

**MID-TERM PROGRESS REPORT OF
SUSTAINABLE DEVELOPMENT GOAL 4 IN
MONGOLIA
(2016-2021)**

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(2016-2021)**

**Ulaanbaatar
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ЯАМ



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FOREWORD

In 2015, the United Nations approved the “Transforming our world: the 2030 Agenda for Sustainable Development,” which includes 169 targets and 17 goals for member states to achieve by 2030. These goals focus on eradicating poverty, improving health and safety, increasing access to and quality of education, protecting the environment, and addressing climate change. Since then, various documents outlining global policies and strategies for implementing and monitoring SDG 4, Quality Education, have been developed by organizations such as UNESCO, including the “Education–2030” program (2015-2030), “The Global Action program” (2015-2019), “ESD2030: Roadmap” (2020-2030), “5-year Progress Review of SDG 4 in Asia-Pacific” (2015-2021), and “Reimagining Our Futures Together: A New Social Contract for Education (2021).”

Mongolia has been selected by UNESCO as one of the countries to support and guide this global initiative to transform education and learning for the sustainable development of the planet and humanity. As part of this cooperation, the Ministry of Education and Science (MES) of Mongolia has prepared the “The Mid-Term Progress Report of SDG 4 in Mongolia.” This report is unique in that it measures the progress of the implementation of the 17 targets of SDG 4 in Mongolia according to relevant indicators, and was developed by a national team with financial support from UNESCO and UNICEF.

The report was prepared by a research team comprising national experts from UNESCO, MES, relevant agencies, civil society organizations, and NGOs. It was supported by a task force group consisting of heads of departments and units and specialists from the ministry.

We would like to express our gratitude to the team that developed and supported this report. The Mid-Term Progress Report of SDG 4 will make a valuable contribution to the refinement of Mongolia's education policy and planning, the implementation of necessary actions, the improvement of the education information and monitoring and evaluation system, and the sharing of experiences with the international community.

May the transformation of education and learning for Education for Sustainable Development and Sustainable Development thrive.

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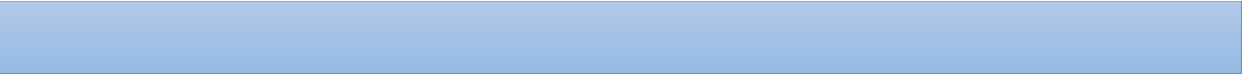
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LIST OF KEY WORDS AND ABBREVIATIONS

Abbreviations (Mongolian)

1.	BE	Business Entity
2.	NFE	Non-formal education
3.	USA	The United States of America
4.	ACA	Anti-Corruption Agency
5.	ADB	Asian Development Bank
6.	WOA	Whole organization approach
7.	USE	Upper secondary education
8.	PSE	Primary and secondary education
9.	LFE	Loan Fund for Education
10.	ITPD	Institute of Teachers' Professional Development
11.	CPDT	Continuous professional development of teacher
12.	PRC	People's Republic of China
13.	ECDI	Early childhood development index
14.	MET	Ministry of Environment and Tourism
15.	MEGDT	Ministry of Environment, Green Development and Tourism
16.	MECS	Ministry of Education, Culture and Science
17.	CEE	Center for Educational Evaluation
18.	EI	Educational institute
19.	SEQE	Study on Educational quality evaluation
20.	MES	Ministry of Education and Science
21.	GIZ	German Agency for International Cooperation
22.	FCA	Foreign Cooperation Agency
23.	TEI	Tertiary Educational Institutions
24.	GAP	Global Action Program
25.	GES	General education schools
26.	GEI	Gender Equity Index
27.	NCGE	National Committee on Gender Equality
28.	GoM	Government of Mongolia
29.	APGoM	Action Plan of the Government of Mongolia
30.	HEI	Higher Education Institution
31.	SCO	Civil society organization
32.	VTE	Vocational training and education
33.	CEIMPET	Center of evaluation, information and methodology for professional education and training

34	NCA	National committee on accreditation
35	OSF	Open society forum
36	MSUE	Mongolian State University of Education
37	NUM	National University of Mongolia
38	NQF	National qualification framework
39	MDG	Millennium Development Goals
40	ICT	Information, communication and technology
41	NCLE	National center for the Lifelong education
42	LL	Lifelong learning
43	UN	United Nations
44	UNFPA	United Nations Population Fund
45	UNICEF	United Nations International Children's Emergency Fund
46	NGO	Non-governmental organization for social service
47	SSSI	Sample study on social indicators
48	SSDIG	Sample study on diverse indicator groups
49		College of Polytechnic
50	WSA	Whole school approach
51	PE	Preschool education
52	MSUAC	Mongolian State University Arts and Culture
53	UFE	University of Finance and Economy
54	TVET	Technical and Vocational education and training
55	TVETI	Institution for Technical Vocational education and training
56	SD	Sustainable Development
57	ESD	Education for Sustainable Development
58	SDG	Sustainable Development Goals
59	WSH	Water, sanitation and hygiene
60	MP	Mongolian Parliament
61	SEC	the State Emergency Commission
62	NSO	National Statistical Office
63	AS	Agriculture sector
64	MNUA	Mongolian National University of Agriculture
65	PHC	Population and Housing Census
66	PF	Population Fund
67	PWDs	Person with Disabilities
68	LRPD	Law on the Rights of Persons with Disabilities
69	MLSP	Ministry of Labour and Social Protection
70	SDC	Swiss Agency for Development and Cooperation
71	GEE	General Entrance Exam
72	OECD	Organization for Economic Cooperation and Development
73	HS	Health sector
74	TLBPL	Level of threshold livelihood below poverty line

Abbreviations (Mongolian and English)

БНБ	EFA	Бүх нийтийн боловсрол	Education for all
ДНҮХ	GAP	Дэлхий нийтийн үйлийн хөтөлбөр	Global Action Programme
НҮТС	MICS	Нийгмийн үзүүлэлтийн түүвэр судалгаа	Multiple Indicator Cluster survey
ТБ		Тогтвортой байдал	Sustainability
ТХ	SD	Тогтвортой хөгжил	Sustainable Development
ТХБ	ESD	Тогтвортой хөгжлийн боловсрол	Education for Sustainable Development
ТХЗ	SDG	Тогтвортой хөгжлийн зорилго	Sustainable Development Goals
ТХЗБ	ESDG	Тогтвортой хөгжлийн зорилгын төлөөх боловсрол	Education for Sustainable Development Goals
АХБ	ADB	Азийн хөгжлийн банк	Asian Development Bank
ДБ	WB	Дэлхийн банк	World Bank
ЖАЙКА	JICA	Японы Олон Улсын Хамтын Ажиллагааны Агентлаг	Japan International Cooperation Agency
ЮНЕСКО	UNESCO	Нэгдсэн Үндэстний Байгууллагын Боловсрол, шинжлэх ухаан, соёлын байгууллага	United Nations Educational, Scientific and Cultural Organization
ЮНИСЕФ	UNICEF	Нэгдсэн Үндэстний Байгууллагын Хүүхдийг ивээх сан	United Nations International Children's Emergency Fund
НҮБХАС	UNFPA	Нэгдсэн Үндэстний Байгууллагын Хүн амын сан	United Nations Population Fund
ОУОУХ	PISA	Олон Улсын Оюутны Үнэлгээний Хөтөлбөр	Programme for International Student Assessment
ЭЗХАХБ	OECD	Эдийн засгийн хамтын ажиллагаа, хөгжлийн байгууллага	Organisation for Economic Co-operation and Development
ШХА	SDC	Швейцарын хөгжил, хамтын ажиллагааны агентлаг	Swiss Agency for Development and Cooperation

Key words (Mongolian and English)¹

№	Монгол	Англи
1	Албан боловсрол	Formal education
2	Албан бус боловсрол	Non-formal education
3	Амьдрах орчноос суралцах боловсрол	Informal education
4	Амьдралыг олон талаас/хүрээнд суралцахуй	Lifewide Learning
5	Арга хандлага	Approach
6	Ахиц дэвшил	Progress
7	Бага насны хүүхдийн боловсрол	Early childhood education (ECE)
8	Багшлахуй	Teaching
9	Бүрэн дунд боловсрол	Upper secondary education
10	Багшийн хангамж	Teacher provision
11	Дэлхийн иргэний боловсрол	Global citizenship education (GCED)
12	Дүйцсэн хөтөлбөр	Equivalency programme
13	Жендерийн тэгш байдал	Gender equality
14	Мэргэжлийн тасралтгүй хөгжил	Continuous professional development (CPD)
15	Орхигдож үлдсэн бүлэг	Marginalized groups
16	Насан туршийн суралцахуй	Lifelong learning
17	Суурь боловсрол ²	Basic education
18	Суралцахуй	Learning
19	Суралцахуйн зорилт	Learning Objective
20	Суралцахуйн хүлээгдэж буй үр дүн	Learning Outcome
21	Суралцахуйн хоцрогдол/алдагдал	learning loss.
22	Сургалтын хөтөлбөр	Curriculum
23	Сургалтын төлөвлөгөө	Syllabus
24	Сургууль бүхлээрээ ажиллах арга хандлага (СБААХ)	Whole school approach
25	Тогтвортой байдал	Sustainability
26	Тогтвортой хөгжил	Sustainable Development
27	Тогтвортой хөгжлийн боловсрол	Education for Sustainable Development

¹ In the official documents in Mongolia, the terminologies related to the SDG 2030 such as “equality,” “equity,” “inclusion,” and “quality” have been translated into Mongolian as “equal status/opportunity,” “non-discrimination/condition,” “inclusive participation,” and “quality,” respectively. However, these Mongolian translations may not always accurately convey the meanings of the original terms, leading to misunderstandings and differences in interpretation. Therefore, in the context of this study, which reviews the last five years of implementation of SDG 4, the original terms have been used as listed in the Keywords section of the report. It should be noted that during the evaluation review, certain difficulties were encountered due to the use of incomprehensible and differently translated indices and indicators from the National Statistics Office, the Ministry of Education and Science, and the Ministry of Labor and Social Protection.

² “Basic education” in Mongolia is equivalent to “lower-secondary education” on the international level.

28	Тогтвортой хөгжлийн зорилгууд	Sustainable Development Goals
29	Тогтвортой хөгжлийн товлосон зорилтууд	Targets for Sustainable Development
30	Тогтвортой хөгжлийн зорилгын төлөөх боловсрол	Education for Sustainable Development Goals
31	Хувирган өөрчлөлт	Transformation
32	Инклюзив оролцоо ³	Inclusive
33	Тохирсон дэмжлэг	Tailored support
34	Тэгш байдал/боломж/нөхцөл	Equality
35	Тэгш бус байдал	Inequality
36	Тэнцвэрт бус байдал	Disparity
37	Тэнцвэрт байдлын индексүүд	Parity indexes
38	Үл алагчлах байдал/нөхцөл	Equity
39	Универсализмын арга хандлага	Universalism approach
40	Үйлийн хүрээ	Framework
41	Хүртээмж	Access
42	Цогц чадамж	Competencies
43	Чанар	Quality
44	Үндэсний мэргэшлийн хүрээ	National qualification framework
45	Хувьсагчид (хамаарах, үл хамаарах)	Variables (dependent & independent)
46	Эмзэг бүлгүүд	Vulnerable groups

CHAPTER ONE: SOCIO-ECONOMIC CONTEXT ENVIRONMENT AND CLIMATE CHANGE

Mongolia is greatly affected by climate change, which is exacerbating desertification.

Despite the critical challenges posed by the COVID-19 pandemic, there is a global focus on protecting the environment, implementing green development goals, and achieving tangible results. Mongolia is a country with harsh climate and three distinct regions: the Asian Altai, Khangai and Khentii mountainous region, and deserts and steppe in the rest of the country. 73.4% of Mongolia's total territory is used for agriculture. Climate change and inappropriate human actions have led to changes in the ecosystem, causing lakes, ponds, rivers and springs to evaporate, and contributing to the increase in desertification. Droughts and dzuds, which can reduce the energy and productivity of the livestock, if not cause their death, have become more frequent, impacting the livelihoods of herders, particularly those living in remote areas and leading to migration towards more urban settlements. The average air temperature in Mongolia has increased by 2.2 Celsius in the past 80 years, twice the global average.

³ “The 5-Year Progress Review of SDG 4–Education 2030 in Asia-Pacific” (UNESCO, 2021) briefly explains the meaning of the term “inclusion” and “equity” and highlights their use as key tools in the review of SDG 4 implementation in the region. In the review, “inclusion” entails an attempt to include all members of the community in all aspects of education and ensure their inclusive participation, particularly by providing equal opportunities for everyone to benefit and gain from education based on their individual needs and demands and by ensuring the full participation of all members. However, “equity” (non-discrimination) in educational services means eliminating gender imbalances in education and ensuring sustainability by involving the general public in educational services, particularly vulnerable groups who may be excluded from services such as those affected by poverty, migration, and conflicts, and providing appropriate support regardless of the student's age, gender, race, origin, disability, residential location, geography, and household income or level of livelihood.

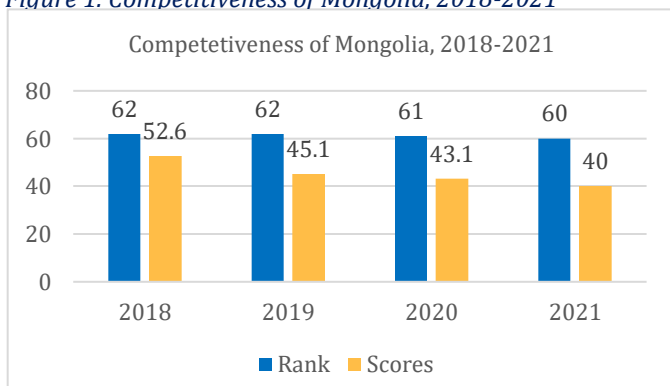
Furthermore, 76.9% of the country's territory has been affected by desertification, with 45.4% classified as being under severe or heavy desertification, a major concern as soil loss poses a threat to Mongolia's national security. The number of disasters in Mongolia has also increased threefold in the past decade compared to the 1990s. To address these issues, the Government of Mongolia has set a goal of increasing the forested area to 8.6% of its territory by 2020-2024, creating a legal environment to provide monetary incentives for individuals and businesses who contribute to green development through tree planting. Additionally, the President of Mongolia launched the "Billion Trees" national program in 2021, which aims to plant one billion trees by 2030 to combat environmental degradation, desertification, and yellow dust storms.

WORK SKILLS AND UNEMPLOYMENT

Economic growth has stagnated, unemployment and poverty are on the rise.

The Mongolian economy has seen growth of 5.3%, 6.9%, 6.7%, and 6.3% in 2017, 2018, 2019, and 2020 respectively. While this trend is positive and may be sustainable through 2021, it is important to carefully consider global economic trends and the country's debt repayment in the coming year when making strategic plans. In terms of competitiveness, Mongolia has scored 40 on the index from 2018-2021, ranking at 60th place.

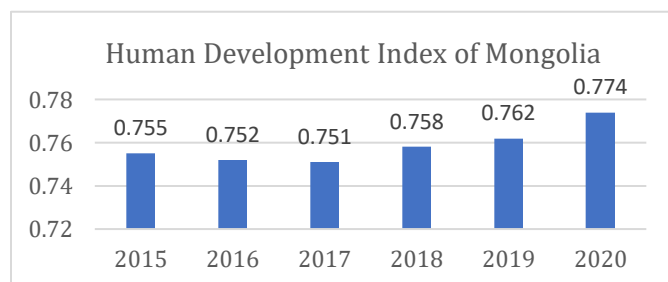
Figure 1. Competitiveness of Mongolia, 2018-2021



A country's education sector is influenced by its economic capability, national per capita income, and educational budget per person. In recent years, Mongolia's national per capita income has reached around \$3,800, which places the country in the upper middle income category.

Source 1: Global report on competitiveness, 2021

Figure 2. Human development index of Mongolia, 2015-2020



In Mongolia, 0.84% of the gross national product (GNP) and 25% of the total budget for educational sector are being used for preschool education. As of 2020, the country's human development index is 0.77.

According to the main poverty indicators for Mongolia, the poverty rate decreased by 1.2 percentage points from 2016 to 2018. This decrease was more significant in rural areas, where the poverty rate declined by 4.1 percentage points, but it increased slightly in urban areas by 0.1 percentage points.

Despite this overall decrease, poverty remains more prevalent in rural areas. In 2016, the poverty rate in rural areas was 7.8 percentage points higher than in urban areas, but this difference decreased to 2.8 percentage points in 2018. Urbanization, which has led to one-third of the total population living in urban areas, has contributed to an increasing concentration of the poor population in these areas, resulting in an increase in poverty in urban areas. In 2016, 62.1% of the poor population lived in urban areas, which rose to 63.5% in 2018, with 41.8% of the total poor population living in the capital city of Ulaanbaatar in 2018. In addition, the population with a living standard below the poverty line made up 62.1% of the total population, an increase of 6.5 percentage points compared to previous years (NSO, 2018).

As of December 2020, 2,553,972 Mongolian people were receiving social welfare services, and the government disbursed MNT 1,5 trillion for these services. There are 72 types of welfare services for 12 groups of people available in the country, and approximately 60% of the total budget is spent on population development programs and measures. However, the recent expansion of social welfare coverage has had a negative impact on the economy. While social welfare support from the government has helped some people to overcome difficult times, it has also caused others to become unwilling to work and reliant on long-term welfare services. In order to improve employment and skills among citizens, the Ministry of Labor and Social Protection is implementing a policy that shifts the focus from **social welfare to employment**. This includes refining social welfare policy and establishing more efficient social welfare services through improved employment mediation.

Between 2016 and 2020, the country's total external debt has been on the rise (as indicated in Table 1). In 2020, this debt reached 32.2 billion USD, representing an increase of 1.5 billion USD (a 4.8% increase) from the previous year and 969.4 million USD (a 3.1% increase) from the previous quarter. When examining the foreign debt by sector, it becomes apparent that 35.5% (or 11.4 billion USD) is made up of direct investment and intercompany loans. The government accounts for 26.9% (or 8.7 billion USD) of the total debt, while other sectors make up 25.7% (or 8.3 billion USD). The Central Bank is responsible for 6.9% (or 2.2 billion USD) of the debt, and savings institutions (excluding the Central Bank) make up 5.1% (or 1.6 billion USD) (NSO, 2018).

Table 1 Total external debt, Mongolia, USD million

	2016	2017	2018	2019	2020
Total external debt	24,624.5	27,492.7	28,714.9	30,677.7	32,161.9

Source 2: (NSO, 2018)

The mining and livestock industries are the primary drivers of Mongolia's economy, relying on the nation's natural resources and environment. The distribution of wealth can be a good indicator of economic growth, but unfortunately, Mongolia struggles with unequal distribution. This has meant that the population has not seen the benefits of economic growth in terms of improved livelihoods or increased employment opportunities, and the number of impoverished citizens has not decreased. It appears that low employment rates, ineffective social welfare policies, high budget expansion,

uneven wealth distribution, and mounting external debt are the main factors contributing to poverty in Mongolia. This suggests that in addition to economic development policies, it is crucial to consider and maintain the interrelatedness of policies on such issues as environmental protection, disaster preparedness, disaster risk reduction, employment growth, equal wealth distribution, optimized social welfare services, responsible debt management, and capacity building.

POPULATION AND MIGRATION

Poor coordination between population structure, migration, and employment

Population structure: In 2020, the population of Mongolia reached 3.3 million, with 49.2% being male and 50.8% being female. Children under the age of 15 make up 31.9% of the population, while 63.8% are between the ages of 15 and 64, and 4.3% are 65 years or older. 30.7% of the total population is considered youth, ranging in age from 15 to 35 years old. The birth rate has trended downward from 2016 to 2020, which may be linked to the global pandemic (see Table 2).

Table 2 Number of birth (by sex)

Sex	2016	2017	2018	2019	2020
All	79,920	75,321	78,444	79,580	77,716
Male	41,033	38,958	40,260	40,755	39,844
Female	38,887	36,363	38,184	38,825	37,872

Source 3: (NSO, 2018)

Originally, it was planned that half a million people would live in Ulaanbaatar, but as of 2020, its population had reached 2.3 million. One in three residents of the city is a migrant who arrived between 1990 and 2015, and the city's annual population growth is 6%, which is 3.2 times higher than the national average. As the population density increases and urbanization intensifies, labor and capital resources become centralized, leading to improved technology and innovation capacity. However, this also brings negative consequences such as pollution of the urban environment, deterioration of citizens' living conditions, and significant disparities in livelihood levels among the population.

Migration: During the reporting period, 146,000 people migrated from their previous places of residence. 52.9% of these migrants came mostly from the central and khangai regions, while 44% of the 210,000 migrants moved to Ulaanbaatar city. Since 1990, there has been a trend of "out-of-flow" migration for education, career advancement, and residence in foreign countries. There has also been an increasing tendency among citizens to work while studying and eventually stay permanently in overseas. According to UN statistics, the number of Mongolian citizens living abroad increased threefold from 24,466 in 1990 to 73,488 in 2019. However, due to the COVID-19 pandemic, this number decreased in 2020 (see Table 3).

Table 3 Number of Mongolian citizens travelling abroad

Statistical data	2016	2017	2018	2019	2020

<i>Business reason</i>		50,640	70,008	57,056	60,577	25,294
<i>Personal reason</i>		1,769,853	1,792,427	1,776,664	1,701,999	217,512
<i>Tourism</i>		80,926	104,076	131,504	150,795	17,864
<i>Residence</i>		11,959	13,758	16,307	19,470	3,514
<i>Other</i>		339,145	459,617	479,343	482,272	307,683

Source 4: (NSO, 2018)

Labor market: According to the Labor Force Survey, the labor market has been relatively stable over the past 20 years, with positive changes following population growth. However, the labor force participation rate and employment rate have slightly decreased. In the domestic labor market, there is a high number of educated and skilled individuals who are unemployed, but there is a shortage of labor among enterprises. One major issue is the mismatch between the knowledge and skills provided by education and training and the needs of employers. This results in difficulty for employers in finding employees with the necessary knowledge and skills, leading to an increase in long-term unemployment in the labor market and a high youth unemployment rate.

Although the level of education among women in our country is relatively high, their employment rate is lower than that of men. 91.2% of women and 86.3% of men over the age of 25 have more than a secondary education, but the labor force participation rate for women is 55.2%, which is lower than that of men (67.5%). The average hourly wage difference between men and women is 11.4%. In addition, working women spend more time than men on low-value domestic and childcare tasks (NSO, 2018).

The demand for decent employment is high. According to the International Labor Organization, decent employment involves opportunities for work that is productive, provides a fair income, offers workplace security and social protection, has better prospects for personal development and social integration, allows for the expression of concerns and participation in decision-making processes, and ensures equality of opportunity and treatment for all. Low labor productivity and the prevalence of informal employment in our country indicate a high demand for decent work. Since 2006, the percentage of informal workers among all workers has doubled to reach 26.3%. Despite population growth in Ulaanbaatar, the demand for decent employment remains high, indicating a mismatch between the knowledge and skills provided by education and training and the needs of employers.

CHAPTER TWO. COUNTRY ADAPTATION CONTEXT AND SDG 4

THE PROGRESS IN IMPLEMENTATION OF SDG 4

The Institute of Teachers' Professional Development (ITPD) published the first edition of a manual for teachers (MECSS, MES, SDC, ITPD, 2018) with funding from the Swiss Agency for Development and Cooperation (SDC). The Education Institute (IE) printed the second edition, titled "Guidebook" (IE, MES, MET, SDC, 2021). These books provide Mongolian readers with a summary of the development path and principles of Sustainable Development (SD) and Education for Sustainable Development (ESD) by analyzing relevant global documents and summarizing their decisions, brief contents, continuity, and implementation mechanisms.


The book concludes that "from the perspective of the development process of Sustainable Development (SD) and Education for Sustainable Development (ESD), these two concepts have become increasingly integrated like the two sides of the same coin, with increasing value. In particular, the main focus of the ESD development process in recent times has been on SD, as well as the incorporation of ideas and content from policies, strategies, and programs on public education implemented around the world. Since the adoption of the "Transforming Our World: Sustainable Development Agenda 2030" in 2015, it has become an increasingly coherent strategy, rather than a separate strategy or series of initiatives." This is clearly demonstrated in the SDG 2030: Roadmap as well.

There has been an increase in efforts to implement the "Transforming Our World: 2030 Agenda for Sustainable Development" and its 17 Sustainable Development Goals (SDGs) since their approval by the UN General Assembly in 2015. For example, UNESCO has defined the concept, fundamental solutions, and long-term and mid-term plans for the transformation of education as a whole from 2015 to 2030. In addition, several important documents on the future development of humanity and education, such as "Reimagining Our Future Together: A New Social Contract for Education," have been published.

In this context, the Institute of Teachers' Professional Development (ITPD) and the Education Institute (EI) published the "Guide" book and made it available to the public in Mongolia to provide comprehensive information and methodology to optimize future activities and gain a new development perspective while providing an overview of world and Mongolian educational development traditions and the relationship between reforms. This book aims to support the tens of thousands of teachers, educators, policy makers, and decision-makers who have been tasked with revitalizing education and who have been affected by successive "reforms" since the 1990s. As a result, Mongolian society, including the education sector, is gaining a relatively well-rounded understanding of SD, SDGs, and ESD.

PROGRESS IN MONGOLIA'S DEVELOPMENT POLICY, PLANNING, AND LEGAL REGULATION

A new chapter in Mongolia's history of developing and implementing development policies began in 2020. We hope that the historical decisions made during this period will provide a significant boost to the implementation of SDG 4 in Mongolia. As part of the "Policy Harmonization" priority outlined in the ESD 2030: Roadmap, Mongolia is currently aligning its development policies with its long-term development vision and international trends. It is also taking comprehensive, systematic, and



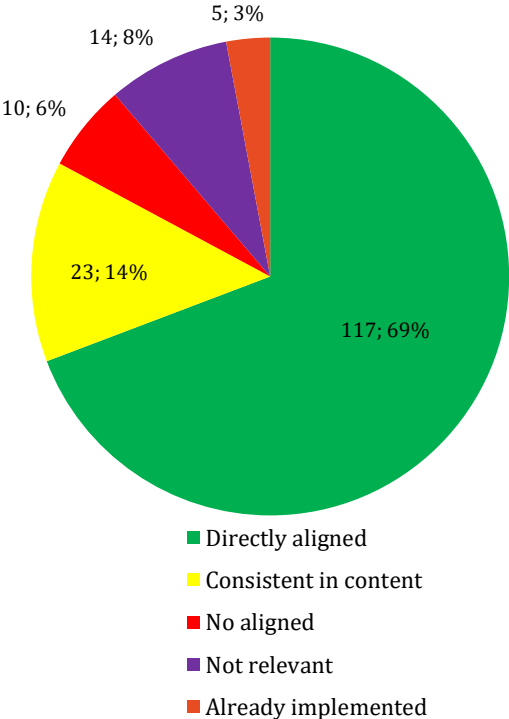
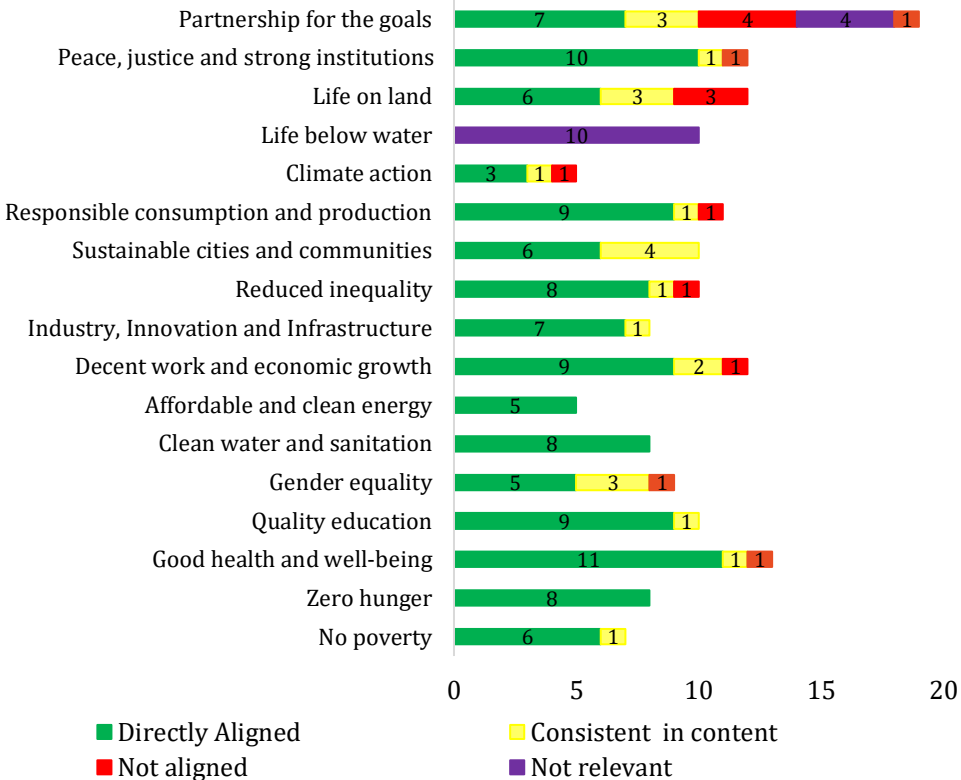
coordinated measures to improve its legal environment and make necessary adjustments, starting with the Constitution.


In accordance with the global "Transforming Our World: 2030 Agenda for Sustainable Development," Mongolia's long-term development policy, "Vision 2050," was approved by Parliament Resolution No. 52 in 2020 and has begun implementation.

The government is working to implement the Sustainable Development Goals (SDGs) in line with Mongolia's long-term policy and midterm planning, with the support of relevant government agencies, UN agencies, international financial institutions, the private sector, and civil society organizations.

According to a study that evaluated the alignment of the goals of Phase I (2021-2030) of the nine groups of 47 goals in the Vision 2050 policy with each of the 17 Sustainable Development Goals (MEC, 2020), 69% were "directly aligned" and 14% were "consistent in content." Of the total 169 planned goals, 83% were aligned with the SDGs, 6% were not aligned with any of the SDGs, and 8% were not directly related to our country, and 3% had already been implemented (Figure 1.2.1).

Figure 3. "Sustainable Development Goals 2030" and "Vision 2050: Mongolia's Long-Term Development Policy"






In addition, the United Nations Development Program (UNDP) published a "Review of the relationship between Mongolia's development policy documents and the Sustainable Development Goals" (GoM, UN Development Program, 2021) as part of the "Project to Promote Implementation of Sustainable Development Goals 2030." The review analyzed three policy and planning documents: Vision 2050, the Five-Year Development Strategy of Mongolia 2021-2025, and the Action Plan of the Government of Mongolia 2020-2024 and compared them to the 169 set targets of the SDGs, evaluating them in five categories: aligned, aligned in content, not aligned, not relevant to the country, and fully implemented.

The review report concludes that about 80% of the objectives set out in the three documents are aligned with the SDGs. In particular, among the 10 targets of SDG 4, target 4.6, which concerns literacy and numeracy for all youth, was aligned in content, and the other 9 targets were directly aligned.

According to the report, 11-20 (SDG 8.8; SDG 10.c; SDG 12.1; SDG 13.3; SDG 14.4; SDG 15.7; SDG 15.8; SDG 15.b; SDG 17.15; SDG 17.16; SDG 17.18; SDG 17.19) of the 169 SDG targets were not aligned with the objectives set out in these national development policy documents. It is suggested that these objectives were formulated too generally and their level of achievement and evaluation criteria were inconsistent. Therefore, the report recommended that the coherence of these targets and goals be improved in the development policy document to be approved in the next stage, specifically the 7 Development Targets to be implemented at the national level until 2030. Moreover, according to the report, only 20 out of the 244 SDG indicators, or only 8%, were reflected in the selected development policy documents.

In the initiative project for implementation of SDG 2030 of Mongolia: Mongolia developed the "ESD 2030 Country Initiative" based on the framework of 5 priority action areas and 6 management areas for their implementation. The results of the 1-4 point survey conducted within the framework of this initiative, as well as the challenges identified, should be taken into consideration in the development of the "Human Development Target Program." For example, according to the survey, the current situation was evaluated as weak in areas other than "Policy Harmonization," which is the first priority area of the SDG 2030. In particular, regarding Priority Area of Action (PAA) 3, which deals with whether the principles of sustainability are realized in the material environment and operations of educational institutions, 3 out of 4 indicators of PAA 4, and indicators such as whether there is national-level policy support to encourage ESD at the local level in PAA 5 were rated 1. These results reflect that the organization as a whole has not developed a working method for SD and ESD, the knowledge and understanding of SD and ESD among educators is insufficient, and the methods and capabilities to acquire them are not at an appropriate level. Furthermore, the contribution of young people to SD is low, there is no mechanism to ensure their participation, and initiatives to disseminate ESD at the local level are weak and national support is insufficient. In the future, it is noted that it is necessary to pay attention to the following points:

- It is necessary to increase cooperation and coordination between education, sustainable development, and other central government institutions and professional agencies, as well as national, local, institutional, and citizen stakeholders, in order to establish a lifelong learning system for all.
- There is a need to systematically increase the capacity of educators in ESD and develop the knowledge, skills, and attitudes needed by students or those who drive change. This includes



introducing criteria and indicators to measure learning of ESD knowledge of educators and students into the evaluation system and creating a unified database.

- Recognizing that the political parties and groups have a strong influence on youth participation and empowerment activities, it is important to ensure that such activities are not perceived as politically motivated.
- The COVID-19 pandemic has both presented opportunities and posed significant challenges for the education sector. In Mongolia, the extended closure of classrooms led to an increase in learning loss among students. During this time, e-literacy among teachers was a relatively low. (E.Erdenechimeg, 2020).

CHAPTER THREE. IMPLEMENTATION OF SDG 4

As part of the review and evaluation process in preparing this report, the educational issues related to each of the 10 targets of SDG 4 were analyzed in three areas: policy, planning, and access and quality. We used available sources and various balance indexes and indicators to evaluate the progress made on each indicator between 2016 and 2021.

SDG 4.1. PRIMARY AND SECONDARY EDUCATION

The progress made in implementing Objective 4.1 of the SDG 4 has been evaluated using the necessary resources. This objective aims to "ensure that all girls and boys complete free, equitable, and quality primary and secondary education leading to relevant and effective learning outcomes by 2030." The evaluation was based on an analysis of changes in indicators over the reporting period and the factors that contributed to them.

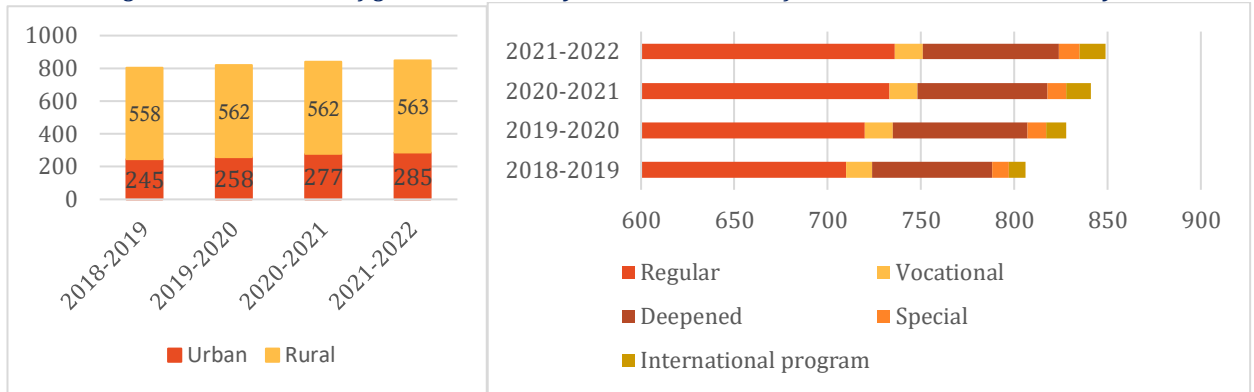
The General secondary education system

The Constitution of Mongolia states that "the State shall provide free general secondary education" (The Constitution, 1992). Article 3.1.1 of the Law on Education defines "general education for all" as "the 12-year training content," and Article 6.3 states that "a citizen of Mongolia shall be obliged to receive basic education." Additionally, Article 7.1 states that "the education system in Mongolia shall be a combination of formal and non-formal education and shall consist of pre-school, primary, secondary, vocational, and higher education" (Law on Education, 2002).

Preschool education is provided through kindergartens, while general secondary education schools provide primary and general secondary education. Vocational education is provided by vocational and training centers and colleges, and higher education is provided by universities and colleges. General secondary education schools are categorized as primary (grades 1-5), secondary (grades 6-9), and high school (grades 10-12). As of the academic year 2021-2022, a total of 848 general secondary education schools are providing different types of education, with 66.4% located in urban areas and 33.6% located in rural areas (MES, Education sector statistics, 2021-2022).



Figure 4.1. 1. Number of general secondary education schools for the 2021-2022 academic year



Source: Education sector statistics for the 2021-2022 academic year

To fulfill citizens' right to education and provide equal opportunities and conditions for receiving education in one's native language, the legal framework has been established to support the variable cost per student in general secondary schools, with a certain percentage increase for children with special educational needs and different language and culture groups in Bayan-Ulgii aimag (Government, 2012). For instance, the variable cost per child in secondary schools will be tripled for children with special educational needs, and the variable cost for providing educational services to children with different languages and cultures in Bayan-Ulgii aimag will be increased (Government 2, 2016). These expenditures are funded in accordance with Government Resolution No. 242 of 2016, which states "3.5. The average variable cost per child enrolled in formal pre-school, primary and general secondary education in Bayan-Ulgii aimag, the cost of social insurance premiums will be increased by 4 percent and other variable costs of goods and services will be increased by 3 percent."

According to data from the National Statistics Office in 2020, 21.8% of households in Mongolia are nomadic herders living in remote rural areas. In some instances, these households are located as far as 100km or 200km from the nearest soum center. As a result, children from these families often reside in dormitories during the school year, which is a defining feature of the Mongolian education system.

The primary and secondary education system in Mongolia spans 12 years. Children begin general secondary school at age 6, attend middle school at age 11, and then progress to high school at age 15. The school year runs from September to June.

Despite the general education system's structure and enrollment rates approaching global standards, it is essential to prioritize the quality of education and student outcomes at all educational levels.

Although general education enrollment is relatively high, it is important to thoroughly investigate the reasons why some children are not receiving education services and to provide appropriate support.

Enrollment in school

The UNESCO SDG 4 Regional Progress Report recommends that governments invest in education for all children from an early age, in line with the Universalist approach. According to the Law on Education, children are enrolled in school as early as six years of age, and for herder families, children can be enrolled in school from the age of seven if necessary.

The implementation of SDG 4.1 is progressing well, with enrollment for six-year-old learners increasing from 88.9 percent in 2016 to 92.5 percent in 2020. However, it has decreased by 2.5 percentage points from the previous year, now standing at 90.0 percent in the 2021-2022 academic year (MES, Education sector statistics, 2021-2022). This indicates that 10.0 percent of six-year-old learners are at risk of dropping out of school or being enrolled late (as shown in Table 4.1.1).

Table 4.1. 1. Enrollment of six-year-old learners in school (by academic year)

Aimag, (capital) city	2016-2017	2017-2018	2018-2019	2019-2020	2020-2021	2021-2022
Total	88.9	90.8	91.9	92.5	92.5	90.0

Source: Education sector statistics

Nomadic herder households often live far away from soum and bagh centers where schools are located, making it difficult for their children to attend school at the age of six. As a result, parents and guardians prefer to enrol their children at the age of seven.

The COVID-19 pandemic has caused extended school closures for the past two academic years, leading to various learning difficulties for all students, especially those in grades one and two. As a result, some parents and caregivers have observed these difficulties and are reluctant to enrol their six-year-old children in school, contributing to the decline in enrollment.

According to the NSO's Multiple Indicator Cluster survey conducted in 2018, the enrollment rate for six-year-old children was 92.0 percent, which is similar to the Ministry of Education and Science's data. However, the survey found that male students have lower enrollment rates than female students, and children in the western region have lower enrollment rates than in other regions, especially among Kazakh households.

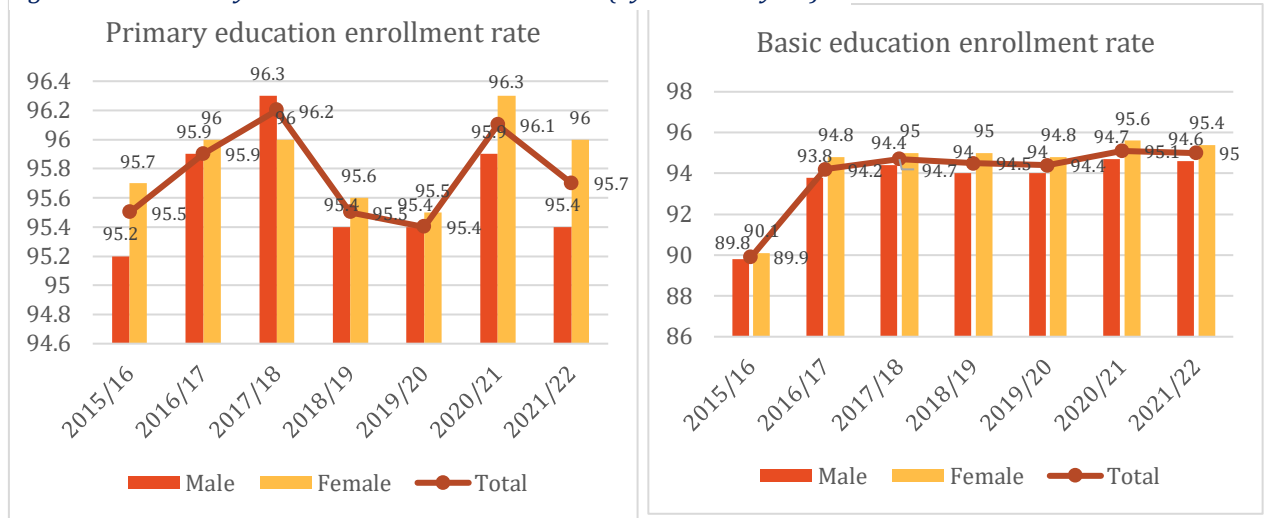
The Khangai region had the highest enrollment rate of 97.3 percent, while the western region had the lowest, with Bayan-Ulgii aimag having the lowest enrollment rate of 80.4 percent. Additionally, the enrollment rate of six-year-old children in general secondary schools in the capital city was 88.9 percent in 2018, which is a significant concern.

Primary and basic education enrollment

Between the 2015-2016 and 2021-2022 academic years, there was an increase in gross net enrollment rates for primary and basic education levels. The gross net enrollment rate for primary education increased from 95.5 percent to 95.7 percent, while that for basic education increased from 89.9 percent to 95.0 percent. This indicates an average yearly increase of 0.05 points since 2015 (as shown in Figure 4.1.2).

Source: Education sector statistics

Figure 4.1. 2. Primary and basic education enrollment (by academic year)



According to the 2018 Survey of Social Indicators, primary school enrollment rate is at 96.1 percent, which is 0.6 points higher than the administrative data from the Ministry of Education and Science. The survey also shows that the enrollment rate for male students is 1.9 points lower than that of female students. Additionally, enrollment rate in Ulaanbaatar city is at 94.2 percent, which is 1.4-4.5 points lower compared to other regions. The enrollment rate of children from Kazakh households is also lower at 93.9 percent, 2.1-3.1 points lower than households from other ethnicities.

Meanwhile, the enrollment rate for middle school (grades 6-9) based on the Multiple Indicator Cluster Survey (MICS) is at 93.0 percent, 1.5 points lower than the statistics from the Ministry of Education and Science. The MICS survey also shows that the enrollment rate for male students is 2.4 points lower compared to female students, and that the coverage of primary and basic education in the western region is 0.8-7.9 points lower than that of other regions. Enrollment rate is also lower for children living in rural areas at 90.8 percent, 0.2-6.3 points lower compared to children studying in other locations. Moreover, enrollment rate for children from low-income households is at 90.7 percent, 0.5-5.5 points lower than other families.

Net enrollment ratio also shows that enrollment of female students is higher than that of male students, and enrollment tends to decline as education levels progress. In terms of school enrollment and lower and general secondary education coverage by gender and location, enrollment rate for female students in secondary school (grades 6-9) is 3.7 points lower in urban areas compared to rural areas. However, enrollment rate for male students remains the same in both urban and rural areas. Basic education coverage is also 6.3 points higher for female students than for male students. At the level of complete secondary education, coverage is higher in urban areas compared to rural regions, with high school enrollment being higher by 7.4 points for female students and 23.2 points for male students. Nevertheless, female students' secondary education enrollment is 9.1 points higher than that of male students in both urban and rural areas.





According to education sector statistics, 78.0-79.4 percent of secondary education school graduates enrol in high school, while 65.0-70.4 percent of high school graduates are enrolled in universities and colleges (Figure 4.1.2).

Source: Education sector statistics

Figure 4.1. 3. Number of graduates of lower and upper secondary education, percentage of entrants in the next stage of education (by academic year)

Indicator	2019/2020	2020/2021	2021/2022
Basic education graduates (total)	43,690	45,916	
Percentage of new entrants in 10th grade from basic school graduates		78.0	79.4
Complete secondary education graduates	29,644	35,850	
Percentage of general secondary education school graduates enrolled in tertiary education		65.0	70.4

Figure 4.1. 4. School enrollment and (by rural and urban regions) SSSI, 2018

	Enrollment in Middle school (Basic education)	Basic education graduates	Enrollment in High school (Upper secondary education)	Upper secondary education graduates
 Rural	96.6		86.1	
 Urban	92.9	95.6	93.5	75.0
 Rural	90.1		66.7	
 Urban	92.9	89.3	89.9	65.9

According to the MICS survey, female students have higher school enrollment and education attainment than male students in both middle and high school. In rural areas, high school enrollment for students with basic education is lower than in urban areas, particularly for male students by 23.2 points. This disparity is attributed to various factors, such as the need for rural youth to pursue animal

husbandry after completing basic education, difficulties in attending high school in the aimag center or other locations after graduating from a 9-year school in the local soum, and poor teaching staff capacity and education quality. Additionally, male students receive less basic and complete secondary education than female students in both urban and rural areas, with a wider gap observed in urban areas (9.1 points). This indicates that in some cases, male students have a higher need and interest in entering the workforce earlier than female students (Figure 4.1.3).

