. Gender balance is loosened in education sector. By 2018-2019 academic year, merely 4% of primary school teachers are male.

2. Inclusive education is not assured; and students cannot access inclusive education.
3. There is a learning gap in urban and rural school students. Soum school students lags behind their peers in urban area.
4. Nomadic children achievement is lower than non-nomadic children.
5. Kazakh children achievement is lower than their peers.
6. Dual language schools teachers lack of Mongolian and mother language proficiency.
7. Primary and secondary education access of children with disabilities is not sufficient. They lack of, for instance, learning materials including textbooks. Spcial education school environment is not comprehended to assure the successful learning of children with disabilities.
CHAPTER SEVEN: PROJECTIONS AND PROPOSED PRIORITIES BY 2030

7.1 Projection results for 2030

**Figure 95.** Projection of school aged population growth by 2030

**Figure 96.** Required/demanded seats in urban and rural areas
Figure 97. Number of demanded teachers by subjects by 2030
### APPENDIX 1: 5-YEAR BUDGET PROJECTIONS BASED ON ENROLLMENT PREDICTIONS BY 2030

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