Graduates of the basic secondary education level

With regards to the continuing education of basic education graduates, the enrollment rate in both the 10th grade of secondary school and Technical and Vocational Education and Training (TVET) has been increasing annually, as shown in Table 4.1.2.

Table 4.1. 2. Number and percentage of graduates of basic education enrolled in the next level of education (by academic year)

Indicator	2015- 2016	2016-2017	2017-2018	2018-2019	2019-2020
Basic education graduates, of which:	23,732	35,896	45,509	42,798	43,690

New entrants in the 10th grade (number, percentage)	16,905	29,320	35,957	32,766	34,092
	71.0	81.7	79.0	76.6	78.0
TVET entrants (number, percentage)	5,552	5,925	7,651	8,548	9,232
	15.5	16.5	16.8	20.0	21.1
Entrants in the next level of schooling	22,457	35,245	43,608	41,314	43,324
Graduates who did not pursue further education	13.3	1.8	4.2	3.5	0.8

Source: Education sector statistics

The enrollment of basic education graduates in the 10th grade of secondary school and TVET has been increasing annually, according to Table 4.1.2. In the 2015-2016 academic year, 71.0 percent of graduates enrolled in the 10th grade, while in the 2019-2020 academic year, this figure increased to 78.0 percent. Likewise, in the 2015-2016 academic year, 15.5 percent of graduates enrolled in TVET, while in the 2019-2020 academic year, this figure increased to 21.1 percent, as reported by the MES Education sector statistics in 2021-2022. These advances can be attributed to the decision to increase the amount of monthly scholarships for TVET students, which supports the interest of youth and adolescents in completing secondary education.

In 2015-2016, 13.3 percent of basic school graduates did not pursue further education. However, this figure has been declining each year, reaching 3.5 percent in the 2018-2019 academic year and 0.8 percent in the 2019-2020 academic year. While this decline may be in part due to the policy support for high school and TVET enrollment, as noted above, the sharp decline in the last year may be due to the Ministry of Education's decision to reduce the enrollment criteria for 9th grade graduates into the 10th grade during the COVID-19 pandemic.

Enrollment of over-aged students

According to education sector statistics, the number of entrants in primary schools has been increasing annually, and the enrollment rate at the age of 6 years has increased from 91.2 percent in 2016 to 95.3 percent in 2020. Late enrollment has also decreased by 1.4 percent in the past 5 years, and no early enrollment has been registered in the last 2 years, as reported in Table 4.1.3. It can be concluded that the decrease in early enrollment is due to the Ministry of Education's decision to disallow the enrollment of children under the age of 6.

Table 4.1. 3. Enrollment in general secondary schools (by age and number)

Academic year	Total	Enrollment age		
		>under 6	6	6 < over
2016-2017	2,242	2.4	91.2	6.1
2017-2018	8,238	0.5	92.9	6.6
2018-2019	2,520	0.0	94.1	5.9
2019-2020	7,195	0.0	95.3	4.7
2020-2021	9,920	0.0	95.3	4.7

Source: Statistical data of the Education sector

In the last 5 years, there has been a significant increase of 74,323 primary school students in general secondary education schools (grades 1-5), with a corresponding decrease in early enrollment. The enrollment rate for students aged 6-10 years has risen to 97.8-98.8%, and the number of overage students has remained stable over the past 4 years, ranging from 1.1-1.3 percent (Table 4.1.4).

In contrast, the number of students in lower secondary school (grades 6-9) increased by 33,506 in 2016-2019, but decreased by 65,736 in 2020 compared to the previous year. Despite the stability of the percentage of students who are younger than the appropriate age for middle school at 1.6-1.8 percent, the number of overage students tends to decrease (Table 4.1.4).

Table 4.1. 4. Enrollment in primary and basic secondary education by number and age

Academic year	Primary classes				Secondary classes			
	< 6 years	6 - 10 years	10 < and over	Total	<10 years	11-14 years	14< years and over	Total
2016-2017	0.6	97.8	1.7	288,345	1.7	93.8	4.5	167,364
2017-2018	0.1	98.5	1.3	309,355	1.8	91.9	6.4	176,210
2018-2019	0.0	98.8	1.2	327,019	1.7	94.6	3.7	184,017
2019-2020	0.0	98.9	1.1	343,028	1.6	95.7	2.7	200,870
2020-2021	0.0	98.8	1.2	362,668	1.8	94.8	3.4	135,134

Source: (Education sector statistics)

According to the 2018 sample survey of social indicators, there is a high percentage (5.7) of overage children from Kazakh households at all levels of general secondary education. Moreover, early enrollment of children from families with low economic status in primary education is relatively low (3.6), while early enrollment of children from families with high economic status is high (7.3) (Table 4.1.5).

Table 4.1. 5. Enrollment in primary and basic education at the required age of enrollment (by standard of living)

Living standard	Primary education			Basic education		
	Younger than required age	At the required age	Older than required age	Younger than the required age	At the required age	Older than the required age
Low	3.6	94.6	1.2	7.0	88.3	3.7
Below average	5.5	93.6	1.3	9.2	86.7	3.1
Average	5.4	93.2	1.0	8.5	90.3	0.5
Above average	4.4	95.0	0.6	8.4	90.9	0.4
High	7.3	91.8	0.8	19.0	79.8	1.1

Source: (MICS, 2018)

The overage rate for low and below-average income households at the basic education level is 6.8 percent (3.1+3.7), which is significantly higher than the 1.5 percent (0.4+1.1) overage rate for higher and above-average income households. This suggests that the standard of living has a significant impact on late enrollment.

It is worth noting that the number of students from higher and above-average income households at the basic education level has increased to 27.4 percent (19.0+8.4).

Dropout rates at the primary and basic secondary education level

Regarding school dropouts, 97.3 percent of primary education graduates are enrolled in general secondary education schools, indicating a dropout rate of 1.1 percent (Table 4.1.6).

Table 4.1. 6. Gross enrollment in primary and basic education and graduation rate (by gender)

	Gross enrollment in the final year of primary education	Attainment of primary education	Gross enrollment in the final year of basic education	Attainment of basic education
Total	92.5	98.4	98.6	92.6
Male	85.5	97.5	93.0	89.3
Female	99.2	99.4	105.2	95.6

The gross enrollment rate for the final year of primary education is 92.5 percent, indicating that 7.5 percent of children who were in the previous grade dropped out of primary school. Furthermore, 1.6 percent of students in the 5th grade dropped out before graduation, and the reasons for this must be further investigated. The rate of students enrolled in the final year of basic education is higher at 98.6 percent compared to primary education, but 6 percent dropped out before graduation.

There has been a 14.7 percent decline in basic education enrollment for children from below-average income households (11.7+3.0), and it is crucial to explore the underlying causes and implement comprehensive measures that address the specific needs of low-income learners (Table 4.1.7).

Table 4.1. 7. Dropout rates at the primary and general secondary education level (by living standard and gender)

Living standard	Primary education			Basic education		
	Dropout	Female	Male	Dropout	Female	Male
Low	3.3	2.6	4.0	6.7	1.5	11.7
Below average	4.3	2.8	5.7	3.3	3.6	3.0
Average	4.1	4.8	3.4	5.3	4.0	6.3
Above average	3.5	1.8	5.3	2.5	3.1	2.0
High	3.0	1.1	4.7	4.7	5.1	4.4

Source: (MICS, 2018)

It is notable that the dropout rate in the capital city is higher at all education levels compared to other regions, with female students experiencing a 1.4-point higher dropout rate than male students at the basic education level. This contradicts the general trend and gender relations in the Mongolian education sector, and therefore requires immediate action to clarify the causes. In rural baghs, the dropout rate for male students is 11.4 percent, which is attributed to the interest and necessity of herder children to pursue animal husbandry, remoteness from schools, inadequacy of dormitories, poor living standards, education of parents and guardians, and sometimes the quality of education. Further research is needed to identify the contributing factors and develop suitable responses (Table 4.1.8).

Table 4.1. 8. Dropout rates at the primary and general secondary education level (by location and gender)

Location	Primary education			Basic education		
	Dropout	Female	Male	Dropout	Female	Male
Urban city	4.2	2.9	5.5	4.4	4.5	4.3
Capital city	5.6	3.9	7.2	6.0	6.7	5.3
Aimag center	1.4	1.1	1.8	1.3	0.6	2.1
Rural area	2.6	2.0	3.1	4.9	1.4	8.1

Soum city	1.8	1.6	1.9	1.7	0.5	2.8
Rural bagh	3.1	2.3	3.9	6.8	2.0	11.4

Source: (MICS, 2018)

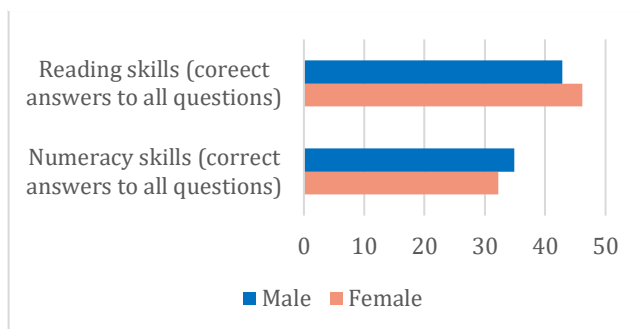
While the performance of students' basic skills in primary and basic education is improving as they progress through higher levels of education, their numeracy skills are consistently lower than their reading abilities at all levels of education.

Basic learning skills

Assessment of the progress of general secondary school students' knowledge and skills is conducted at the school level for each class and subject, following the rules governing external evaluation (Minister of Education C. a., 2018, A/425). According to these rules, the Education Evaluation Agency conducts a sample external quality assessment survey annually for each level of primary, basic, and secondary education. Starting in 2019, the quality assessment survey covers 9th-grade students from all schools. As a result, it is possible to determine the quality of education in each school annually to a certain extent. However, due to the COVID-19 pandemic, no quality assessment has been conducted in the past two years.

It is not possible to compare the results of school-level assessments (class progression, graduation) with the results of external assessments, which differ in content, methodology, and organization. Therefore, we have considered the 2018 MICS basic skills performance indicators as a source of reading and numeracy skills. The MICS is an internationally representative survey conducted in accordance with international methodology.

Figure 4.1. 5. Basic learning skills

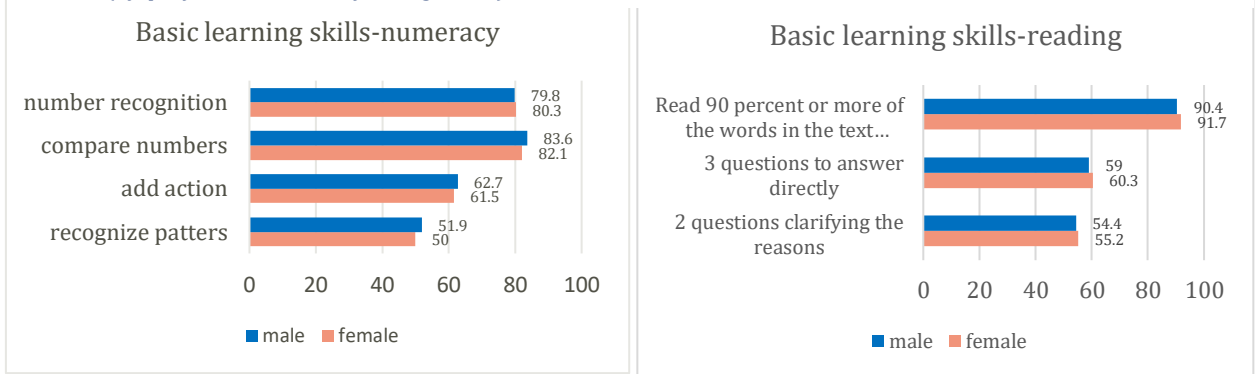


The survey covered three levels: 2nd and 3rd grade, primary, and basic education. Basic reading skills for 2nd and 3rd-grade primary school students were found to be 44.4 percent (46.2 percent for females and 42.8 percent for males), while numeracy skills were 33.6 percent (32.2 percent for females and 34.9 percent for

males). Although male students perform 2.7 points better than females in numeracy skills, their reading ability is 3.4 points lower than that of their female peers. The task performance assessment results show that 80.1 percent of students completed the number recognition task, 82.9 percent completed the comparison task, 62.1 percent completed the addition task, and 51.0 percent correctly determined the regularity task.

Additionally, 91.0 percent of students correctly read 90 percent or more words in the reading text. Furthermore, 59.6 percent answered the reading comprehension test or 3 direct questions correctly, and 54.4 percent correctly answered 2 clarification questions (Figure 4.1.6).

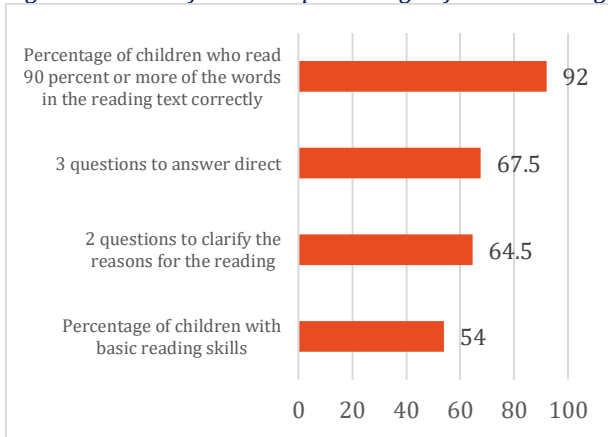
Figure 4.1. 6. Percentage of basic reading and numeracy skills in primary education, and 2nd and 3rd-grade students (by performance ability and gender)



Source: (MICS, 2018)

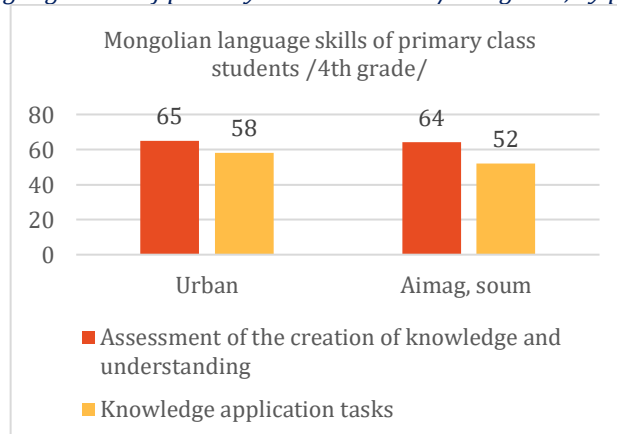
According to Figure 4.1.6, 54.0 percent of primary school students have basic reading skills. Additionally, female students exhibit higher basic reading skills compared to male students by 1.3 points. It is worth noting that 92.0 percent of students can accurately read 90 percent or more words from a given reading text. Moreover, 67.6 percent of students were able to answer a reading comprehension test consisting of three direct questions, while 64.5 percent answered two clarification questions.

Figure 4.1. 7. Performance percentage of basic reading skills of primary school students (by performance)



Source: (MICS, 2018)

Figure 4.1. 8. Mongolian language skills of primary school students / 4th grade, by percentage /



Source: (IE, 2019)

According to the 2019 survey conducted by the Institute of Education (IE), completion rates for tasks that assess knowledge of the Mongolian language among primary school students ranged from 64 to 65 percent. Meanwhile, completion rates for tasks that require application of knowledge ranged from 52 to 58 percent (refer to Figure № 4.1.8).

It is worth noting that although the objectives of the MICS and the Implementation of the General Education Curriculum and Its Influencing Factors survey (IE, 2019) differ, both surveys indicate lower levels of students' ability to ask questions and apply their knowledge compared to other indicators.

Figure 4.1. 9. Percentage of students' basic numeracy skills (by performance)

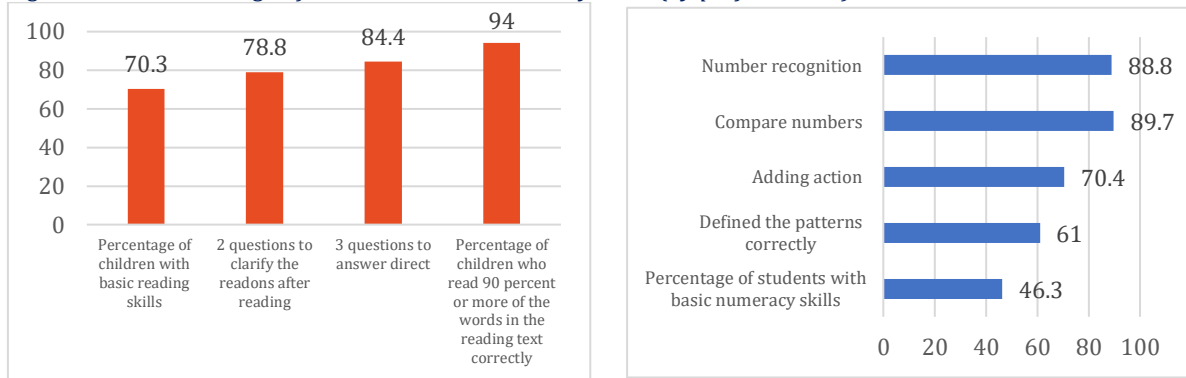
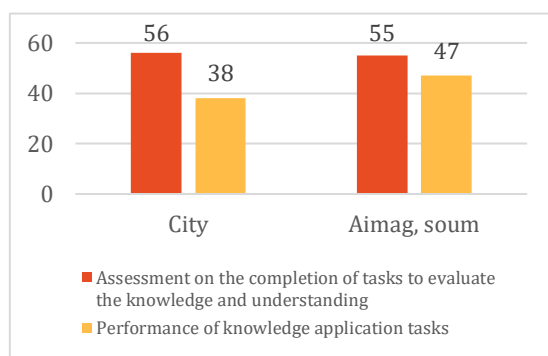


Figure 4.1.9 indicates that 46.3 percent of **primary school** students have acquired **basic numeracy skills**, with male students outperforming female students by 1.2 percentage points. Additionally, 88.8 percent of students completed the number recognition task, while 89.7 percent completed the comparison task. For the addition task, 70.4 percent of students completed it, while only 61.0 percent of students were able to correctly determine the regularity.

Moreover, the 2019 survey conducted by the Institute of Education (IE) found that completion rates for tasks that assess mathematical knowledge and understanding among primary school students were 55-56 percent, while completion rates for tasks that require application of knowledge ranged from 38-47 percent (refer to Figure 4.1.10).

Figure 4.1. 10. Mathematical skills of primary school students / 4th grade /



Both of the aforementioned studies highlight the importance of improving the quality of primary mathematics education, with a particular emphasis on the acquisition of basic numeracy skills and the ability to apply knowledge.

The Institute of Education's (IE) 2019 survey concludes that "the core curriculum of primary education identifies the abilities of critical thinking, making assumptions, and working with information as one of the general skills to be acquired through research. The analysis shows that although students in the study have acquired a certain

level of these skills, there remains more to be addressed. To ensure that children acquire critical thinking skills in stages from primary school onwards, it is essential to focus on improving the content and methodology of teaching. It is crucial to use teaching methods that help strengthen the knowledge and understanding of primary school students."

In addition, Figure 4.1.11 indicates that 70.3 percent of **primary school** students have mastered **basic reading skills**, with female students performing 0.4 percentage points better than their male counterparts. Furthermore, 94.0 percent of students correctly read 90 percent or more of the words in the reading text. Regarding the reading comprehension test, 84.4 percent of students answered three direct questions, while 78.8 percent answered two clarification questions.

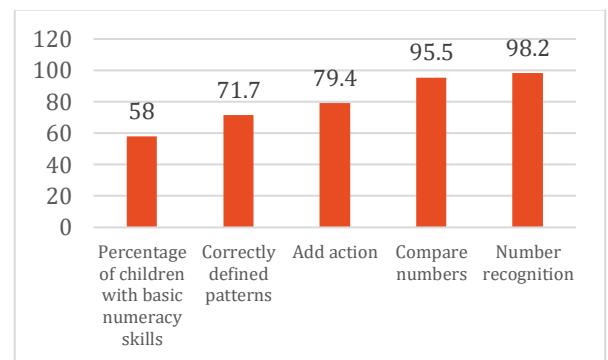
Figure 4.1. 11. Percentage of students' basic reading skills (by performance)

Based on the performance of students' basic reading skills, it can be concluded that although progress has been made in all areas, the completion rate for clarification questions is relatively lower than that of other tasks at each stage. Additionally, female students tend to perform better than male students in reading skills at all levels of primary and secondary education.

Source: (MICS, 2018)

Figure 4.1. 12. Percentage of mathematic skills performance

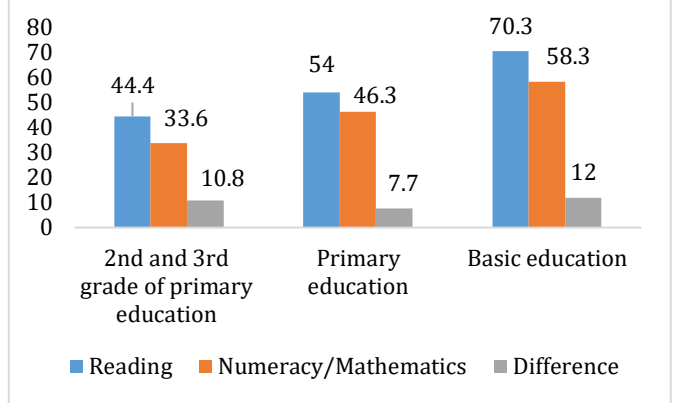
At the **basic secondary education level**, 58.3 percent of students have mastered basic secondary numeracy skills, and female students perform 8.6 percentage points better than male students in numeracy skills. The completion rates for tasks such as identifying patterns and performing a number of actions are relatively lower than that of other tasks, although students' performance in basic numeracy skills generally improves as they progress through levels of education. At the primary education level, male students perform better in basic mathematics skills, while at the basic education level, the performance of female students is higher.



Although students' performance in basic numeracy skills improves as they progress through the levels of education, the completion rate for tasks involving identifying patterns or performing multiple actions is relatively lower than other tasks. At the primary education level, male students outperformed female students in basic mathematics skills, but at the basic education level, female students showed better performance in basic mathematics skills (Figure 4.1.12).

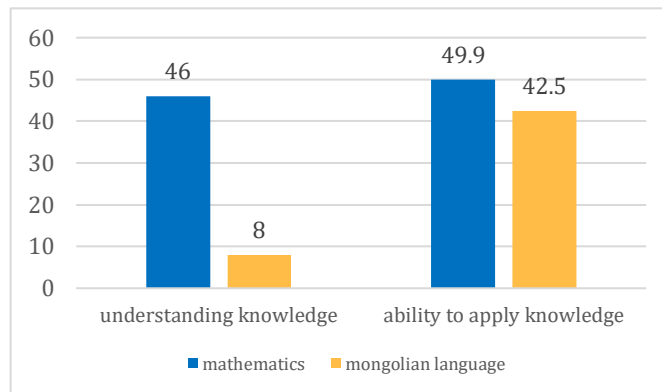
The above results indicate that the ability to read, comprehend, reason, and identify patterns is comparatively lower than other tasks. However, as students progress, a general improvement in this ability can be observed. It is crucial to consider whether this improvement in skills is linked to the quality of education or other factors such as the developmental characteristics of growing children. Nonetheless, it is worth noting that students' performance in basic numeracy skills is 7.7-12 percent lower than their performance in basic reading skills at all education levels (Figure 4.1.13).

Figure 4.1. 13. Performance of basic skills



Source: (MICS, 2018)

Figure 4.1. 14. Completion of basic secondary school mathematics and Mongolian language assignments (8th grade)



Based on the 2019 survey conducted by the Institute of Education, it was found that the level of knowledge and understanding of middle school students (4th grade) for both mathematics and Mongolian language subjects is quite similar, ranging from 46 to 49.9 percent (Figure N°4.1.13). However, the ability to apply mathematical knowledge is very poor.

Learning skills at the end of primary and secondary education levels

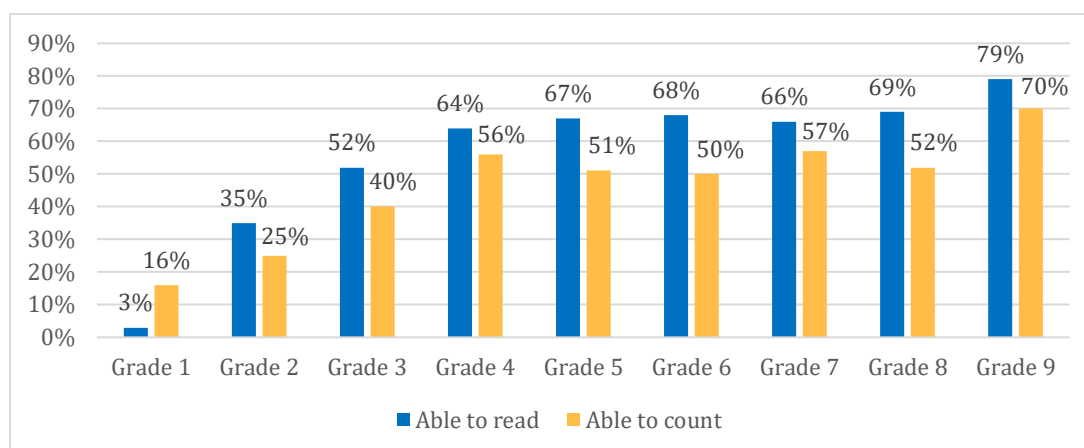
The basic reading⁴ and numeracy⁵ skills of students in grades 1-9, as revealed by the results of the 2018 MICS assessment, do not exhibit a consistent increase with each grade (Figure 4.1.15).

Source: (MICS, 2018)

⁴ The **reading ability** is determined by the percentage of children aged 7-14 who can correctly read 90 percent or more words in a given text, respond to three direct questions, and answer both clarification questions.

⁵ The **numeracy ability** is determined by the percentage of children aged 7-14 who can correctly complete all exercises for recognizing numbers, adding numbers, and identifying patterns.

Figure 4.1. 15. Basic reading and numeracy skills for students in 1-9 grades (by percentage)



Source: (MICS, 2018)

The assessment of the 2018 MICS showed that students' reading and numeracy skills at grades 1-9 do not exhibit a steady increase with each grade (Figure 4.1.14). At the end of primary education (5th grade), students' reading skills were evaluated at 67 percent, while numeracy skills were evaluated at 51 percent. At the end of basic education (9th grade), the evaluations increased to 79 percent and 70 percent, respectively. However, there is a sharp decline of 11 percent in students' numeracy skills in the 6th grade, which is the grade of basic education. This highlights the need to focus on student adaptation and teacher methodology between levels of education. Additionally, the scores of 79 percent in reading and 70 percent in numeracy skills for 9th-grade students are insufficient, and it is essential to investigate and address the factors causing these shortcomings. At the primary and secondary education levels, the same pattern for reading and numeracy skills performance among students observed during other levels of education is maintained in the final years (grades 5 and 9).

Starting in 2021, the school readiness survey of new entrants to general secondary schools has been conducted nationwide as part of the evaluation reform in the sector. This is an important measure to ensure continuity between education levels.

However, there are various factors that affect the quality of education, such as the diverse material environment of general secondary education schools, the stark contrasts of nature, climate, lifestyles, and living standards of students, inadequate infrastructure, communications and social services, the quality of life of citizens, the professionalism of teaching staff, and unsustainable school governance. These factors cause large gaps in the quality of education between urban and rural areas. For instance, the national survey conducted in 2018 on the quality of basic education revealed that the academic achievement of rural school students was 2.0-8.2 percent lower than that of urban learners. To reduce the gaps in academic achievement, it is necessary to improve the learning environment, enhance dormitory services, introduce ICT in training, develop digitalized learning systems and open educational resources, and use other resources to meet the learning objectives of the curriculum. In other words, improving the quality of education is essential to ensure the sustainability of their further quality learning by transforming the entire learning environment, including the curriculum, into an environment that allows each child to meet their specific learning needs.

SDG:4.2: EARLY CHILDHOOD AND PRE-SCHOOL EDUCATION

The Incheon Declaration states that “beginning at birth, early childhood care and education (ECCE) lays the foundation for children’s long-term development, well-being and health” (UNESCO, 2015).

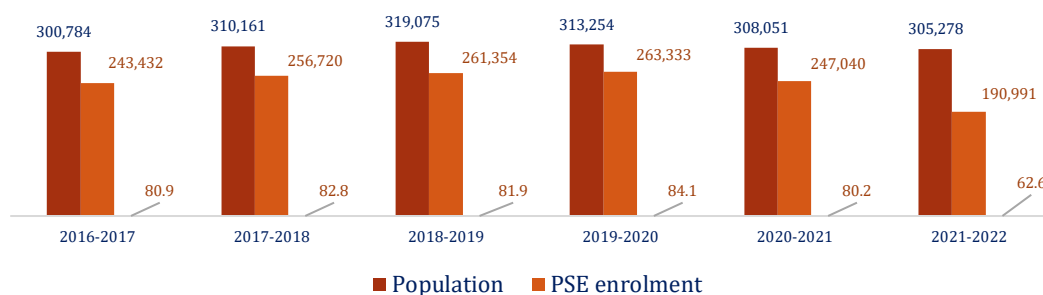
The development of young children is one of Mongolia's most cherished values, and the essence of Mongolian intelligence and values is preserved in their proverbs. One such proverb is "From child to man, from foal to horse," which captures the Mongolian tradition of nurturing and attending to the upbringing and development of children from an early age. This is further confirmed by the statement that "Although Mongolia is a low-income country, it is internationally recognized as one of the leading countries in terms of progress and development in its preschool education system, development of each child, and public funding of the preschool education sector" (MES, World Bank, Global Partnership for Education, 2019).

Mongolia provides preschool education to all children from the age of 2 to school enrollment, through regular and alternative education, covering 100 percent of normative expenditures per child from the state budget, regardless of the ownership of the preschool education facility.

To maintain the level of preschool enrollment in Mongolia and ensure the quality of service, it is necessary to implement new levels of cooperation with parents and guardians.

Mongolia's policies to create legal environments and increase state budget and investment funding to support preschool education have led to a significant increase in preschool enrollment among children aged 2-5. In the academic year of 2019-2020, prior to the COVID-19 outbreak, the enrollment rate reached 84.1 percent (Figure 4.2.1), which is 24 points higher than in 2010 and 2.5 points higher than in 2015. Although Mongolia's population of children aged 2-5 has steadily increased over the past six years, from 300,784 in 2016 to 327,771 in 2021, preschool enrollment has declined in the last two years (Figure 4.2.1).

Figure 4.2. 1. Number and percentage of total children aged 2-5, and the number of children enrolled in preschool



On average, the net share of preschool enrollment for the 2016-2021 academic year is **78.7 percent**, while the average enrollment in kindergarten is **72.3 percent**. In 2016, the starting year for achieving the SDG 4.2 target, preschool enrollment was 80.9 percent, and it has further increased to 84.1 percent in 2019. However, due to the widespread risks of the COVID-19 pandemic, enrollment has declined by 19 percent in recent years (Figure 4.2.2).

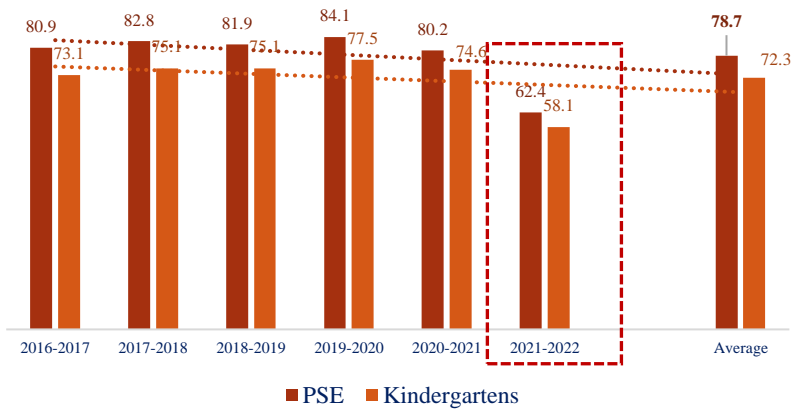
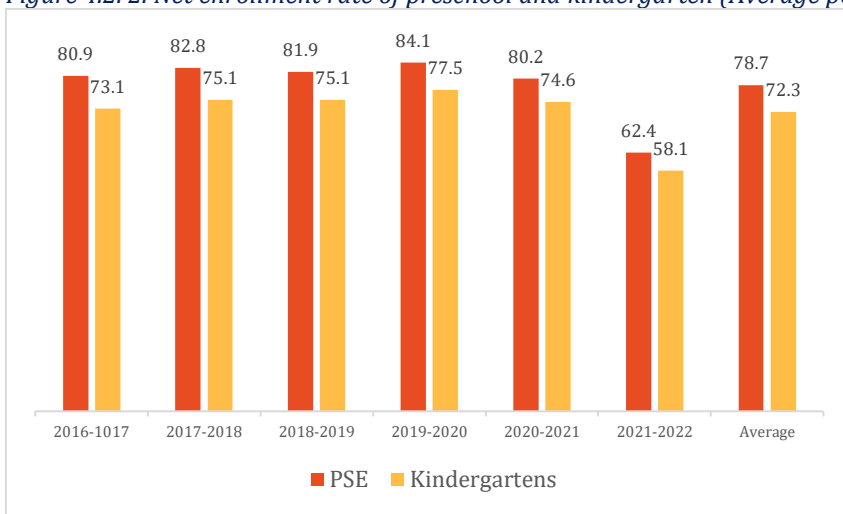
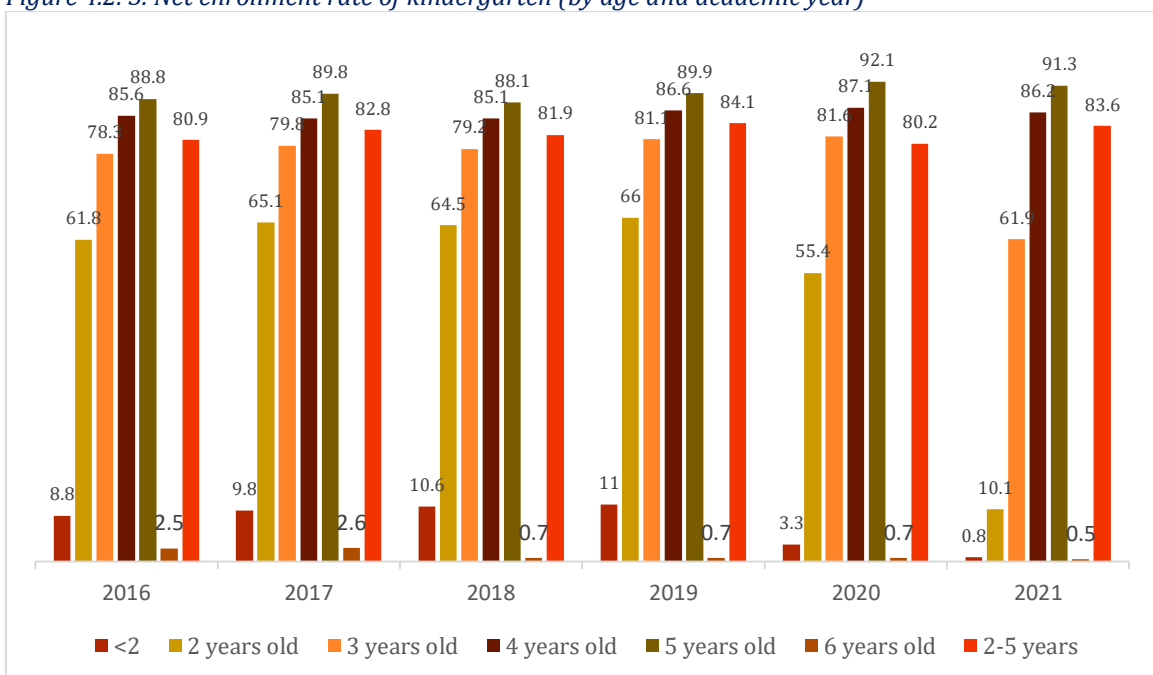


Figure 4.2. 2. Net enrollment rate of preschool and kindergarten (Average per academic year,)



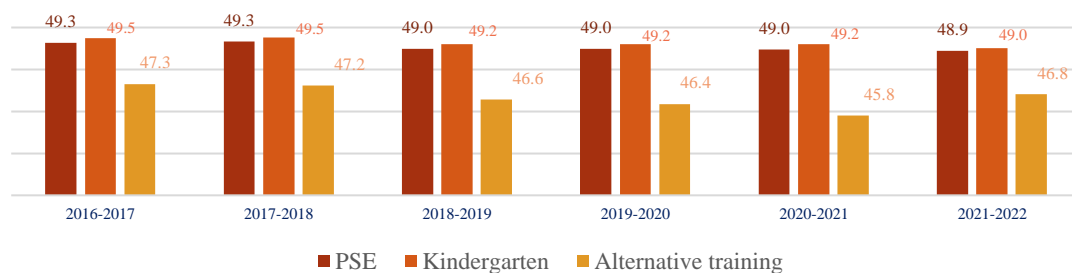
Each year, there is a repeated pattern of the net share of preschool enrollment increasing with children's age (Figure 4.2.3).

Figure 4.2. 3. Net enrollment rate of kindergarten (by age and academic year)



In 2016, 88.8 percent of 5-year-olds were enrolled in preschool education. Since then, this number has been increasing, and in 2021, it reached 91.3 percent. This statistic is a positive outcome of the comprehensive measures taken by the Government of Mongolia to implement the policy of full enrollment of 5-year-old children in preschool education. Of all pre-school and kindergarten attendees, 49 percent are female

Figure 4.2. 4. Net enrollment rate of girls in preschool education (by age and academic year)



Preschool education curriculum, training and organization of activities: In 2019, the preschool curriculum was updated to allow for the planning of learning activities tailored to each child's specific needs and the realistic assessment of children's developmental progress (MECSS, 2019, A/484). Additionally, the dissemination of recommendations for program implementation has been instrumental in realizing the improved program.

The content of the preschool education curriculum aims to support the physical, cognitive, and social development of young children through programs such as "Movement," "Health," "Linguistics," "Simple Mathematical Concepts," "Nature and Environment," and "Music and Fine Arts," which are targeted to develop each area of study. The success of each area of study is determined at three levels based on the age and developmental characteristics of the child. Level "I" is designed for 2-year-olds, "II" for 3-4-year-olds, and level "III" is dedicated to 5-year-old students.

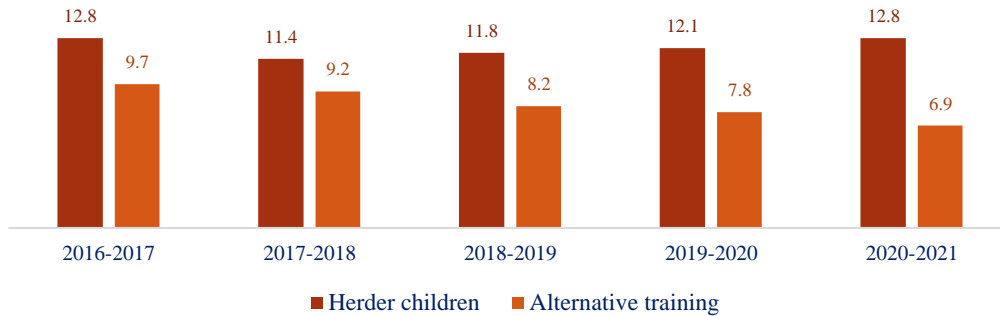
The Law on Preschool Education stipulates that "Preschool education services in the form of multi-grade training, mobile, shifted training" for children who are unable to attend regular kindergarten training shall be financed from the state budget, identical to kindergarten service.

Preschool education assessments include *an assessment of the development and school readiness of the children* involved in the service (Minister of Education culture science and sports, 2020). The "Child Development Assessment" collects information about the physical, cognitive, and social changes and development of children in regular and alternative kindergarten education. The "School Readiness Assessment" identifies the skills, practices, and attitudes required for children to enroll in schools and identifies areas for additional support. Kindergartens work with associated agencies to ensure that all preschool children are covered by the "Child Development Assessment." The "School Readiness Assessment" is organized by general secondary education schools with the participation of all-new first-grade students.

Mongolia requires flexible educational services for specific groups of nomadic herders because of its vast territory. In the past 20 years, efforts to create a legal environment and allocate the necessary budget to assimilate alternative training services tailored to the specifics of Mongolia have been successful. However, **although the total number of children in herder households involved in**

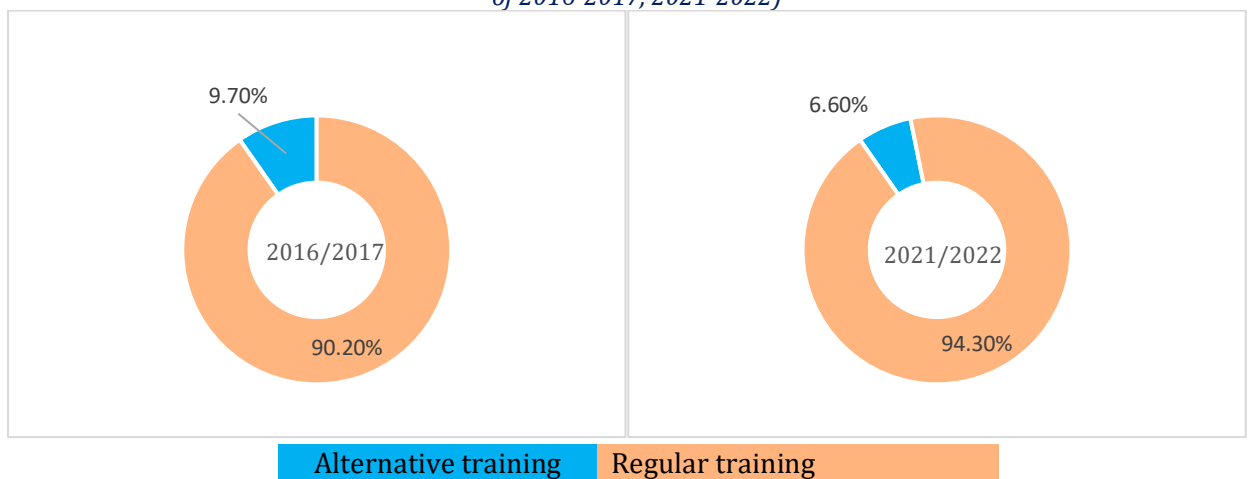
preschool services has not decreased, their enrollment in alternative education has decreased to 6.9% in the academic year of 2020-2021. This may have increased the number of children enrolled in kindergartens on one hand, but decreased due to alternative education funding on the other (Figure 4.2.5).

Figure 4.2. 5. Percentage of herder children and children enrolled in alternative pre-school education



Alternative educational services are provided within the classroom or family setting, either individually or in the form of combined activities. In the academic year of 2016-2017, the enrollment level in alternative education was 9.7 percent, but it has decreased to 6.6 percent in the academic year of 2021-2022, while regular kindergarten enrollment for herders' kindergartens has increased by 4.1 percent (Figure 4.2.6).

Figure 4.2. 6. Enrollment rate of regular and alternative preschool education (Comparison of the academic years of 2016-2017, 2021-2022)



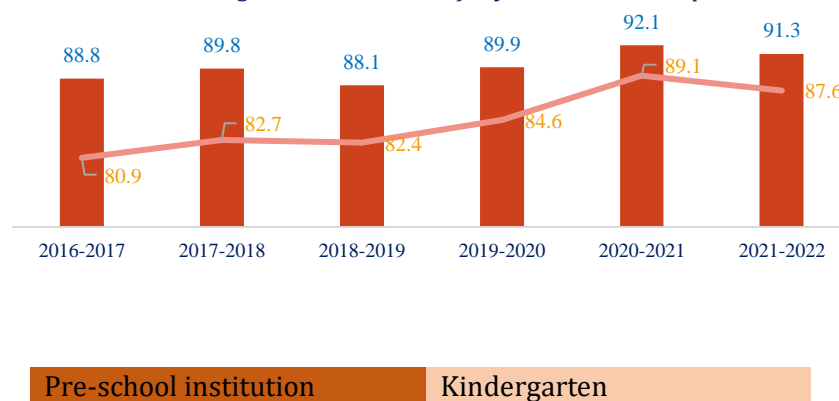
The equity indicator for preschool funding has met international standards. However, researchers have found that the budget for alternative training is the “most vulnerable or unreliable.” This is because there have been violations of the Law on the State budget, such as changing the purpose of approved budgets of aimags and districts, merging and shifting between allocated funds. These violations have contributed to the decline in enrollment in alternative educational services (UNDP, Analysis of budget expenditures in the education sector, 2021).

The continuity between preschool and primary education is ensured by providing one year of preschool training to each child. The enrollment of each child in a one-year preschool training is reflected in the Action Plan of the Government of Mongolia for 2020-2024 as “the enrollment age of

preschool children shall be increased to 3-5, and ensure school readiness for all 5-year-old children." This policy reform to include all 5-year-olds in preschool and establish a school readiness assessment system is essential in ensuring progress in the Mongolian preschool sub-sector to meet the goals set forth in SDG 4.2. **Comprehensive measures** have been taken within the framework of full coverage of 5-year-old children in preschool services to achieve the goal set in SDG 4.2 in 2021 and to improve the quality of preschool education. These measures include:

- Starting kindergarten classroom training in stages during the COVID-19 epidemic and taking measures to fully cover 5-year-old children in preschool services.
- Developing the first textbook to prepare 5-year-olds for school.
- Conducting a study to identify teaching and learning needs to support the comprehensive development of school-age children and developing recommendations for preparatory group teachers.
- Supplying toys and learning materials to children of 197 preparatory groups from 21 aimags.
- Conducting school readiness assessments among 5-year-old learners.

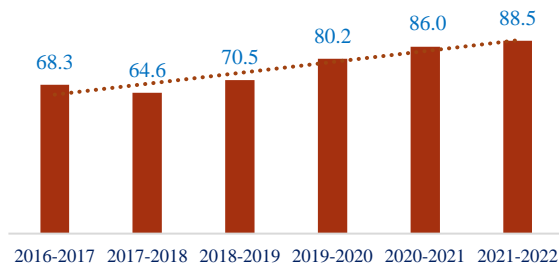
Figure 4.2. 7. Preschool and kindergarten enrollment of 5-year-old children prior to school enrollment



Although the percentage of 5-year-old children attending preschool has increased compared to the 2019-2020 academic year, it decreased by 0.8 percent in 2021 due to the COVID-19 pandemic, resulting in a 1.5 percent reduction in kindergarten enrollment from the previous year (Figure 4.2.7).

However, the enrollment level of first-grade students in preschool education (prior to school enrollment) has increased each year between 2017 and 2021. The number of first-graders enrolled in preschool and prepared for school has increased by 20.2 percentage points compared to the 2020-2021 academic year (Figure 4.2.7). This indicator is a significant outcome of the government's policies and efforts to provide full coverage of all 5-year-old children in preschool education. Additionally, the workload of kindergartens was reduced due to quarantine measures following the COVID-19 pandemic, providing an opportunity for 5-year-old children to attend kindergartens.

Figure 4.2. 8. Pre-school enrollment of first-grade students



The national-level pilot survey to assess the quality of preschool education was conducted for the first time, covering 23,462 first-graders from 323 schools, with a completion rate of 60.7 percent. Of the children who participated in the survey to evaluate their school readiness, 97.0 percent (22,727) were enrolled in kindergarten or distance learning during the 2020-2021 academic year,

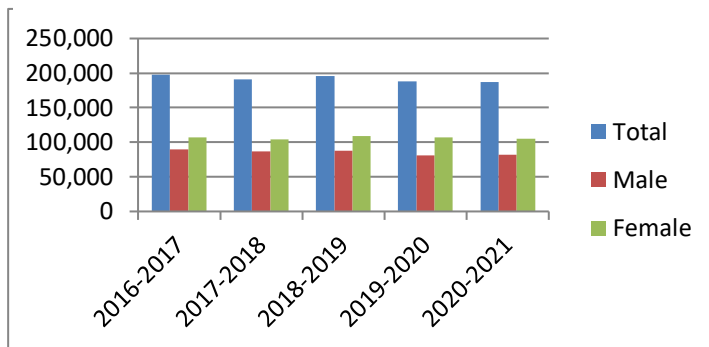
while 3 percent (735) did not have access to preschool education. The average performance of preschool children was 60.8 percent, while the non-preschool children's performance was 2.1 points lower at 58.7 percent.

SDG 4.3 VOCATIONAL EDUCATION, TRAINING AND TERTIARY EDUCATION

Adults who have graduated from high school can receive educational services from TVET in three levels: vocational training, vocational education, and technical education, as well as tertiary education with three levels: bachelor's, master's, and doctoral. As of 2021, 33% of the total population has been involved in all stages of education, of which 17% belong to TVET and tertiary education.

Between 2016 and 2021, a total of 187,458 students have been studying in vocational and higher education institutions, of which 56% are women and 44% are men. This enrollment of female students is higher than that in preschool (PE), primary, and secondary education (GSE). In terms of each sector, 40% of students are studying in TVET institutes, while 61% are enrolled in HE institutions (Figure 4.3.1).

Figure 4.3. 1. Number of students



In 2021, the total number of students decreased by 5.0% compared to 2016, with male students decreasing by 8.7% and female students by 1.8%, due to a decrease in the number of GES graduates in 2019-2020. **Despite the expansion of vocational education and training and tertiary education for all, accessibility has declined in recent years.**

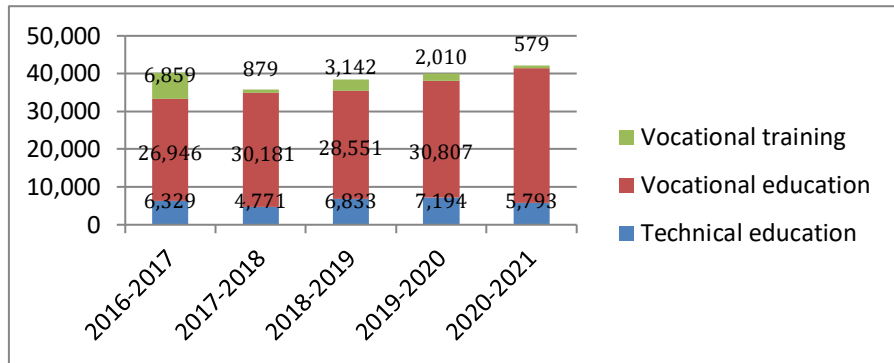
In 2016, 73.5% of general secondary school graduates enrolled in higher education institutions, accounting for 67.1% of the total enrollment. In 2020, 67.5% of general secondary school graduates entered higher education institutions, accounting for 76.6% of the total enrollment.

In 2020, 11,128 students who graduated from 9th and 12th grade were enrolled in vocational and technical education institutions, accounting for 49.0% of the total enrollment. The remaining 51.0% are of non-traditional age, indicating that vocational and higher education has become accessible to all.

In 2016, 15.8% of students in TVET institutions were studying at the level of technical education, 67.1% at vocational education, and 17.1% at vocational training. In 2021, 13.8% of all students are enrolled in technical education, 84.8% in vocational education, and 1.4% in vocational training

(Figure 4.3.2). Compared to five years ago, the number of students in vocational education has increased by 8,755. The number of students at the level of technical education has been fluctuating, and the number of students at the level of vocational training has fallen sharply. The increase in the number of students in vocational education shows that citizens are more interested in acquiring a profession that meets the demands of the labor market and employer requirements, rather than acquiring a competency unit in a short period of time.

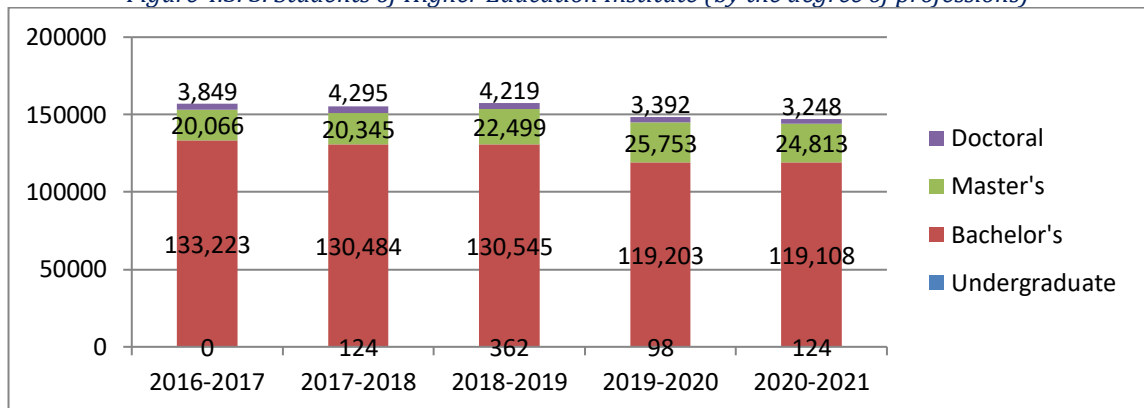
Figure 4.3. 2. Students of TVET Institutions (by training level)



In 2016, 84.8% of students in higher education institutes were enrolled in bachelor's degree programs, while 12.8% were in master's programs and 2.4% were pursuing doctorates. However, in 2021, the distribution has changed,

with 80.9% of students pursuing bachelor's degrees, 16.8% in master's programs, and 2.2% in doctoral programs (see Chart 4.3.2). Over the past five years, the number of undergraduate students has decreased by 10.6%, while the number of master's students has increased by 23.6%. However, the number of doctoral students has decreased by 15.6%.

Figure 4.3. 3. Students of Higher Education Institute (by the degree of professions)



Between 2016 and 2021, the number of students in vocational education and training per 10,000 population decreased by 7% (from 129 to 120), while the number of students in higher education decreased by 12% (from 632 to 558). These figures indicate a need to focus on increasing accessibility. Tertiary education offers students the flexibility to re-study subjects and expand their study period by taking time off. While this provides opportunities to students, it can also negatively impact drop-out rates due to prolonged periods of unsuccessful learning. Although the number of inactive students is unknown, it is likely a contributing factor to the reduced accessibility of tertiary education.

Although the total population of Mongolia increased by 9.3% from 2016 to 2020, the number of young people aged 15-24 decreased by 9.3%, resulting in their share of the total population dropping from 15.8% to 13.6%. While the number of students in TVET institutions remained relatively stable,

the number of secondary school graduates decreased sharply in 2019-2020 due to the transition from a 10-year to a 12-year education system. Additionally, the number of students in higher education institutes decreased by 6.3% between 2016 and 2020 due to an increase in the entrance threshold.

The number of students in the vocational education and training sector has been steadily increasing in recent years due to various policies implemented by the Government of Mongolia and the Ministry of Labor and Social Welfare since 2010. These policies include transferring the Vocational Training Center and Polytechnic College system to a new "competency-based training and assessment" system that meets the needs of the labor market and employers. Additionally, measures were implemented to promote and enhance the reputation of the vocational education and training sector among the public, particularly the youth. Furthermore, the Law on Vocational Education and Training was revised in 2009 and amended in 2012, 2015, and 2016 to support this sector.

As of 2018-2021, on average 28.9% of the total population aged 15-24 were enrolled in vocational and higher education. Mongolia's TVET enrollment is higher than the global average of 5% and 2-16% in the Asia-Pacific region, according to UNESCO and UNICEF (2021).

The number of students aged 15-24 in TVET institutions increased by 9.5%, while in higher education institutes it decreased by 20.1% from 2016 to 2021 (refer to Table 4.3.1).

Table 4.3. 1. Number of students, percentage (by age group)

	Age group	2018-2019		2019-2020		2020-2021	
		Number	Percentage	Number	Percentage	Number	Percentage
TVET Institutions	15-24 year-old	28,745	74.6%	29,066	62.6%	31,476	74.8%
	25-59 year-old	9,781	25.4%	10,945	27.4%	10,597	25.2%
Higher education institute	15-24 year-old	119,822	76.0%	98,894	66.6%	95,753	65.0%
	25-59 year-old	37,803	24.0%	48,809	33.4%	46,048	35.0%

Source: statistics of MoLSW and MES

As of 2021, 25.2% of all students in TVET Institutions and 31.3% of all students in higher education institutes are between the ages of 25 and 59. In order to optimize the age groups, it is necessary to update some statistical data forms of the Ministry of Labor and Social Welfare.

Table 4.3.1 shows that the number of students aged 25-59 in vocational and higher education is increasing year by year, while the number of students over 60 is also increasing. This can be attributed to the technical, vocational, and tertiary education of the working-age population, as well as the acquisition of dual education and advanced education by those who have completed their education. It is necessary to increase lifelong learning opportunities for citizens, and there is a need to develop teaching and learning environments and methods that are tailored to their specific needs.

As the level of education increases, gender inequality is also on the rise, leading to the deepening of gender inequity not only in employment but also in the interpersonal relations of families, colleagues, and social groups, causing negative impacts.

Table 4.3.2 reveals that the gender ratio of students, measured by the number of female students per 1 male student, has remained stable at 0.6-0.7 in TVET Institutions, but has increased from 1.4 to 1.6 in higher education institutes between 2016 and 2021. In preschool, primary, and secondary education, this ratio is around 1.0, while it is lower in technical and vocational education. However, for undergraduate degrees, it ranges from 1.4-1.5, and for master's degrees, it is increasing to 1.7-2.0, while the level of doctoral degrees is declining to 1.4-1.2. In the Asia-Pacific region, women's access to higher education in 2019 was highest in ocean countries, at 21% (UNESCO, UNICEF, 2021). However, women in Mongolia are 40-50% more likely to have access to higher education than men.

Table 4.3. 2. Gender ratio of students (by the level of education)

Hierarchy of education, training level		2016-2017	2017-2018	2018-2019	2019-2020	2020-2021
TVET Institution	Total	0.7	0.6	0.6	0.7	0.7
Higher education institute	Total	1.4	1.4	1.5	1.6	1.6
	Higher with diploma	-	0.2	1.1	0.2	0.2
	Bachelor	1.4	1.4	1.4	1.5	1.5
	Master	1.7	1.7	1.8	2.0	2.0
	PhD (doctoral)	1.4	1.4	1.3	1.2	1.2

Source: statistics of MoLSW and MES

The gender ratio of approximately 1.0 in the total population of Mongolia implies that the educational gap between men and women will widen and gender inequality in family and community relations will deepen unless proper policies and measures are taken to ensure gender equality, especially for girls in the vocational education sector and for boys in the higher education sector.

In poor households, especially among herder households, boys' education is often neglected, leading them to drop out of secondary school and enter low-skilled jobs at an early age. This situation is exacerbated as the level of education increases, which in turn increases the risk of poverty. Research has shown that access to education is the main way out of poverty for poor households since the lower the level of education of the household head, the higher the risk of poverty (NSO, The Image of Poverty, 2018; 2020).

Creating opportunities for herders and farmers to receive on-the-job training, education, and improve their skills is critical not only for their personal development but also for the development of the agricultural sector, which is a significant sector in Mongolia.

Although girls now have equal access to higher education, there is still a lack of specific support services tailored to their unique needs, such as facilities for pregnant and breastfeeding students and affordable or government-subsidized childcare services. Parents see higher education as a way to spare their daughters from physical labor and provide better living conditions. Furthermore, girls tend to perform better than boys academically in secondary schools, giving them an advantage in pursuing higher education. Despite this, research suggests that women still face obstacles in finding employment and advancing their education due to their biological roles in childbearing and parenting.

The desire to obtain professional education is growing among children and youth with disabilities, thanks to a recent shift in attitudes that recognizes that people with disabilities can work and earn a living, just like everyone else. Successful individuals with disabilities have also started sharing their work and life experiences, further fueling this trend.

The Ministry of Education and Science's effort to release detailed statistics on higher education enrollment of students with disabilities since the 2019-2020 academic year is commendable. The Education Loan Fund (ELF) supports students with disabilities by providing full-tuition fees in accordance with Resolution No. 71 of the Government of Mongolia, which approves the scholarship award to students of higher education institutions (Table 4.3.3). Additionally, this resolution covers undergraduate tuition fees for students who are orphans, students whose parents have disabilities, and/or are completely disabled. Despite the government's significant financial support, there remains a lack of specialized facilities for these students. Addressing this requires both government and public support in creating an inclusive learning environment that caters to the unique needs of students with disabilities. This includes setting up specialized schools and programs, training teachers in special needs education, and providing appropriate training materials and services.

Table 4.3. 3. Students with disabilities (by level of education)

Level of Education	Number of students	2018-2019	2019-2020	2020-2021	
TVET Institution	Total	555	585	767	
	Of which	Male	308	316	395
		Female	247	269	372
Higher education institute	Total	1056	828	877	
	Of which	Male	-	-	298
		Female	-	-	579

Source: statistics of MoLSW and ELF

In the higher education sector, 0.6% of students have disabilities while TVET institutions have 1.8% of students with disabilities (Table 4.3.3). The number of students with disabilities attending TVET institutions reached 767 in the 2020-2021 academic year, an increased of 31.1% from the previous year. Also, the number of female students with disabilities also increased by 38.5% in the 2020-2021 academic year. Additionally, in the same academic year, 66% of students with disabilities enrolled in higher education institutes were women.

To improve access to TVET institutions, the "Partnership-based technical and vocational education and training" project, implemented by the German International Cooperation Agency (GIZ) and the Ministry of Labor and Social Welfare of Mongolia in 2019, created favorable conditions for children and youth with disabilities to study and acquire vocational education. For instance, the project "Improving the environment and increasing access to TVET Institutions in Mongolia" was funded by the German Ministry of Economic and Development Cooperation and strengthened human resource capacity by assessing and recommending the availability of infrastructure in 7 polytechnic colleges' competency centers. The TVET institutions improved their doorways, built roads for the visually impaired, installed information boards in Braille, repaired ramps, automatic doors, toilets, conference halls, and stairs for people with disabilities. They also installed adequate lighting in hallways and classrooms for the deaf and developed and widely used an application to assess and evaluate environmental accessibility standards.

The number of students in vocational training educational institutions is constantly growing due to government support, including dormitory and meal provisions, as well as scholarships for tuition fees. This support is considered a form of social security for students.


In the academic year of 2020-2021, 42,073 students were enrolled in 75 TVET institutions, offering more than 225 specialties in 16 fields. This enrollment reflects an increase of 8.9% compared to the average of the previous four years. The government has provided significant financial support to students in TVET institutions and polytechnic colleges through various resolutions. For instance, Government Resolution No. 294 of 2007 set the scholarship amount at MNT 23.0 thousand, which increased to MNT 45.0 thousand as per Resolution No. 30 of 2008, MNT 70.0 thousand as per Resolution No. 329 of 2013, and MNT 100.0 thousand according to Resolution No. 12 of 2019. Moreover, Resolution No. 44 of February 4, 2020, increased the scholarship amount to MNT 200,000 per month. Furthermore, the daily meal cost per student living in TVET institution dormitories increased to MNT 3,000.0 per day, as per Government Resolution No. 83 of 2020, compared to MNT 2,315.0 per day as per Resolution No. 106 of the Government in 2012. These measures have made vocational education more accessible to the public, and students do not face any economic difficulties to study at TVET institutions.

The accessibility of higher education institutions may be negatively impacted by the low funding support and constant increase in tuition fees.

Tuition fees account for more than 90 percent of higher education funding and have increased in recent years. Households have spent 2.3-3.8% of their total income on education in the last 6 years, according to the household socio-economic survey. The total number of students negatively affects the average tuition fee, while the gross domestic product and the average monthly household income have a positive impact (NSO, Analysis of Key Indicators of Higher Education, Factors Affecting It, 2019).

The MES has attempted to prevent the increase of tuition fees, but despite their efforts, the average undergraduate tuition fee increased from MNT 1,913,000 in the academic year of 2016-2017 to MNT 2,291,860 in the academic year of 2020-2021, with an average increase of 5% per year. Although tuition fees at state-owned higher education institutions are only slightly higher than those of private ones, students from poor households tend to choose schools with lower tuition fees. Moreover, private institutions offer flexible payment schedules which may result in differences in the quality of education. To prevent any qualitative differences in student education, an amendment to the Law on Higher Education was introduced in 2016, which stated that all higher education institutions must be accredited every five years. All schools must meet the same accreditation criteria, regardless of ownership or other differences, and as of 2021, 98% of all students are enrolled in accredited schools.

As of 2021, the average annual tuition fee at a higher education institution is less than twice the average monthly household income, indicating that there are only a few economic difficulties in studying at a higher education institution for households with above average income. However, lower-middle-income households in rural areas, where unemployment and poverty are high, continue to face economic difficulties in accessing higher education.



In the academic year of 2020-2021, only 6,256 students, who are orphans, have both parents disabled, or have one parent unable to work, were provided with tuition grants. This accounts for only 4.0% of the total number of students. While there is some support available for these students, there is very little that takes into account the social and economic differences of other students.

In addition, given the new context of digital transition for the future and the increasing use of information and communication technologies during the pandemic, it is important to ensure that the use of ICT does not widen the digital divide for vulnerable groups mentioned above. It is also crucial to increase funding and investment for their education.

The concentration of Higher Education Institutions (HEIs) in the capital city puts low-income rural students at a disadvantage, as they have to bear high costs to live and study in Ulaanbaatar. This also leads to issues related to rural-to-urban migration of families.


According to the Ministry of Education and Science (MES), there are 88 HEIs in Mongolia as of 2021, with 79 of them (89.8%) located in Ulaanbaatar. More than 92% of all students are studying in these institutions. Among them, 47.4% or 65,491 students come from rural areas, but only 7.3% or 11,359 students live in dormitories. However, it seems that this does not negatively affect their learning since more than 90% of all students who apply for dormitories are enrolled in one, and other students arrange their accommodation differently according to statistics from 2016-2021. But due to geographical differences, students from rural areas incur higher costs for education and travel expenses. Thus, travel expenses for these students are covered by the Education Loan Fund (ELF).

Rural residents often move to Ulaanbaatar temporarily or permanently for education and employment opportunities. They usually live in remote locations with poor infrastructure. Surveys conducted during the pandemic have shown that households in the ger districts do not have electricity or the internet. TVET and HEIs are mainly located in the city center, where student services like libraries and internet cafes are also available. It would be beneficial to bring such services closer to the ger districts to facilitate independent study and reduce traffic congestion in the city.

However, there are very few private schools in rural areas, and the number of public schools is declining. This is a persistent issue that needs attention. The number of students in 9 rural universities is decreasing each year, indicating unfavorable conditions and lower quality of education. The government has decided to address this issue by diversifying rural universities according to regional needs and establishing a University of Engineering and Technology, based on the mining industry, in 2021.

Improving the policy and legal environment for digital education and learning, and transforming the learning and teaching environment into a digital one, requires the participation of public-private partnerships and creative partnerships.

During the 2020 pandemic crisis, household expenditures increased on average, while poverty levels and expenditure inequality decreased slightly. According to B.Otgontugs (2021), the poverty rate decreased by 4.8 points and the Gini coefficient decreased by 0.026 points compared to 2019. Although the government took certain measures, such as providing a universal cash handout to every citizen, monthly cash benefits for children, and exemption from payment of household bills, additional costs associated with digital learning were observed for households with many students



whose income had decreased due to the quarantine. Despite these difficulties, higher education institutions implemented flexible arrangements for tuition fees as directed by the MES, preventing school dropouts that could have otherwise occurred.

In urban and rural areas, primary and secondary school children have different academic achievements. Wealthy families can afford to provide their children with early schooling, extended study periods, and more exposure to information technology, which has widened the knowledge gap between children from poor and non-poor households. This situation is likely to have been exacerbated by the pandemic. Many families with multiple children experienced a lack of computers and slow internet speeds, especially for rural students with limited access to the internet. As a result, there is a potential increase in the gap in information technology skills acquired by secondary school graduates, depending on the soft and hard IT infrastructure, digital content, availability of digital resources, and quality differences between TVET institutions and higher education institutes they enrolled in. Therefore, establishing and enforcing digital learning standards, and reaffirming best practices are crucial.

The quality and outcomes of teaching and learning activities are affected by differences in teachers' digital skills, their ability to prepare digital learning content, and digital communication methods. This is resulting in an increase in inequality in student learning. Organizing vocational education and training during the pandemic is challenging. There is a need to analyze the content of training and provide effective training in a combination of classroom and digital forms. For higher education institutions, it is crucial that the skills acquired by students in laboratory and practical classes are not lost during digital learning. Accepting skills learned from informal and daily life environments is also becoming an important issue. Providing opportunities for students to gain experience based on mutual understanding and cooperation with employers is essential, especially now, as many students who were unable to complete internships during the pandemic are entering the labor market.

Policies need to be implemented to eliminate the education and skills gap caused by the pandemic, in both the supply and demand of the labor market. This includes creating an environment that supports the acquisition of digital skills, as well as providing assistance for youth employment.

SDG: 4.4 WORK AND EMPLOYMENT SKILLS

In 2020, the population of Mongolia reached 3.4 million, with an average annual growth rate of 1.8 percent. The population age structure consists of children aged 0-18, accounting for 37.1 percent of the total population, young people aged 15-34, accounting for 30.7 percent, working-age people aged 18-59, accounting for 56.8 percent, and senior citizens, accounting for 7.4 percent. According to statistics from the National Statistical Office of Mongolia (NSO) as of the second quarter of 2021, the working-age population aged 15 and over is recognized as 2.1 million people in Mongolia, of which 1.2 million are part of the workforce, and 917,000 are outside the labor force. The government, Ministry of Education and Science, and Ministry of Labor and Social Welfare are working on policy and legal reforms to create an open, multi-stakeholder, flexible system of formal, non-formal, and informal learning environments for the continuous improvement of work skills for the working-age population and adults.

A formal, non-formal, and informal learning system of technical and vocational education and training is being developed to prepare the workforce to meet the demands of the labor market and employer requirements.

In the academic year 2020-2021, there were 225 specialties across 16 sectors in TVET and 200 majors across 11 sectors in bachelor's degree programs available for students. Since 2012, vocational education and training has been transferred to a competency-based training and evaluation system. The training content has been updated to align with employer requirements and rapid technological changes. The vocational education and training standards and general requirements - MNS 6541:2015 - were introduced into the training and approved by the Mongolian Agency for Standard and Metrology. These commitments have brought significant improvements to the quality of vocational education and training.

In addition to training competitive professionals to meet labor market demands and employer requirements, the vocational education and training sector is providing a national labor market demand for the workforce. It is also improving citizens' employment skills and preparing nationally qualified staff through its lifelong learning supportive training. There are 1,039 vocational training institutions registered nationwide, of which 738 are active as of 2021 according to MoLSW. In the last four years, 23,775 citizens received a certificate of competency after participating in vocational training and being assessed and certified by the Vocational Education and Training Evaluation, Information and Methodology Center. In the academic year 2020-2021, 50.1% of the total participants were women.

Table 4.4. 1. Vocational training competency certificate data

Category		2018	2019	2020	2021	Total
Obtained a certificate of competency	Total	5,749	9,284	4,462	4,280	23,775
	Male	-	-	2,062	2,300	4,362
	Female	-	-	2,400	1,980	4,380

Source: Vocational Education and Training Evaluation, Information and Methodology Center, 2021

Since 2017, the Center for Vocational Education and Training Evaluation, Information and Methodology has been organizing assessments to recognize civic knowledge and skills acquired from formal and non-formal education, as well as work and life experience. By participating in this assessment, citizens can get a certificate appropriate to their level of specialization, which not only increases their employment, career advancement, and wage but also helps identify gaps in knowledge and skills and learning needs, allowing for further learning. In 2021, the center assessed 1505 citizens, which is 848 citizens and/or 2.2 times more than the previous year.

In the future, it is necessary to publish new statistics on vocational training and integrate it into the Education Management and Information System (EMIS). This will help form an integrated registration database of educational institutions that includes digitalized requests to obtain and renew certificates, as well as data on enrollment, certification, training content, teachers, and human resources. This is expected to enable specialization and retraining activities to be implemented on a research basis.

HEI and TVET institutions are required to take the lead in conducting various training and activities aimed at promoting adult employment and acquiring new skills.

To keep up with the constantly expanding, shrinking, and transforming labor market and gain new skills, it's not only important for TVET, Polytechnical colleges, and TEIs to develop curricula for enrolled students, but also to prioritize ESD services that promote sustainable employment through on-the-job training, job mediation, and various skills improvement programs for professionals, including retraining and advanced skills training.

In the academic year 2020-2021, 19,734 students graduated from vocational and technical education institutions, and 45.5% of them found direct employment while 6.2% advanced to the next level of education. The employment rate of graduates was 51.7%, indicating a 0.2% increase from the rate of 51.5% in 2019-2020 (according to Table 4.4.2).

Table 4.4. 2. Employment rate graduates


Level of education		2016-2017	2017-2018	2018-2019	2019-2020
Percentage of graduates who found a job	Vocational education and training organization	46.3	62.3	58.1	51.5
	Higher education institution	32.2	34.4	34.6	-

Source: Statistics of MoLSW and MES

According to data from the Ministry of Education and Science, the employment rate of graduates in the academic year 2015-2016 was 50.7%. However, after three years, in 2019, the employment rate had increased to 79.6%, as reported in the "Graduate Employment Survey 2019" conducted by the Labor and Social Welfare Research Institute (LSWRI). Similarly, the survey indicated that the employment of TVET graduates had increased to 71.6% after three years. It is crucial to conduct regular follow-up surveys using approved methods on graduates' employment for a certain period after graduation. Failure to register employment results in a lack of information and creates a negative public perception about education.

The survey revealed that 76.6% of tertiary institute (TI) graduates and 62.0% of TVET graduates work in their respective professions. This reflects the implementation of policies to develop social partnerships at all stages of enrollment, training, and graduation and increase the role of professional associations to improve the employment rate of vocational education and training graduates. Despite the negative impact of the pandemic, it is notable that some results have been achieved in this regard.

The survey results indicate that HEI graduates working for three years after graduation expressed the need for professional knowledge and skills in a foreign language, computer knowledge, and document processing. Meanwhile, TVET graduates reported a lack of knowledge and skills in foreign language, computer, workplace safety, and hygiene during their employment period (LSWRI, 2019). **The government of Mongolia has implemented a policy to ensure the quality of higher education programs by harmonizing them with the labor market demand. This has resulted in an increase in the number of nationally and internationally accredited programs.**




Since 2014, about 200 bachelor's degree programs in ten sectors have been harmonized with the labor market demand and brought in line with international standards by the Ministry of Education and Science (MES). The policy of increasing the employment of graduates from Higher Education Institutions has been an essential part of the Government and the MES' goals, and various measures have been taken to achieve this objective. One of them is the "Higher Education Reform Project" funded by ADB, implemented by the MES from 2012-2019, which brought significant changes to the sub-sector. As part of this project, some schools completely updated their curricula in 2014, emphasizing the development of skills such as the ability to search for new knowledge, problem-solving, research, systematic planning, teamwork, writing and reporting in electronic multimedia using graphic tools, communication skills, foreign language, professional ethics, and responsibility. For example, the Mongolian National University of Education has updated all its undergraduate programs since 2014, which led to the improvement of the teacher training system for preschool and general secondary education schools. The university has accredited all its undergraduate programs by the National Council for Education Accreditation and four programs by the ASIIN (Global Leader in Quality Assurance in Higher Education) in 2019-2020. Furthermore, the establishment of a legal framework for mandatory accreditation of teacher training programs will be an essential step in ensuring that the curriculum is compatible with the labor market. The MES has pursued a policy of eliminating duplication and merging programs, and Higher Education Institutions face challenges in opening new professional programs aligned with the labor market expansion. However, it is a good practice that the Mongolian University of Science and Technology and some Higher Education Institutions have initiated and piloted programs from 2020 onward that have not been implemented in Mongolia, such as artificial intelligence and robotics.

A total of 110 programs were accredited internationally, and 226 programs were accredited by the National Council for Education Accreditation (MNCEA) in 2017-2021. In addition to the general requirements for undergraduate programs, the MNCEA-accredited training programs include skills required by employers, such as Mongolian language and literature, English, computer, and basic information technology. During the accreditation of the training program, interviews with employers and graduates revealed that the graduates' oral and written communication skills and information technology skills were not poor, but there was a lack of digital skills development and use of ICT in training.

The combination of formal education and workplace learning presents ample opportunities for individuals to develop essential work skills. Interviews conducted with students from higher education institutions suggest that many of them secure employment before graduating. It is quite common for students to start working in the information and communication technology industry after completing their second year of study, while internships during the third and fourth years typically lead to employment in the engineering, technology, and agriculture sectors. This trend is supported by both training institutions and employers who recognize the need for new methods of converting classroom training into practical internship experiences.

Under the Erasmus Plus Program of the European Union, the Higher Education Capacity Building Project (CBHE) funded the project "Implement a job-based training program in the higher education system of Mongolia to increase the employment of graduates," initiated by Otgontenger University. The project began implementation in collaboration with the National University of Agriculture, University of Finance and Economics of Mongolia, Mongolian State University of Arts and Culture,



and Dornod University in 2020, with the participation of the Ministry of Education and Science. This new form of partnership includes the State Bank, Golomt Bank, and the Mongolian Tourism Association as project partners. The project will support the formulation of a legal environment for the implementation of workplace-based training programs and elaborate policy and roadmap for the development of workplace-based training from 2024-2029.

The goal of higher education institutions is to create a favorable environment that is socially and culturally friendly for students to acquire soft skills during their studies. To intensively deepen program reform, there is an urgent need to establish and develop internal and external quality assurance systems that align with international, regional, national, and local labor distribution, market structure, and demand. For example, international experience has shown that priority and policy-supported professions transferred to the accreditation system are mandatory but gradual to ensure labor access and quality.


According to a study by the Labor and Social Welfare Research Institute in 2018, the biggest problem for entrepreneurs is new employees with a lack of active knowledge, outdated theoretical knowledge, and poor soft skills. Soft skills such as teamwork, communication, independence, reflection, time management, planning, self-organization, and problem-solving are considered the most deficient. Some employers have considered soft cognitive skills more important than technical skills in some cases, believing that technical skills can be improved through on-job training or gaining experience at the workplace.

Women make up the majority of those with higher education, but their employment and labor force participation rates are lower than those of men.

In the second quarter of 2021, Mongolia's labor force participation rate was 56.8 percent, which is a decline from previous years, when the rate was 61.0% in 2018, 60.5% in 2019, and 58.8% in 2020 (source: www.1212.mn). In particular, the labor force participation rate of women was only 49 percent, which is 16.7 percent lower than that of men.

As of the second quarter of 2021, there were 917,000 people in Mongolia who were not participating in the labor force, and of those, 579,500 (63.2 percent) were women. Therefore, women make up the majority of people who are not in the labor force. Among the women not in the labor force, 37.6 percent are retired, 24.1 percent are studying, 17.9 percent are caring for children, 3.9 percent are disabled, 2.9 percent are caring for a sick or elderly person, and the remainder have other reasons. The main reason for women being out of the labor force, apart from retirement and studying, is that they are caring for children, which could be attributed to the limited activities of schools and kindergartens during the Covid-19 pandemic.

Women do the majority of unpaid household work and make up 75.9% of the people working without pay for businesses run by families. International experience suggests that reducing the amount of time women spend on unpaid domestic work, increasing men's participation, and creating a work-friendly environment for women are crucial to increasing women's labor force participation (ADB, 2020). Family-friendly, work-life balanced employment policies and arrangements, such as part-time work and working from home, should be introduced for women, especially for mothers with young



children who are unable to work full-time. It is important to provide them with integrated management, organization, and methodology to evaluate their work in caring for young children.

Some women might prioritize childcare over paid work, as early childhood development is recognized as the foundation of lifelong health, education, and quality of life. To increase women's labor force participation and support their re-employment, opportunities for lifelong learning should be provided to keep up with technological advances while they are parenting for both the long and short term.

The increasing number of highly skilled jobs is driving the demand for workers who possess the right combination of education, work experience, and professional skills.


Appropriate workforce skills are essential to increase productivity in the industrial and services sectors. Furthermore, it is becoming increasingly important to combine the high level of skills required for the diversification of the Mongolian economy with the soft skills that are in demand in today's job market. Policies and training programs in Technical and Vocational Education and Training and Higher Education need to be reviewed to bridge the gap in skills supply and demand, particularly in the areas of construction, mining, industry, agriculture, tourism, and information technology-based services.

There is an urgent need to establish and implement a national qualifications framework. Employers have varying requirements for citizens' professions, levels of specialization, skills, evaluation, and degrees, as there is no integrated regulation at the national level, despite Mongolia developing a national qualifications framework. The Ministry of Social Welfare is pursuing a policy to provide skills training and facilitate employment by improving the social protection system, streamlining welfare services, increasing access and efficiency, and implementing a policy of transitioning from **welfare to employment**.

Government policies and effective implementation management provide a great opportunity to significantly increase employment.

The development and implementation of a scientific and data-based “Dynamic Model of the Employment System” is an innovative and effective approach that could assist policymakers in managing labor market supply and demand and employment promotion, providing them with an opportunity to estimate and research future outcomes.

Out of the registered job seekers, 38 percent have a specific profession or higher technical and vocational education, while the remaining 62 percent have either completed secondary education or have no education at all. Despite the high number of unemployed individuals in the domestic labor market, businesses are experiencing labor shortages. This mismatch between the knowledge and skills provided through educational training and the knowledge and skills required by employers has become a problem. This situation is affecting employers, who may not be able to acquire employees with the necessary knowledge and skills, contributing to long-term unemployment in the labor market and a high unemployment rate among young people.



In 2021, the National Employment Council approved and implemented various programs, including the “Job Preparation Program,” “Entrepreneurship Recovery Program during the pandemic,” “Program to Promote Youth Employment,” “Supporting the Employment of People with Disabilities,” and “Program to Support Senior Employment.”

The unemployment rate has decreased since 2016, but a significant proportion of jobless individuals are youth between the ages of 15-24 who are not in education, employment, or training, accounting for approximately 20.5%. Among them, women account for 22.3%, which is 3.6% higher than men (source: www.1212.mn).

Approximately 52.6 thousand workers are in demand in the labor market in 2021, with 74.9% generated in the first half of the year and the remaining 25.1% in the second half. 74.2% of the total labor demand is permanent, 25.8% is temporary, 53.5% is new, and 46.5% is vacant. The growing demand for new jobs in the labor market suggests that there is significant potential for growth in the labor market and employment.

SDG:4.5. EDUCATIONAL EQUITY AND NON-DISCRIMINATION


Education equity and inclusive participation are at the core of SDG 4. For instance, SDG 4.5 emphasizes eliminating gender disparities in education, ensuring equal access to education and vocational training for vulnerable individuals such as those with disabilities, indigenous people, and children in vulnerable situations, and providing equal opportunities. Disaggregating all education indicators by teachers and students' information such as their household income, gender, age, race, origin, participation in migration, disability, geographical identity, and victims of conflicts is essential for analysis and response. This gives an opportunity to monitor and evaluate progress made in terms of equity by other indicators (UNGEI, 2019).

The National Statistical Office, in its 2017 report, stated that "Equilibrium indices that can be broken down by all education indicators in this list (other indicators that are possible to be reported such as by gender or male/female, by social identity or wealthy/poor, urban/rural, and disability) will be responsible for MES."

This sub-section of the brief evaluation for the progress implementation of SDG 4 was developed based on the results of the Social Indicators Sample Study (SISS) jointly conducted by NSO, UNICEF, and UNFPA. The 2013 and 2018 results of the SISS were used to analyze gross enrollment, graduation, and learning outcomes.

Mongolia's education policy aims to create equal opportunities for all and focuses on the successful learning of each student.

The "Vision - 2050" approved by Parliament in 2020 sets the main goal for human development during 2021-2030 as creating equal opportunities for every person to receive quality education, with the expected outcome being the reform of the education system to provide equal inclusion and access for all. To achieve this goal, support will be provided to vulnerable students who are unable to access educational services and ensure their equal inclusion in education. The budget of educational institutions will be utilized to ensure the successful learning of every student. Preschool education



for children of herders, migrants, low-income households, and children with disabilities and special needs will be given equal opportunities and conditions.

To ensure that everyone is entitled to the fundamental right to education as guaranteed by the Universal Declaration of Human Rights and international human rights norms and standards, emphasis must be placed on the rights of vulnerable or marginalized groups in accordance with the principle of leaving no one behind, which is a fundamental principle of the UN SDGs. The Law on Education protects citizens' right to education and prohibits discrimination on the basis of ethnicity, language, race, age, gender, developmental characteristics, health, social status, wealth, occupation, position, religion, and perspectives. It also mandates that educational services are provided in the student's mother language and is the basic legal regulation that specifically protects the education rights of citizens (Munkhsaikhan, 2021).

In 2017, the UN Committee on the Rights of the Child recommended that the Government of Mongolia ensure the rights to education for Kazakh children, children from low-income and herder households, children from remote rural areas, children with disabilities, boys, and children attending monasteries. The Committee on the Elimination of Discrimination against Women advised Mongolia to include sexual and reproductive health and human rights issues in the educational curriculum, pay special attention to sexual harassment and violence occurring in schools and dormitories, promote continual study in school for pregnant girls, and implement measures to re-socialize young mothers after birth (NCV).

The main indicators for anti-discrimination were identified in human rights and educational documents at the international level and SDG 4 documents, which recommended that countries address issues based on their specific characteristics, situation, and socioeconomic status. Recent studies and surveys show that data in the education sector is classified by children with disabilities, herders' children, minority children, children with low socio-economic status, migrant children, and victims of violence in preschool and secondary schools. However, in most cases, numeric data and information are only available disaggregated by gender and location, and starting from the 2021-2022 academic year, by disability type.

The legal environment to promote inclusion and ensure the rights to education for children and youth with disabilities is experiencing significant improvements, and social attitudes towards disability are changing.

Mongolia has made significant progress in improving the legal environment for the education of children with disabilities, who are among the most marginalized groups in the education system, since 2015. The country has adopted a principle that the most appropriate way to ensure the right to education for children, youth, and adults with disabilities is to provide them with equal education opportunities in regular schools. In 2016, a separate group of clauses entitled "The right to education of persons with disabilities" was included in the Law on the Rights of Persons with Disabilities, approved by the Parliament. This move was not only evolutionary in terms of educational policy but also marked a turning point in policy reform towards inclusive education.

To comply with this law, the Law on Education of 2002 was amended, and an article (44.2.8) was added which stipulated that "the physical and developmental characteristics of students with disabilities shall be respected and conditions for students with disabilities to be equal as others shall

be created.” However, in the past, the provisions of the Law on the Rights of Persons with Disabilities (LRPD) have been inconsistent with each other and with the provisions of the Convention on the Rights of Persons with Disabilities (CRPD). Additionally, the amendments to the Law on Education and the Law on Primary and Secondary Education made in connection with the adoption of the LRPD have not been comprehensively regulated and fully understandable (D. Tungalag, 2020). Therefore, the reform of the Package of Laws on Education reflects in its draft to address the right to education for children with disabilities and other types of differences through inclusive education.

However, it can be inferred that these laws have brought progress to the legal environment for inclusive education, particularly in fulfilling the inclusive participation of children with disabilities. This progress can be seen in the many interdisciplinary and educational resolutions and guidelines that accompany the aforementioned laws. For example, the Minister of Education, Culture, Science, and Sports approved "The Resolution for Inclusive Education of Children with Disabilities in General Education Schools" in 2019 (A/292) and the Minister of Education and Science approved "The Resolution for Equal Access to Preschool Educational Services for Children with Disabilities" in 2021. These resolutions authorized the establishment of a new structure called the "Support Team" in schools and kindergartens to assist children with disabilities in obtaining an education. Moreover, the "Guideline for Comprehensive Developmental Support for Children with Disabilities" was approved in 2018 by the Ministers of Labor and Social Protection, of Education, Culture, Science, and Sports, and of Health (A/304, A/699, A/460). Additionally, a "Support Team to Promote School Enrollment" has been implemented in rural areas.


The Minister of Education, Culture, Science, and Sports approved the "Individualized Education Plan for Children with Disabilities" in 2018 (A/155), along with its methodology for development, an exemplary sample, and usage guidelines. The Minister also approved "Guidelines for Classroom Activities to Support Children's Development in General Education Schools" in 2020 (A/249), as well as a "List of Supporting Teaching-Learning Materials and Classroom Materials" in 2019 (A/292). These decisions were made to promote inclusive learning and teaching, focusing not only on enrollment but also on the progress of learning for children with disabilities.

In 2020, the MES approved the "Resolution on Creating Specialized Learning Materials and Learning Environment that Meets the Needs of Students with Disabilities in all Levels of Educational Institutions" (Minister of ECS, 2020, A/184). This was the first inclusive educational decision for all levels of educational institutions.

The inclusion of children with disabilities is varied in all stages and levels of education, and the implementation of policies and resolutions is inconsistent.

According to the 2020 Population and Housing Census,⁶ Mongolia has a population of 3,197.0 thousand, of which 31.5 percent are children aged 0-14 years old, 64.4 percent are people aged 15-64 years old, and 4.1 percent are 65 years old and older. Among them, there are 106.4 thousand people with disabilities (3.4% of the total population), including 59.0 thousand males and 47.4 thousand females. Children up to 15 years old account for 7.6 percent of the total people with

⁶ The numeric data of people with disabilities in the Population and Housing Census 2020 were calculated based on information databases from the Population and Household Database, the General Department for Labor and Social Welfare of the Ministry of Labor and Social Protection, and the Database of People with Disabilities of the Ministry of Health.



disabilities, those from 15-64 years old account for 87.1 percent, and elderly people aged 65 and older account for 5.3 percent (www.1212.mn Statistical Information Database, 2021).


The Census also reports that 45.3 percent of people with disabilities aged 6-29 years old, comprising 43.7 percent of males and 47.4 percent of females, are involved in some level of educational institution. Of the 1.9 thousand children with disabilities of kindergarten age, 78.0 percent are enrolled in kindergarten, while 22.0 percent are unable to access it. There are 686.8 thousand children aged 6-17 years old who should be enrolled in general education schools, of which 98.0 percent are involved in the schools, while 2.0 percent are unable to access education. Of the 7.8 thousand children with disabilities in the same age range, 84.8 percent are involved in the schools, with 15.2 percent out of general secondary education.

In the 2020 Census, 87.4 thousand (86.1 percent) of people with disabilities aged more than 10 years old have received education or possess some level of education, showing an increase of 8.1 points from the previous census. In the 2010 census, 63.7 percent of uneducated people with disabilities were illiterate or could not read and write a simple sentence, which increased to 71.9 percent in 2020, indicating an increase of 8.2 points.

It is noteworthy that enrollment in kindergarten has been increasing since the 2015-2016 academic year, while it has been decreasing for children with disabilities. The total number of children with disabilities enrolled in kindergarten in the 2021-2022 academic year was 1,065, a decrease of 372 children from the 2014-2015 academic year (ADB, 2019). Although 84 percent of children of kindergarten age are involved in formal and informal types of kindergarten, only 63 percent of children with disabilities are included in preschool education (MES, 2021). In Mongolia, the workload per class in preschool institutions is high, with one class having 35-40 children in public kindergartens. Due to the high workload per teacher and lack of assistant teachers, teachers are reluctant to include children with special educational needs in ordinary classes.

According to the ADB (2019), there are 5,606 children with disabilities studying in general secondary education schools in the 2021/2022 academic year. This number is a decrease of 5,466 children compared to the 2014/2015 academic year. Unfortunately, many children with disabilities abandon school or drop out of elementary school. Many of these children enroll in the Equivalency Program and Literacy Program of the Lifelong Learning Center. In the 2021/2022 academic year, 777 children with disabilities are studying in vocational training programs. Of these, 191 are involved in special schools, and the remaining children access inclusive education. However, there are many improvements needed for inclusive education to educate students with disabilities in the aforementioned two educational levels. Regarding higher education, there are currently 405 students with disabilities studying at this level (MES, 2021). One major issue is the lack of an accessible environment and tailored curriculum that is based on individual needs (UNESCO, 2019).

The pre-accreditation criteria for educational institutions and curricula set by the Mongolian National Council for Education Accreditation (MNCEA) aim to improve access to and the quality of services, as well as support participation of students with disabilities, in line with the needs and interests of teachers, students, and other stakeholders. However, these curriculum accreditation criteria only provide a general definition of the need to assess inclusiveness and non-discrimination



in tertiary education, making it impossible to evaluate the implementation and results in detail or in-depth. Consequently, information is scarce (MECS, 2019).

The first steps have been taken to ensure gender equality in the educational sector, with some objectives being defined differently by sub-sectors.

In a joint study report conducted by the National Committee on Gender Equality and other organizations in 2021, it was concluded that the “consequences of implementing the gender equality guarantee in culture and education have been moderate since the law came into force. Progress has been made in 3 of the 7 articles to ensure gender equality in the cultural and educational sectors, but only minor progress has been noticed in the remaining 4 articles.” The report suggests that a “decent effort is necessary to achieve the targeted objectives” (National Committee on Gender Equality, 2021).


The Policy on Gender Equality in the sectors of education, culture, science, and sports (2017-2024) (Minister of ECS, resolution A/130, 2017) is a mid-term development plan that defines the framework to introduce the gender equality concept in the sectoral development policy process and identifies its implementation. The plan includes expanding gender-sensitive career guidance for students at all levels of education, developing gender-sensitive training packages for parents and caretakers, providing gender-sensitive toys and learning materials to kindergartens, improving gender-sensitive water supply and sanitary facilities of kindergarten, general education schools, and dormitories, and improving the gender sensitivity in the primary and secondary education curricula based on the results of education quality assessment, relevant policies, and comprehensive child development research. The mid-term development plan of the educational sector (2021-2030) indicates that its goals and activities are planned to cover all levels of education. Even if not comprehensively implemented, the results will be significant in achieving the goal of ensuring gender equality through education, with a special target to develop and implement a gender policy based on the gender situation analysis of the TVET sector and its result.

A gender analysis of the Mongolian educational sector was conducted to develop the aforementioned mid-term plan. However, the results were not fully used for the planning, as evidenced by the lack of specific goals and activities for boys’ education.

The Ministry of Education and Science has set the following objectives to improve gender sensitivity in some selected programs, as part of the Government of Mongolia’s pilot demonstration of a new approach to Gender Sensitive Budgeting (GSB):

- Providing psychological support for students of general education schools and establishing favorable conditions for learning
- Providing buildings with sanitation facilities and organizing them in a friendly way for boys and girls
- Introducing gender sensitivity planning in the sector policy plan and building human resource capacity (Ministry, 2021).

The indicators in the preschool subsector vary significantly depending on the ethnicity of the head of household, the level of household livelihood, and the region.



Equilibrium indices were used to measure important aspects of the educational process in the 2013 and 2018 Social Indicators Surveys, which were conducted by the National Statistics Office (NSO), United Nations Population Fund (UNFPA), and United Nations Children's Fund (UNICEF). The surveys measured indices of preschool involvement, readiness for school, early childhood development, enrollment and involvement in secondary school, graduation, dropout, and basic skills in reading and mathematics. These indices were analyzed by independent variables such as gender (male, female), region (regions with the lowest and highest characteristics), residential location (rural, urban), household livelihood (low, lower than average, higher), maternal education (uneducated, low, high), and origin of the head of the household (Kazakh, Khalkh). In total, 14 sub-indicators were used. The survey results from both years were compared, and the differences were calculated and presented in Table 4.5.1. The primary data of the survey result is shown in Attachment 1. It is important to note that the Early Childhood Development Indices and Student's basic skills to read and calculate in secondary schools are covered in the 4.1 and 4.2 targets, and therefore, data on these aspects are not available for the current target

Indicators related to the equilibrium index	Preschool education			Primary, secondary education							
	Enrollment	Preparedness	Entrance	Enrollment		Graduation			School dropout		
				Primary education	Basic secondary education	Complete secondary education	Primary education	Basic secondary education	Primary education	Basic secondary education	Complete secondary school
Gender											
Male	3.4	7.4	(3.3)	(2.6)	1.1	2.7	(21.3)	(23.4)	2.5	(0.2)	(0.8)
Female	7.9	4.9	(1.6)	(1.5)	(0.7)	0.6	(11.3)	(20.6)	1.1	1.3	=
Regions											
The lowest performance	3.5	16.6	(1.1)	(2.7)	(0.1)	(1.8)	5.9	(34.7)	(0.3)	(1.6)	(1.2)
	West	West	West	West	West	Central East	West	East	UB Central	UB Central	UB
	West	West	UB	UB	West	West	West	East	UB	UB	UB
The highest performance	2.4	4.6	1.5	(0.1)	4.2	2.7	(22.8)	12.4	2.5	0.8	(1.0)
	East	UB	East	UB, East	UB	UB	UB	UB	West	East	East
	Central	East	Khangaï	Central	Central	UB	East	UB	UB	West	East
Place of residence											
Rural	0.9	7.9	1.3	(0.3)	2.5	0.6	(1.8)	(33.0)	0.2	(0.9)	1.8
Urban	5.5	3.2	(4.7)	(3.0)	(1.4)	2.2	(17.9)	(16.3)	2.8	1.7	(0.7)
Household welfare level											
Below	(1.7)	0.1	2.5	0.1	5.3	(0.5)	(3.0)	(37.9)	(0.4)	(3.0)	2.4
Below average	13.8	15.5	(5.5)	(2.3)	3.4	5.8	(34.8)	(34.3)	2.0	(0.4)	(5.5)
Above	(1.1)	(3.2)	(0.4)	(2.8)	(4.8)	(5.8)	(6.8)	(5.1)	2.1	4.0	5.5
Mother's education level											
Uneducated	(10.4)	1.6	6.5	(2.4)	7.3	4.4	1.0	=	2.4	=	5.9
Primary	1.0	(2.5)	1.7	(1.6)	5.9	(4.7)	(11.6)	=	1.0	(0.1)	5.4
Higher	0.2	3.0	(5.3)	(3.2)	(3.1)	(0.4)	(6.8)	=	2.8	3.0	2.0
Nationality of the head household											
Kazakh	4.3	18.0	1.5	(1.5)	7.1	4.1	9.9	(31.5)	1.3	(1.2)	(1.9)
Khalkh	4.6	4.0	(2.9)	(2.2)	0.1	2.5	(14.3)	(21.3)	2.0	0.3	(0.9)

Table 4.5. 1. Changes in the dependent variables of the Preschool and Secondary school by equilibrium indices (by differentiation of 2013 and 2018)

Source: NSO, UNPF, UNICEF, SISS, 2014 and 2019

Preschool education: Preschool education is important, and it is necessary to identify the reasons for the decline in some indicators, despite the overall increase in the preschool equilibrium indices. The preschool enrollment has increased in most of the indices and sub-indicators when comparing 2013 and 2018 data. For instance, in terms of gender, male and female children's involvement has increased by 3.4 and 7.9 points, respectively. Regarding regions, the UB and eastern regions, which have the lowest and highest involvement, have increased by 3.5 and 2.4 points, respectively. In addition, children's involvement in rural and urban areas has increased by 0.9 and 5.5 points, respectively. With respect to the origin of the head of the household, children's involvement in Kazakh and khalkh households has increased by 4.3 and 4.5 points, respectively. Concerning household livelihood, children's involvement in households with lower-than-average livelihood has increased by 13.8 points, while children's involvement in households with lower and higher livelihood has decreased by 1.7 and 1.1 points, respectively. Additionally, regarding mothers' education, children of mothers with high and primary education have experienced an increase in enrollment by 0.2 and 1.0 points, respectively. Conversely, children of uneducated mothers have experienced a decrease in enrollment by 10.4 points.

With regards to **school readiness**, most sub-indicators have demonstrated an increasing trend except for two independent variables. For example, boys and girls' readiness for school has increased by 7.4 and 4.9 points respectively, while readiness in the western and UB regions increased by 16.6 and 4.6 points respectively. Similarly, children's readiness in rural and urban areas increased by 7.9 and 3.2 points respectively, and the readiness of children from Kazakh and khalkh households increased by 18.0 and 4.0 points respectively. However, there was almost no change in the readiness

of children from households with low levels of livelihood, while children from households with lower-than-average livelihood saw an increase of 15.5 points, and those from households with higher levels saw a decline of 3.2 points. Additionally, the readiness of children whose mothers had no education and those with highly educated mothers increased by 3.0 and 1.6 points respectively, while the readiness of children whose mothers had primary education declined by 10.4 points.

It is important to pay attention to and identify the reasons behind the increase in preschool enrollment, particularly the significant increase of 33.3 points among mothers with higher education, while school readiness has only increased slightly by 3 points. Moreover, there has been a decrease in school enrollment and school readiness for children from high-income households, which requires further investigation.

Primary and secondary education: The equilibrium indices of primary and secondary education show significant fluctuations, with no clear patterns observed. In comparing enrollment rates between 2018 and 2013 for **primary and secondary education**, six indicators showed an increasing trend of 6.5-1.1 points, including enrollment of children from households in rural areas, households with low levels of livelihood, mothers with no education or primary education, and Kazakh households. As for regions, the UB region replaced the western region with the lowest enrollment rate, resulting in a 1.1-point decrease between them. The Khangai region replaced the Eastern region with the highest points before, with a difference of 1.5 points between them. However, the remaining seven indicators showed a decline of 5.5-0.4 points.

When comparing **enrollment in primary and secondary education** in 2013 and 2018, there was almost no change in primary education enrollment for households with low livelihood (0.1), and the remaining 12 indicators decreased by 3.2-0.3 points. **For basic secondary education**, there was almost no change in enrollment for khalkh households, while female students, UB residents, households with higher livelihood, and children of highly educated mothers had a decline of 4.8-0.7 points. However, the remaining 8 indicators increased by 7.3-1.1 points. **For complete secondary education**, the involvement of children from households in rural areas, with higher and lower livelihoods, and those of mothers with primary education decreased by 5.8-0.5 points, while the remaining 8 indicators increased by 5.8-0.6 points.

In terms of regions, enrollment remained low in the Western region, and enrollment in primary and basic education continued to decline slightly, while enrollment in upper secondary education increased by 5.9 points. However, in the UB region, which had a high enrollment rate, there was a minor decline in primary education enrollment, but an increase of 4.2 and 2.7 points for the secondary and high stages.

When comparing the enrollment for complete secondary education between 2013-2018 by educational levels of primary, basic secondary, and complete secondary education, it is observed that as educational levels increase, enrollment increases for children from households with livelihoods lower than the average and Khalkh households, while enrollment decreases for children from households with higher-level livelihoods, male and female students, and children of mothers with higher education. The remaining 8 indicators show a fluctuating pattern with both increasing and decreasing data.


The comparison of 2013 and 2018 shows that for the primary education level, two indicators show no change while the other 12 indicators have declined. Additionally, as a mother's education level and household livelihood improve, the enrollment rate decreases. As educational stages increase, there are fluctuations in the changes of many indicators that need to be closely monitored. Therefore, further in-depth studies should be conducted to better understand the underlying factors.

In terms of changes that occurred between 2013 and 2018 in **the graduation rates of primary and basic secondary education** levels, there was an increase in the graduation rates for primary schools of children from Kazakh households and those with uneducated mothers by 9.9-1.9 points, while the other 11 indicators showed a decline. On the other hand, children's graduation rates decreased by less than 10 points (6.8-1.8) for households in rural areas, with lower and higher livelihoods and maternal education levels, while the remaining seven indicators showed a decline of more than 10 points (34.8-11.3). It is worth noting that maternal education indices were not calculated for the primary education level. At the **basic secondary education** level, if changes are identified by 11 indicators of the other five indices, only children's graduation rates of households with high livelihoods increased by 5.1 points, while all other indicators showed a decline of more than 10 points (37.9-12.4). In other words, the graduation rate decreased significantly in 2018 compared to the previous five years for most indicators in primary education and for all indicators measured in basic education.

In terms of regional classification of graduation rates, the Western region had a low graduation rate in primary education, which increased by 5.9 points, while the UB and Eastern regions showed a decline of 22.8 points. The Eastern and UB regions, which also had a low graduation rate in basic education, showed a decline of 34.7 and 12.4 points, respectively. It is evident that there is a need to focus on improving the graduation rates in these regions, particularly in basic education. Further research should be conducted to understand the reasons behind these declines and identify ways to address them.

When comparing school dropout rates between 2013 and 2018 based on educational levels, it was found that for **primary education**, the dropout rate of children from low livelihood households increased by 0.3 and 0.4 points while the remaining 12 indicators decreased by 2.8-0.2 points. For **basic education**, there was an increase of 3.0-0.2 points in indicators for male students, rural residents, households with livelihoods lower than average, mothers with primary education, and Kazakh households, while the remaining 8 indicators declined by 4.0-0.3 points. For **complete secondary education**, indicators such as male students, urban residents, households with livelihoods lower than average, and Kazakh and khalkh households decreased by 5.5-0.7 points while rural residents, households with lower and higher livelihoods, uneducated mothers, and mothers with primary and high education saw an increase of 5.9-1.8 points, respectively.

When examining the school **dropout rates** by region for children who should be receiving a decent education at an appropriate age, it was found that the UB and Central regions had a positive result with a decreasing trend of 0.3-1.6 points in each stage of education. However, the Western region, which had the highest dropout rates in primary education, switched places with UB, and the Eastern region, which had the highest dropout rates in basic education, was replaced by the Western region. There was a differentiation of 2.5 and 0.5 points, respectively, while the Eastern region, which had high dropout rates in high school, showed a slight decrease of 1.0 point.



When comparing other dependent variables for complete secondary education, it was found that dropout rates were relatively low and had less fluctuation in terms of independent variables at all levels of basic and complete secondary education. Dropout rates decreased in the Western region at all levels of education. However, for primary and secondary education levels, the dropout rate for male students, households with livelihoods lower than average, and Kazakh households decreased, while children dropping out from households with higher livelihoods increased.

TVET and Tertiary Education: **There is lack of available data to assess the equality indices for all levels and stages of vocational and tertiary education.** An analysis of the Household Socio-Economic Survey conducted between 2010-2015 revealed that Mongolia had one of the highest differentiations in higher education enrollment and household livelihoods compared to 64 other countries (D'Addio, Jamil Salmi & Anna, 2020). Marginalized groups face significant barriers in accessing higher education, such as living expenses and tuition costs. This financial burden is particularly challenging for social groups such as herder households, those who could not save due to the transition from a socialist society, those who have fallen into poverty due to social transition, and those employed in low-paying jobs.

Inclusive education is essential for promoting social justice, economic efficiency, and unlocking the potential of young people. For a sparsely populated country like Mongolia, failing to provide access to tertiary education for talented young people from low-income or minority households results in a significant loss of human resources for social and human development. Tertiary education is a prerequisite for individuals to have good health, higher salaries, and income, and overall life satisfaction.

Furthermore, inclusive education has public and social benefits, such as reducing unemployment, increasing tax revenue, social mobility, civic and voluntary participation, improving activeness, and reducing citizens' dependence on social services (D'Addio, Jamil Salmi & Anna, 2020). Therefore, tertiary education institutions must implement policies, programs, and measures to eliminate the gap in access and successful learning for certain groups of young people.

The absence of data on relevant equality indices and their independent variables at each level of vocational and tertiary education, especially at the household livelihood level, hinders evidence-based policies to promote non-discrimination and inclusion in those sub-sectors. It also makes it challenging to create conditions for stable incentives and benefits appropriate for each social group.

Gender equality index: **Although the gender balance index of students is relatively similar, the proportion of female students is increasing as the level of education increases.** The MES compiles the total number of male and female students at each level of preschool and general education schools each academic year, and since the academic year 2019-2020, these statistics have been released for each level of tertiary education. However, while technical TVET-related statistics have been developed by the MLSW since the 2016-2017 academic year, there is no disaggregation by rural and urban categories. The Gender-Equality Index (GEI) was calculated for all students at all levels of schools, and the changes were analyzed in total and by rural and urban areas by summarizing statistical data from the MES and MLSW for the years 2015-2021 (Table 4.5.2).

The analysis shows that for the entire academic year from 2015-2016, the GEI for all preschool service recipients and secondary school students in total and in rural and urban categories was approximately 1.0 points, which is a normal value. For high school students of general educational schools, the value is approximately 1.2 every year due to the increasing number of girls at this educational stage, with a variation of more or less 0.1 points in urban and rural areas.

At the technical and vocational training center level, the students' GEI has remained the same, at a total of 0.7 for all academic years. In other words, the number of male students has been increasing at this level of education. In terms of this level of education, the level of vocational education does not differ significantly from the yearly total (0-0.1). For professional training, the GEI for the 2018-2019 and 2021-2022 academic years was 0.2-0.3 points, indicating that male students were over represented. However, for the technical educational level, the index was 1.0 and 0.92 in the 2019-2020 and 2016-2017 academic years, respectively, which means that the number of female students increased.

Table 4.5. 2. Gender Balance Index of total students (educational levels and stages, academic year)

Academic year	Indicators	GSE				TVET				Universities and HEIs				
		Total	Primary	Secondary	Full secondary	Total	Professional training	Vocational training	Technical education	Total	Diploma	Bachelor	Master	Doctor
2021-2022	Total	0.99	0.96	0.98	1.20	0.67	0.20	0.68	0.65	1.6	4.0	1.5	1.9	1.4
	Rural	0.99	0.96	0.98	1.15					2.3		2.0	3.4	6.3
	Urban	1.00	0.95	0.98	1.26					1.6	4.0	1.5	1.9	1.3
2020-2021	Total	1.00	0.95	0.98	1.20	0.66	0.67	0.67	0.62	1.5	0.2	1.5	1.9	1.2
	Rural	1.00	0.95	0.98	1.25					2.4		2.1	4.0	5.6
	Urban	0.99	0.96	0.98	1.15					1.5	0.2	1.5	1.9	1.2
2019-2020	Total	1.00	0.96	0.98	1.21	0.70	0.93	0.64	0.97	1.6	0.2	1.5	2.0	1.2
	Rural	1.00	0.95	0.98	1.23					2.6		2.4	3.5	2.8
	Urban	0.99	0.96	0.98	1.17					1.5	0.2	1.5	1.9	1.2
2018-2019	Total	0.99	0.96	0.99	1.16	0.65	0.33	0.61	0.95	1.5				
	Rural	1.00	0.95	0.99	1.19					2.0				
	Urban	0.99	0.96	0.98	1.12					1.4				
2017-2018	Total	1.00	0.96	0.98	1.19	0.64	1.31	0.62	0.64	1.4				
	Rural	1.01	0.96	0.99	1.23					2.1				
	Urban	0.99	0.96	0.98	1.13					1.3				
2016-2017	Total	1.01	0.96	0.99	1.20	0.66	0.78	0.58	0.92	1.4				
	Rural	1.02	0.96	1.00	1.23					2.3				
	Urban	1.00	0.96	0.97	1.16					1.3				
2015-2016	Total	1.01	0.96	0.97	1.21					1.4				
	Rural	1.02	0.96	0.98	1.24					2.2				
	Urban	1.0	1.0	1.0	1.2					1.3				

Source: Statistical data from MES, 2015-2021

Throughout **all levels of tertiary education, the Gender-Balance Index (GBI)** for all students between the academic years of 2015-2021 was consistently high, with 1.4-1.6 points. This is higher than in developed countries that support women's tertiary education. When classified by **rural** and **urban** categories, due to the majority of students (95-97%) studying in the capital city, the index is

quite similar, with a total of 1.5-1.6 points. However, in all stages of tertiary education, the index of rural students is high, ranging from 2.0-6.3.

When analyzing this data by **stages of tertiary education**, the number of female students is highest at the master's level (GBI=2.0), followed by the bachelor's level (GBI=1.5), and lastly, the doctorate level (GBI=1.2), while excluding the 2021-2022 academic year, the number of male students in the diploma level was higher (GBI=0.2). **When analyzing this index by tertiary education levels and rural and urban indicators and identifying changes in the last three years**, there is no diploma education in rural areas, which means all students must study in the cities, resulting in a gender balance index of 1.5 points in the first two years and 4.0 in the last academic year (2021-2022), indicating that the number of women students increased four times. For the bachelor's education level, the index is consistently 1.5 points for all academic years, while for the doctorate stage, it decreases to 1.2 points.

According to the 2018 Statistical Information and Indicators on Social Welfare and Labor (SISS), the enrollment net weight indicator shows that the enrollment of girls is higher than that of boys, and this indicator is expected to increase as the level of education goes higher. Even in secondary and high school levels, girls' enrollment is higher than boys. For example, the enrollment net weight of boys is **92 percent** in primary education and 91.9 percent in basic education, which is 1.9 and 2.4 points lower than that of girls in the respective levels. Their graduation rate is 97.5 percent in primary education and 89.3 percent in basic education, which is lower than that of girls by 1.9 and 6.3 points, respectively.

The gap in gender balance index in terms of lower enrollment and graduation rates for boys and young men at all levels of education compared to girls and women is impacted by cultural, economic, and institutional factors (NCGE, UNFPA, MMCG, 2021).

SDG: 4.6 LITERACY AND NUMERACY

Learning literacy and numeracy skills are fundamental human rights, essential for achieving quality education, decent work, good health, overall well-being, and social participation.

There is a need to assess adult literacy skills more frequently, particularly functional literacy skills.

In Mongolia, official statistics on the literacy and numeracy skills of young people and adults are not published annually. The literacy rate is based on the population and housing census, which is conducted every ten years. The most recent population and housing census took place in 2020, and the literacy rate⁷ of Mongolia's population aged 15 and over was 98.7 percent, which was an increase of 0.4 percentage points from the previous census.

Table 4.6. 1. Literacy rate of the population aged 15 -24 (by rural /urban area and by the difference between 2010 and 2020).

Literacy	2010			2020		
	Total	Urban	Rural	Total	Urban	Rural
Total	100,0	100,0	100,0	100,0	100,0	100,0

⁷ As in previous censuses, recommendation from the United Nations on the definition of literacy followed in the 2020 census.

Percentage of literate population	98,3	99,1	96,3	98,7	99,3	97,6
Percentage of the illiterate population	1,7	0,9	3,7	1,3	0,7	2,4

Data comparing urban and rural populations show that the share of the urban illiterate population is 0.7 percent, while that of the rural population is 2.4 percent, resulting in a difference of 1.7 percentage points. This difference is due to the fact that children of rural herders, especially boys, are more likely to be out of school and drop out of primary education.

Regarding gender literacy, ⁸ 98.6 percent of men and 98.9 percent of women are literate, according to the National Statistical Office's report on Education and Literacy Levels in 2020.

The literacy rate of the population aged 30-34 and 35-39, according to the Population and Housing Census of 2020, is lower than the national average. This could be due to the fact that between 1991-1993, approximately 23,000 to 33,000 children dropped out of school each year, as reported by the Ministry of Education and Science in 2020 (Figure 4.6.1).

Figure 4.6. 1. Percentage of literates in the age 15 and over /by age group/ in 2020 and percentage of nonliterates in the age 15 and over /by age group/ in 2010/ in 2020.



The 2010 Population and Housing Census is considered flawed because literacy was measured based on the participants' testimonial. In contrast, the latest 2020 census administered a micro-test to determine literacy levels. However, it is essential to assess functional literacy by evaluating the ability to use literacy in a variety of contexts and assessing literacy every five years rather than just traditional literacy. UNESCO has recently issued a new definition of literacy that emphasizes the ability to identify, understand, interpret, create, transmit, and count using printed and written materials in various contexts. Literacy is an ongoing process

that enables individuals to achieve their goals, develop their knowledge and skills, and fully participate in local and community life. Therefore, the definitions and literacy methods used in our Population and Housing Census are outdated, and their importance is diminishing.

It is noteworthy that the level of literacy among men in the Western and Central regions is declining.

SDG 4.6 aims to ensure that the majority of adults (aged 15 years and above) have mastered literacy and numeracy skills. It initially targeted all young people (15-24 years old), which is a far-sighted policy.

⁸ A person who could read and write simple sentences in a language was considered literate. To ensure international comparability, the literacy level of the Mongolian population was determined at the age of 15 years and older.

To measure the progress of SDG 4.6, data and information from the Social Indicators Sample Survey⁹ in 2013 were used as a comparison with the 2018 sample survey of social indicators data (Table 4.6.2).

Figure 4.6.2. Literacy rate of youth aged 15-24 (by region, the difference between 2013 and 2018)

№	Location	Literacy rate in 2018		Literacy rate in 2013		Difference	
		Male	Female	Male	Female	Male	Female
	National level	93.1	96.4	95.2	97.5	-2.1	-1.1
	Regions						
1	Western	85.5	89	94.2	90.7	-8.7	-1.7
2	Khangai	87.2	94	95.1	90.9	-7.9	3.1
3	Central	92.3	96.1	96.2	93.2	-3.9	2.9
4	Eastern	86.7	93.5	95.9	91.7	-9.2	1.8
5	Ulaanbaatar	98.2	99.4	99.5	98.8	-1.3	0.6

Source: (NSO, UNFPA, UNICEF, 2014) and (NSO, UNFPA, UNICEF 2019)

In comparison to 2013, the literacy rate among 15-24-year-olds decreased by 1.1 and 2.1 points for men and women, respectively, in 2018. The largest decline for men was observed in the Eastern and Western regions, with decreases of 9.2 and 8.7 points, respectively, indicating a need for future literacy efforts in remote areas. However, literacy rates among women increased, except in the Western region.


Literacy rates vary based on urban or rural areas, regions, and household welfare levels. For instance, almost all urban youth (98.4 percent of men and 99.2 percent of women) are literate, while 88.2 percent of rural men and 92.9 percent of rural women are literate.

In terms of literacy rates by region, young people in the Western, Khangai, and Eastern regions have lower literacy rates than other regions. Additionally, almost all young women aged 15-24 (99.7 percent) and men (100 percent) from upper-middle-income households were literate, while only 87.9 percent of women and 84.4 percent of men from low-income households were literate (NSO, UNFPA, UNICEF, 2014).

The probability of literacy among youth aged 20-29 was estimated during the most recent Social Indicators Sample Survey in 2018. Among young people of this age, illiteracy rates are relatively low, but there is a difference in the level of household well-being (88 percent and 100 percent). The main reasons for illiteracy were that they did not attend school or attended primary school but remained illiterate (UNFPA, 2020).

The training curriculum at all levels of education must include digital literacy due to increasing demand. While traditionally, literacy referred to the ability to read, write, and count in one's mother tongue, the concept of literacy has expanded to include digital literacy with the development of technology and the complexity of the information space. Digital literacy demands that modern

⁹ The NSO conducts a survey every five years, which provides information to support national policies, programs, and development plans, as well as key indicators to monitor progress in implementing the Sustainable Development Goals (SDGs) and other international commitments.



individuals possess the ability to create and use content using digital technology, computer programming skills, and the ability to search, share, and communicate information. Digital literacy is included in the SDG implementation indicators as it stimulates and accelerates the development of self-learning and other essential professional and life skills.

Although the Sample Survey of Social Indicators 2013 lacked information under the category of "Ability to use information and communication technology," an analysis of the Sample Survey of Social Indicators 2018 reveals that 31.6% of women aged 15-49 and 29.7% of men possess the aforementioned ability. The highest rate for men was 43% in Ulaanbaatar, while the highest rate for women was 39.4% in Ulaanbaatar and 21.5% in the Eastern and Western regions.

Furthermore, among youth aged 15-24, 42.9% of women and 44.9% of men possess digital skills. Thus, digital literacy is an essential skill that must be integrated into the education system to keep pace with the ever-changing technological landscape.

SDG: 4.7. EDUCATION FOR SUSTAINABLE DEVELOPMENT AND GLOBAL CITIZENSHIP EDUCATION

In 2015, Global Citizenship Education (GCE) and Education for Sustainable Development (ESD) were introduced as the core content of education at all levels in SDG 4.7. These were goals that must be measured and evaluated, and 1 common, 5 thematic indicators were identified in the "Education-2030" program.

In 2018, UNESCO emphasized that the requirements for measuring and reporting indicators still need to be determined (UNESCO, IFS, 2018). In 2020, it evaluated 25 sub-contents of 8 groups and recommended using the following criteria to determine their implementation: a) national policy, b) training curriculum, c) assessment of teachers' education, and d) evaluation of students (UNESCO, 2020).

In Mongolia, there has been inadequate development of the content, criteria, indicators, and measurement methodology required to evaluate the progress of SDG 4.7 targets, and the measurements have not been fully stabilized. Specifically, the NSO identified in 2017 that the readiness to release official statistics and administrative statistics was not met for the 2-5 indicators of 4.7 (sdg.1212.mn, 2017). As a result, the precondition for evaluating whether SDG 4.7 has been accomplished, according to the UNESCO 2020 recommendation, has not been met. Therefore, this progress review was based on research reports conducted by projects that have been implemented or are being implemented at the national level and related organizations from 2018 to 2021. These include:

- The virtual integrated event report on Joint Initiatives and Partnerships for Education for Sustainable Development, which was developed as part of the "Education for Sustainable Development II" project supported by the MES and SDC in 2020.
- The Baseline Survey Report of the "Education for Sustainable Development II" project from 2020.
- The document analysis report on the concept of ESD within the framework of documents related to the secondary education curriculum from 2020.

- The joint research report "Implementation of legal training programs for students of secondary education, HE institutions, and vocational training centers" by MoJDA and SDC from 2020.
- The joint report "Gender analysis of General Curriculum Content of general secondary schools and HE institutions and universities" by MES and ADB from 2019, among others.

Additionally, the Institute of Education conducted research reports on "Quality of Education and Factors Affecting It (2020)" and "Implementation of General Secondary Education Curriculum and Factors Affecting It (2018)" according to the order of the MES.

Despite the integration of Sustainable Development, ESD, SDG, and GCE concepts into national educational policy and midterm planning, there is still a need to emphasize the contents of ESD.

There is no specific independent policy on ESD and GCE. However, several essential objectives and actions have been defined in policy documents since 1995, such as "National Program for Ecological Education" (1998-2005), "Green Development Policy" (2014), "National Program for SDG" (Phase I: 2018-2020, Phase II: 2021-2022), "Environment Programs and Projects," and "Education for Sustainable Development I and II Projects" (2015-2017 and 2019-2022). The researchers have identified three stages of development progress (EI, MES, MET, SDC, 2021). The first stage of the "SDG National Program" was completed in 2020 and was approved by a joint order of the Ministers of Environment and Tourism and Education, Culture, and Science in 2018. The goal of the program was to contribute to the sustainable development of Mongolia and encourage ESD for protecting the environment, respecting historical and cultural heritage, mitigating and adapting to the negative effects of climate change, disaster risk reduction, and developing an environmentally friendly, resource-efficient, adequate consumption culture, and healthy lifestyle. It defined 17 main actions and 4 targets. To implement this program's objectives, the following actions could be taken:

- Acquisition of ESD through all levels of formal and non-formal education and a lifelong learning system, including informal education from the environment.
- Ensuring coordination of ESD activities reflected in all sectoral policies and programs, and expanding inter-sectoral coordination and cooperation.
- Expanding public-private partnerships, international organizations, civil society organizations, individual partnerships, and collaborations.

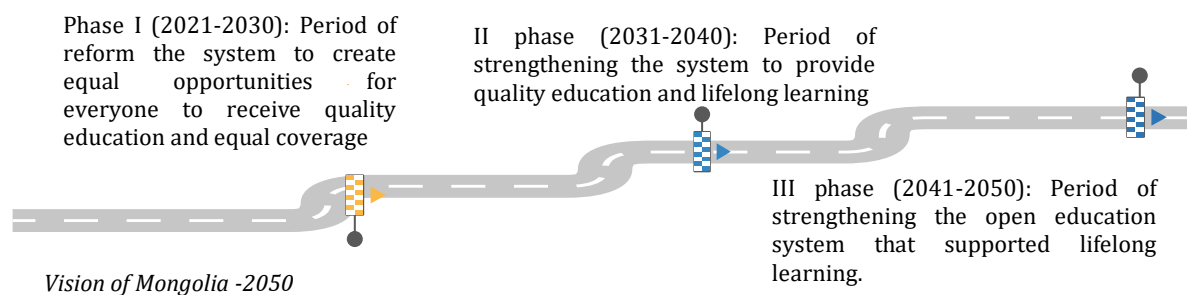
The joint order of the two Ministers of Environment and Education approved the action plan for the implementation of the national program, and a total of 55 activities are planned for 2018-2022 within the framework of the above targets and key actions (MET, MECS, 2018). The first phase of the program would be reported nationally in 2021, but it has not yet been made public. The program was canceled due to the government's decision to develop and implement target programs in line with the **Long-term development policy of Mongolia**.

Mongolia approved "Development Policy, Planning and Its Administration," "Vision 2050: Long-term Development Policy of Mongolia," and "Midterm Plan for Educational Development (2021-2030)" in 2020, respectively, and they are under implementation. In the framework of the long-term development policy, the GoM is developing a program to be implemented during 2020-2030 that relates to 7 target sets, including the "Human Development Target Program" and "Environmental Target Program."

No	Policy Document	Duration (year)	Type
1.	Long-term Development Policy of Mongolia, 2020-2050, (Annex 1)	30	Long-term
2.	Long-term Development Policy of Mongolia, 2020-2050, (Annex 2) ... Activities to be implemented in 2021-2030	30	
3.	Long-term Development Policy of Mongolia, 2020-2050, (Annex 3) ... monitoring and evaluation criteria and level of achievement	30	
4.	Government Policy on Education	10	Mid-term
5.	Mid-term Development Plan of Education Sector (2021-2030)	10	
6.	Development framework of Mongolia for five years (2021-2025)	5	
7.	Government Action Plan of Mongolia 2020-2024	5	

The Ministry of Education and Science (MES) has submitted the draft of the Package law on Education and its concepts to Parliament for approval. This draft law includes some regulations necessary for implementing SDG 4, as shown on the Parliament of Mongolia's law forum website (<https://lawforum.parliament.mn/>, 2021).


ESD 4.7 was not directly assessed in publications such as "Global and National Level SD and ESD Development Path and Growth in Mongolia: A Guidebook" (IE, MES, MET, SDC, 2021) and "Integration of ESD: Document Review" (IE, SDC, 2020). However, these publications concluded that Mongolia's long-term and midterm development policy documents have been developed coherently, incorporating the ideas of sustainable development and ESD. Furthermore, the publications state that ESD has been recognized as one of the fundamental concepts for developing midterm policies and plans for the educational sector's development. The publications state that the Medium-Term Development Plan for the Education Sector (2021-2030) includes the following planned activities:



“providing necessary support and equal access to education for at-risk students who cannot access primary and secondary education services; enhancing the quality of primary and secondary education by integrating personal development, maturity, bilingualism, and common human values into the curriculum, content, and methodology; and conducting regular surveys on factors that affect student achievement and making policy and planning decisions based on research results.”

Source: ESD-II, Some results of integrated measures “Collaborative initiatives and partnerships for education for sustainable development”, 2021

According to MES (2021), Mongolia has a three-year short-term plan to eliminate students' learning loss, which includes supporting students with disabilities and from other ethnic minorities. Mongolia has made progress in fulfilling and implementing policies and legal frameworks related to human rights, child protection, and gender equity, which are the main focus of SDG. Notably, in 2017,



Mongolia ranked 53rd globally and 3rd in Asia in terms of gender equality. The training documents, "General Secondary Education Curriculum Development Concept" and "General Requirements for Undergraduate (Bachelor's Degree) Programs," reflect the objectives and requirements related to human rights and comprehensive ESD capabilities, such as humanity, democracy, respect for human rights, research, systematic planning, and professional ethics.

Positive progress has been made in integrating education for sustainable development into national education policies that cover global citizenship education, gender equality, and human rights, particularly with regards to SDG 4 and ESD issues at a general level. However, researchers have noted that key ESD terms such as "global citizenship education, gender stereotypes, and gender equality" are almost not used in policy and training documents. These terms are crucial to ESD, and their absence suggests room for improvement in using specific ESD terminology.


Although ESD concepts are reflected in educational curricula, it is important to note that the curricula of tertiary education and textbooks of general secondary schools remain gender-insensitive.

In 2018, the Minister of ECS approved a methodology to improve the curriculum of general secondary schools, which played an important role in ensuring its sustainability (Ministerial Order by MECS, 2018). The current training programs were launched between 2013 and 2015 and were upgraded in 2019, with further improvements scheduled to begin in 2024.

The Center for Sociological Education NGO conducted a baseline study for the ESD-II project, revealing that 82.9 percent of secondary school students consider social science as the primary subject to learn about ESD in general secondary schools. In addition, in 2021, the Ministry of Justice and Internal Affairs and SDC published a research report titled "Implementation of Legal Training Programs for Students of General Secondary Education, Vocational Training Centers, and Higher Education Institutes/Universities" as part of the Civic Participation Project. According to this report, human rights and constitutional concepts related to global citizenship education and ESD content are taught to young people aged 16-20 across all levels of formal education in Mongolia.

Since the spread of the Covid-19 pandemic in January 2020, schools at all levels in Mongolia have shifted to digital learning, with 900,000 students now learning through distance education. Over the past two school years, e-learning and digital content have been developed and delivered to students. According to the research report titled "Implementation of Legal Training Programs for Students of Secondary Education, HE Institutions, and Vocational Training Centers", upper secondary grade students in general secondary schools and vocational training centers study human rights and the Constitution as part of the Social Science curriculum. Meanwhile, students in higher education institutions and universities study these concepts under the Human Development, Communication Ethics, and Law curriculum.

In 2018, the Institute of Education conducted an analysis of global citizenship education content in primary and secondary education and its inclusion in the curricula of these levels. The analysis found that the content of the following subjects in primary education aligns with global citizenship education content: Man and Environment, Man and Nature, Man and Society, and English. These curricula provide educational content regarding global citizenship that covers various aspects, such as processing information, understanding different cultures, following rules, taking responsibility,



participating actively, loving the environment, and respecting Mongolian and global values. The core curriculum of basic education has two objectives related to the goal of socialization and behavior of global citizenship education, as noted by researchers. These are the cognitive objectives in section 3.2.2, which aims "to be a citizen who respects and inherits the national language, culture, history, and traditions, respects the common values of humanity, and treats people, nature, and society appropriately," and in section 3.2.3, which aims to "become a citizen with creative learning and lifelong learning." It's worth noting that the researchers concluded that "there are fewer global and regional issues in the core curriculum of primary and lower secondary education, but more national issues."

The question of whether **gender equality** is reflected in the curricula of general secondary education and higher education institutions was explored in two studies: the "Gender Analysis of the General Basic Curriculum of Higher Education Institutions" by the MES and ADB, and the "Gender Analysis of Primary and Secondary Education" conducted in 2016 as part of the "Education for Sustainable Development" project. According to these studies

- The general core curricula of higher education institutions, with the exception of the field of humanities, do not reflect gender equality in their objectives, content, and topics, and are gender insensitive. The textbooks used also tend to emphasize male academics, scholars, and historical figures more than female ones, though there is no trend to confirm gender stereotypes, there remains a lack of gender sensitivity.
- The "Gender Analysis of Primary and Secondary Education" report (MNUE; 2016) found that textbooks reinforce gender stereotypes in the minds of students. Gender stereotypes were observed in homework, exercises, assignments, texts, illustrations, references to male and female scholars, and examples from historical figures.

The "Textbook Analysis Report" (MES, 2021), which was developed by independent researchers commissioned by the Ministry of Education, Science and Culture and published in 2021, indicates that crucial concepts such as the ability to think systematically that expresses the key ideas of sustainable development (recognizing the interdependence of things and analyzing complex systems), predictability (prevention), taking responsibility, making conscious choices, and living harmoniously in society are not adequately represented in the textbooks of primary, basic, and secondary education.

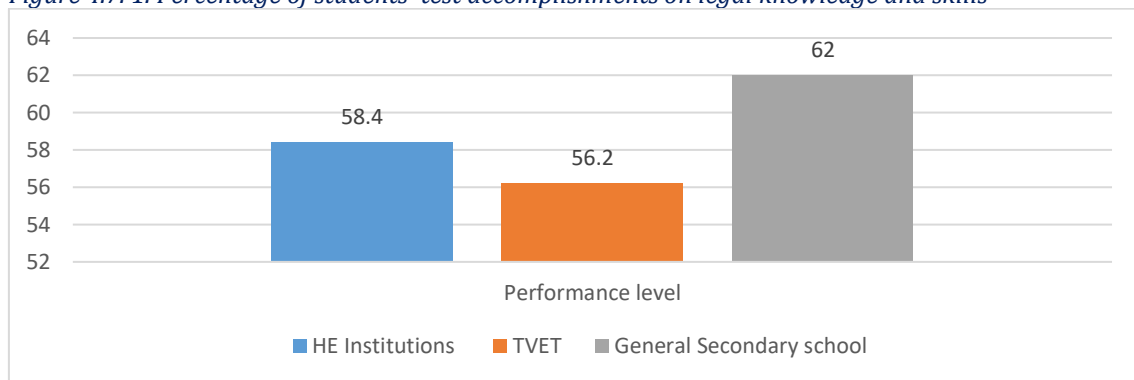
More than 500 students were assessed on 20 indicators of ESD knowledge and skills, according to a self-assessment conducted by the Sociological Education Center in 2020. The results showed that students have a good understanding of the importance of interacting with the environment, utilizing natural resources sustainably, and respecting universal human rights and freedoms without discrimination. However, students rated themselves below average in several areas, including gender equality and self-participation in ESD (average rating of 3.37-3.39), awareness of the interdependence of the world and the environment and a friendly attitude toward nature (16.1% below average), conflict resolution (15.3% below average), commitment to future generations, responsibility, and participation (13.6% below average), and being non-wasteful, frugal, and mindful of needs (14.6% below average).

Additionally, the Anti-Corruption Authority has conducted an annual "Child Integrity Survey" since 2014, with results showing an average integrity rating of 3.91-3.97, with a rating of 3.91 in both 2018

and 2019. This suggests that children's level of fairness decreases as they progress in grade levels (IAAC; 2017-2019).

The research report, "Implementation of Legal Training Programs for Students in General Secondary Education, Higher Education Institutions, and Vocational Training Centers" (MoJDA, 2021), found that completion rates for tests on human rights, the constitution, and legal knowledge related to employment and social security services were 56-60 percent. General secondary school students performed relatively well, while students from vocational training centers performed poorly (as shown in Figure 4.7.1).

Figure 4.7. 1. Percentage of students' test accomplishments on legal knowledge and skills



Source: Research report "Implementation of legal training programs for students of general secondary education, HE institutions and vocational training centers"

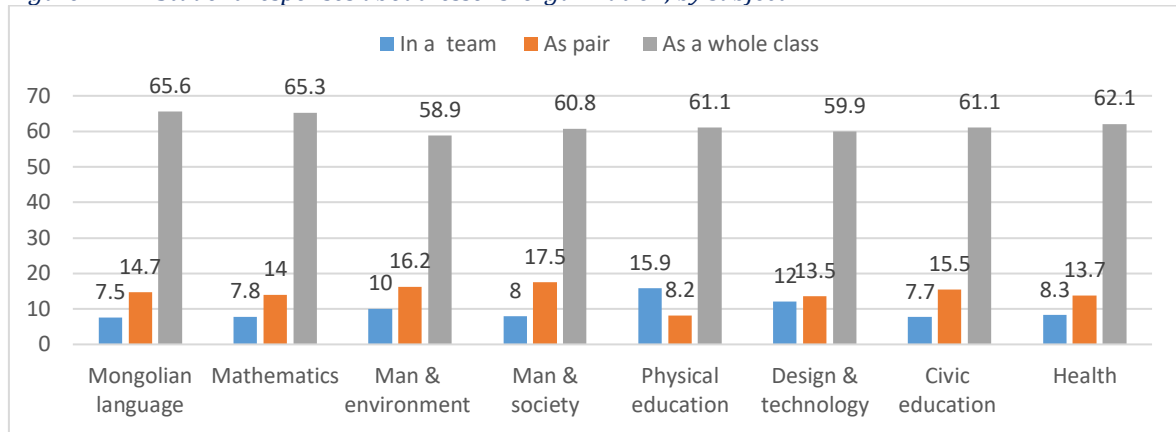
The ITPD has been consistent in incorporating 4-6 hours of SD and ESD content into the basic professional improvement training program for teachers, administrators, and staff. With support from the "ESD-I" project implemented by SDC in 2018, the methodology to integrate ESD into the training and learning activities of GES was published and distributed to approximately 800 schools. This handbook has been utilized in discussions, lesson planning, teaching, and testing as part of the basic professional development curriculum from 2019 to 2021. By 2021, 37,657 teachers, administrators, and staff had received basic training, which represents 66.4% of all preschool and GES teachers, managers, and training support staff.

In 2021, methodological resources were created and posted on the bagsh.itpd.mn and esurgalt.itpd.mn websites, including 303 guidelines to support the implementation of core training curriculum, four books and manuals on ESD, 54 guidelines on the integration of sustainable development and ESD into lessons and activities, and manuals and sample planning. These actions improved teachers' knowledge and understanding of SD and ESD, and their lesson planning methods. However, it is essential to select lesson contents and topics from specific examples of 17 ESD goals, core content, and SD's comprehensive competencies, plan lessons using creative and participatory methods, and provide methodological advice on the use of student self-assessment and progress assessment techniques focused on achieving lesson objectives and outcomes.

Despite efforts to support teachers' education for sustainable development (ESD), the poor implementation of student curricula and low student achievement may be attributed to inadequate training and activities that do not meet the required standards. The survey conducted revealed that while some teachers used active teaching methods, this was not consistent across all subjects, and

most teachers had a "teacher-centered" approach. The "Curriculum Implementation Study" (Figure 4.7.2), conducted by the Institute of Education, showed that classes are primarily organized within the classroom, and teachers are less likely to work in groups or pairs at the primary education level.

Figure 4.7. 2. Student responses about lessons' organization, by subject



It is reasonable to assume that the activities students engage in during classroom training, as well as the teaching methods used by educators, tend to develop only the lower level of the cognitive skills of students, particularly in the areas of knowing and understanding. This assertion is supported by the research reports, "Implementation of the Legal Curriculum for Students in General Secondary Education and Higher Education Institutions, and Vocational Training Centers" and "Study of Textbooks Used in Secondary Schools." The reports highlight that *one of the biggest shortcomings in our country's education system is the dissemination of low-level knowledge focused on memorization and repetition. Therefore, it is imperative that efforts are made to develop students' skills in applying, analyzing, and creating knowledge and skills.*

National initiatives and civil society organizations have the potential to play a significant role in promoting education for sustainable development (ESD). Civil society organizations, in particular, have an important responsibility in promoting ESD that includes issues on global citizenship education, gender equality, and human rights to teachers, students, and citizens. In Mongolia, there are numerous civil society organizations and NGOs working in the field of human rights and democracy education, as well as protecting the interests of women and people with disabilities. These organizations conduct training as part of their implementation of projects and programs. However, there is currently no integrated national data or information system to consolidate this data. It is crucial to establish an integrated data and information system to develop policies that support lifelong learning for individuals, take necessary actions, and provide opportunities for cooperation between government, individuals, and non-government organizations to work collaboratively for sustainable development. Establishing new forms and mechanisms of partnership will be essential to achieving this goal.

Mongolia has made impressive strides in ESD by launching the "A Billion Tree" national movement with the ambitious objective of planting and growing one billion trees by 2030. The movement has garnered support from both governmental and non-governmental organizations, schools, cultural and research institutions, and private companies. By consolidating these efforts, Mongolia can create an integrated digital learning platform that promotes and disseminates ESD, enabling all stakeholders to engage in lifelong ESD education in their desired field, regardless of location or time.

SDG: 4.A. EDUCATIONAL INSTITUTIONS AND LEARNING ENVIRONMENT

Policy to build a child-friendly school and learning environment

The Government Action Plan 2020-2024 has prioritized creating a child-friendly learning environment by improving accessibility and expanding opportunities for children with special needs to study and develop in ordinary schools and kindergartens. To achieve this, the government plans to build new schools and kindergartens and improve the water, sanitation, and hygiene conditions (WASH) of schools. For instance, by building and commissioning 70 kindergartens and 50 schools annually, 273 new kindergartens and 200 new schools will be established between 2020 and 2024. Additionally, the government plans to renew and renovate two kindergartens and schools for children with specialized needs every year and provide modern toilets and bathrooms for at least 100 kindergartens, schools, and dormitories with pit latrines annually. They also aim to improve the educational curricula for art and physical education classes of GES and provide relevant classrooms and gym halls with necessary tools and equipment. International development organizations, especially UNICEF, are jointly implementing pilot projects with the government to demonstrate innovative solutions for WASH in schools.

The GAP and "SDG-2030: Roadmap" have identified transforming the school and learning environment to ensure the inclusive participation of all students without discrimination as a key priority. In 2015, MECS, MH, and MF jointly approved "Norms and requirements for WASH for kindergartens, schools, and dormitories," which is currently being implemented as part of the policy to improve WASH conditions in schools.

Improvement of Water, Sanitation, and Hygiene Facilities

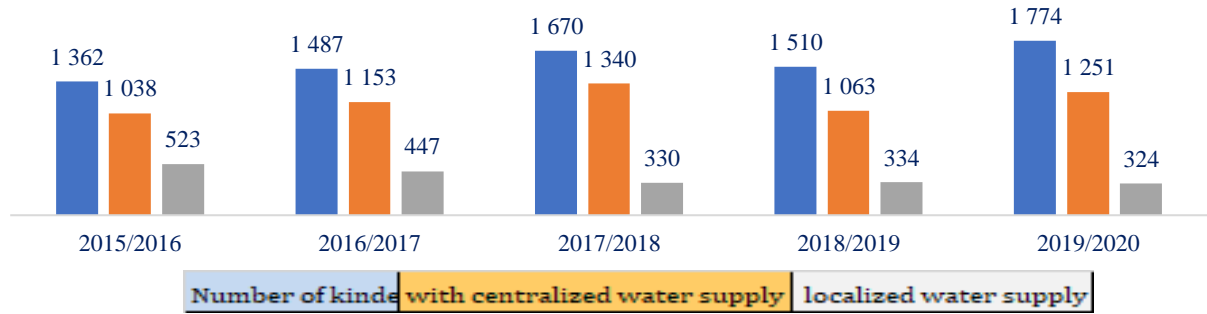
The issues related to infrastructure, equipment, and learning environment in educational institutions, especially in rural areas, have not been fully resolved. In sparsely populated and remote soums, the cost of building water, sanitation, and hygiene facilities is becoming a problem. Therefore, the objectives to connect them with a reliable water source, build public clean and wastewater sewage, and central heating systems, and replace with the hygienic toilet can be solved comprehensively in accordance with the integration in the local development policy. However, this will take time and incur high costs. Therefore, the focus should initially be on changing pit-latrines.

A situation analysis was conducted in 330 soums, which revealed that 357 schools or 52.3%, 220 kindergartens or 22.9%, and 242 dormitories or 45.2% have outdoor pit latrines.

In the 2015-2016 academic year, there were 1,362 kindergarten buildings. This increased by 412 (30.2%) in the 2019-2020 academic year, reaching a total of 1,774. This increase had a positive effect on preschool involvement and, to some extent, on the increase in net enrollment rate.

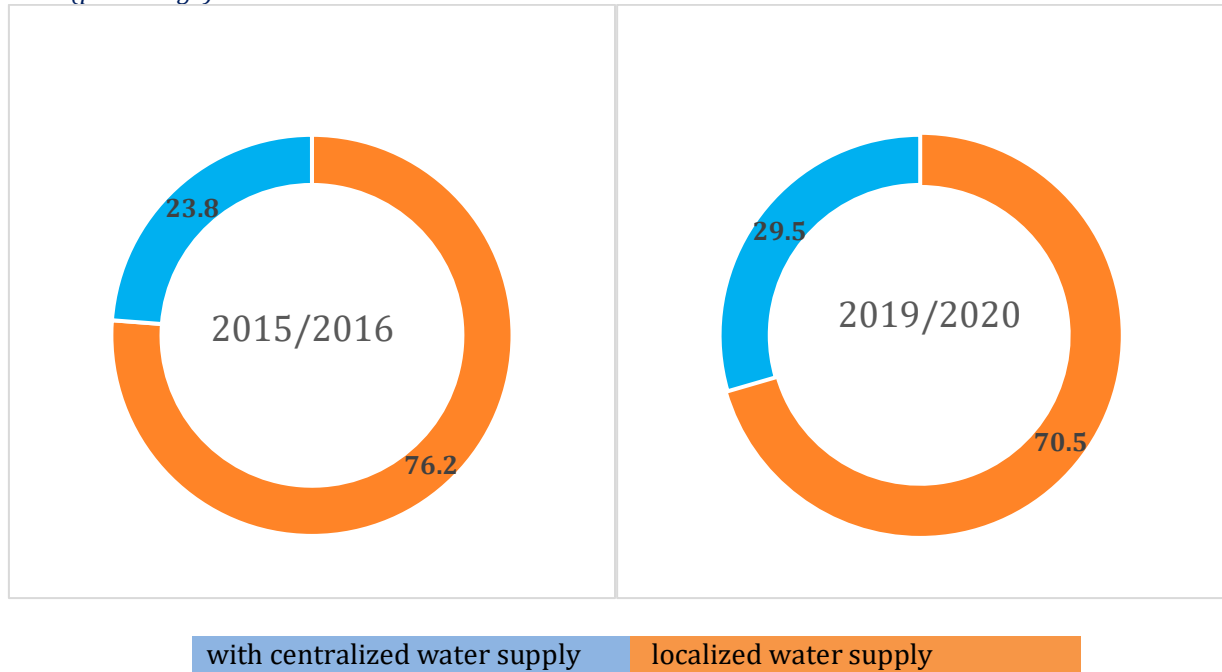
In terms of WASH in PSE, there were 523 kindergartens with decentralized water supply in the 2015-2016 academic year, which decreased to 324 in the 2019-2020 academic year. Over the last four years, this reduced by 199 (38.0%) (Figure 4.a.1).

Figure 4.a. 1. Number of kindergarten buildings (by water supply type, academic year)



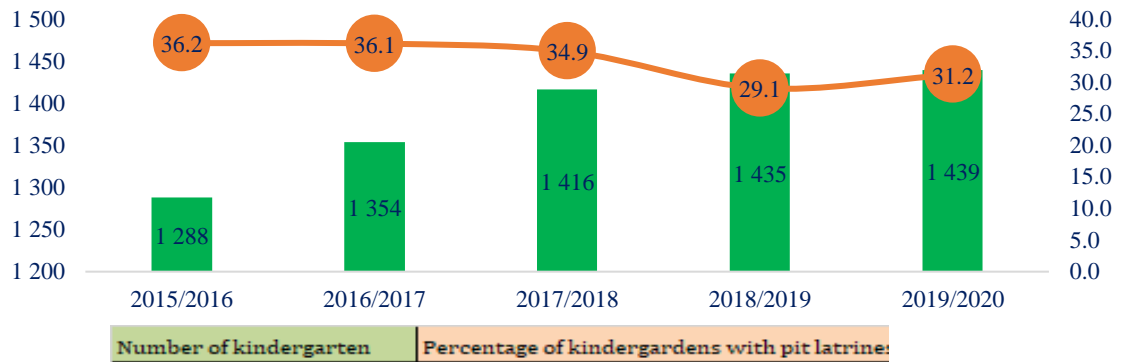
The percentage of kindergartens without centralized water supply was 23.8 percent in the 2016-2017 academic year. By the 2019-2020 academic year, this number had increased to 29.5 percent, an increase of 5.7 points (Figure 4.a.2). This indicates that the provision of kindergartens with centralized water supply has not improved significantly.

Figure 4.a. 2. Comparison of the water supply of kindergarten buildings by academic year 2015-2016 and 2019-2020 (percentage)



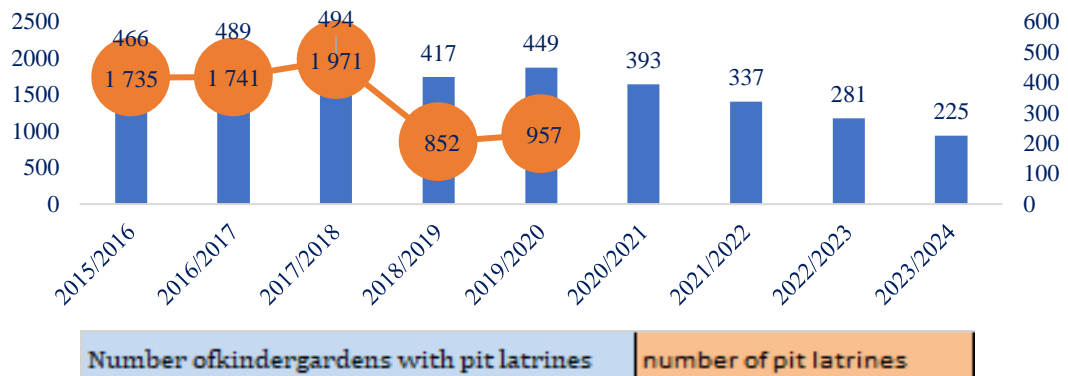
The percentage of kindergartens with pit latrines in the total number of kindergartens was 36.2 percent in the 2015-2016 academic year, and it decreased by 5 points to 31.2 percent in the 2019-2020 academic year (Figure 4.a.3).

Figure 4.a. 3. Percentage of kindergartens with a privy in total kindergartens (by academic year)



Based on the results of the thematic study "Current situation of water supply and sanitation facilities in schools and kindergartens" conducted by WASH Action Mongolia in 2016-2017 in collaboration with MECS and UNICEF, of the total of 1351 kindergartens in 2017-2018 academic year, there were 494 kindergartens with 1971 pit latrines. The number of pit latrines has decreased to 957 by 2019-2020 academic year. The study projects that the 449 kindergartens with 957 pit latrines will be reduced by 50 percent by the 2023-2024 academic year (Figure 4.a.4).

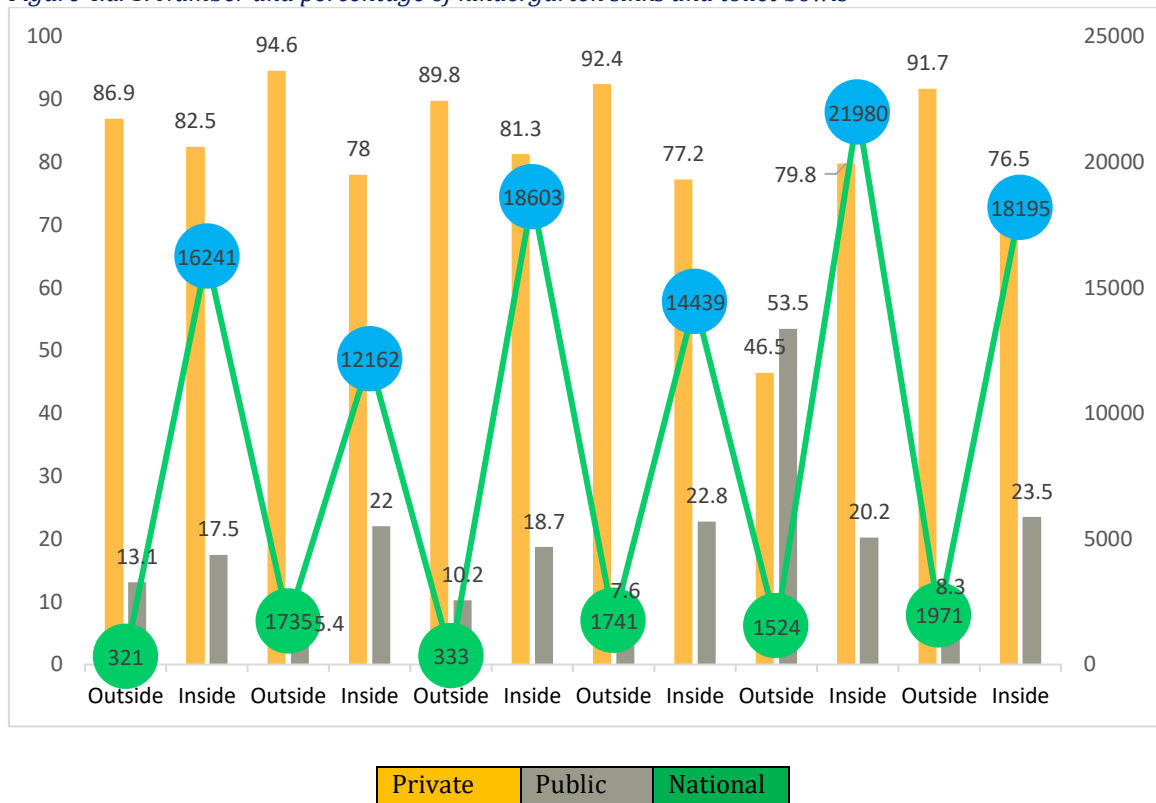
Figure 4.a. 4. Number of kindergartens with privy and privies' number (academic year, by perspective)



Source: (WASH-Center, 2017)

Regarding washing facilities located outside of the building, the percentage of state-owned kindergartens decreased from 86.9 percent in the 2016-2017 academic year to 46.5 percent in the 2017-2018 academic year, indicating a decrease of 40.4 percentage points. On the other hand, the proportion of state-owned kindergartens with toilets located outside of the building decreased from 94.6 percent in the 2016-2017 academic year to 91.7 percent in the 2017-2018 academic year, indicating a decrease of 2.9 percentage points (as shown in Figure 4.a.5).

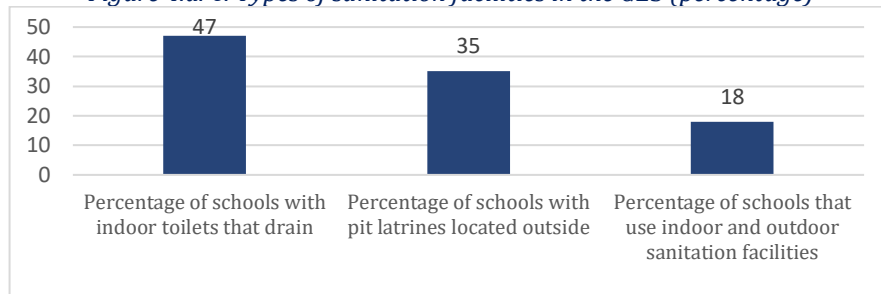
Figure 4.a. 5. Number and percentage of kindergarten sinks and toilet bowls



Although improvements have been made to the learning environment and hygiene in preschools, there is still a need for sectoral investment to further enhance their quality.

Regarding WASH in GES, the study results mentioned earlier, which were jointly carried out by MECS and UNICEF in 2016-2017, included 770 schools, of which 54.0 percent had a centralized water supply. Among these schools, 47.0 percent had inside toilets with flushing water for cleaning waste, 35.0 percent had outside pit latrines, and 18 percent utilized both inside and outside toilet facilities (as shown in Figure 4.a.6).

Figure 4.a. 6. Types of sanitation facilities in the GES (percentage)

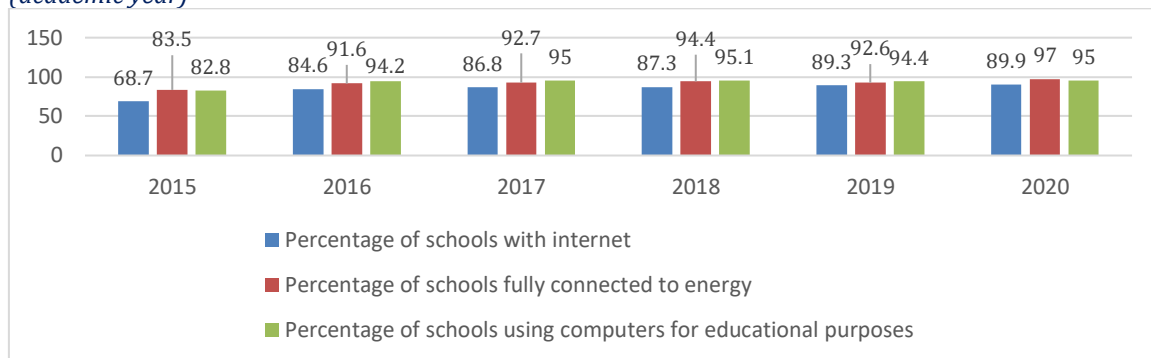


Out of the 402 dormitories that were included in the aforementioned study, 61.0 percent had outside pit latrines, 17 percent had inside toilets, and the remaining 22 percent had both types of toilet facilities. One of the objectives of MES is to ensure that students have access to filtered drinking water during school hours. As of the 2020-2021 academic year, 69.0 percent of all schools had made provisions for drinking water.

Improvement of learning environment promoting inclusive participation of students:

Supply of electricity, internet connection, and computers in the schools: The goal has been to improve the learning environment in alignment with the advancement of information and communication technologies. To achieve this objective, efforts were made to connect schools to electricity and provide them with computers and equipment. As a result, in 2020, 95 percent of schools were equipped with computers, and 97 percent had access to electricity. Additionally, the percentage of schools with internet access for educational purposes had increased by 22.1 percent since 2015, as illustrated in Figure 4.a.7.

Figure 4.a. 7. Status of electricity and internet connection of the schools and percentage of computer supply (academic year)

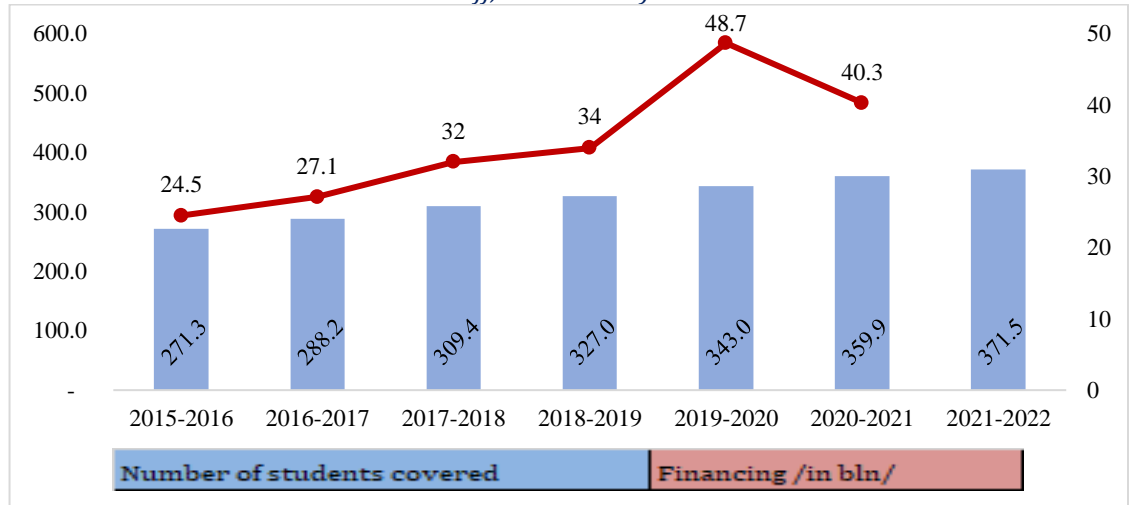


Source: NSO information, 2021

One of the major objectives of the GES is to create a conducive environment for inclusive education for children with disabilities. In 2019, the Minister of Education, Culture, and Science adopted Resolution A/292, which aimed to improve the school environment and conditions for children with disabilities by providing them with learning opportunities and necessary materials, such as books, textbooks, manuals, and training equipment that cater to their specific needs. The resolution emphasizes the significance of ensuring accessibility for children with disabilities to enter schools without facing any barriers and enabling safe movements within schools.

Foodservice for students: Providing healthy and nutritious food to students at school is one of the key factors in creating a child-friendly learning environment and improving their learning outcomes. In Mongolia, School Snack Services have been provided to all primary school students since 2006, financed from the state budget, regardless of school location, ownership, household income, health, or citizenship differences. In the 2015-2016 academic year, the GoM allocated MNT24.5 billion to provide snacks for 271,300 primary school children, while in the 2020-2021 academic year, the amount increased to MNT40.3 billion for 359,900 students (Figure 4.a.8). The number of children receiving the service and government expenditure from the state budget has been increasing annually since the 2015-2016 academic year. The unit cost per child for the food service was MNT600 in 2016, which increased to MNT1,500 in 2022 when the service was expanded to include lunch.

Figure 4.a. 8. Number of students covered in the School snack service and expense amount (academic year, by the tariff, million MNT)



Source: MES statistics, 2021¹⁰

During the school brunch, students are provided with a variety of snacks, including industrial bakery products such as biscuits, boortsog (a national snack), pastries, drinks, dairy products, juice, hot tea, and hot curd. To improve the quality of the brunch, the Parliament approved the "Law on food production and services in general education schools" in 2019, which allowed for the expansion of the brunch time into lunch starting from September 1, 2021. The introduction of lunch services has had a significant impact not only on children's health and growth, but also on their learning motivation and quality of education, as well as on household livelihoods, ensuring equal access to education for every child.

By 2024, this lunch service will be expanded and become available to all students in grades 1-12 of schools. This new law aims to provide safe and nutritious lunch to all students, prepared by professional human resources under designated conditions that meet the requirements and use locally produced and grown products from the local area and livestock.

The GoM has a tradition of taking full responsibility for the meal expenses of students living in dormitories of the GES and has a tradition of providing full funding. In the 2021-2022 academic year, the GoM fully covered the meal expenses of 32,576 children living in 548 dormitories, with funding from the state budget of MNT 25.4 billion.

In addition, the GoM has been providing lunch services to all students in special schools, not just primary school students, since September 1, 2017. However, the daily food budget of MNT 2,400 per child is currently insufficient and will need to be increased in the future.

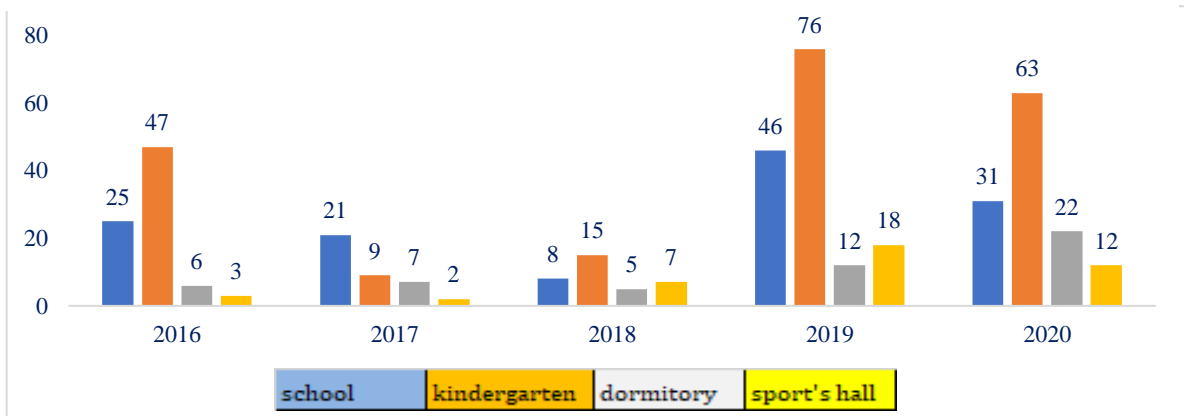
School building capacity and utilization

The biggest challenge in creating a conducive learning environment in schools is funding. Since 2016, new school buildings, kindergartens, dormitories, and sports halls have been constructed annually,

¹⁰ The last 3 academic years are represented by the budget approved for that year, and due to the suspension of classes and training due to the COVID-19 pandemic, the budget performance will be different.

and in the last two years, the number of new buildings has increased rapidly (as shown in Figure 4.a.9). Consequently, positive outcomes have been achieved, such as reducing the number of school shifts and providing full enrollment for children in remote areas who previously lacked access to educational services. However, there is still a need and demand for further expansion of these facilities.

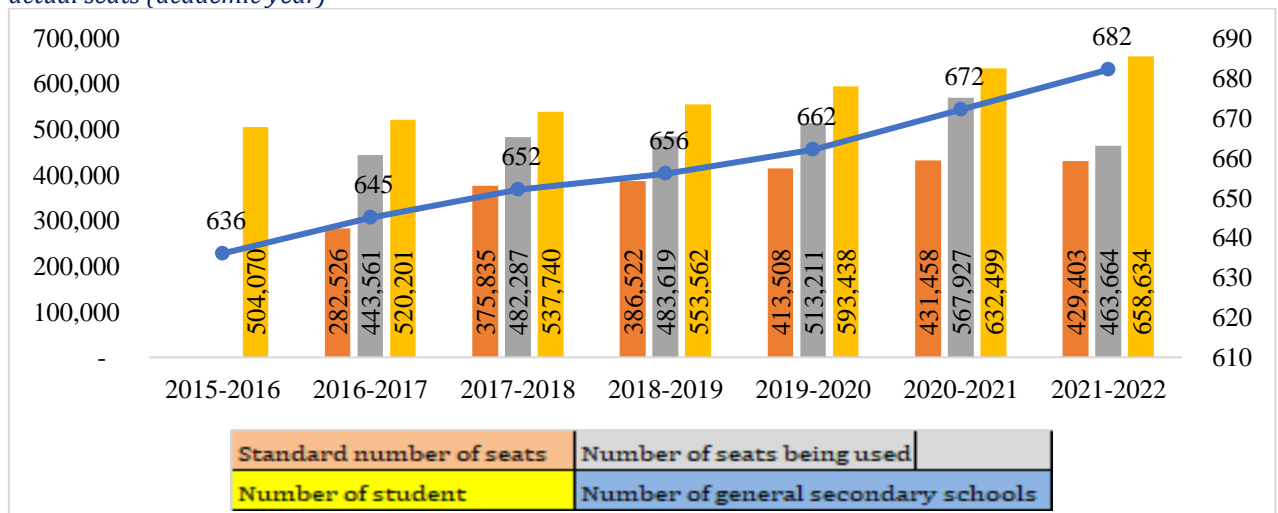
Figure 4.a. 9. Number of buildings commissioned with state budget investment



Source: MES statistics, 2021

According to data from MES, Mongolia had a total of 535,055 students enrolled in public and private schools during the 2015-2016 academic year. This number has steadily increased every year, reaching 712,353 in the 2021-2022 academic year, representing a growth of 33.1% in the total number of students. In the same period, the number of students in public schools increased from 504,070 to 658,634 (as shown in Figure 4.a.10).

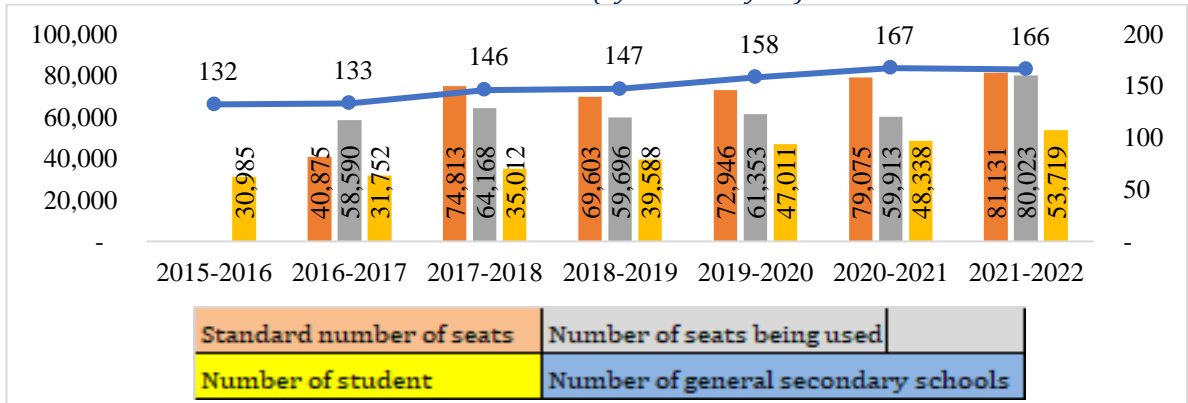
Figure 4.a. 10. Number of public schools and their students as well as school building's norms and changes in the actual seats (academic year)



Source: MES statistics, 2015-2021

The number of students in private schools increased from 30,985 to 53,719, with their share of the total student population rising from 6.1% to 8.2% (as shown in Figure 4.a.11).

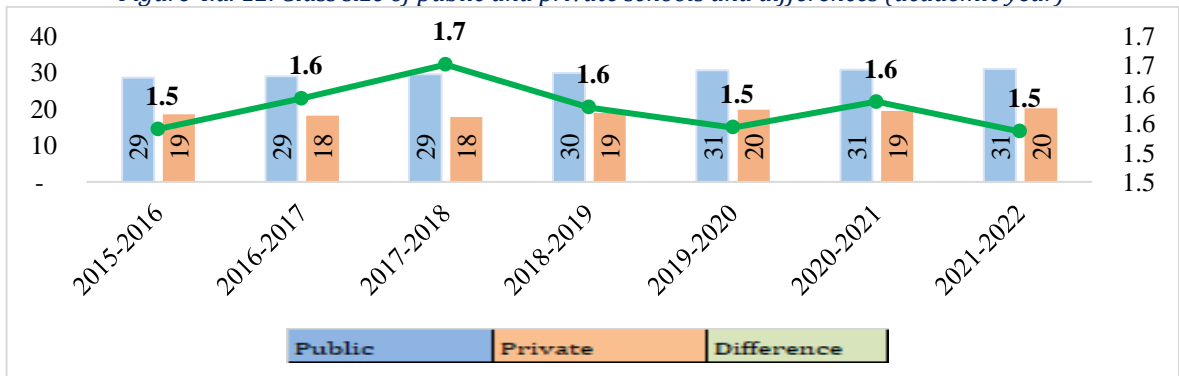
Figure 4.a. 11. Number of private schools and number of students as well as school building's norm and change in the actual seats (by academic year)



Source: MES statistics, 2015-2021

The class size in public schools is approximately 1.5 times larger than that of private schools, with the number of students per class being significantly higher in public schools (as shown in Figure 4.a.12).

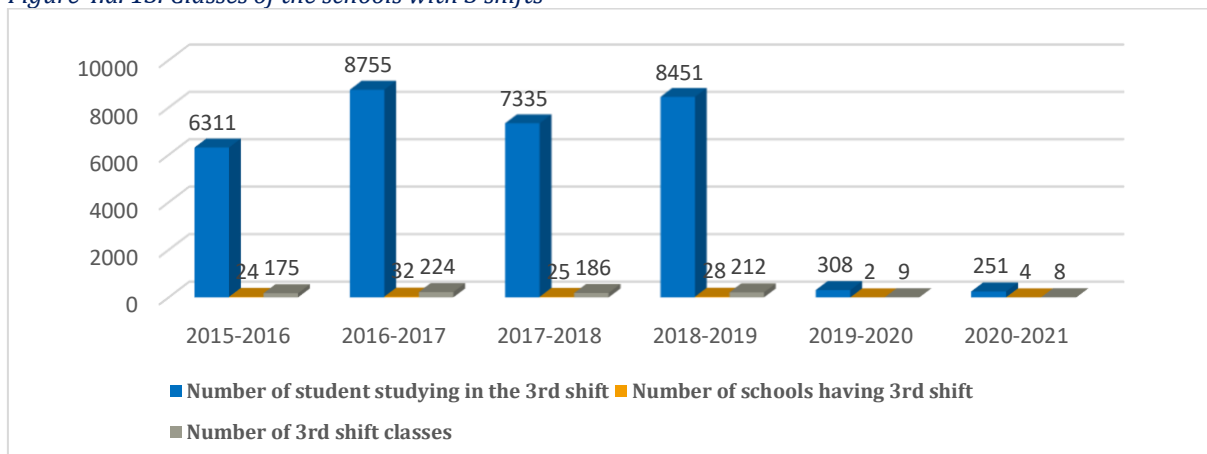
Figure 4.a. 12. Class size of public and private schools and differences (academic year)




Source: MES statistics 2015-2021

In the 2020-2021 academic year, 71.31 percent of the total school classes in GES are in the first shift, 28.66 percent are in the second shift, and only 0.03 percent are operating in the third shift. This is due to the commissioning of many new school buildings over the last 5 years, which has reduced the number of classes in the third shift from 175 to just 8, as shown below.

Figure 4.a. 13. Classes of the schools with 3 shifts





The Minister of Education and Science is responsible for overseeing the implementation of 16 projects, out of which 5 are being carried out with foreign loans and assistance amounting to USD 128.7 million. These projects include the "Expansion of the Campus of the Mongolian-German Joint University of Minerals and Technology" project, which is receiving EUR 7.0 million in funding, and the "Higher Education for Engineers and Technology" project, which is receiving a soft loan of JPY 7.5 billion. The remaining 8 projects are being implemented with grant funding. In recent years, several new school and kindergarten buildings have been commissioned with grants and loans from various countries and regional financial organizations. For instance, 7 schools with 5,720 seats in Ulaanbaatar city and 1 kindergarten with 100 beds in Arkhangai aimag were constructed with grants from China, 4 schools with 2,520 seats in Ulaanbaatar city were built with grants from Japan, and 4 kindergartens with 200 beds in Dornogovi, Sukhbaatar, Selenge, and Uvs aimags were constructed with grants from the USA. Additionally, with a soft loan from the ADB, it is planned to build 10 schools with 4,300 seats in Ulaanbaatar and Darkhan cities, Govi-Altai, Dornogovi, and Govisumber aimags, as well as 22 kindergartens with 3,800 beds, of which 2 schools have already been built.

The safe and non-violent environment of the schools

To prevent violence, harassment, bullying, neglect, and other potential risks to students in GES schools and protect them from harm, increase schools' capacity to respond, and improve the quality and availability of child protection services in the school environment, the Minister of Education, Culture, Science, and Sports approved Order A/476 in 2018, titled "Child Protection Policy in General Education Schools," and Resolution A/239, titled "Procedures for Preventing Child Abuse in Education Institutions and Dormitories," respectively. Additionally, in 2019, the minister approved Order A/508 for "The Model Contract with Parents and Guardians and Custodians of Children in Kindergartens and Schools" to ensure the safety of kindergarten and school children.

In the education sector, despite the presence of child protection policies, school environment safety standards, and the necessary legal framework to prevent potential risks to children in the school environment, research results indicate that their implementation is inadequate at the organizational level.

A study conducted by Save the Children in Mongolia revealed that 37.9% of 1,236 school children aged 11-16 from 9 districts of Ulaanbaatar city experienced bullying and insults, while 40.7% witnessed bullying and physical abuse. Additionally, 80% of the participants reported that they do not know where or to whom to report these incidents. Similarly, the report "Children's Rights and Protection," conducted jointly by the National Human Rights Commission and the International Organization Good Neighbors in 2017, showed that violence and neglect were the most common violations of children's rights in Mongolia.

Moreover, a sample survey of social indicators conducted in 2018 found that 40.4% of children aged 1-14 reported experiencing emotional violence, and 32.8% reported experiencing corporal punishment within the previous month. These two studies reveal a strong pattern of neglect and abuse towards children, which contributes to the prevalence of bullying and other violations among children.

Additionally, recognizing the prevalence of peer bullying and family violence, the Government of Mongolia declared 2022 as the year of anti-violence. However, there is a lack of official data on these issues, and only a limited number of studies have been conducted.

To promote a violence-free environment for children, education must be provided to them on respecting themselves and others on social media, using social media properly, avoiding inappropriate communication, and refraining from discriminating or oppressing others. In 2016, the campaign "No Social Media Discrimination" was initiated, which provided education to children, adolescents, parents, teachers, and guardians on preventing discrimination and harassment of students in the online world. It is believed that this campaign has helped create a social and psychological environment to overcome social media discrimination. In addition to protecting themselves from social media bullying, students are becoming more aware of proper behavior and anti-discrimination practices. Further studies are required to understand the negative effects of the external environment on children and to make significant policy changes. Professional collaboration among social workers, doctors, and educators is needed to address issues related to social media and negative information. It is important to improve parents and guardians' control and attention.

Since 2017, as a result of the initiative to organize bus transportation for children in general education schools and kindergartens in the capital city, 33% of Ulaanbaatar's schools have achieved the goal of transporting students in comfortable and safe buses that meet standard requirements, transportation conditions, and technical integrity.

The "School Police" project was implemented in 2013 to involve parents in prevention activities such as traffic accidents and crime, and to ensure the safety of the school environment for children in general education schools.

SDG: 4.B Scholarships for studying overseas

Establishing the "State education fund" in 1993, which implemented a public policy to finance higher education by providing scholarships and allowances for the target group until 2016. In 2016, the Parliament and GoM re-organized the State education fund into Loan Fund for Education which kept its main operation up to date.

In 1993, the "State Education Fund" was established with the aim of financing higher education through scholarships and allowances for eligible students. This policy was continued until 2016 when the government reorganized the fund into the Loan Fund for Education, which continues to operate today.

Through these funds, a total of MNT 909.8 billion was provided to 1,491 thousand students in various forms of funding such as discounted loans, student development loans, grants, scholarships, and loans for students studying overseas for their bachelor's, master's, and doctorate degrees (as shown in Table 4.b.1). However, it was not possible to determine what percentage of the funding and the number of recipients studied in developed countries, as the data was aggregated over different timeframes and did not distinguish by year or academic year.

Table 4.b. 1. The amount of funding provided by the GoM for all types of tuition fee support and allowances between 1993-2021, and the number of recipient students (in duplicate number)

Discounted loan, Student development loan	Grant, scholarship	Foreign loan (bachelor, master, doctor)	Foreign scholarship
Between 1993 and 2020, the State education fund	Between 1995 and 2020, MNT591.8		Between 2016 and 2021, USD 14.3 million,

and Loan fund for education provided MNT102.5 billion funding to 213.3 thousand domestic students in the form of discounted loans and student development loans.	billion in funding was provided to 1.2 million students in the form of grants and scholarships for tuition fee.	Between 1997 and 2020, USD 98.6 million, or MNT 182.7 billion was funded for 4,914 students as a foreign loan.	or MNT 32.8 billion was disbursed to 917 students as intergovernmental scholarships.
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TOTAL: From 1993-to 2020, in total MNT909.8 billion was funded for 1,419,140 students to get higher education locally and internationally

Source: Education Loan Fund

Over the last 3 years, the Loan Fund for Education has provided products and services totaling MNT54,640.4 billion, on average, to finance tuition fees for students studying at both local accredited universities and foreign universities and colleges to obtain higher education. This funding is provided in the form of scholarships for tuition fees, grants, and repayable discounted loans. It has benefited approximately 30,000 citizens, as shown in Table 4.b.2.

Table 4.b. 2. The total number of students and the amount of funding provided by the LFE in relation to tuition fees during 2018-2020 (types of products and services)

1.	Grant for tuition fee	19,067.5	18,699
	1.1. Scholarship, grant (orphan, PWDs, 3 children from 1 household study, Tsaatan, lost ability to work)	12,248.7	6,146
	1.2. Teacher profession, teaching practice	2,786.1	1,571
	1.3. Intergovernmental contract	3,006.2	317
	1.4. Travel cost allowance	1,026.5	10,665
2	Domestic loan (Student development loan)	15,103.8	10,200
3	Foreign loan and scholarship	20,095.6	323
	3.1. Top 100 universities of the world	14,288.6	183
	3.2. Master and doctor level study	5,807	140
	TOTAL AMOUNT	54,630.4	29,950

Source: Loan Fund for Education

Article 40.2 of the Law on Education previously stated that "the state will finance from the state budget the fixed cost of all levels of public schools and kindergartens." However, it was amended on November 2, 2018, to state that "the local budget will finance fixed costs for public schools and kindergartens and dormitories of the general education schools." As a result of this amendment, the Government stopped funding fixed costs for higher education institutions starting in 2018. The GoM now only provides support for higher education through scholarships, allowances, grants, and student development loans, as shown in Table 4.b.3.

Table 4.b. 3. Provision of student tuition grants, discounts, assistance and student development loans

Types	Student number /on average/	Funding /on average, MNT billion/	Explanation
Scholarship for students in nursing	approx 1700	4.6	Nurse scholarship has started from 2020
Scholarship for vulnerable students	approx 6000	11.6	Has disability, fully orphan, both parents have disability etc

Scholarship for students for teacher profession	approx 700	1.7	
Scholarship for foreign students studying in Mongolia	approx 150	0.7	
Scholarship for students with Government scholarship	approx 700	8.3	Starting from 2022, the Presidential and Prime Minister's scholarships have been awarded
Student development loan	approx 10000	17.9	Loans for students in the priority professions
Loan for students to study abroad	approx 200	8.9	Starting from 2021, the loan to study abroad has stopped. However, will provide till previous students' graduation

Grants

Some students in higher education institutions require state social welfare support and assistance. In order to promote inclusive education, the Government resolution, as stated in article 4.1 of #264 resolution dated 2021, provides tuition scholarships and grants as government funding support to the following students of domestic higher educational institutions:

- Fully orphaned students
- Students with disabilities studying in the educational levels of bachelor, master, and doctoral programs, or those who have both parents with disabilities and are studying for a bachelor's degree
- Bachelor's students from families with a member with disabilities
- Bachelor's students from Tsaatan families
- One student from families with three or more children studying for a bachelor's degree in higher education institutions simultaneously.

Therefore, in order to ensure anti-discrimination in the educational sector, the Government implemented Resolution #71 in 2014, which provides financial support and loan programs for tuition fees to students from households in target groups.

The Loan Fund for Education provides nine types of scholarships and two kinds of loans to eligible students. The scholarships include: (1) a scholarship for foreign students studying in Mongolia under a government contract, (2) a scholarship for vulnerable students, such as fully orphans and students with disabilities, to cover tuition fees, (3) a travel cost allowance for rural students, (4) a scholarship for students pursuing a teaching profession to cover tuition fees for bachelor and master's programs, (5) a scholarship for teaching practice in rural areas, (6) a scholarship for students studying nursing at state-owned universities, (7) a scholarship for students studying abroad under a government contract, (8) Presidential scholarships, and (9) Prime Minister's scholarships.

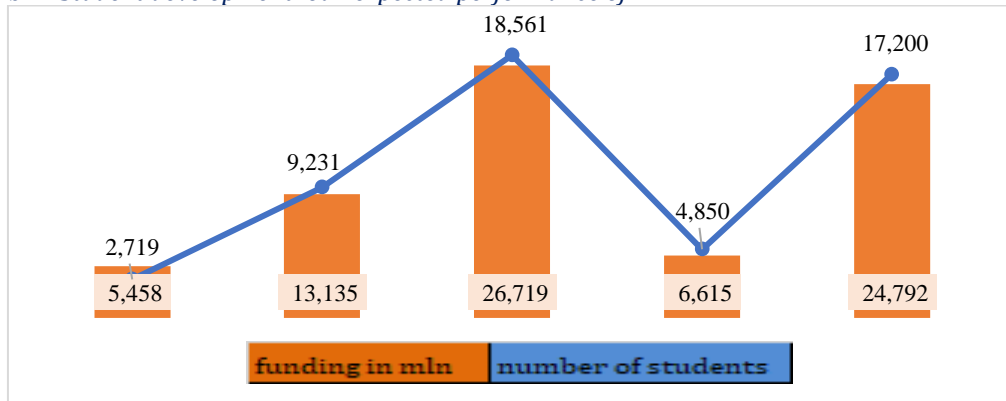
The two kinds of loans provided are a student development loan and a loan for students studying abroad. However, as of 2021, the loan for studying abroad has been suspended, but students who received the loan prior to the suspension will continue to receive support until graduation.

Student development loan

According to Government resolution #46 of 2018, one of the most popular products and services provided by the Loan Fund for Education is the "Student Development Loan." This loan was first

made available through commercial banks in 2017-2018 and through the Loan Fund for Education in 2018. As of expected performance in 2021, a total of 44,266 students (in duplicate number) have received a loan of MNT73.7 billion (Figure 4.b.1).

Figure 4.b. 1. Student development loan expected performance of 2017-2021



Source: Loan Fund for Education

Loan Requirements: In 2017, the loans totaling MNT5.4 billion were provided through commercial banks to 2,719 students at an interest rate of 2% per annum, with the requirement of collateral and guarantee for income sources. However, from May 01, 2018, loan terms were simplified to improve accessibility to credit. The Loan Fund for Education has since provided MNT42.0 billion in loans to 29,852 students with no interest rate and no collateral required. Repayment of these loans is required within 6 years after graduation. As of the end of 2020, a total of MNT39.9 billion in outstanding loans is owed by 27,653 students who are currently studying, and these loans will be paid after graduation.

Policies, concepts, and legal coordination for the provision of loans and scholarships to students to study abroad

The provision of loans and scholarships to students for studying abroad is governed by various policies, concepts, and legal frameworks in Mongolia. These include the "Law on Financing Higher Education and Student Social Security," Presidential Decree #78 of 2013, Government Resolution #271 of 2013 on the admission of students to top universities worldwide, and Resolution #70 of 2020 on issuing tuition loans to students of foreign higher educational institutions, among others.

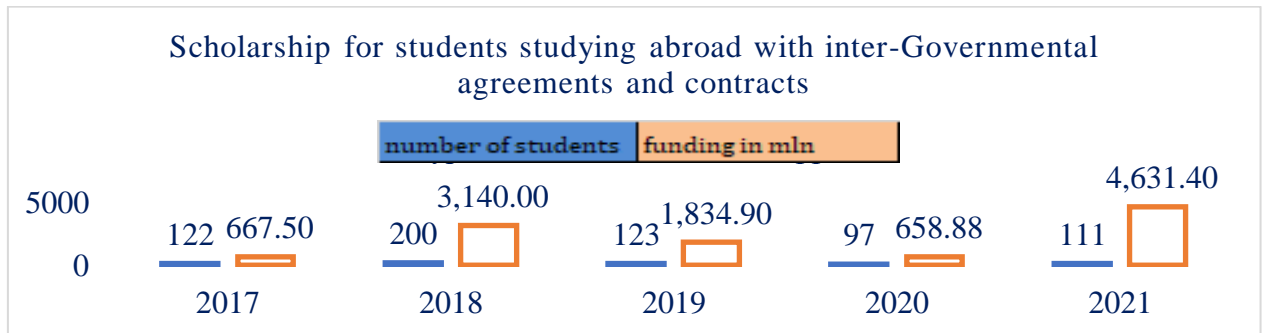
The Loan Fund for Education provides the following financial supports to students of higher educational institutions:

- Scholarship program for undergraduate students of the top 100 universities in the world
- Master's and doctoral programs in highly developed countries

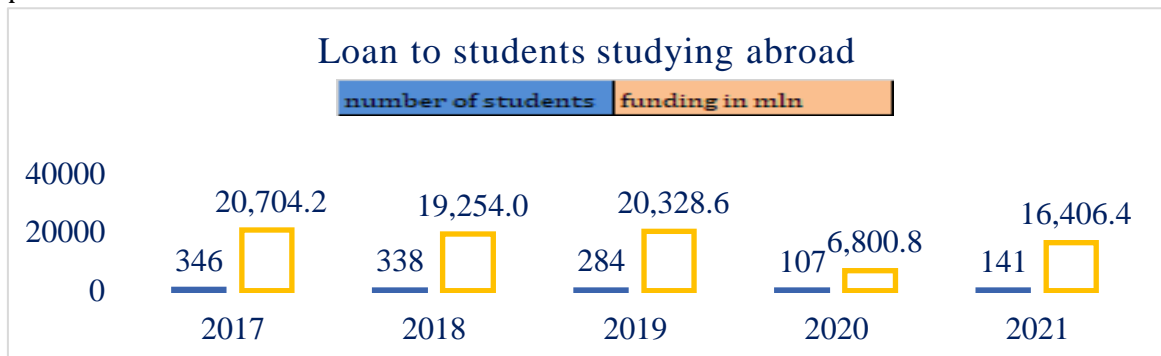
In the academic year 2020-2021, a total of MNT100.1 billion was provided to 421 students studying in the top 100 universities in the world. Additionally, 37 students graduated on grant financing while 384 students are studying on discounted loans, as per Government Resolution #217 of 2011.

Scholarships for students studying abroad under intergovernmental contracts and agreements between the two countries' Governments are also available. On average, about 100 students receive

scholarships amounting to MNT2.0 billion per year. Starting from 2022, scholarships for the Presidential and Prime Minister's will also be provided.




Approximately 200 students annually receive a loan for tuition fees to study in the bachelor's, master's, and doctoral programs at the top 100 universities in the world. This program has been suspended in 2021 but will continue to support current students until their graduation. The funding for these two programs has been reduced due to the decline in state budget caused by the Covid-19 pandemic.



In the past, Mongolian citizens have participated in 16-18 different scholarship programs through bilateral agreements and contracts between the governments and ministries of various countries. These programs involve countries such as the Republic of Poland, the Republic of Bulgaria, Romania, Hungary, Ukraine, the Republic of Cuba, the Czech Republic, the French Republic, the United States of America, the Republic of Kazakhstan, the Republic of China, the Republic of Belarus, the Republic of Vietnam, the Lao People's Democratic Republic, the Russian Federation, the United Kingdom of Great Britain and Northern Ireland, Japan, and the Republic of Korea.

The Government of Mongolia has approved two procedures for awarding scholarships as an honor from the President and the Prime Minister of Mongolia. These procedures are outlined in Annex #1 and Annex #2, respectively, and were approved under Resolution #275 of 2021.

Under the framework of the scholarship program as an honor from the President of Mongolia, one student from each of the 330 soums and 171 khorooos will be admitted to a bachelor's degree program at a university or college in a highly developed country. On the other hand, the scholarship program as an honor from the Prime Minister of Mongolia will benefit up to 50 students for master's and doctoral programs who have received an invitation from the top 100 universities in the world. These programs will commence from the academic year 2022-2023. As part of the high-level policy decision, the selection process for the presidential scholarship will ensure fair selection of students from each administrative unit of Mongolia, irrespective of their financial ability to pay tuition fees.



Before studying at the top universities of the world with state funding, selected students will undergo special preparation at local universities. This solution ensures non-discrimination in the sub-sector of higher education, particularly in educating the best professionals abroad.

Citizens who receive the aforementioned scholarships will pursue professions listed in the "List of priority professions required in Mongolia" as approved in the 2nd annex of the Government of Mongolia's Resolution #70 of 2020. This list includes majors such as preschool teaching, primary school teaching, special education teaching, environmental studies, renewable energy, environmental protection technology, artificial intelligence, data science, food engineering, oil engineering, nutrition studies, veterinary science, nursing, and social health.

The objective of providing equal education opportunities for all and preparing a globally competitive workforce is mentioned in Objective 2.1 of Mongolia's long-term development policy "Vision-2050," Objective 2.3 of the Government of Mongolia's Action Plan 2020-2024, and Objective 2.1 of Mongolia's five-year development guidelines for 2021-2025. These policies and measures will play a vital role in achieving these goals by training specialists in priority professions in developed countries.

SDG: 4.C. Teachers and Educators

According to the Education sector Policy Review of Mongolia published by UNESCO in 2019, "clustering can serve as a means of multi-objective optimisation of human, temporal and financial resources. Clusters have potential to provide the optimal solution for key problems of education by establishing a policy cycle that is no longer separate and stage-based, but is instead a holistic process — and with a well-articulated relationship between clusters" (UNESCO, 2019).

The teaching development cluster mentioned earlier is structured into three tiers: general, basic, and detailed. A version of the teaching development cluster model was developed with seven main levels at the first tier, 33 sub-levels at the second tier, and 103 special levels at the third tier. The model comprises a total of 143 indicators, and its results were analyzed and presented in the package of preschool, primary, and general secondary education teacher and management development policies, medium-term plans, and the education law (MECS, SAAQ, ADB, 2019).

The stages of teaching development clusters are as follows:

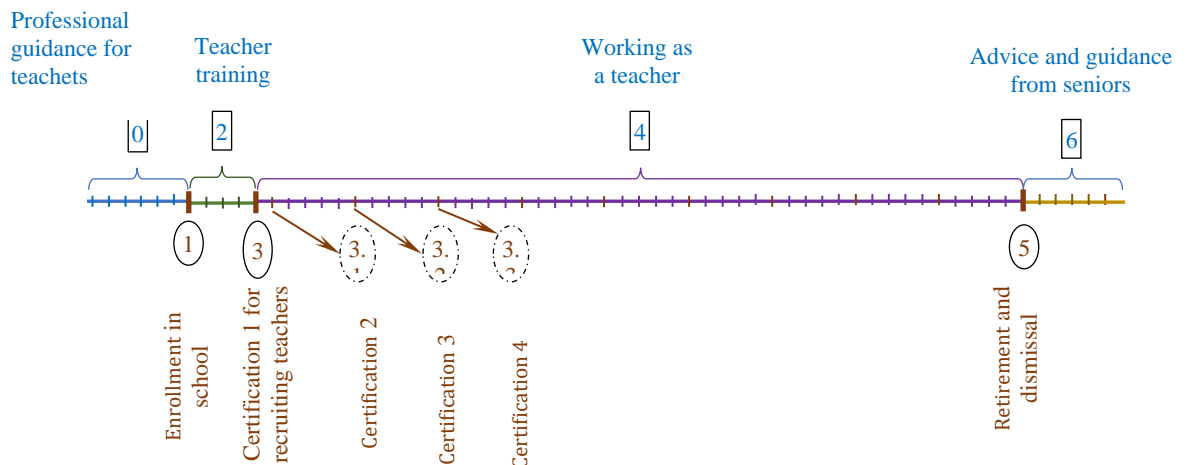
- TC0: Provision of professional guidance to teachers
- TC2: Teacher training, in-service support for continuous professional development
- TC4: Working as a teacher
- TC6: Advice and support from seniors

The basic stages of transition in teaching development are:

- TC1: Enrollment in teacher training schools
- TC3: Recruitment of teachers
- TC5: Retirement and dismissal

The goal is to measure the progress of implementing this target by using common and thematic indicators related to SDG 4.7 and 4.c, along with some secondary indicators. This is a methodological feature of this subgroup, based on the four stages of teaching development clusters and three transitional states.

Figure 4.c. 1. The general structure of teaching cluster development



Source: Journal of the Institute of Education

TC1. Provision of professional guidance for teachers:

In the initial stage of the teaching cluster, several significant factors are considered. Firstly, the desire to become a teacher is an essential aspect. Secondly, it provides an opportunity for individuals to discover their talents and abilities. Thirdly, the requirements for admission to the teaching profession are crucial. Finally, the input of the "teacher" process, such as professional advocacy, is also considered an important factor.

Willingness to become a teacher, and the opportunity to discover oneself: Mongolians have a long-standing tradition of respecting teachers. However, recent research has shown a significant decrease in the interest and motivation of adolescents and young people to enroll in the teaching profession.¹¹ This is attributed to the low salaries and social value attached to teachers. For instance, a quarter of teachers opted for the teaching profession as a second choice after failing entrance examinations for other schools or professions. One in ten people reported that they lacked the autonomy to make their own career choices, as they were influenced by others. Only 1.3% cited reasons related to their passion for teaching and professional career prospects. Two in three teachers expressed the desire to switch careers due to excessive workload and low wages.


High school students lack opportunities to make informed decisions about their future professions by discovering and recognizing their talents, interests, and basic skills before graduating from high school and entering college. Although high school students are legally allowed to choose three subjects, each class is required to have no less than 20 students, limiting every student's opportunity to choose subjects based on their interests. As a result, students are likely to follow the majority's choice, opting for subjects such as English, Mathematics, and Social studies. Therefore, not all children are given equal opportunities. The number of students taking entrance exams in subjects other than those mentioned above is small, which reduces the competition and quality of university entrants in the fields of natural sciences (chemistry, physics, geography, biology) and arts.

¹¹ "Perceptions and views of Mongolian teachers on professional ethics and morality" Davaajav Purevjav*, Edit Katalin Molnár**, Davaasuren Davaadorj***

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Under the Employment Skills Support Project, funded by the World Bank, a "Career Orientation" program was developed in 2016 for students in grades 9-12. The program was recommended as an extracurricular activity, and training was provided to classroom teachers and social workers nationwide. Consequently, some high school seniors organized extracurricular activities such as work and career-related research, projects, field trips, and meetings with various professionals. However, due to unclear regulations and policies, the program was not implemented consistently in every school after the curriculum was revised in 2019.

Although the Mongolian National University of Education (MNUE), a major state-owned school with a teacher training function, facilitates a general secondary education school under its operation, its programs and activities are not aimed at providing teachers with a professional foundation or guidance (No advanced teacher training class is available).

Advocacy for the "Teacher" profession: In an effort to promote the teaching profession, a targeted television series called "I am a teacher" was developed in 2019 and 2021 in cooperation with the Ministry of Education and Science and "Bolovsrol" TV. The series aimed to recognize and reward the best, most skilled, and leading teachers, and to increase the value and prestige of teachers in society. The winning teacher received a prize of MNT 100 million, making it a substantial effort to re-motivate teachers and draw the attention and interest of the public, adolescents, and young people to the teaching profession.

TC1. Enrollment in Teacher training schools

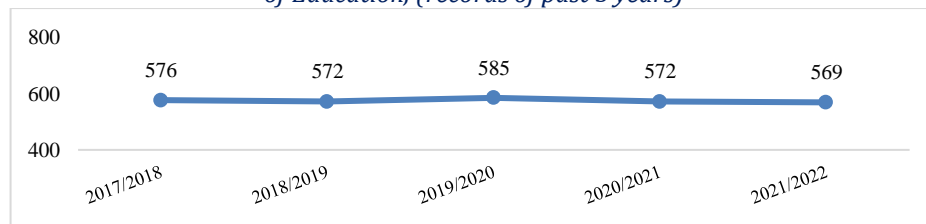
The state of this teaching cluster has a decisive impact on the continuous professional development of teachers and, consequently, on the quality of education. Factors such as professional higher education entrance exams, gender issues, choice of learning methods, student scholarships, and support affect enrollments in teacher training institutions.

Requirements for admission into the teaching profession: According to the decision of the MECSS in 2018, entrants of the teaching profession are required to write essays about their readiness, experience, personal characteristics, and ability to learn, in addition to the entrance exam. The main criteria for admission to other universities are the results of the general entrance examination. Currently, five public and 19 private universities train preschool teachers. Of these, 12 schools have additional requirements related to individual competencies, while the rest have not taken steps to implement the Ministry's decision and continue to enroll entrants based solely on the general entrance examination scores (Institute of Education, MECSS, UNESCO; NatCom, 2019).

Entrance examinations: In Mongolia, university general entrance examinations are conducted in accordance with regulations approved by the Minister of Education. The national entrance threshold for teachers was increased in 2021 by Order A/187 of the Minister of Education, Culture, Science and Sports to 480 points for state-owned universities and colleges, 410 points for non-state-owned universities and colleges, and local universities, and 400 points for professional colleges (MES, 2021).

In 2018, the MNUE decided to waive up to 100 percent of tuition fees for male students enrolled in the school, depending on their academic performance (Institute of Education, MECSS, UNESCO; NatCom, 2019).

Figure 4.c. 2. Average entrance examination score for the teaching profession at Mongolian National University of Education, (records of past 5 years)



Source: MSUE, Statistics, 2021,

According to the average score of the general entrance exam for the Mongolian National University of Education over the past 5 years, the average score for the 2019-2020 academic year was higher than in previous years. This increase may have been due to the decision to reduce tuition fees for high-scoring students. However, the average score on teacher entrance exams has been declining annually.

Student scholarships and support: When it comes to student **scholarships and support, discounts and assistance for students in the teaching profession are not as widely available** as the range of scholarships offered to university students in developed countries, as well as those offered to students at domestic and foreign universities. The “List of Priority Professions Required in Mongolia” was approved by the Government Resolution on “Measures to be taken for the education loan fund” (Mongolia G. o., Annex 2 of the Government Resolution No.70 on the Measures to be taken for the education loan fund, dated February 19, 2020, 2020). It includes 37 professions in 13 priority areas, including three educational professions: preschool and primary education teachers, and special education teachers.


According to the Law on Supporting Teachers’ Development (Mongolia P. o., 2018), “the curriculum of higher education institutions for teachers shall include a 6-month internship period. Scholarships may be provided if the trainee works in rural areas, and the relevant regulations will be approved by the Government.” However, these regulations have not yet been approved.

From 2006 to 2018, an average of 59.3 percent of all entrants each year were female students. In the 2018-2019 academic year, 42.7 percent of all entrants were residents of the Capital City. Of these students, 52 percent came from rural areas, and in addition to tuition fees, they received support for higher education costs such as dormitories and travel expenses. Despite these additional expenses, financial assistance for tuition and travel expenses can positively affect access to higher education (Institute of Education, MECSS, UNESCO; NatCom, 2019).

TC2. Teacher training and re-training

The teacher training and re-training cluster involves various aspects, including teaching curricula and their accreditation, teaching practice, the supply and development of professors and teachers in higher education institutes, and university learning environment and accreditation, among others. Below is a more concise and coherent presentation of information on the various aspects of the teaching cluster.

Teaching Curricula and Accreditation:



Article 2.1.34 of the "Vision-2050" Long-Term Development Policy of Mongolia sets the objective to establish special criteria for quality assurance in teacher training, increase the requirements for curricula, and strengthen the system of step-by-step certification of teaching licenses in educational institutions (Parliament of Mongolia, Government of Mongolia, 2020).

Article 21 of the Law on Primary and Secondary Education of Mongolia states that teachers for general secondary education schools must receive training at teacher training universities, institutes, and colleges. Similarly, according to Article 12 of the Law on Preschool Education, pre-school education institutions are required to have teachers with a bachelor's degree or higher in the field of pre-school education.

Currently, there are 41 universities and colleges licensed to provide higher education, offering a total of 233 undergraduate programs across 37 areas of study. Out of these, only 32 programs in 12 specific areas from 7 schools are accredited, which accounts for just 13.7% of the total teacher-training programs available.

Teaching internships: Regarding teaching experience, in 2018 the Law on Supporting Teachers' Development was approved, which includes a 6-month internship period in the curriculum of higher education institutions for teacher education, as stated in Article 8.3 of the Law. The Law further specifies that scholarships may be awarded to interns who work in rural areas, but the government has yet to approve relevant regulations under the Law. In state-owned and private universities, there is a wide variation in the duration and quality of teaching internships provided to students studying teaching.

Provision and capacity development of Higher Education Institute professors and teachers: the Law on Higher Education in Mongolia (Mongolia T.P., 2002) states that professional courses in universities, higher education institutions, and colleges must be taught by teachers holding master's degrees or higher. Master's and doctoral programs must be taught by teachers with Ph.D. degrees, while colleges offering engineering and technology training can be taught by qualified engineers. Additionally, teachers who do not hold professional teaching degrees must receive appropriate training and master teaching methods. The law also specifies the categories of teachers in higher education institutions and the system for awarding titles and degrees (Institute of Education, MECSS, UNESCO; NatCom, 2019).

While the professional development needs of university teachers have been largely determined by the development of their academic knowledge and research skills, there is an ongoing need to develop teaching methods for training adults, professional didactics, classroom and distance learning methods, ICT skills development, and foreign language skills within the workplace.

To ensure the implementation of the Law on Supporting Teachers' Development, the Higher Education Teacher Development Department was established in September 2020 at the Institute for Teachers' Professional Development. This has been a significant step forward in establishing a system to support the development of higher education teachers.

Accreditation and development of Higher education institutions: Table 4.C.1 displays the higher education institutions that offer accredited training for the three professions of teacher education included in the list of priority professions in the Government Resolution on "Measures to be taken regarding the education loan fund", along with the number of students enrolled in accredited schools and programs.

Table 4.c. 1. Priority specialties: Teacher's qualification

Nº	Specialized subject	Name of profession	Number of licensed schools	Training school	Number of schools with accredited programs	Number of programs	Number of students
1	011- Education	Teacher, pre-school education	29	29	3	78	2866
		Teacher, primary education	24	24	4	47	2324
		Teacher, special needs education	2	1		4	56

Source: (MNCEA, 2021)

Out of all higher education institutions that offer training in the three professions included in the priorities, only 12.9% provide accredited programs.

A 2021 study conducted by the National Council for Education Accreditation found that public and private higher education institutes lack a unified policy to develop teacher-training curricula at a mutually acceptable level, and do not comply with legal regulations in this area.

Provisions for the “Teacher” profession: According to the 2021-2022 academic year statistics from the Ministry of Education and Science, there are a total of 43,937 full-time teachers in preschool, primary, and secondary education in Mongolia. Among them, 8,827 are in preschool education and 35,110 are in the primary and general secondary education sub-sectors (see Table 4.C.2).

Table 4.c. 2. Number of secondary school teachers and students for the 2015-2022 academic year

Academic year	Students	Teachers	Number of students per teacher
2015-2016	535,055	28,490	18.78
2016-2017	551,953	28,889	19.11
2017-2018	572,752	29,242	19.59
2018-2019	593,150	30,411	19.50
2019-2020	640,449	32,085	19.96
2020-2021	680,837	34,073	19.98
2021-2022	712,353	35,110	20.29

Furthermore, there are significant differences in the number of students per teacher and the number of learners per class between the capital city and rural areas, as well as between public and private schools. As a result, teacher workloads vary significantly not only between rural and urban areas but also between schools. (Refer to Table 4.C.3.)

Table 4.c. 3. Number of students per teacher as of the 2021-2022 academic year/ by location and school type /

Location, type of school	Education level		
	Primary	Basic	Upper secondary
Local	33	16	14
Capital	35	16	15
State-owned school	33	16	13
Private school	20	10	11
National average	31	15	13

Figure 4.c. 3. By school group enrollment, local affiliation, and school type (2021)

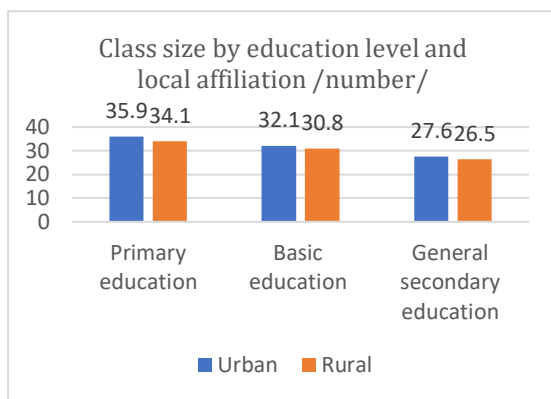
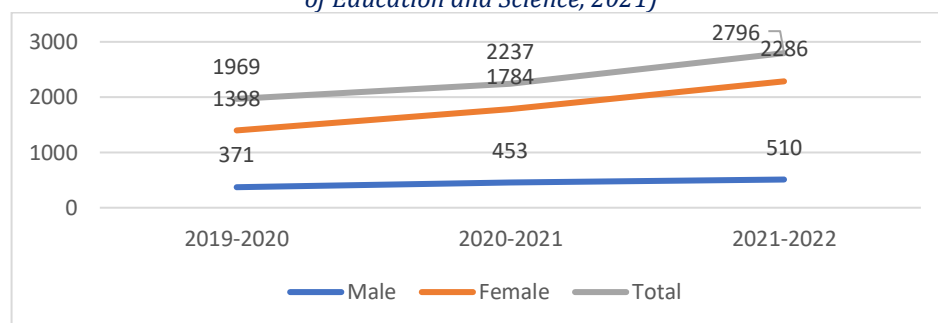


Figure 4.C.3 illustrates that the number of students in general secondary schools in the capital city is 4.5-6 points higher than in local schools. In some cases, schools in the capital city and urban areas have exceeded the recommended number of students per class, with up to 45-70 students in a group. This high student-to-teacher ratio creates a heavy workload for most state-owned schools in the capital city, especially for primary school teachers. As a result, it becomes difficult to ensure the quality of teachers' work, students' health, and the right to equal and accessible

education for all.

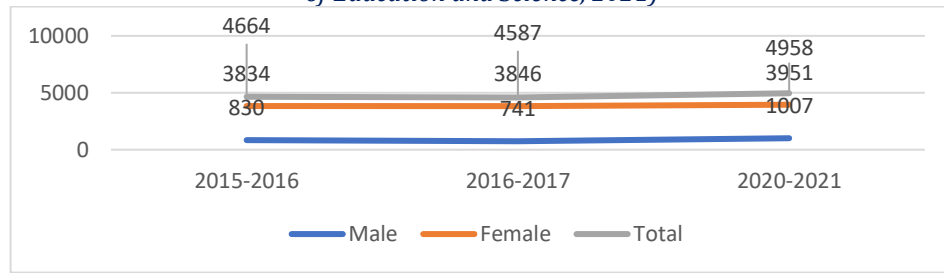
As of 2019, professional teachers have been provided for more than 95 percent of all educational institutions, and the obvious shortage of teachers has been eliminated. According to statistics from the academic years of 2012-2021, the supply of professional teachers in secondary schools has reached 99.8 percent (MES, 2021). However, there is still a shortage of professional music and science teachers, particularly in physics, chemistry, and mathematics, at the national level.¹²

Figure 4.c. 4. Number and gender of university entrants in the teaching profession in the past 3 years (Ministry of Education and Science, 2021)



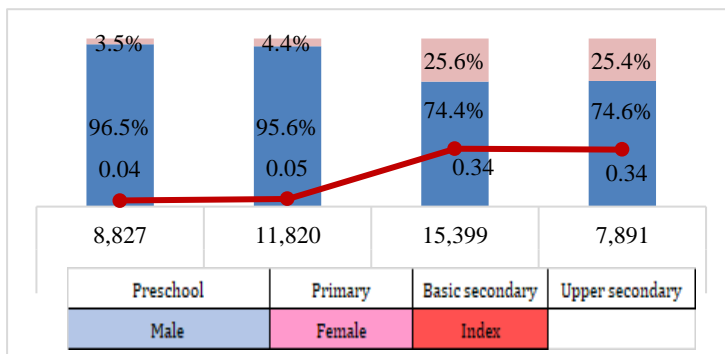
¹² From the reports on the implementation of the performance agreement signed by the aimag and capital city governors with the Minister of Education and Science in 2021

Figure 4.c. 5. Number and gender of university graduates in the teaching profession in the past 3 years (Ministry of Education and Science, 2021)



While there has been a slight increase in the number of university entrants and graduates in the teaching profession each year, the majority are women, accounting for 79% - 82% of all entrants and graduates.

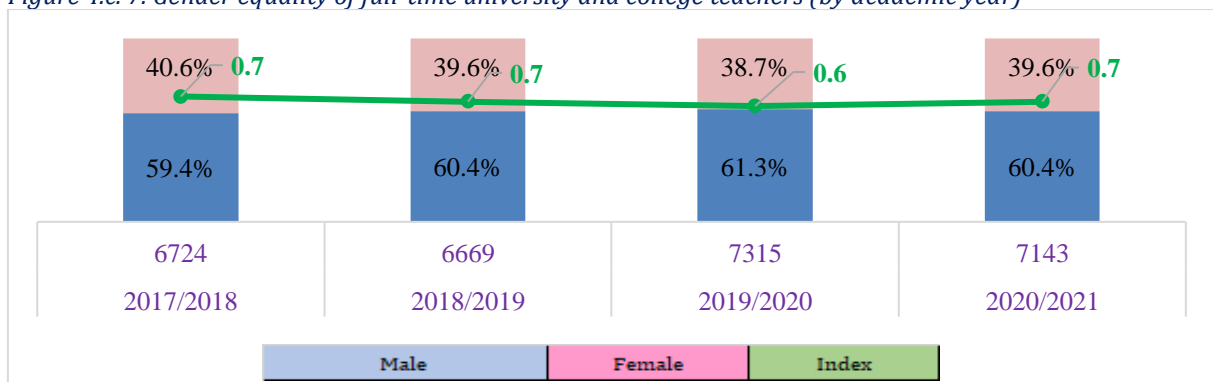
Figure 4.c. 6. Gender balance of preschool and general secondary school teachers for the 2021/2022 academic year (by level of education)



The gender distribution among teachers in Mongolia is imbalanced, with a majority of kindergarten and primary school teachers being women (95.6-96.5%), while middle and high school teachers are mostly men (more than 74%). This is reflected in the gender balance index, which ranges from 0.04-0.34 for preschool and primary

education teachers (Figure 4.C.3), indicating a substantial gender disparity. Such a disparity can adversely affect students' learning styles and attitudes towards gender. Moreover, it has been noted that the role of fathers and brothers is relatively minimal in the family environment, which could also contribute to this gender imbalance in the teaching profession. To address this issue, there is a pressing need for gender-sensitive policies and support that promote male students' interest in becoming teachers and encourage their enrollment in teacher training universities. On a positive note, the gender equality index is relatively high (0.6-0.7) for university teachers (Figure 4.C.4).

Figure 4.c. 7. Gender equality of full-time university and college teachers (by academic year)



TC3. Recruitment of teachers

The recruitment of teachers is a critical aspect of the teaching cluster, and many factors determine this process. These factors include recruitment requirements, the legal environment for the employment of teachers, the availability of jobs in the labor market, and employment decisions. Among these factors, the most important requirement that must be addressed is the issue of teacher education and teaching rights.

Recruitment requirements: Since 2014, the Institute for Teachers' Professional Development has conducted biannual "External Examinations for Teacher Licenses" in accordance with the "Procedure for awarding teaching licenses and professional degrees to preschool and secondary school teachers" implemented between 2013 and 2018. The examinations include a two-step structure that consists of a multiple-choice test on the level of recollection and knowledge of education, ethics, and laws that all persons in the teaching profession should acquire, and an essay writing section on professional ethics.

However, only 5-58 percent of new graduates and teachers with less than 3 years of experience working in schools or kindergartens have passed the exam (Institute, 2014-2018). These results indicate that university graduates and teachers with less than 3 years of experience are not adequately trained or qualified to work as teachers in the preschool, primary, and general secondary education sectors (Table 4.C.4).

Table 4.c. 4. Example: Number of people who participated and passed the teacher certification exam held in 2016

Profession	Total number of participants (in the examination)	Number of participants who passed the examination	Percentage
Primary education teacher	1444	548	37.95%
Physical education teacher	502	129	25.70%
Biology teacher	235	128	54.47%
Foreign languages teacher	804	358	44.53%
Geography teacher	172	77	44.77%
Fine Arts, Design Technology teacher	301	100	33.22%
Mathematics teacher	364	177	48.63%
Mongolian language and literature teacher	675	347	51.41%
Informatics teacher	241	103	42.74%
Pre-school education teacher	1340	490	36.57%
History and social sciences teacher	484	227	46.90%
Physics teacher	223	115	51.57%
Chemistry teacher	150	87	58.00%
Music teacher	104	49	47.12%
Total	7039	2935	41.70%

According to research reports from the Institute of Education, MECSS, UNESCO, and NatCom in 2019, the Institute for Teachers' Professional Development's teacher certification examination was an external assessment of the quality of teacher training universities and their graduates, and served as a key criterion for teacher recruitment.

However, in 2018, the Minister of Education, Culture Science and Sports issued Order A/812, which invalidated the “Regulations on granting and revoking professional licenses to preschool and secondary school teachers”, and instead approved an individual procedure for awarding professional degrees. As a result, the “teacher licensing” exam, as well as the licensing and extension of teaching licenses, have been suspended since 2018, leaving the requirements for teacher recruitment and teaching, as well as the issue of teaching licenses, unclear.

Currently, teacher recruitment in Mongolia is being conducted differently at various schools and educational institutions, without common standards and regulations. This is due to conflicting provisions in the Law on Education, which states that “teachers have the right to teach”, and the Law on Supporting Teachers’ Development, which states that “graduates with a higher education degree in teaching have the right to teach”. The issue of “Teacher certification and licensing” must be regulated, as recommended in the “Comparative Analysis and Recommendations of the Law on Education” (MES, 2019).

The legal and working environment of teachers: The Law on Civil Service and the 2002 Package Law on Education regulate the main functions, activities, and legal relations related to the authority of teachers. For instance, the Law on Education provides for nine social provisions on social guarantees for teachers, seven on teachers' rights, and eight on their duties and responsibilities. The Law on Preschool Education outlines 17 provisions on the rights and responsibilities of preschool teachers and seven provisions for the rights and responsibilities of assistant teachers. The Law on Primary and General Secondary Education is governed by six articles under the "Law on Training and Retraining of Secondary School Teachers" section and 11 articles of the "Law on Teachers' Rights and Responsibilities" section. Additionally, the Code of Conduct for Teachers, Managers, and Other Employees of General Secondary Schools, Kindergartens, Non-Formal and Lifelong Learning Centers sets out the principles and ethical standards to be followed in the performance of their duties, prevents these rights from being violated, and protects the professional reputation of teachers. New legal documents such as the Law on Supporting Teachers' Development of 2018-2020, the "Teacher Code of Ethics," the "Skilled Teacher" program plan, and the new draft of the General Education Law, developed and submitted to the Parliament in 2021, aim to reform and improve the system of professional development and continuous professional development of teachers. Only the "Skilled Teacher" program addresses the development and adherence to teacher professional requirements and professional standards, but this work has not yet begun, and the Code of Ethics for Teachers does not provide criteria for hiring teachers.

TC.4. Working as a teacher

System for ensuring continuous professional development: The cluster analysis report (MECS, SAAQ, ADB, 2019) on development policy, long-term plans, and research recommendations for pre-school, primary, and secondary teachers and administrators concludes that the indicators of the "BK4. Work as a teacher" stage are evenly distributed and considered important in relevant documents. Specifically, the Law on Education was amended in 2012 to require every teacher to participate in professional development training provided by the state every five years, and relevant rules and regulations were approved. Additionally, in 2012, the Teacher Development Institute was established by the Government in accordance with Resolution No. 180 to ensure the implementation of state policy in supporting the continuous professional development and retraining of teachers. The Law on Supporting Teacher Development, which regulates activities to support continuous

professional development and retraining of teachers, was approved in 2018 and came into effect on January 1, 2019.

The Institute for Teachers' Professional Development regularly organizes basic professional development training for general education teachers of secondary schools, vocational schools, and teachers and staff of Lifelong Learning Centers working in the 1st, 5th, and 10th years, using specialized, custom, and optional approaches. In the 2016-2021 academic year, a total of 37,633 preschool and general secondary school teachers participated in basic professional development training, representing 85.7% of the total number of teachers in this field (Table 4.C.5). However, the Institute has encountered challenges with the data on in-service teachers from the education sector information system, which it has been using since 2020. The data is disorganized and inaccurate, which makes it unsuitable for direct use in training and research purposes.

Table 4.c. 5. Number of teachers and staff involved in basic professional development training in 2016-2021

Target level		The number of learners attended						Total
		2016	2017	2018	2019	2020	2021	
First-year	Must be covered	2131	2259	3219	3593	3992	5423	20617
	Covered	2089	2189	3076	3136	2889	3452	16831
	Percentage	98.0%	96.9%	95.6%	87.3%	72.4%	63.7%	81.6%
Fifth-year	Must be covered	1988	1871	3593	2219	2407	2456	14534
	Covered	1817	1802	3136	2027	1897	1539	12218
	Percentage	91.4%	96.3%	87.3%	91.3%	78.8%	62.7%	84.1%
Tenth year	Must be covered	1630	1693	1948	1643	1577	1754	10245
	Covered	1258	1609	1787	1516	1266	1148	8584
	Percentage	77.2%	95.0%	91.7%	92.3%	80.3%	65.5%	83.8%
Total	Must be covered	5749	5823	8760	7455	7976	9633	45396
	Covered	5164	5600	7999	6679	6052	6139	37633
	Percentage	89.8%	96.2%	91.3%	89.6%	75.9%	63.7%	82.9%

The Institute for Teachers' Professional Development also undertakes other activities to support continuous professional development, in addition to teacher training. For instance, it has been coordinating a teacher exchange program between Korea and Mongolia since 2012 in collaboration with the Ministry of Education and Science and APEC. The program has seen the participation of a total of 175 teachers from 2012 to 2021 (Table 4.C.6).

Table 4.c. 6. Number of teachers involved in the Korea-Mongolia teacher exchange program

Profession	English	Primary	Physical Education	Biology	Geography	Arts	Mathematics	Mongolian	Korean language	Preschool	History and	Special needs education	Physics	Music	Informatics	Total
Number	27	27	9	6	3	9	15	15	2	1	13	19	3	5	1	155

To increase opportunities for teachers and staff to develop based on their professional needs, the Institute for Teachers' Professional Development introduced the "Optional Training" program in 2018. Over 2019-2020, 6,312 teachers and staff participated in 46 elective programs of their choice, while 37,386 teachers and staff took part in 31 training programs based on their needs in 2021 (Table 4.C.8). This highlights the need to expand available resources for teachers and staff at all education levels to select programs that meet their professional development requirements. However, there have been delays in implementing some activities under Objective 2 of the "Skilled Teacher" program approved by the MES in 2021. These include the following:

- 2.1.1 Developing and approving professional standards for teachers,
- 2.1.2 Updating and following the procedure for continuous professional development of teachers,
- 2.1.3 Stabilizing research on teachers' professional knowledge, skills, and attitudes,
- 2.1.4 Updating and implementing the content, forms, and methods of basic teacher training according to teacher professional standards,
- 2.1.5 Organizing credit training for teachers using professional development "cards,"
- 2.1.6 Developing a competency-based modular curriculum based on open educational centers,
- 2.2.4 Establishing procedures for formalizing and recognizing results.

Therefore, the aforementioned provisions should create a legal framework for the "Skilled Teacher" program's implementation and are essential to improving the structure, organization, functions, and coordination of ministries and education agencies. There should also be increased policy support and investment to meet the program's objectives and provide feedback.

The Education Policy Review of Mongolia has identified major impacts on teacher supply, professional development policy, medium-term planning, and regulatory reform since 2020. These impacts relate to Policy framework 1.1 Capacity building of teachers and management, Policy framework 2 The wide-ranging introduction of information and communication technology in education and learning, and Policy sub-framework 4.2 Evidence-based planning.

Annexes 2 and 3 of Vision 2050 define specific activities that need to be implemented by 2030 for teacher provisions and professional development, along with relevant criteria, indicators, interpretation, measurement methodology, frequency, data, sources, and responsible organizations. These activities include:

- Distinguishing teacher standards in terms of professional skills, teaching methodologies research, ICT and foreign language skills, implementing these skills in line with teacher development and human resource policies, and providing professional teachers to educational facilities of all levels (2.1.34).
- Training and upgrading the required primary, special needs, and professional teachers for general secondary education schools (2.1.35).
- Aligning the workload of kindergarten and general secondary education school teachers and assistant teachers to the specifics of the workplace and required work, evaluating their performance based on results, improving the wages and bonus system, and maintaining the actual wages of teachers above the national average (2.1.36).
- Establishing special criteria for quality assurance in teacher training, increasing the requirements for curricula, and strengthening the system of phased certification of teaching rights in educational institutions (2.1.37).

- Reforming and updating the system of professional development of teachers and staff, and strengthening the system of teacher self-development (2.1.39).
- Strengthening the capacity of training and methodological organizations to support teacher development, and expanding activities to establish centers based on teacher training HE institutions and facilitate cooperation between such centers (2.1.40).
- Increasing the participation of governmental, non-governmental, and private organizations which provide multi-stakeholder participation in professional development training and activities for teachers and staff (2.1.41).
- Utilizing ICT in teaching by teachers, conducting online and distance learning, improving English language skills, developing ICT content and standards for general secondary education institutions in line with international practice, providing students with online literacy education, and providing security skills in the online environment (2.1.44).

TC4.2. Mechanisms to support Lifelong learning

The Law on Supporting Teachers' Development outlines that the teacher development support system will encompass teacher training, in-service training, retraining, and continuous workplace development. This system will support teachers at the national, local, organizational, interest group, and individual levels. The Law establishes a Government-level program that supports the structure, management, organization, key players, and teacher development of this system. Furthermore, the Law specifies that educational institutions at all levels are required to provide a teacher development center. Training and methodological institutions must offer professional and methodological advice and support to these centers. Additionally, the Law allows for up to two percent of the total variable costs of general secondary education institutions to be allocated for teacher development purposes.

TC4.3. Provision of knowledge and skills to implement training programs and plans (Teaching standards):

The Law on Education states that "Education standards define the basic requirements for teachers' professional level and learning environment."¹³ However, there are no other clear regulations or legal guidelines for the teaching profession. Moreover, there has been a delayed implementation of activities specified in 2.1.1 and 2.1.2 of the "Skilled teacher" program in TC4.1. To support the knowledge and skills of teachers and staff in implementing the renewed preschool and primary, basic, and upper secondary education curricula and plans for 2013-2020, the Ministry of Education and Science, the Institute for Teachers' Professional Development, and the Institute of Education have organized national training programs, as detailed in Table 4.C.7.

Table 4.c. 7. Number of participants in national training to implement updated curricula and plans

Training	Year							Total
	2013	2014	2015	2016	2017	2018	2019	
Methodological training for Specialists of the Department of Education and Laboratory school administrators on the implementation of core curriculum for preschool, primary and basic education	516		433					949

¹³ This section has been amended by the Amendment dated December 8, 2006. (This section was amended by the Amendment dated April 14, 2016)

Methodological training for laboratory school teachers on program implementation	2,427		1,897	328		324		4,976
National level methodological training for program implementation for primary, basic and upper secondary teachers		3,177	23,540		13,259		14,926	64,902
Total	2,943	3,177	13,259					70,827

Teachers have faced challenges and uncertainties due to the short-term planning cycle of 1-4 years for implementing curricula, plans, trainings, and consulting activities. To address this issue, the "Capacity Building for Professional Learning Organizations" project was implemented by JICA from 2016-2019, and its results have been institutionalized. The Ministry of Education, Culture, Sports, Science, and Technology (MECSS) approved and implemented the "Methodology for Improving School Curriculum" in 2018, which involves updating educational programs and standards, organizing training to increase teachers' capacity, providing necessary learning materials and environment, and adjusting the evaluation system prior to national implementation (Minister of Education C. S., 2018). These efforts are part of a medium-term plan to achieve the development goals of the education sector in 2021-2025, which includes updating job descriptions and requirements for human resources in the education sector in accordance with the national specialization framework, confirming the hierarchy of positions, and creating a gender-sensitive human resource (MECS, Medium-Term Education Sector Development Plan (2021-2030), 2020). However, the global pandemic and the learning styles and characteristics of modern learners have created new challenges, requiring teachers to expand their ICT skills.


In addition to being indicators of professional development, the professional degrees of teachers, administrators, and other staff at all levels of education are sources of additional income.

TC4.7. Remuneration, social security and living standards: When comparing the minimum and maximum teacher salaries to the gross domestic product (GDP) per capita, the highest values were observed in 2008-2009, ranging from 0.7 to 0.8. However, among teachers with 15 years of experience in other Asian countries, this ratio was 2.2 for primary school teachers and 2.5 for secondary school teachers. In 2017, the ratio was between 0.85 and 1.37 among OECD member countries. This indicates that our teachers are paid less than the international average relative to GDP per capita. In other words, if we compare the ratio of teachers' salaries to GDP per capita, our teachers are paid lower than the international average.

TC5. Retirement and dismissal

In this state of the teaching profession, teachers become eligible to receive state pensions, benefits, and other government support in accordance with relevant legislation. All teachers and staff at all levels of education, like employees of other public and private organizations, have the right to retire at the age of 60 for men and 55 for women (50 for women who have four or more children) in accordance with the "Law on Pensions and Benefits from the Social Insurance Fund."

Under the "Procedure for Providing One-time Grants to Civil Servants upon Retirement" (Mongolia G. o., 2019), teachers and staff retiring from public schools are provided a cash benefit equal to up to 36 months' basic salary. Additionally, according to the Law on Senior Citizens, the government and



the organization in which teachers were employed provide various services, including health, recreation, sanatorium, and public transportation benefits.

Teachers working in non-governmental schools wish to receive the civil service allowance of up to 36 months of wages provided to teachers in state-owned schools upon retirement. This highlights the unequal access to social security under the Law on Education, which is a critical issue for private school teachers.

TC6. Advice and support from seniors

At this stage of the teaching profession, senior teachers are required to participate in activities such as working part-time, mentoring other teachers, participating in training and research, creating educational materials, writing and editing books and manuals, and joining educational associations and coalitions as necessary.

Opportunities for university professors and teachers to work as part-time instructors in educational institutions and engage in contract work with research and methodological organizations after retirement are greater than those available to kindergarten and secondary education teachers.

Although some retired senior teachers work as consultants and mentors at their own initiative and at the request of educational institutions, financial and policy support for these teachers is not well-coordinated and is ineffective.


CHAPTER FOUR: THE IMPACT OF THE PANDEMIC ON THE PROGRESS OF SDG-4

THE “COVID-19” PANDEMIC AND LEARNING LOSS

Due to the global pandemic, a significant percentage of classroom days were conducted online during the 2019-2020 academic year, accounting for 47% of the total number. In the following academic year of 2020-2021, this percentage increased to a range of 62.5% to 68%, with the majority of learning taking place within the home and family environment.

Although classes and training activities transitioned to distance learning, it did not completely replace classroom training.

In Mongolia, the main form of distance learning was tele-lessons, and the education sector had relatively good experience in the preparation and organization of tele-lessons due to the outbreak of the H1N1 influenza A virus in 2011, where kindergarten and school training were conducted in the form of tele-lessons. Therefore, the preparation and broadcasting of tele-lessons and lesson recordings have been relatively familiar processes for national professional organizations in the field of education and media organizations. However, despite the efforts to prepare and broadcast tele-lessons for each class and subject, several factors such as home and family environments, infrastructure, remoteness, and other challenges affected the tele-lesson process. Families with two or more children faced difficulties when their tele-lessons overlapped, or when they lacked sufficient access to televisions. Children with disabilities were not able to receive the special educational needs they required. As a result, 178.5 thousand urban and rural students were unable to attend tele-lessons fully, leading to learning loss. Thus, the pandemic highlighted the need to increase the accessibility of learning through other forms of distance learning.



Children with disabilities faced a high risk of learning loss during distance learning activities. This was because the opportunity to attend tele-lessons on a regular basis varied from child to child. Additionally, there were limited opportunities for individual training tailored to their specific needs, such as language therapy, movement therapy, and spatial orientation for visually impaired children. As a result, many children with disabilities were not able to receive the specialized attention required to facilitate their learning, which contributed to the increased risk of learning loss.

The partnership, creative participation, and support of non-governmental organizations and international partner organizations played a key role in ensuring the continuation of education during the lockdown period.

To adapt teaching methods used in traditional classroom education to children's interests, the Government directed its policies and activities during the transition to the state of advanced disaster protection and public preparedness. The Government, non-governmental organizations, and international development partner organizations actively cooperated to develop "student-centered" teaching content and tele-lessons. The participation of non-governmental organizations and partner organizations working in the field of education was crucial in increasing access to distance learning, reducing difficulties, supporting students, parents, guardians, and teachers, and ensuring the availability of classroom training during these difficult times.


These activities included:

- a) With the leadership of the Association of Televisions, a total of 18 television and Mongolian radio stations broadcasted tele-lessons free of charge, which were introduced in sign language, Tuva, and Kazakh languages.
- b) The United Nations Children's Fund supported the development and delivery of interactive lessons for children with special educational needs and elementary school students. They also conducted research ("Social and psychological problems of children, 2020").
- c) The Japan Children's Welfare Foundation distributed educational materials to support the independent learning of disabled children in the family environment.
- d) JICA supplied DAISY-E-PUB devices to every visually impaired student and teacher to support their learning.
- e) In cooperation with Mobicom Company and World Vision International Organization, tele-lessons were installed on mobile phones used for demonstration purposes and delivered to children in remote areas.
- f) The Asian Development Bank and the World Bank supported activities to empower teachers, support self-development, and prepare self-help books, greatly improving the benefits of distance learning for students.

The government has supported distance learning in all aspects to ensure the implementation of non-discrimination principles.

In cooperation with mobile operators, the government has provided free access to tele-lessons posted on www.econtent.edu.mn and the websites www.help.eec.mn and www.eyesh.eec.mn for graduating students. This has proved to be a real boost in supporting students.

The Ministry of Education and Science (MES) and the Institute of Education have developed and delivered printed and adjustable materials to children with special needs in remote soums, bags, and



schools. These materials are for children who are unable to attend e-learning due to poor infrastructure, lack of internet and electricity.

Special focus was given to the development of lessons and training for graduating students. E-lessons for students of grades X-XII were organized nationwide under the guidance of the best national teachers, covering 30.1 thousand urban and rural students. The purpose of this was to provide students in rural schools with the opportunity to participate in the lessons of the best teachers in other aimags and the capital city, learn from others, and develop together, in addition to attending their own teacher's lessons.


During the distance learning period, additional efforts were made to provide feedback to students, advice and information to parents and guardians, prepare and deliver additional materials to support family learning, prepare and deliver paper materials for children with special educational needs, prepare tele-lessons and e-lessons, and translate lessons to sign language. These activities were carried out with the participation of general secondary education teachers, which significantly increased their workload.

As all general secondary education training transitioned to distance learning activities, unforeseen challenges and risks have emerged in the process of children's learning, development, and socialization, as well as in the relationships between students, teachers, parents, and caregivers.

Although the government, donors, and partners have collaborated to support distance learning in all aspects, research has shown that unequal access to distance learning and participation has led to learning loss and had negative impacts on children's social skills and education quality. For instance:

- According to the average coverage of tele-lessons conducted between February and May 2020, the national coverage of tele-lessons was 74.4 percent (Plan, 2021).
- Due to insufficient infrastructure, internet, electricity, and technical conditions in the family environment, 172,300 students from 330 soum schools and 6,277 students from 46 bag schools, totaling 178,577 students, were unable to participate in tele-lessons and e-learning (Plan, 2021).
- The research report on "Emergency period tele-lessons, its results and suitability" found that "on average, 21 percent of students did not attend tele-lessons for one reason or another in the first half of the year" (MES U. , 2020).
- "The transition to distance learning in different technical, technological, and family environments has exacerbated inequality" (CSO, 2020).
- Symptoms of stress have become more common among middle and high school students. For example, 58.8 percent of urban students and 73.9 percent of rural students became easily frustrated or irritable, and 54.9 percent of urban students and 76.1 percent of rural students became increasingly anxious or distraught following school closures ("Social and psychological problems of children, 2020").

In response to the pandemic, schools adapted to the new situation and flexibly reorganized their teaching methods and teacher work arrangements. Additionally, parents and guardians paid more attention to their children's learning and provided unprecedented support.



The implementation of distance learning and flexible approaches created new teaching and learning opportunities while also emphasizing the importance of parental involvement in the learning process. In addition to tele-lessons, schools gained new experiences by leveraging platforms such as Google Drive, Google Forms, Zoom, and Moodle to create e-classes, organize lessons and training, provide explanations and repeats related to tele-lessons, and conduct examinations and tests.

Various alternative measures have been taken to ensure continuity of education. However, due to the lack of energy supply, equipment, and facilities, many urban and rural schools have organized home visits to review course progress and performance and distribute exercise books and manuals to reach the 178.5 thousand students in remote areas.

A study conducted by MES in 2020 found that more than half of the parents surveyed, who were quarantined at home with their children, expressed concerns about their child's education, increased frustration due to family and child-parent relationship issues, declining household income, unemployment, and increased household spending. They also reported feeling fatigued from spending long periods of time with their children and emotionally unstable due to the uncertainty of the situation and fears of future risks of COVID-19 (MES H, 2020). Despite these challenges, distance learning in the family environment has increased the amount of time parents and caregivers spend with their children as they assist them in participating in tele-lessons and e-learning, encourage them to complete homework, and communicate more with teachers.

Despite the high need to resume classroom training, concerns remained strong among students, teachers, parents, and caregivers regarding the safety of resuming in-person classes after a long break.

The COVID-19 pandemic has had a significant impact on the mental health of an entire generation of children, and our country is no exception, according to research. For instance, the "Socio-psychological Issues and Risk Assessment of Children" study, conducted by the Ministry of Education and Science and the United Nations Children's Fund (UNICEF), indicates that 76.8% of students are experiencing anxiety, with children aged 6-13 reporting significantly higher levels of anxiety and stress than usual. Furthermore, the majority of students fear the COVID-19 pandemic and the potential for learning loss. Therefore, it is crucial to take supportive measures to address and reduce these social fears ("Social and Psychological Problems of Children," 2020). To address these issues, efforts have been made to create and support a positive socio-psychological environment for students, as well as to tackle and eliminate learning loss. Since the beginning of the academic year, educational psychologists have been employed in general secondary education schools.

The Ministry of Education and Science has developed and published a handbook titled "Methodological Recommendations for Supporting Parental Education through Classroom Teachers" (Recommendations, 2021). This handbook has been distributed to schools, and national teacher trainers have been trained to support the knowledge and skills of parents and guardians to work

with their children through the class teacher, better understand their children, support their development and maturity, and increase opportunities to work with schools and teachers. The handbook covers topics such as (i) methods of working with classroom teachers and parents, (ii) parental involvement in child development, (iii) child protection-parental cooperation, and (iv) understanding the specifics of a child's age and physiological characteristics, and provides professional support for parents, guardians, and teachers to approach and work with children in the same way. According to the aforementioned research report, "Social and Psychological Problems of Children" (2020), there have been both positive and negative changes in the relationships between friends and peers.

During quarantine and lockdown measures, the workload of teachers significantly increased due to the organization of distance learning activities.

According to a survey conducted by a civil society organization (Education A. f., 2021), 77.3% of teachers confirmed that their workload has significantly increased due to the organization of distance learning activities during quarantine and lockdown measures. The main responsibilities of teachers, such as preparing lessons and teaching in the classroom, were replaced by tasks like confirming tele-lessons through e-classes, checking assignments, communicating with students and parents, and reporting to management. It was more difficult for teachers to connect with their students than conduct distance learning.

Despite the lack of preparation for distance learning, teachers have improved their ability to use advanced technology in teaching. At the beginning of the transition to distance learning, 73.3% of the teachers who participated in the survey had never conducted distance learning activities, 75.2% were not trained in conducting distance learning, only 20% had access to electronic tools, and 2.8% did not know how to use online software. However, at the end of the distance learning activities, teachers had learned new skills in working online, using e-learning tools, and working with new communication tools. This resulted in changes in their teaching methods.

During distance learning, the majority of teachers used social media platforms like Facebook, rather than dedicated e-learning programs. According to a UNICEF survey report (MES U. , 2020), 96% of participating teachers use Facebook regularly, 31.6% have poor internet access, 28% lack necessary equipment, 18% have to pay for data fees, and 14% have insufficient experience in working online. According to another survey conducted by a civil society organization, Education for All, televisions (78.3%) and mobile phones (49%) are the main means of receiving tele-lessons.

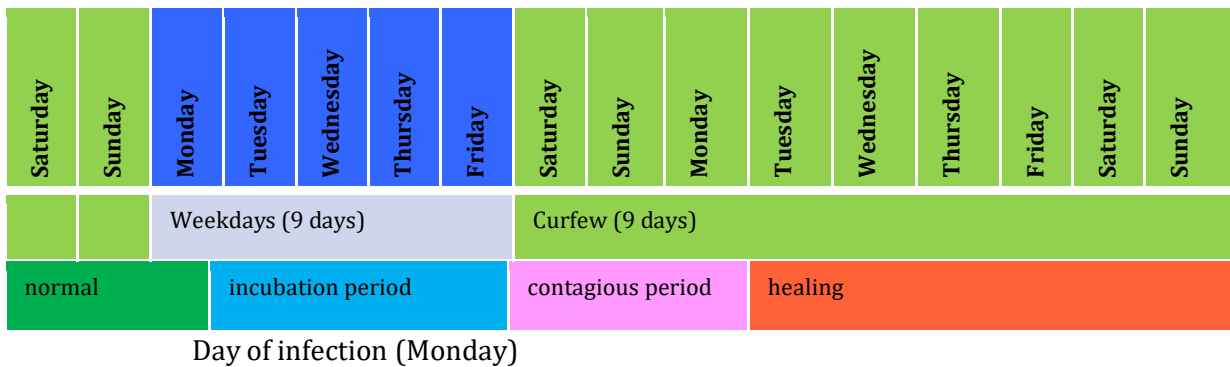
Despite the prolonged pandemic, the 2021-2022 academic year was launched with a hybrid model of classroom and online learning.

During the pandemic outbreak, a research team comprising of representatives from the Ministry of Health and the State Special Commission collaborated with the education sector to predict the spread of the disease (Figure 1.5.1) and identify effective responses.

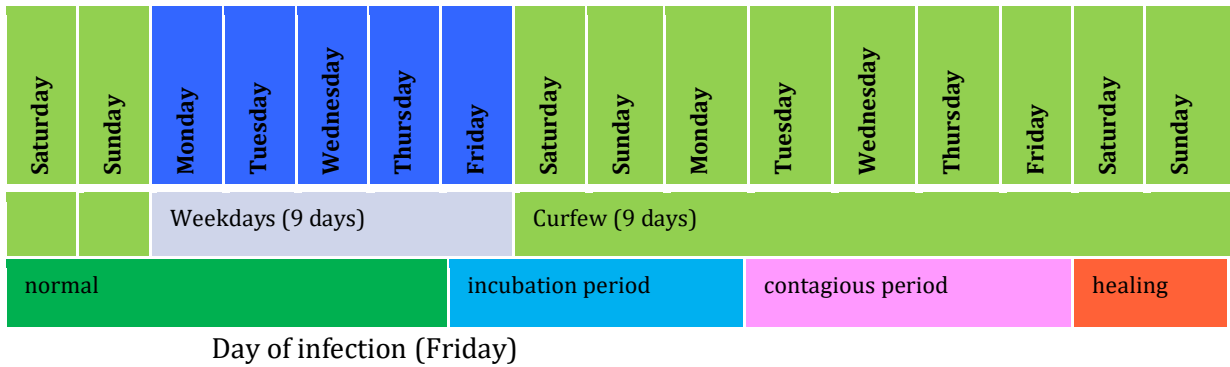
In case of infection on Monday



Figure 5.5. 1. From the presentation of the "Research Group at the Operational Headquarters of the State Emergency Commission"



In case of infection on Friday




Color expression:

- Cumulative confirmed covid-19 cases
- Number of people who are incubation period
- Number of people who are contagious period
- Number of people who are being treated
- Number of people who are healed
- Number of people who are dead

The recommendations and advice provided by the research team and the special commission have been essential in determining whether to resume classroom learning and developing alternative methods for organizing classroom teaching, as well as establishing temporary risk control procedures (A/292, 2021). Furthermore, research conducted with the support of partner organizations has played a significant role in reducing risk and ensuring preparedness in schools.

Although new cases of infection have not significantly decreased, regulations (A/292, 2021) for organizing kindergarten and general secondary education activities have been approved, following an infection control regime based on the vaccination rate of the entire population. General secondary education classes and training started nationwide on September 1, 2021, using a hybrid model of classroom and online learning. The type of training varied locally based on the infection level, with areas classified as green, yellow, orange, and red zones. Schools in green and yellow zones conducted classroom learning, while schools in orange and red zones held five days of classroom learning followed by five days of online learning, meaning that students did not attend school in person for a total of 9 days (5 work days and 4 weekends). This arrangement allowed enough time for symptoms



to appear and for treatment to begin in case of infection or outbreak, as healthcare providers advised that symptoms appear on the 6th day following infection.

The Ministry of Health reported that although infections were detected among students in kindergartens and general secondary education schools from September to December 2021, the outbreak was controlled due to the regulations' success.

To ensure that schools are prepared for emergencies, micro-studios were established in 45 secondary schools across the aimag and capital city education departments, with an investment of 1.2 billion MNT from the state budget. This investment was crucial in preparing digital content, creating and enriching digital learning resources, and ensuring that teaching staff are ready to provide education during unforeseen circumstances.

Policies and measures to reduce and eliminate learning loss and gaps

During the quarantine period, distance learning classes were conducted through tele- and e-lessons, which only accounted for about 20% of regular classroom training. This significantly contributed to learning loss. In fact, a survey conducted among teachers in March 2021 found that 92.5 percent of them believed that learning loss among students was as high as 40-50 percent.

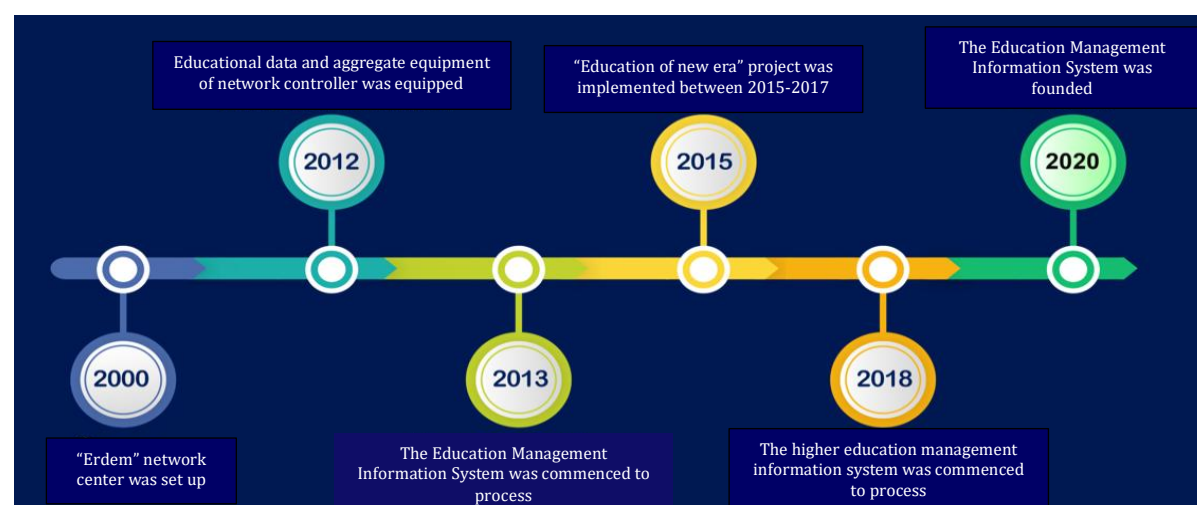
In response to this issue, the MES developed the "Comprehensive Plan for Compensating and Eliminating Learning Loss in Secondary School Students" with the participation of national researchers and the support of the ADB-funded project "Providing Educational Services to Vulnerable People During the Financial Crisis". This plan has been approved by the Minister of Education and Science under order A/190 of 2021 and is currently being implemented.

DIGITAL TRANSFORMATION OF EDUCATION

In recent years, the education sector has undergone a significant transformation due to the introduction and implementation of information and communication technologies (ICTs). This digital transformation is expected to continue and intensify in the future.

Mongolia has been working diligently to modernize the education sector through the introduction and implementation of information and communication technology (ICT). The goal is to reform education and improve management and planning, which has resulted in a significant transformation in recent years. To further support the development of the information and communication sector, the government has implemented policies such as the "Government Policy on Information and Communication Development (2017-2025)" and "Measures to provide public services in electronic form" (Mongolia G.o., Resolution №259, 2018). These policies aim to optimize the legal system, increase investment, create favorable policies and business environments, develop highly skilled human resources with information and communication skills, ensure digital literacy for all, and support the use of information technology in the development of Mongolian education and knowledge. As a vast country with a sparse population, introducing, developing, and utilizing ICTs in education will be crucial in saving both time and financial resources.

Figure 2.2. 1. Basic conditions for digital transition in the education sector



Source: 1. MES

The Education Management Information System (EMIS) has been introduced at all levels of the education sector in Mongolia, with the aim of systematically digitalizing educational services.

The Education Management Information System (EMIS) has been developed in stages since 2013 with the overall aim of digitalizing the activities of the education sector. Its primary objectives include creating a unified database, providing citizens with quick access to information, collecting necessary information in a unified methodology, and facilitating decision-making, implementation, coordination, monitoring, and evaluation processes. EMIS was introduced in general education in 2015, preschool education in 2018, and the higher education sector in 2019. The system is continuously being developed, and the www.esis.edu.mn system has become a staple for the preschool and general secondary education sectors, while the www.hemis.edu.mn system is utilized in the higher education sector. These systems record and preserve information related to the activities of kindergartens, general secondary education schools, and higher education institutions, including human resources, student and academic achievement assessments, enrollment, digitalized records keeping, migration, promotion, state exams, graduation, educational documentation, statistical data, and report processing.

The MEDLE.mn digital learning platform has been developed and launched for daily use, providing lifelong learning opportunities regardless of distance or time.

In 2013, econtent.edu.mn was developed, in addition to the publication of TV lessons, textbooks, and interactive lessons. This platform enables teachers, students, and parents to access digital resources for studying without the need to purchase textbooks. (Refer to Table 2.2.1 for more details.)

Table 2.2. 1. Number of electronic content hosted on the Econtent.edu.mn system

Nº	Category	Learning material	Tele-lessons	Interactive content
1	Preschool education	-	324	20
2	Primary and general secondary education	180	2,825	84

3	General entrance examinations		151	
4	Special needs education		149	
5	Life long learning		127	
	Total	180	3,576	104

In 2021, the econtent.edu.mn system was updated and developed into the comprehensive MEDLE.mn platform, which provides digital learning opportunities for students from the best teachers across Mongolia. The platform aims to support lifelong learning opportunities, facilitate communication between teachers and students, enable teachers to learn from each other, and create a unified database of digital content. The system follows the general secondary education curriculum, allowing any teacher to create content for each subject and make the most relevant and best-rated content available to the public through the MEDLE.mn platform for use in general education activities.

The platform aimed to create a total of 16,411 course contents, and as of December 2021, 1,439,217 (in duplicate) users had accessed the platform, with 1,572 teachers posting 520 lessons. To support teachers in content creation, content development classrooms have been established in 21 aimag education departments and 45 general secondary schools. The lack of equipment, content development halls, and teachers' knowledge and skills in information technology has been the most significant challenge for teachers in preparing digitalized training. Therefore, the Institute of Education needs to take the lead and make significant efforts to provide ongoing methodological support.

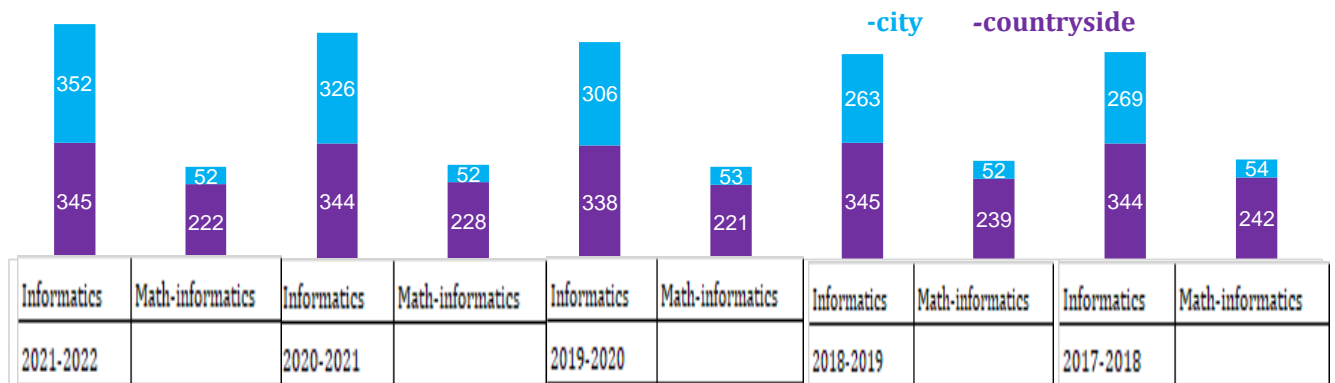
Although most universities and higher education institutes have digitalized learning procedures in place, the policy environments and implementation vary from urban to rural schools. No academic content for ICT research and training is implemented. Additionally, schools are organizing digitalized trainings and taking appropriate measures for digital transition, based on their internal conditions and opportunities. However, implementing online training programs increases the workload of teachers. Therefore, it is necessary to strengthen the development and implementation of online training programs to ensure equitable access to quality education for all students.

An integrated education network has been established by creating infrastructure in the education sector.

The "New Century Education Project" was implemented in 2015-2017 with preferential loan funding from the People's Republic of China to strengthen the ICT infrastructure. The National Center for Integrated Education was established within this framework, and a total of 27 sub-centers (6 in the capital city and 21 in aimag centers) were established. State and local schools across the country were connected through fiber optic cables, resulting in the creation of an integrated education network that can handle the flow of information and content consumption within the education sector.

As a result of this project, 90 percent (738) of state and local schools have been connected to the education network. However, despite the availability of information technology infrastructure in the education sector, the use of ICTs is limited as schools, dormitories, and kindergartens are not connected to the internet, which hinders the access to resources required to handle the flow of information and content.

Figure 2.2. 2. Number of Informatics, Mathematics and Information Technology teachers in general secondary schools (MES, Education sector statistics, 2021)



During the 2021-2022 academic year, the network of over 300 schools experienced disruptions, resulting in equipment damage and the absence of an internal network to support a digital learning environment. These issues arose due to inadequate efforts to ensure network security and stability, as well as a lack of focus on human resource development.

The establishment of the Centre for Educational Information Technology (CEIT) has been instrumental in introducing and implementing information and communication technology (ICT) in the education sector.

Established in 2020, the Centre for Educational Information Technology's (CEIT) main goal is to ensure the monitoring and sustainability of education information systems, digitalized learning content, management systems, databases, integrated information networks, and educational data centers, and to comprehensively address digital transformation issues. As part of its education policy, the CEIT is responsible for implementing information technology, systems, network monitoring, and development in the education sector. Additionally, the centre plays a vital role in introducing and implementing ICT in the education sector. It also maintains and manages the network of state and local general secondary education schools.

Mongolia's development policy and planning documents have provisions relevant to the digital transformation of the education sector.

The country has adopted long-term, medium-term, and short-term development policy and planning documents for 2020, which include goals related to digital and distance learning programs, training platforms, and teacher participation. These goals were put in place to address the impact of the COVID-19 pandemic on society, and to overcome economic difficulties by creating a digitalized learning platform, preparing digital content, exploring appropriate forms and options for digitalized learning, providing digitalized learning opportunities for households and individuals without access to television or the Internet, and creating a legal environment to support digital learning. These policies are outlined in Resolution No. 23 of the National Assembly and other policy documents (Mongolia P. o., Five-year guidelines for the development of Mongolia in 2021-2025, Resolution No. 23 of the National Assembly, 2020) and (Mongolia P. o., 2020, 24).

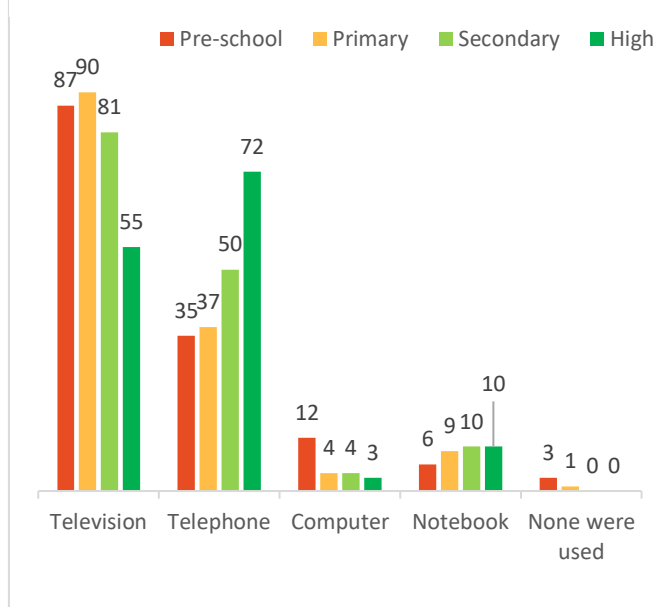
Although these long, medium, and short-term policies provide clear outlines for ICT policies, objectives, and activities in the education sector, as well as inter-sectorial coordination and collaboration, the Medium-Term Education Sector Development Plan (2021-2030) has noted that “the current legal framework does not clearly define the relationship between ICT in education, its goals, curricula, and learning outcomes.”

The extent of learning loss during the pandemic has been partly attributed to digital divides.

Many countries worldwide have resorted to conducting remote and digital training using technological advancements to ensure continuous education during the COVID-19 pandemic, regardless of location. However, research by international organizations such as UNESCO and the World Bank indicates that most countries were not fully prepared to transition from classroom to distance learning.

To ensure the continuity of education during the pandemic, access to information technology and telecommunications equipment is crucial. Students utilize various devices such as televisions, smartphones, tablets, laptops, and desktops for remote learning. Unfortunately, due to remoteness, lack of infrastructure, internet, electricity, and equipment, a total of 178,577 students, including 172,300 students in 330 rural soums and 6,277 students in 46 bagh schools, were unable to attend e-learning during the COVID-19 pandemic, as reported by the Ministry of Education, Culture, Science, and Sports and the Institute of Education (MES, IE, 2021).

Figure 2.2. 3. Technology used to attend tele-lessons (by education level and percentage)

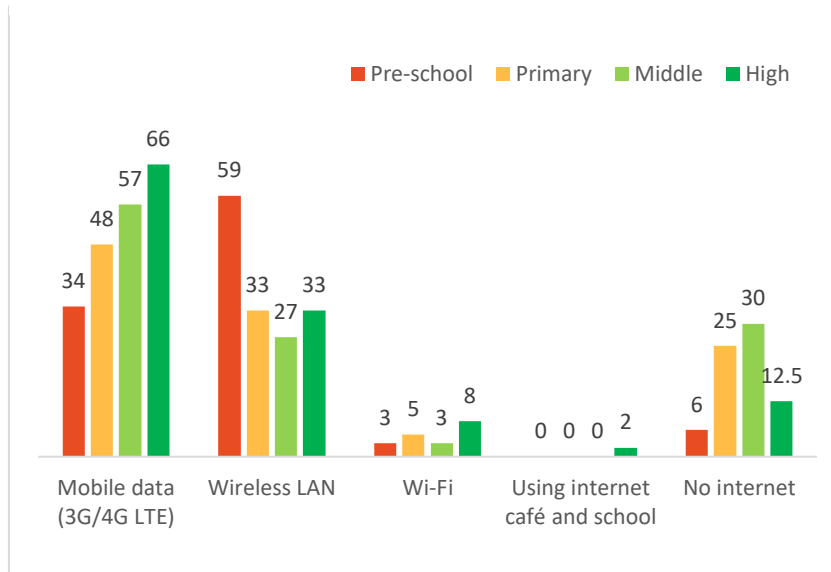


A survey on the "Effectiveness and Relevance of Emergency Tele-Lessons in 2020" was conducted by the Ministry of Education, Science, and the United Nations Children's Fund (UNICEF) (MECS, UNICEF, IREM, 2020). The study included 720 children and 454 parents as participants, and the

survey report revealed that televisions and smartphones usage level was high for all stakeholders, as depicted in Figure 2.2.3.

The survey results showed that 3G/4G LTE network usage ranked the highest, with mobile data being the most common type of internet connection. Parents, teachers, and students emphasized the importance of communication between students and their teachers, performance evaluation, and teacher-student connectivity. It was also noted that logging on to Facebook to monitor performance and the use of data were crucial for conducting these activities, as shown in Figure 2.2.4.

Figure 2.2. 5. Accessibility to the Internet (by educational level and percentage)



Studies aimed at determining the information technology channels used by teachers and students to communicate with each other and participate in tele-lessons have shown that Facebook groups are the most active channel for organizing tele-lessons at the aimag and local levels, and for all-round communication. The second most common channel used by teachers to communicate with students and parents was

cellular connection.

In addition to tele-lessons, schools have been able to utilize programs such as Google Drive, Google Form, Zoom, and Moodle to create digital classes, organize lessons and trainings, provide explanations and reviews related to tele-lessons, conduct examinations and tests, and share new experiences, as stated in the study report for the "Effectiveness and Relevance of Emergency Tele-Lessons in 2020" survey conducted by the MECS, United Nations Children's Fund, and IRIM in 2020.

Teachers' information technology skills have increased during digitalized learning.

At the start of the pandemic, a survey conducted by the civil society organization, All for Education, on "Teaching and Learning during the COVID-19 Quarantine" revealed that 73.3 percent of teachers had never participated in distance learning before, 75.2 percent were not trained to conduct distance learning activities, 20 percent had the necessary electronic tools, and 2.8 percent lacked sufficient knowledge of using online software. However, during the training, teachers reported attaining new skills for working in an online environment, utilizing digitalized training tools, working with new communication tools, and adapting their teaching methods for the digital transition. Although the surveyed teachers were not prepared for distance learning at the beginning of the academic year, they believed that their ICT skills had substantially improved by the end of the academic year.

CONCLUSIONS

The results of the evaluation of the progress of the implementation of SDG 4 from 2016-2021 were thematically integrated into the research, resulting in a detailed and specific conclusion being made for each of the General and Targeted objectives below:

GENERAL CONCLUSIONS

1. **Socio-economic context:** Mongolia is currently facing multiple socio-economic challenges, including rapid desertification, stagnant economic growth, increasing dependence on welfare, rising unemployment, and poverty. Although the influx of local migrants to the capital city has increased the labor force and enhanced capacity for technology and innovation, it has also led to a rise in pollution in the urban environment and significant inequality in the living standards of

the urban population. Contributing to the issue of rising unemployment are low labor productivity, widespread informal employment, and a high demand for decent work. Unfortunately, democratic values and social justice have been undermined, while corruption and official misconduct are pervasive among authorities. Although there are relatively high access indicators across all levels of education, non-discrimination equality indices are unstable, and the quality of education has not yet reached the required standards. Furthermore, issues of inclusive learning have not been fully addressed.

2. **Development needs of the social education sector and national level restructuring:** Today, Mongolia is confronting common challenges that all countries around the world are facing, such as achieving SDGs and ESD goals by 2030 and overcoming the challenges posed by the COVID-19 pandemic. Additionally, Mongolia is grappling with its own unique set of challenges in addressing the "social injustice of the last 20 years". In recent years and months, Mongolian society has been exposed to and increasingly frustrated with numerous "incredible" revelations regarding domestic groups with foreign connections, whose actions undermine democratic principles, exploit public property on a massive scale, and distort social justice, deepening inequality, weakening government and public relations, and undermining public trust. The education sector has a crucial role to play in addressing these issues. The development of Mongolia in the next decade will depend on the education and learning of its youth.

The Parliament and Government of Mongolia have accurately assessed this situation and approved the development policy from 2020 to 2050, amended the Constitution, developed medium-term national target programs to be implemented by 2030, and are currently revising relevant laws and legislation to ensure sustainable development and protect national independence. This is a significant new opportunity to transform Mongolia's education and learning sectors to support SD and SDGs. Furthermore, the Ministry of Education and Science and its national agencies have undergone major restructuring since the end of 2021, with officials and specialists being re-selected and placed in new positions.

3. **Digital transformation of the education sector:** Mongolia's development policy and planning documents include relevant provisions necessary for the digital transformation of education. However, an integrated policy and program linked to the sector level has not been approved yet. Nevertheless, the process of digital transformation in the education sector is progressing rapidly. In 2020, the Center for Educational Information Technology was established with the overall goal of comprehensively implementing issues related to transformation. This includes the establishment of an ICT infrastructure in the education sector, creation of an integrated education network, introduction of an education management information system at all levels of education, gradual movement to digitalized educational services, and provision of control and sustainability of digital learning content, databases, information networks, and educational data centers. Furthermore, the national digital learning platform MEDLE.mn has been successfully developed and launched to provide lifelong learning opportunities regardless of time and distance.

In addition to the urban-rural divide in primary and general secondary education school enrollment, children from wealthy families tend to start school early, study for many years, and have more knowledge of information technology, which has widened the knowledge gap between children from poor and non-poor households. This situation has been further exacerbated by the

recent COVID-19 epidemic. With the transition to digital learning, large families may have limited access to computers and poor internet speeds, especially for rural students. The differences in information technology skills acquired by general secondary education school graduates depend on the soft and hard IT infrastructure, technical content, availability of digital resources, and quality differences of the TVET and Higher Education Institutions in which they are enrolled. It is crucial to establish good practice and set standards for digital learning to prevent the gaps from increasing.

In addition, the variation in the teachers' digital skills, digital learning, and online communication methods affects not only the quality and effectiveness of teaching and learning activities but also increases inequality in student learning. However, during the transition to digital learning due to the COVID-19 pandemic, teachers' information technology skills have significantly increased.

4. **Quality of Education:** The education system in Mongolia underwent a comprehensive reform in the 1990s, coinciding with the transformation of the country's social system. The process of reforming the entire system to align with new social relations is ongoing, with a focus on areas such as kindergartens and general secondary education schools. Reforms in national standards and curricula, textbooks, monitoring and evaluation, teacher training, and professional development have been integrated into interrelated development policies and strategies. These reforms have been successfully implemented in all schools and kindergartens, in conjunction with the restructuring of the general secondary education system, which has seen changes to enrollment age and duration of study in order to transition to a 12-year education. However, evaluating the level and quality of performance of all types of pre-school and primary education activities, services, products, and key stakeholders has been a relatively "late and problematic" component of this comprehensive systemic reform. Enrollment rates at all levels of education are relatively high in Mongolia compared to some countries, which is a key indicator of non-discrimination in education. However, the quality of education, a key indicator of inclusive learning, remains insufficient. Therefore, it is crucial to select the quality of education, which is the main goal of SDG 4, as a key topic in this review. Analyzing and evaluating this subject in further terms of education quality management mechanisms will be essential for the next phase of SDG 4 implementation.

The education development policy of Mongolia is dedicated to ensuring the quality and consistency of education at the national level. In recent years, hierarchical development policies and plans have placed great emphasis on measuring and assessing the quality of education through coordination, monitoring, and evaluation. To achieve this, Mongolia has strengthened its national assessment body, expanded its scope of activities, improved the quality assessment of all levels of education, established an external assessment sub-system to evaluate the quality and progress of educational institutions, teachers, and students, and participated in international quality assessments like TIMSS and PISA. The overall aim is to establish a system for evaluating the quality of education in line with international standards.

In addition to these efforts, the evaluation of educational institutions, teachers, administrators, and students includes ESD and Global Citizen Education indicators. However, the lack of an official statistical database poses challenges such as insufficient evidence to assess the progress of SDG 4.7, inaccessibility or non-disclosure of monitoring and evaluation results, or insufficient feedback for data usage even when disclosed. Furthermore, although researchers conduct

research on target groups at the tertiary education level, it is necessary to establish a reliable system and methodology for national assessment and an external assessment system. It is equally important to address the common occurrence of non-government schools retaining students with high-scoring incentives.

5. **COVID-19 and learning loss:** During the COVID-19 epidemic, Mongolia closed classroom trainings for extended periods of time but continued to use distance learning methods either through full distance training or a combination of classroom and electronic formats. However, despite these efforts, learning loss has occurred at all levels of education. The extent of learning loss was exacerbated by digital divides during the pandemic. Despite these challenges, the pandemic has also created new opportunities for education and brought about significant changes.
6. **Monitoring and evaluation system for assessing learning progress:** During the reporting period, Mongolia developed and utilized an education management and information system that covers all levels of education. The government also introduced a monitoring and evaluation system that meets international standards for measuring SDG implementation. This system provided a more detailed analysis of SDG 4 implementation. Additionally, measures were taken to establish a system of external evaluation in the education sector, and assessments were conducted and analyzed by a national assessment organization for primary, basic, upper secondary education, and school readiness. These assessments provide opportunities to identify factors that affect learning outcomes and to develop a comprehensive response. For example, key indicators of primary and general secondary education enrollment, graduation, dropout, and other levels and key indicators are relatively high, with some progress seen in 2021 compared to 2015. However, when broken down by criteria such as gender, school location, level of household well-being, and ethnic minority, changes in the reporting period show a general pattern of small fluctuations and instability. This is most likely due to the severity of the COVID-19 pandemic.

Currently, the measurement of key indicators related to education quality and changes in these indicators is controlled. However, the selection of indicators related to the quality of education, enrichment, measurement methodology, consistency, and reliability between assessments is not yet fully ensured. Furthermore, an education quality assessment system with integrated national mechanisms and mechanisms for assessing learning outcomes and factors has not been fully developed.

Therefore, in this study assessing the progress of SDG 4.1 implementation, the results of the 2018 Social Indicators Sample Survey Reading and Computational Basic Skills were used as a source for analysis. This study is a major internationally representative external study conducted in accordance with international methodology. The Social Indicators Sample Survey assessed reading and numeracy skills at three levels: 2nd and 3rd grade, primary, and lower secondary education. According to the results of this study, students' reading and numeracy skills increased with each grade and education level. However, numeracy skills were lower than reading skills by 10.8 points in 1st and 2nd grade, 7.7 points at the primary education level, and 12.0 points in the lower secondary education levels. As the grade and level of education increase, there is an improvement of 8 to 17 points in all tasks except for the task of comparing the percentage of completed tasks and the ability to read the original reading correctly. However, the performance of comparative math tasks decreased by 10.3 points compared to primary education, while the performance of reading comprehension tasks increased only slightly by 1-2 points.

At all levels of primary and lower secondary education, the reading skills of female students are relatively higher than those of male students. While the numeracy skills of male students are higher than those of female students at the primary education level, at the secondary education level girls' numeracy skills were better. These findings highlight some of the more complex issues of learning and teaching, such as the need to review and improve the reading and mathematics curricula. It is also essential to consider the differences in teaching methods between primary and secondary school teachers while taking into account the teenage developmental stages of boys and girls.

Furthermore, the quality of education at different levels of education is determined by various factors. These factors include the material conditions of the educational institution, the natural environment, climate, lifestyle, living standards, and infrastructure, communication, social services, and the professional skills of teaching staff. Unfortunately, many factors, such as the low level of education and instability of school governance, have a direct impact on the quality of education, leading to differences in the quality of education in urban and rural areas. For instance, a national survey conducted in 2018 on the quality of basic education revealed that the academic achievement of rural school students was 2.0-8.2 percent lower than that of urban learners.

7. **Equality Index:** The NSO, UNFPA, and UNICEF conducted the 2013 and 2018 Social Indicators Sample Survey Equality Index surveys to measure 7 types of dependent variables, including preschool enrollment, school readiness, early childhood development index, primary education enrollment and coverage, graduation and dropout levels, and basic skills (reading and arithmetic), using 14 types of 6 independent variables, such as gender, region, place of residence, level of household well-being, maternal education, and ethnicity of the head of the family. When we evaluate SDG 4.5 targets and compare the 2013-2018 Education Equality Index using these variables, the following points can be made.

For example, preschool enrollment increased for most indices and sub-indicators, but for households with lower-than-average income, enrollment increased by 13.8 percentage points, while those with lower and upper level income households the enrollment decreased by 1.7 and 1.1 percentage points, respectively. Maternal education played a role in enrollment as well, with children of mothers with higher and primary level education increasing by 33.0 and 1.0 points, respectively, and children of uneducated mothers decreasing by 10.4 points. School readiness remained almost unchanged for low-income families, but decreased by 3.2 points for higher-income households and 10.4 points for mothers with primary education.

Changes in primary and secondary education equality indices show no clear patterns, and the primary and secondary education dropout rate is relatively low compared to other indicators. The dropout rate is lower than average for male students, low-income households, and Kazakh households at the basic and upper secondary levels, and the western region's dropout rate is declining. Surprisingly, the dropout rate is higher for children of high-income households at all levels of education.

There is insufficient data to assess the Equality index by vocational and higher education levels. The lack of data collection on relevant Equality indices and indicators impedes the creation of suitable conditions for sustainable incentives and benefits for each social group. Mongolia's

coverage gap between the Social Indicators Sample Survey and SDG progress review period is relatively long, and adjustments must be made to address the potential impact of these studies on their effectiveness. Moreover, the evaluation criteria, indices, and indicators used in the Mongolian language in the NSO are not aligned in each sector, leading to interpretation issues.

8. **Gender Equality Index:** Although the gender balance index of students is relatively similar, the proportion of female students is increasing as education levels progress. For example, the Ministry of Education and Science has calculated the total number of male and female students for each academic year at every level of preschool and primary education, and starting from the 2019-2020 academic year. However, the Ministry of Labor and Social Welfare has estimated TVET-related statistics since 2016-2017, but the data has not been categorized by urban or rural groupings. As part of this review, the Ministry of Education and Science and the Ministry of Labor and Social Welfare statistics were compiled for 2015-2021 to calculate the Gender Equality Index (GEI) for all students at all levels of education (see Table 4.5.1).

For the entire academic year of 2015-2016, the GEI of preschool learners and primary and secondary school students is approximately 1.0 in both urban and rural areas. For high school students, the total score is approximately 1.2 per year, with the number of female students at this level of education increasing. However, in urban and rural areas, the rate remains 0.1 percentage points higher and lower, respectively. The GEI of students in technical and vocational training centers is consistent for all academic years at 0.7, indicating an increase in the number of male students at this level of education. The level of vocational education does not differ significantly from the annual total (0-0.1). In the case of vocational education, the GEI for the 2018-2019 and 2021-2022 academic years is 0.2-0.3, with male students clearly over represented, while at the technical education level, the index is 1.0 and 0.1 for the 2019-2020 and 2016-2017 academic years, respectively. This indicates an increase in the number of female students.

The GEI of all students at all levels of higher education was consistently 1.4-1.6 throughout all academic years between 2015 and 2021. This rate is higher than that of developed countries where women are encouraged to pursue higher education. When the index is categorized by urban and rural areas, the majority of students study in urban areas (95-97%), making the index 1.5-1.6 in total in urban areas. The index is broken down by level of tertiary education and urban-rural, and changes in the past three academic years show that there are no students in rural areas at the undergraduate education level, and all undergraduate students are trained in urban areas. The number of female students studying at this level has quadrupled. In undergraduate degree level, the index remains unchanged throughout the entire duration of study, at 1.5 points, however, it reduces to 1.2 for doctoral degree education levels.

In low-income households, particularly among herder families, there is a common tendency to neglect the education of male children, leading to early dropouts from general secondary education and enrollment in low-skilled jobs. This trend is even more pronounced in higher education indexes, increasing the risk of poverty for these individuals. Research has shown that households headed by individuals with lower education levels are more likely to experience poverty, and that access to education is a key solution to reducing poverty (NSO, Poverty face 2018, 2020). To promote the development of both individuals and the agricultural sector, it is crucial to create favorable conditions and opportunities for herders and farmers to access education and improve their livelihoods.

Equal access to higher education for female students is an important indicator, but specific services tailored to their unique needs are lacking. For instance, there is a shortage of nursing rooms for pregnant and nursing students, as well as affordable or government-subsidized childcare services. While more women are enrolling in higher education institutions due to their parents' desire to secure decent work and avoid manual labor for their daughters, and the fact that girls tend to outperform boys in secondary education, research suggests that women are still less likely to obtain advanced education and find employment than men due to their biological roles in childbearing and childrearing.

Given that the gender ratio in the total population of Mongolia is close to 1.0, if policies and measures in the vocational education sector do not ensure gender equality for women and similar measures are not taken in the field of higher education for men, then the education gap between women and men will widen. This could deepen gender inequality not only within families but also among communities and social groups.

9. **Education of ethnic minorities:** An ethnic minority refers to a group of people who live within a nation and differ from the majority group in terms of ethnicity, language, and culture. When developing policies to ensure the rights of minorities to learn, communicate, and receive information in their native language, it is crucial to consider various factors such as the percentage of ethnic minorities in the total population, their distribution, place of residence, occupation, lifestyle, methods of inheriting and protecting their history and culture, and assimilation. In order to pursue the principle of non-discrimination and leaving no one behind in education and guarantee the right to education for all, it is necessary to create educational services that take into account these circumstances. According to the 2020 Population and Housing census in Mongolia, the total population is estimated to be 3,296,866, of which 3,174,565 people (or 96.3%) are Mongolian citizens. The Khalkha (83.8%), Kazakh (3.8%), Duvud (2.6%), Bayad (2.0%), and Buryat (1.4%) ethnic groups have the highest population among all 31 ethnic groups in Mongolia.

Although Mongolia has 31 ethnic groups, it is not possible to determine the provision of preschool services for each ethnic minority group since education for national minorities is classified according to age groups of 6 and 10 years old. However, there are very few studies on the education of ethnic minority groups, and the available studies mostly focus on the Kazakh ethnic group. Education and other thematic surveys do not provide specific statistics on the Kazakh minority, who constitute the majority of the population in Bayan-Ulgii aimag, or on other ethnic groups residing in different aimags and districts. The lack of data on ethnic minorities may be attributed to the inclusion of these groups in the education indicators of the total local population.

However, there is a dearth of information regarding the Dukha people, who rely on reindeer and reside in the taiga of Tsagaan Nuur soum, Khuvsgul aimag, in terms of key educational indicators, similar to the situation in Bayan-Ulgii aimag. For instance, the 2020 Population and Housing census report depicts a total population of 208 reindeer herders across the nation, which is 74 less than the 2010 census. The report classifies the population above the age of 10 based on their educational qualifications, revealing that 4.9% of the Dukha population possess higher education, 2.0% have specialized secondary education, 17.6% have completed secondary education, 19.6% have lower secondary education, 30.4% have primary education, while 25.5% have no education

or technical/vocational education. According to the Khuvsgul Population and Housing census, 10.1% of the Dukha people live in urban areas, while 89.9% live in rural areas, and 75% of them are aged between 0-14. In terms of the educational level of the population aged 6 and above, there has been a decline in education rates across all levels of education in comparison to the 2010 census, while the number of uneducated individuals has increased by 33 points. These indicators highlight the need for specialized lifelong education services, particularly for preschool, primary, and basic education.


CONCLUSIONS ON THE SDG 4 TARGETS

4.1. PRIMARY, SECONDARY EDUCATION

1. During the reporting period, there have been positive changes in the legal environment to promote inclusive and equal access to education for all children. Positive indicators such as the enrollment of 6-year-olds in general secondary education, overall school enrollment, graduation rates, and post-secondary education have been identified.
2. Despite progress in reducing school dropouts and increasing enrollment in secondary schools, it is necessary to assess the conditions of vulnerable groups in society, as well as the impact on urban, rural, and regional areas, and develop targeted measures for these groups.
3. The Social Indicators Sample Survey and external evaluations in the education sector show that children and young learners lack basic reading and numeracy skills, and urgent measures are required to identify and address the factors causing this delay.
4. The establishment of an external evaluation system in the education sector and the assessment of primary, basic, upper secondary education, and preschool readiness by the national evaluation organization facilitates the opportunity to identify the factors influencing the learning outcomes and develop comprehensive responses.

4.2. EARLY CHILD DEVELOPMENT AND CHILD PROTECTION

1. Mongolia has enacted laws that mandate preschool education for all children aged 2 until school enrollment age, including basic and alternative education. The state budget covers 100% of the normative expenditures per child, regardless of the ownership of the preschool education facility. The country has established legal obligations to provide preschool services to all young children and make preschool education mandatory for all children in the year before enrollment. To ensure school readiness, parents are required by law to enroll their children in preschool services. The government's policy to support preschool education, create a legal environment, and increase funding for the state budget and investment has led to Mongolia being recognized internationally as one of the world's leading countries in preschool education.
2. Mongolia has adopted and implemented a policy that supports the comprehensive development of young children. It has evaluated the implementation of this policy and updated and improved its concepts, policies, and legal regulations to align with global trends, as well as Mongolia's development policy and planning, to better support the comprehensive development of young children. As part of the education sector's legal reform, a revised draft of the Law on Preschool




and General Secondary Education has been submitted to Parliament. This draft proposes to increase the age range of preschool services from 2-5 years to 3-5 years. This change will provide a wide range of services to meet the needs of children aged 0-2 years, as well as parents and guardians, by ensuring equal access to health, nutrition, care, social welfare, and protection services.

3. The physical development, socialization, emotions, learning skills, and alphabet-numbering skills of 3-4-year-old children with appropriate developmental skills were assessed using MIGS. The results showed that Mongolian children's alphabetical and numeracy skills do not meet international standards.
4. Mongolia has implemented a comprehensive policy aimed at providing at least one year of free preschool education services to all children through experienced and professional teachers. The policy aims to reach out to poor and vulnerable children and ensure equal access to education. However, while progress has been made in preschool enrollment, there is a significant variation in enrollment rates by age. Specifically, 10.1 percent of 2-year-olds are enrolled, compared to 61.9 percent of 3-year-olds, 86.2 percent of 4-year-olds, and 91.3 percent of 5-year-olds. To ensure that all children have access to preschool education, it is necessary to direct efforts to increase enrollment among specific groups of children, such as herders, people with disabilities, ethnic minorities, and rural-urban migrants. These efforts will help to ensure that all children in Mongolia have the opportunity to receive a high-quality preschool education, setting them up for success in their future academic pursuits.
5. The pre-school statistics currently available do not include information on children from specific groups such as Tuva, Tsaatan, migrant children, etc. These groups require special attention and support from the population. Therefore, it is important to expand the minority information in the statistics, as the information on these children is likely to be neglected.
6. In the past two years, the enrollment of 5-year-old learners in kindergarten training has increased by 8.3 percentage points. This is due to the impact of the government's policy on full coverage of 5-year-old children in preschool and the reduction of kindergarten workload caused by the pandemic.

4. 3. VOCATIONAL EDUCATION, TRAINING AND TERTIARY EDUCATION

1. The expansion of tertiary education has been facilitated by changes in admission criteria, which now only take into account the subjects covered in the admissions exam and the minimum score required. Furthermore, policies and legal frameworks have been put in place to enable students to pursue studies at vocational training and educational institutions based on their interests. These developments are in line with the principles of education for all and promote lifelong learning, resulting in a more inclusive and accessible tertiary education system.
2. Regarding tuition fees for tertiary educational institutions, the annual cost is slightly more than twice the average monthly household income, which is considered affordable for households with above-average incomes. However, there is a risk that the discontinuation of loans and support through the Loan Fund for Education could negatively impact the accessibility of education for households with below-average incomes.

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3. The number of students in vocational training educational institutions is constantly growing, thanks to government support for dormitories, meals, and tuition scholarships, which provide social security for students.
 4. Unless accessible policies and measures are implemented to provide gender equity for female students in TVETs and male students in tertiary education institutions, the gap between women and men in terms of the quality and level of education will continue to widen, deepening gender inequity in families, workplace, and social groups.
 5. While it is commendable that MLSP compiles statistical data on students with disabilities on an annual basis, and MES for the 2019-2020 academic year, the government's financial support for these students, while a significant amount, is not enough to address the lack of accessible learning environments for them.
 6. According to statistical data from the 2016-2021 academic years, the living situation does not have a negative impact on students' learning. About 90% of dormitory applicants were able to secure a spot in the dormitories, while others found alternative ways to manage their living situations.
 7. The roadmap for tertiary educational institutions was not developed in line with the country's development priorities and regional development policies. As a result, tertiary education institutions are concentrated in the capital city, forcing low-income rural students to live and study in the expensive capital city and exacerbating issues related to rural-urban migration.

4.4. SKILLS FOR WORKFORCE

1. Mongolia has initiated the refinement of the social welfare system and implemented a policy called the "transition from social welfare to employment." This policy aims to provide appropriate measures for citizens to acquire skills and receive employment mediation services.
2. The primary objective of the reform for employment promotion programs is to support initiatives that prepare and provide jobs for individuals who face challenges in finding employment, particularly working-age members of households in need of social welfare support and assistance.
3. To enhance the employment rate of TVET graduates, a policy has been implemented to develop social partnerships and increase the involvement of professional associations, resulting in some progress.
4. The transfer of TVET to a competency-based training and evaluation system, where the training content is updated in accordance with employer requirements and rapid technological changes, has created significant conditions for improving the quality of education.

4.5. NON-DISCRIMINATION

1. Recent studies on the education sector have examined the experiences of various groups of children such as those with disabilities, herder children, minority children, children from low socioeconomic backgrounds, migrant children, and victims of violence in preschool and secondary schools. However, in most cases, the data provided by the education sector is only

disaggregated by gender and residential location. This lack of detailed data hinders more substantive analysis. Starting from the 2021-2022 academic year, data by disability type will also be available.

2. Policy research conducted in the last two decades suggests that the most effective way to address barriers faced by vulnerable students in higher education is by comprehensively implementing policies that address both financial and non-financial obstacles (OECD 2008; Salmi & Bassett, 2014). Evidence shows that financial assistance programs targeted towards specific groups, and efficiently managed, can effectively remove financial barriers to higher education. Moreover, many countries have successfully implemented high school-related programs, such as outreach to target groups, updating recruitment procedures, and enriching enrollment policies to provide advantages to specific groups, thus increasing the percentage of graduates while maintaining it.
3. Based on the results of the SISS equilibrium indices conducted by the NSO, UNFPA, and UNICEF in 2013 and 2018, the following conclusions can be drawn
 - a. Attention needs to be paid to and causes need to be identified for the increase in preschool enrollment of children with mothers having higher education, which increased by 33.3 points while school readiness increased only by 3 points. Furthermore, enrollment and school readiness of children from households with higher livelihood remained low.
 - b. In terms of the independent variables, there is less fluctuation in the changes of the indicators for dropouts in all stages of primary, basic, and full secondary education. For the UB and Eastern regions, dropouts decreased in all levels of education, while for the Western region, dropouts have increased. However, in basic and full secondary education stages, the dropout rate for male students, households with livelihood lower than the average, and Kazakh households decreased while children from households with higher livelihood showed an increased dropout pattern.
 - c. The absence of data collection on relevant equilibrium indices and their independent variables at each level of vocational and tertiary education, especially at the household livelihood level, has resulted in a lack of evidence-based policies to promote anti-discrimination and inclusive participation in the development of these sub-sectors. This has also led to a lack of conditions for stable incentives and benefits appropriate for each social group.

4.6. LITERACY AND NUMERACY

1. Despite the high literacy rate among adults in Mongolia, the rate is lower in rural areas and among immigrants in the suburbs of UB.
2. The low literacy levels among the younger generation are influenced by the fact that children with disabilities, children of ethnic minorities, herders' children, and children from low-income households are more likely to be out of school or drop out of school.
3. Although the demand for digital literacy is high, half of the youth aged 15-24 years old are illiterate.

4.7. ESD (education for sustainable development) and GCE (global citizenship education)

1. By the end of 2020, the UNESCO Executive Board broadened the scope of Global Citizenship Education (GCE) and Education for Sustainable Development (ESD) of SDG 4.7 by breaking them down into eight subgroups with 25 sub-contents. However, in Mongolia, there is a lack of comprehensive assessment or research data covering these contents. Thus, there is an urgent need to develop tools that can identify the type of information to be collected, from whom, by whom, and how. This will enable the compilation of data into a database, sustain a monitoring and evaluation system, and measure progress step by step until 2030.
2. In the past, there has been a lack of policy and planning that encompass the principles of lifelong learning and support ESD and GCE across all educational levels. These policies should involve studying and researching best practices, incorporating them into educational policy and planning, and making ESD the core of education and learning. Furthermore, the policies and planning of ESD and GCE have primarily focused on primary and secondary education, limiting their scope.
3. Based on the national policy and legal documents reviewed in this study, it is evident that Mongolia is committed to developing a comprehensive national and cross-sectoral policy and planning framework that reflects the principles of sustainable development and education. Looking ahead, it is important that the upcoming midterm development policies, such as the "Human Development Target Program" and "Environmental Target Program," integrate specific targets and actions from the ESD 2030 Roadmap, the ESD Country Initiative, and other relevant targets related to SDG 4.7.
4. The integration of ESD goals, content, and comprehensive competencies into the general education training curriculum, as well as the inclusion of goals, objectives, and content related to Human Rights and GCE in some general education and tertiary institutions' training and curricula, is commendable. However, this study found that teaching about ESD is limited to only documents, and students' knowledge and skills related to ESD are very low. This indicates a lack of significant improvement in their academic performance.
5. The goals, objectives, and contents of human rights and GCE were integrated into the curricula of general education and some tertiary institutions. Nevertheless, there is a need to pay attention to developing maturity from an early age to understand and accept gender equality and have gender sensitivity. When improving textbooks and curricula, contents and images with gender stereotypes should be removed.
6. Mongolia possesses considerable resources and opportunities for cooperation and partnership, including a system to ensure the professional development of teachers and school staff across all levels of education, civil society organizations, and professional and research organizations working towards ESD, GCE, gender equity, and human rights. These resources can be utilized effectively to disseminate ESD not only to teachers and students but also to the wider public. Going forward, the government and civil society organizations can improve the quality of ESD in the target groups by cooperating, exchanging, and sharing information to implement SDG 4.7.

4.a. SCHOOL AND LEARNING ENVIRONMENT

1. The Government of Mongolia places great importance on the goal of providing safe, non-violent, inclusive, and effective learning opportunities for every child. This goal has been integrated into

long-term and midterm development policy documents that are currently being implemented. Over the past five years, improvements have been made in various areas to make the learning environment more child-friendly, as evidenced by this study.


2. It can be inferred that progress has been made at both the policy and implementation levels, including improvements to the educational environment, such as the construction, renovation, and expansion of schools and kindergartens, as well as the renovation of water, sanitation, and hygiene (WASH) facilities. Additionally, there has been a greater focus on improving the rural school environment. However, many issues still need to be addressed, such as improving the infrastructure of rural schools and connecting them to centralized water supplies, as well as replacing pit latrines.
3. Furthermore, despite a significant increase in the state budget allocation for the educational sector in recent years, there is still a lack of financial capacity to create a favorable learning environment.
4. Additionally, there is a requirement for specialized funding to create accessible infrastructure, an inclusive learning environment, facilities, and learning tools and materials that meet the specific needs of children with disabilities, to ensure their full participation in learning.
5. The MES deserves recognition for initiating and organizing nationwide advocacy campaigns aimed at protecting children from violence. These campaigns involved children, parents, and adolescents, and were designed to safeguard children from all forms of violence, including online violence. Going forward, there is a need to launch and execute various activities such as increasing the amount of positive information in the online environment and developing appealing applications for students.
6. In conclusion, limited information and studies are available on the topics covered in this section.

4.B. SCHOLARSHIP

According to Mongolia's long-term and medium-term development policies and planning documents, which aim to prepare globally competitive human resources, the government has approved resolutions such as the "Procedure to Admit Students to Top Universities in the World" (2013) and "Procedure for Issuing Tuition Loans to Students of Foreign Tertiary Educational Institutions" (2020), as well as other regulations and intergovernmental contracts. Financial support is provided to students of tertiary educational institutions from the Loan Fund for Education. Additionally, starting in 2021, additional scholarships have been provided as an honor of the President and Prime Minister.

Under the program to support students pursuing masters and doctoral studies in developed countries, a total of 1,934 citizens studied in 36 foreign countries for 22 different professions between 1997 and 2020. The students received MNT 106.9 billion or USD 31.6 million in discounted loans.

4.c. TEACHERS AND EDUCATORS

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1. In 2019, over 95% of educational institutions had access to professional teachers, resulting in the significant elimination of teacher shortages. Recent statistics from the 2020-2021 academic year show that the supply of professional teachers in secondary schools has now reached an impressive 99.8%. In the 2021-2022 academic year, 84% of preschool and primary school teachers were female, resulting in a gender balance index ranging from 0.04 to 0.34. The gender balance index for university teachers was relatively high, ranging from 0.6 to 0.7.
 2. The existing policies, plans, legal regulations, monitoring, evaluation, and reporting that are being used to guide teaching have not fully met the new requirements of contemporary education and the ongoing transformation of learning. Several factors are influencing the availability of well-trained professional teachers who can work productively and effectively, including:
 - a. There is little motivation among high school graduates and young people to pursue a career in teaching, which indicates the low prestige and status of the teaching profession in society. This situation is attributed to various underlying causes, including low wages, high workload, poor quality of education for aspiring and practicing teachers, inconsistent policies, and inadequate regulatory mechanisms.
 - b. The Teacher Training Institute has established a unit for higher education teacher development, allowing higher education professors to collaborate on policy and support the development of professional and pedagogical skills, particularly in the area of education and learning transformation.
 - c. Despite an increasing number of teachers obtaining professional degrees in schools and kindergartens, these degrees are unlikely to serve as a motivator for continuous professional development as intended. This is due to suboptimal criteria for obtaining professional degrees and the allocation of decision-making authority regarding their granting.
 - d. Currently, activities aimed at supporting the continuous professional development of teachers include mandatory core training in professional development for each teacher in their first, fifth, and tenth years of work, organized by the Teacher Training Institute and funded by the state budget. Additionally, the Institute and other organizations provide customized training for all teachers and staff, research opportunities, theoretical and practical conferences, presentation or speech contests, Olympiads, and programs facilitating visits to and advice from educational institutions, all of which are funded by the state budget and other sources. Between 82% and 84% of teachers required to attend basic training sessions from 2016 to 2021 have completed the necessary training. However, optional courses are still in the early stages of development, and issues related to budget, funding, registration, certification, and incentives have not been fully resolved. Online training is currently the most popular delivery method for these types of training sessions.
 - e. The frequent reforms to the general secondary education school curriculum have caused uncertainty and additional workload for teachers. However, since the adoption of the 2018 School Curriculum Development Methodology, the reforms have been relatively stable in recent years. This situation has not only affected teachers but also professional development activities. The planning and organization of teacher training and consulting activities have been focused on short-term cycles of 1-4 years rather than a long-term vision. With the next

10-year cycle of general secondary school curriculum improvement set to begin in 2024, the "next wave" of increasing pressure on the requisite knowledge, skills, workload, and responsibilities for teachers is approaching.

- f. The salaries of teachers are lower than both the national average wage for public sector jobs with similar nature and the international average wage for similar jobs. This has a negative impact on the professional reputation of teachers and hinders efforts to attract high-achieving students to teacher training schools. Additionally, it prevents the establishment of long-term employment for teachers and the setting of high standards for performance, as well as holding teachers accountable for their work. Teachers, like civil servants and social insurance payers, retire at the legal age and receive pensions according to general rules. The Law on Civil Service and the Law on Education dictate that public school teachers receive a one-time benefit equal to 36 months of basic salary when they retire. This benefit provides a certain amount of support to start a new cycle of life and business.

RECOMMENDATIONS

Based on the specific conclusions of the above-mentioned general and targeted objectives, the results of the analysis for evaluating and reviewing the implementation progress of SDG 4 were thematically summarized within the research content. Detailed recommendations for each of the general and targeted objectives have been developed with the same structure.

GENERAL RECOMMENDATIONS

1. Many challenges faced by humanity and our planet, such as human rights violations, discrimination, displacement, natural disasters, pandemics, unemployment, and digital division, are not unique to Mongolia. These challenges are exacerbated by unequal distribution of wealth, social injustice, climate change, and the impact of the digital age. As Mongolians, we have a responsibility to take care of ourselves, our families, our communities, and our country while also striving to contribute to global efforts towards a more just, equitable, and sustainable future.
2. In addition to formulating policies for economic development, Mongolia must consider the interconnectedness of various factors and aim to protect the environment, prevent disasters, reduce risk, create employment, promote equitable distribution of wealth, redesign social welfare policies, maintain an appropriate level of debt, and build capacity.
3. *National capacity in the educational sector: Approaches in the education development policy, strategic planning, implementation management and monitoring:* For adhering to the recently approved development policies and laws, newly appointed officials and structural changes in the national educational sector are crucial. However, formulating and approving the Human Development Program, which will be implemented until 2030, implementing the new Law on Education, and fulfilling core organizational responsibilities, will require these newly appointed officials to depart from their old methods, personal values, and attitudes. Otherwise, they will not be able to overcome these historic and emergent challenges. This is because an individual's actions are shaped by their attitude, principles, and values.


Therefore, firstly, each official needs to explore advanced approaches to transforming education and learning. These may include the right-based approach to education, a whole sector-wide approach (SWAp), a comprehensive and holistic approach, a whole organization working

approach (WIAp), a gender-responsive approach to education planning (GRESAP), a Universalism approach, a Transformative approach to learning, and Constructive Learning approaches. These approaches should be integrated into the actions of policy and plan development, implementation, monitoring, and evaluation.

Acquiring, applying, and developing knowledge and methods to use these approaches are not as easy as the saying goes, "If you have the willingness to have money, you will become an owner of the property." Instead, these approaches are more in line with the Eastern philosophical principle of the interdependence of yin and yang, expressed in the phrase, "People know by doing, they do by knowing." Therefore, one need not be intimidated by the many approaches with different names, as they can only be grasped through one's own experience of trying things in a creative way. At the heart of all these approaches is a "system of thought" that focuses on the structure or systems of things and phenomena, rather than the units of things and phenomena, and on recognizing and analyzing the status quo and implementing solutions through action. Once you possess these approaches, nothing is impossible.

The reason for this relatively detailed recommendation is that if we attempt to implement all the new goals and actions using our old approaches and methods without introducing these new approaches to education, there may not be significant progress. Furthermore, this substantial structural change may worsen the situation, and we will not be able to address the problem of social injustice. Therefore, it is crucial to integrate these new approaches to education, plans, and their implementation to ensure that we achieve progress towards our goals. Otherwise, we risk exacerbating the problem of social injustice instead of solving it.

4. **Life-long learning system:** It is important to implement policies and plans and adhere to new legal regulations based on an understanding that ensuring the achievement of all targets of the SDGs, particularly SDG 4, depends ultimately on how the system of life long learning is created and what kind of solutions are there for improving it. Therefore, in order to make progress towards this goal, significant time and effort has been devoted to refining the Life Long Learning system proposed in this thematic study to suit the context of Mongolia. The new system will be gradually developed, with a focus on incorporating recommendations for each of the proposed general and target objectives into future action. For example, the LLL system should be developed holistically, with a focus on both lifelong and life-wide learning. Additionally, the missing parts of the current lifelong learning process cluster should be added, and educational services should be diversified and prioritized to ensure they are interconnected and interdependent. Finally, ICT should be introduced as a key area of learning within the lifelong learning system.
5. **Digital transformation of education:** Although the implementation of the national policy "Digital Nation" by the Government of Mongolia has resulted in significant and rapid digital transition in the educational sector, it is crucial to have a development policy, strong legal regulations, sufficient investment and budget, and skilled human resources to manage this progress with foresight. Therefore, the following recommendations should be concentrated on in the future:
 - a. Reflect and confirm the legislation to promote the digital transformation of education, ensuring safe, reliable, and sustainable operation, in the newly revised educational and other relevant laws and regulations. Develop and implement a detailed medium-term plan for the



implementation of digital transformation in the educational sector, and devise and enforce relevant regulations and principles.

- b. The percentage of people connected to the internet in Mongolia is higher than the global and regional averages, indicating that the country has built the hard and soft infrastructure necessary for digital transformation. However, due to the digital divide between nomadic herders and suburban areas (ger districts) caused by infrastructure limitations, there is a risk of unequal accessibility and incomplete operation of hard and soft infrastructure. Therefore, it is important to conduct regular surveys at different stages to assess infrastructure and equipment, and based on the findings, establish research-based infrastructure development, equipment supply, and provision of soft infrastructure supply and maintenance subsystems.
- c. The government should take full responsibility for covering costs and creating special budget items and categories, as well as providing funding guarantees for the necessary actions for digital transformation. This includes data fees for teachers and target student groups required for the introduction of ICT in teaching and learning, as well as sustainable maintenance of both soft and hard infrastructure.
- d. It is important to establish a human resource of ICT professionals who are responsible for infrastructure and human resource capacity building within government units and general education schools at the district, aimag, and local government levels.
- e. Although each tertiary institution uses a learning and school management system for their ongoing education activities respectively, the quality and accessibility vary greatly. Therefore, unified standards and regulations to improve the recognition of learning outcomes should be developed and enforced.
- f. To promote the study and research of teachers and students, a "shared" digital library should be created, along with a database of laboratory and research studies, and the "adaptation" of open-source software.
- g. In line with the rapid development and change of information technology, forms of education and learning environments should be identified, and a budget for e-learning should be allocated to all levels of educational institutions. This includes supporting teacher training and capacity building activities and creating new legal provisions to support monthly payments for data usage and other supportive activities.
- h. To ensure effective capacity building for all staff in schools, it is important to enforce the ICT competency standards for teachers (Minister of ES, A/67, 2020) that was approved in 2020. This framework should be utilized not only for building the capacity of teachers, but also for management staff and non-teaching staff in schools.
- i. It is important to create conditions for students to study in a family environment by emphasizing the importance of parents' and community participation in successful tele-lessons and e-learning. The government should ensure the continuous delivery of educational services to children in rural herder and vulnerable households, and provide integrated management at all levels of public administration and sector-wide coordination to

deliver social services digitally. Partnerships and collaborations at all levels should be utilized to ensure a sustainable digital transformation of education.

6. **Quality of Education:** Improve the adaptive assessment system for learning quality by evaluating learning input resources, learning environment, processes, and output results. Institutionalize the accumulated experiences and define learning outcomes based on cognitive and non-cognitive features, making them an integral part of the teaching and learning processes. Regularly conduct adaptive assessments to adjust and improve the system.
7. Establish a system for evidence-based educational policy planning, monitoring, and evaluation that is developed based on comprehensive solutions to ensure the flow and use of information. To reduce disparities in academic achievements and provide feedback on monitoring and evaluation, it is essential to meet the learning objectives of the curricula and make specific recommendations for improving the quality and outcomes of training. This includes reducing differences in the learning environment, improving dormitory services, introducing ICT in training, developing open-source e-learning, and utilizing other resources and opportunities. To transform the entire learning environment to enable the inclusive participation of every child and ensure the sustainability of their future quality education, the following specific recommendations should be considered:
 - a. Ensure the reliability and sustainability of the "study on school readiness" as an initial assessment of teachers in primary schools and an evaluation of the preschool program's performance. This will ensure the continuity and interrelations of the early stages of lifelong learning, fulfilling a key condition for estimating the future return on investment.
 - b. Develop a system for evaluating the learning outcomes and quality of elementary schools, which currently exists. The aim is to create and enhance a quality assessment system that meets international standards. The system should give special importance to the lessons learned and experience generated by the international assessment (PISA-2022) and the results it produces.
 - c. The proposal is to increase the allocation for advisory services provided by a professional organization in the annual budget of schools that have received a low rating in the educational quality assessment survey. This measure aims to address the specific needs of these schools and improve their overall quality of education.
 - d. Professional organizations should provide support for the evaluation of student learning progress through the use of objective, reliable criteria and indicators that are consistent across all schools. They should also provide books and manuals, as well as organize modular courses that follow a specific plan, in a step-by-step manner.
 - e. Introduce indicators and criteria to assess the possession of ESD and GCE in the evaluation of educational institutions, teachers, and students. Apply detailed educational quality evaluation by measuring equilibrium indices.
 - f. Introduce external assessment of TEIs based on written examinations and databases in the near future. Create conditions for the process of tertiary education to be measured,

evaluated, and reported by using national evaluation standards or similar requirements and criteria.

- g. The goal is to promote a positive social attitude towards the quality assessment of education at all levels. This involves fostering a societal understanding that assessments serve a research role, not just an auditing one.

8. **COVID-19 and Learning Loss:** There is a pressing need to identify ways to ensure continuous education and develop optimal alternatives to adapt to the uncertain situation caused by the COVID-19 pandemic, which is not only affecting Mongolia but also the rest of the world. In addition, we need to be prepared for unpredictable disasters and emergency situations such as dzud, snowstorm, flood, fire, the spread of infectious diseases (seasonal fever, infectious diseases of humans and animals), and earthquakes, which frequently occur in Mongolia. Therefore, it is crucial to start classroom learning immediately to reduce the learning loss caused by distance learning, re-train to overcome this loss, and implement effective plans to prevent further loss. Moreover, it is essential to create a legal environment that ensures the continuity of education during emergency situations in the policy documents of the educational sector. The following measures should be implemented:

- a. Many studies have shown that the main forces for continuous education during emergency situations are human resources, technology, and infrastructure in the educational sector. Therefore, the sectoral policy and actions should focus on transforming teaching and learning in line with the new situation and conditions through on-the-job training, providing methodological guidance, teaching various teaching methods for classroom and distance learning approaches, and improving skills to utilize technology.
- b. During the current period of changing learning approaches, special attention should be given to teaching children to learn independently from an early age, building the capacity of teachers for this purpose, and making appropriate changes in teaching and learning at all levels of education.
- c. The main focus of the transformation of education in Mongolia should be inclusive education that provides equal opportunities for all citizens to receive quality education, offers lifelong learning opportunities, and eliminates inequities.
- d. To establish a learning environment for distance and combined (in-class and distance) education and improve internet conditions in educational institutions, we need policies that support the technological environment of vulnerable children and children with special educational needs to ensure efficient distance learning.
- e. It is essential to establish flexible arrangements to support teachers' capacity building and create new teaching methodologies through experimenting with inter-school use of teacher and environmental resources.
- f. Enabling children to participate in extracurricular and developmental activities through a permanent platform with integrated coordination of collaboration between children,

parents, guardians, and educational institutions can be a way to strengthen the cooperation of the parties and ensure the continuity of activities.

9. **Non-discrimination and inclusion:** To ensure non-discrimination and inclusion, the following measures should be implemented:
 - a. It is essential to adapt the indices of educational equality and equilibrium in accordance with international standards. This involves using consistent terminology across all sectors, ensuring that all variables (educational indicators) are adapted to the country's context, and their interpretation and understanding are coherent. Moreover, evidence can be improved by diversifying major national surveys and determining their frequency and timing appropriately.
 - b. After analyzing the results of the review of progress towards targeted objectives, new situations and issues that require attention have been identified. In the future, it is necessary to conduct detailed studies on the causes of these situations and issues, and also to focus on groups that are left out of services. Adequate responses should be put in place to address these concerns, and information availability should be ensured for those who need it.
 - c. It is crucial to implement a program that addresses learning loss in education. This program should take into account the specific characteristics of each level and stage of education and should pay special attention to identifying and utilizing invariant learning methods. In professional terms, a strategy to eliminate learning loss that has high a level of generality and based on the student's age and mental uniqueness should be developed, and it should be possessed by the teacher. It is important to remember that a "child's brain is not a balloon that expands and inflates by blowing."
 - d. In line with the universalism approach, it is crucial to increase the role of parents and guardians, especially mothers, in nurturing their children's development during early infancy and supporting their learning. To accomplish this, a lifelong learning system should be implemented that provides parents and guardians with the necessary education to raise and educate their children effectively. Moreover, it is essential to encourage every organization and business entity to collaborate with schools and teachers to improve education. By doing so, education can align with the future trend of education development, which emphasizes investment in education by society as a whole, instead of solely dedicating education to social development. This approach will lead to sustainable development and create a fair, happy, and prosperous society.
 - e. To better meet the varying learning needs and abilities of students across all levels of education, as well as promote their progress and development through inclusion, a comprehensive reform is needed. This reform should include an improved curriculum that encompasses clear learning objectives, relevant content to achieve those objectives, effective teaching methodologies, and assessments that fully support inclusion. In addition, the reform should focus on transforming the school and learning environment, providing continuous professional development opportunities for teachers, establishing a renewed roadmap for educational institutions, promoting fair competition, and optimizing the allocation of investment and funding to protect the interests of vulnerable groups. To achieve these goals, a new approach to work called "Organization as a Whole" (AWOW) should be introduced for

the management of educational institutions and all levels of professional and administrative organizations. For educational institution management, the "School as a Whole" approach (AWWS) should be adopted.

- f. To ensure that everyone, regardless of age, background or circumstance, has the opportunity to develop their literacy and numeracy knowledge and functional skills, it is important to create a non-discriminative and inclusive learning environment for lifelong learning. This is especially important given the ever-increasing pace of work and life changes, and the unique needs of each age group. To achieve this, it may be more appropriate to rely on social partnership, utilizing informal learning and learning from life, while implementing specific policies and plans. Additionally, regardless of residential location, household livelihood and gender differences, it is crucial to pay attention to creating an adequate internet environment for digital literacy and providing electronic devices such as mobile phones, along with relevant training materials. Research on literacy and numeracy knowledge and skills should be conducted regularly, in accordance with international guidelines and using a new definition of literacy and numeracy. Relevant measures should then be taken based on the findings of this research. By implementing these strategies, we can create an inclusive and equitable learning environment that supports the lifelong learning needs of adults and youth from all walks of life, regardless of their background or circumstance.

RECOMMENDATIONS ON THE TARGETED GOALS

4.1. PRIMARY, SECONDARY EDUCATION

1. In order to ensure that all children have access to non-discriminatory, accessible, and inclusive quality education services, including the primary and secondary education, certain measures need to be implemented. These measures include:
 - a. While Mongolia has already established a legal framework to provide free primary and secondary education, and ensure the right to education for children with different educational needs, it is necessary to increase enrollment at all levels of general secondary education and eliminate school dropouts. To achieve this, education management, information systems, and other relevant monitoring and evaluation systems must be utilized to monitor progress effectively. Expansion of enrollment and quality education surveys should also be conducted frequently, and survey results utilized creatively to analyze the reasons for changes in attendance and quality. Policy and implementation, monitoring, and evaluation results must be appropriate for each target group.
 - b. Analyze the causes of early or late school enrollment, identify negative factors that influence it, and implement policies and measures to address and mitigate the impacts of locational differences, diverse student needs, and livelihoods. Additionally, evaluate and report on the implementation of the clause "35.4.9" of the Law on Education, which states that "enrollment decision must be based on a request from herder parents who were unable to enroll their children in school at the age of six due to unavoidable circumstances."
 - c. Increase cross-sectoral efforts to reduce the number of school dropouts in rural areas and some districts of the capital city. Additionally, increase the creative participation and




practical support of all levels of administrative, professional, and methodological organizations.

- d. Review and change the content, techniques, and approaches of assessment, and strengthen the human resource capacity of systems in which external evaluation of general secondary education students' learning outcomes has been established. The assessment tasks, methodology, and organization should be developed to create conditions for both self-assessment and external assessment.
 - e. Improve reading comprehension and basic arithmetic skills to help students transition from primary to lower secondary education and adapt to new environments and conditions. This can be achieved by supporting teaching methods and skills, child psychology, protection, communication skills, and preventing dropouts in line with the results of a sample survey of social indicators.
 - f. Analyze the level of basic skills of students, the factors that influence them, and the results of the assessment of school readiness. Then, implement measures to ensure the continuity of preschool and primary education programs and teaching methods.
2. Educational institutions at all levels must focus on identifying and supporting students' basic skills. This can be achieved by ensuring coherence in the process of external evaluation, improving the methodological capacity of teacher evaluation, and changing teacher performance evaluation to focus on the quality of teaching.
 3. While policies to encourage basic education graduates to enroll in higher education have made some progress, it is important to develop policies that target young people who are entering the workforce directly or who are left without a profession.

4.2 EARLY CHILDHOOD DEVELOPMENT AND CHILD PROTECTION

1. Ensure the sustainability and coherence of inter-sectoral activities in the field of social services for young children. This can be achieved by integrating health, social care, and protection policies with measures to support preschool and early childhood development and education.
2. Develop family and community-based services to improve the health, safety, and development of young children. Additionally, improve the legal environment to support such activities.
3. Implement integrated budget and financial policies and plans to support the provision of quality, non-discriminatory preschool services. These services should provide equal opportunities and inclusive participation through multilateral partnerships.
4. Implement policies and measures to improve the knowledge and education of parents and guardians. Ensure their participation in supporting the development and education of young children.
5. Implement specific policies and measures that meet the needs of social groups who require attention, care, and support from society but are often excluded from preschool services. Such groups may include herder families, people with disabilities, migrants, the poor, orphans, etc.


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6. Conduct research on the inclusion of letters and numbers in the Mongolian preschool teacher-training curriculum. This research should examine the content of theoretical and methodological knowledge for teaching children to read short words and the inclusion of letters and numbers in the preschool curriculum.
 7. Pursue a policy to include infants and young children in family-based, multi-option services. This policy should be within the framework of supporting the comprehensive development of young children and laying the foundation for a new subsystem of services to support their comprehensive development.

4.3. PROFESSIONAL EDUCATION, TRAINING AND TERTIARY EDUCATION

1. To shed light on the circumstances faced by individuals who have been excluded from technical and vocational education and training (TVET) as well as higher education due to various factors such as economic conditions, geographical location, employment characteristics, and differences in students' characteristics, a comprehensive research study needs to be conducted. Furthermore, it is imperative to establish a flexible support system that caters to their unique needs.
2. To increase the number of adults who successfully complete post-secondary education, it is necessary to investigate the reasons behind their dropout and disengagement. Additionally, it is crucial to provide them with opportunities to attain, transfer, and validate skills they have acquired from life experiences.
3. To achieve gender equity, it is essential to enhance the quality of education and promote the creative contributions of families towards social development, beyond merely relying on gender ratios or numerical data.
4. In accordance with the development goals of the region, it is crucial to create a comprehensive map of TVET and higher education institutions. This map should consider various factors such as location, size, specialization, specialization diversification, typology, and hierarchy. Additionally, improving the quality of the learning environment and curriculum of educational institutions and providing accreditation support are also essential.
5. In light of the pandemic and the new era of digital transformation, it is crucial to prioritize increasing the utilization of information and communication technology (ICT). This is necessary to prevent the digital divide that may negatively impact vulnerable individuals. Furthermore, increasing funding and investment for education is essential to support these efforts.


4.4. EMPLOYMENT SKILLS


1. By taking part in the evaluation of previously acquired knowledge and skills (RPKS), individuals can not only increase their employability, advance their careers, and earn higher wages, but also identify areas where they lack essential knowledge and skills. Therefore, it is crucial for Mongolia to establish a national qualification framework and promote lifelong learning by integrating it into the comprehensive educational system.

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2. To significantly enhance the curriculum reform in alignment with international, regional, Mongolian, and local employment distribution, and to accommodate the changing labor market demands, comprehensive measures are necessary. These measures should aim to overcome new challenges, particularly the establishment and development of internal and external quality assurance systems for the programs.
 3. When reviewing, refining, and redesigning curricula, which are at the core of education and learning transformation, it is essential to focus on eliminating the persistent gaps in the supply and demand of skills. Specifically, efforts should be made to provide the necessary skills in promising sectors such as construction, mining, industry, agriculture, tourism, and services, which are increasingly reliant on information technology.
 4. Creating a new database of vocational education and training in the EMIS and developing an integrated digital system are necessary steps. This will establish a unified registration database for educational organizations, including information on teachers and human resources, training content, registration certificate acquisition and renewal, digital applications, enrollment, and graduation. Additionally, such a database will enable the facilitation of retraining activities based on research findings.
 5. The number of students who secure employment prior to graduation or during graduation is increasing. However, the lack of registration of employment post-graduation creates a negative perception in society. Therefore, it is necessary to conduct follow-up research to measure employment of graduates to address this issue.
 6. There is an urgent need for flexible, family-friendly policies and cross-sectoral coordination to increase women's employment and participation level in the labor force. It is particularly important to establish an educational sub-system that integrates health, education, and social care services for young children and mothers, with unified coordination. This system should prioritize non-formal, lifelong learning methods and promote learning in living environments. It is also necessary to ensure women's social protection and increase employment and labor force participation by providing paid childcare and upbringing in the family environment.
 7. To keep up with the constantly evolving labor market, it's crucial for TVET, polytechnic colleges, and HEIs not only to develop curricula for enrolled students but also to prioritize ESD services that promote sustainable employment for all. These services include on-the-job training, job mediation, and various training programs, such as improving professional skills, retraining for professionals, and advanced skills training. By working flexibly, developing independently, and acquiring new skills, individuals can adapt to the changing demands of the labor market.

4.5. NON-DISCRIMINATION

1. To ensure inclusion and combat discrimination, Mongolia should establish a system that offers diverse types of subsidies and tailored support for each social group. This system can be created by identifying and investigating groups that have been left behind and discriminated against, developing a database of education for each social group by level and stage of education, and implementing policies that are evidence-based and promote anti-discrimination.

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2. In order to address the specific needs of preschool education, it is important to develop and improve cycles of cross-sectoral research, policy, planning, implementation coordination, monitoring, evaluation, and reporting that cover all stages, levels, and types of education, starting from preschool. This approach should consider comprehensive early childhood development and reduce inequality by investigating equity in the educational sector. To achieve this, cross-sectoral data such as education, health, social welfare, and child protection should be summarized and analyzed.
 3. A comprehensive systematic study should be conducted to identify the factors that influence enrollment, involvement, graduation, and dropouts of the target groups in preschool, general education schools, vocational training centers, and tertiary education, such as children of herders, migrants, Kazakh households, those with uneducated mothers, low-income households, and boys. In response to the needs and requirements of each group, a policy should be pursued that looks at issues and situations as a whole, and step-by-step measures should be taken, fully mobilizing opportunities and resources. The following methods and mechanisms can be implemented:
 - a. Policy measures should be implemented to encourage households to involve their children in preschool education or adequately prepare them for school enrollment by the age of six, including Kazakh households. These measures should apply a certain amount of pressure on households who have the means to provide such education but fail to do so. The "Child Money" program could be utilized as a means of implementing these measures without affecting the overall subsidy amount.
 - b. Household livelihood has a strong impact on the involvement, graduation rates, dropouts, and learning success of students at all levels of education. Therefore, it is important to ensure transparency in the distribution of discounts on school supplies, textbooks, and uniforms to the intended recipients. Furthermore, subsidies should be allocated based on means testing and targeted to vulnerable families. Efforts should also be made to increase income opportunities for these families and provide them with financial support if necessary.
 - c. In order to meet the diverse learning needs of students in general education schools, TVET, and tertiary education institutions, as well as the standard requirements for gender-sensitive water and sanitation supply, there is a need to improve the condition of dormitories and address the protection and safety of children and youth. This requires coordinated cross-sectoral policies, funding, and human resources.
 - d. Bilingual education in Bayan-Ulgii aimag requires special attention. It is necessary to develop a bilingual educational policy and implement measures to address bilingual programs, teaching methods, textbooks, teaching materials, and teacher development at the national level, with the participation of local governments and communities.
 4. As part of the education reform, the following measures should be legislated in the Package of Laws on Education:
 - a. Implementation of an early participation program for young children with disabilities in the preschool system, along with appropriate measures to ensure their inclusion.


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- b. Explanation of key concepts in education, such as equality, equity, and inclusion, in an internationally understood context. These terms should be named appropriately in Mongolian and used uniformly across all educational institutions.
 5. Assess whether adolescent girls in secondary school possess the knowledge necessary to prevent early pregnancy and marriage, as outlined in the health education curriculum of general education schools. It is crucial to establish and support partnerships and collaborations that effectively advocate for enhancing the reproductive knowledge, understanding, maturity, and attitude of teenagers and young individuals from vulnerable societal groups.
 6. Moving forward, educational development policies must incorporate gender-sensitive policies and planning approaches. This involves fostering a culture of operational and budget planning, financing, and consistent gender analysis. Moreover, educational budget allocations must be more sensitive, and funding strategies should align with anti-discriminatory principles. Investments and budgets must be targeted towards areas that require the most support.

4.6 LITERACY AND NUMERACY

1. Literacy education must be redefined in the context of lifelong learning, and given that there is a need, literacy programs must be sustainably implemented in areas where they are necessary.
2. Adopt internationally recognized literacy and numeracy skills assessment methods, and conduct annual evaluations with the participation of lifelong learning centers.
3. Enhance and evaluate the effectiveness of literacy programs for young people with disabilities, herder youth, and adults.
4. Establish funding and structural regulations to enable Lifelong Learning centers to be locally owned organizations that cater to the learning needs of the community.
5. To change the attitude of educational policy makers towards adult education and promote a lifelong learning approach in policy planning.
6. Pay attention to digital literacy education by including basic skills in the upcoming secondary education program reforms, and by developing and implementing a program that enhances digital literacy education for the adult population.

4.7 ESD AND GLOBAL CITIZENSHIP EDUCATION (GCE)

1. Drawing from past successful practices and lessons learned in the field of ESD and GCE, we must pursue a strategy that places ESD at the forefront of transforming education and learning as a whole. This approach requires an integrated education policy and medium-term plans that prioritize LLL for all, leverage existing internal and external opportunities and resources, and foster cooperation and partnerships at all levels. Additionally, continuous efforts must be made to enhance the capacity of human resource ESDs, enabling them to develop, approve, implement, monitor, and evaluate these policies effectively.

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2. Targeted programs should define objectives and activities based on the framework of gender equality, peace and non-violence, climate change education, environmental sustainability, human well-being and survival, and sustainable production and consumption.
 3. The training curricula and textbooks must incorporate content that promotes understanding and acceptance of gender equality and fairness, fosters gender sensitivity, addresses climate change mitigation, promotes environmental sustainability, and cultivates knowledge, skills, and participation necessary for sustainable production and consumption from an early age.
 4. Prohibit the use of gender stereotypes in textbook content, images and descriptions.
 5. Standardized assessment criteria should be developed to measure students' knowledge, skills, and attitudes towards ESD. Regular monitoring and evaluation should be conducted using these criteria, and relevant data and information should be collected systematically. An open database must be created to store this data, which should be circulated regularly.
 6. The assessment of students' ESD and GCE knowledge and skills, and their practical application, should be integrated into the assessment of educational institutions, teachers, and students. Additionally, an integrated national database must be established to store this information.
 7. Mechanisms for cooperation between the government and civil society organizations must be established to promote ESD dissemination under the framework of the Billion Tree National Initiative. Opportunities for lifelong learning should be provided through all education systems, including formal, informal, and everyday learning.

4.a. SCHOOLS AND LEARNING ENVIRONMENTS

1. Ensure that the data and information necessary for evaluating the implementation of the SGD 4.a target over the next 5 years is available.
2. To create a favorable learning environment, prioritize and select schools, kindergartens, and facilities that require urgent attention, and provide them with mid-term evidence-based policies in accordance with the Law on Development Policy, Planning and Management. Support these policies with five-year planned policies, local fundraising, and initiatives to ensure successful implementation.
3. Improve school internet infrastructure based on lessons learned from the pandemic. Provide secure and fast connectivity to all schools in the near future and offer teachers opportunities to work online.
4. Utilize innovative technologies and gender-sensitive planning to improve school and kindergarten WASH facilities.
5. Place special emphasis on improving the dormitory environment to promote inclusivity.
6. Organize systematic and regular public awareness campaigns to ensure that children are free from violence, and encourage the private sector and civil society to participate in these efforts.


4.b. SCHOLARSHIPS

1. Develop appropriate databases to record the professions, academic achievements, progress, and postgraduate information of Mongolian citizens who receive various scholarships and assistance, including those based on government and ministerial agreements, the Education Loan Fund, and Presidential and Prime Ministerial Scholarships. Embassies in countries where Mongolian citizens study should also play a significant role in this activity.
2. To address the neglect of vocational education and postgraduate education services in Mongolia's LLS for all, it is crucial to establish and use a unified database of students who have studied or are currently studying abroad, especially those in priority majors with government support. This database is vital for policy development and response. Initially, an analysis should be conducted on the scholarships and funding granted to students who have studied in developed countries, including the number of recipients per year, country, and profession. The collected information should be compiled into a database and expressed as a percentage of total education expenditures, scholarships, and student loans.

4.c. TEACHERS AND EDUCATORS

To address the issue of the overall professional teacher supply based on the development cluster of teaching, it is crucial to first develop a comprehensive, visionary, and integrated policy, along with guidelines for implementation and a comprehensive legal framework that avoids conflicts, as well as adequate budget, active advocacy, and other measures. It is also necessary to review medium-term planning based on the results needed to implement these solutions and to create and develop a unified teacher supply system with an optimal structure, organization, implementation process, regular monitoring of results, evaluation, reporting, and accountability. The following are priority areas that require immediate attention:

- a. Increase the reputation and social status of the teaching profession and raise teachers' salaries to at least the average salary of professions in high demand. Encourage young people to become teachers by providing social security and competition, increasing their motivation to work in this profession, and creating incentives for high school graduates with top grades and those who score high points on the entrance exams to enter the teaching profession.
- b. Establish and adhere to an educational institution mapping system (including location, size, structure, and type), teacher work norms, sustainable training curricula, and teacher qualifications developed in close coordination with curriculum reform. These should be combined and inter-professionally converted in an open and flexible manner.
- c. We should establish and enforce a professional standard for teachers, reinstate external evaluations for teaching licenses in compliance with the law, create national regulations that reflect hiring principles and requirements for teachers, and regularly monitor their implementation. The outcomes of assessments must be publicly reported.
- d. As stated in the 'Methodology for Improving GSE School Curricula,' we must first consult teachers and identify their learning needs before updating and implementing educational standards, curricula, and plans. It is crucial to organize systematic training to enhance their capacity and provide a conducive learning environment and teaching materials. Drawing from past experiences, we must prepare by developing detailed long-, medium-, and short-



term plans and schedules, making appropriate adjustments to student and teaching performance assessments, and preparing parents and the wider public for these reforms

- e. We must conduct regular research to assess whether students' knowledge, skills, and competencies meet the requirements of the labor market. Based on the research findings, we should improve the quality assurance criteria and indicators of teacher training programs. It is essential to conduct quality assurance regularly in all training programs, especially in teaching practice. Additionally, we should develop and enforce general requirements for the content of teacher training programs for the same profession, irrespective of the type of ownership of the educational institute.
- f. A 'Teacher Development Center' should be established at all levels of education institutions to create a system that supports teachers' continuous professional development within their workplace and increases their motivation and opportunities for lifelong development. This system can be used to determine the role of the professional development plans in the evaluation of teachers' professional degrees, positions, and jobs performances. Moreover, these centers can serve as a focal point to connect teachers with international colleagues and work on integrated teacher platforms worldwide.
- g. We must create a system for studying the supply of teachers, their demand and needs for professional development and develop the framework of the content of training and activities by a professional organization, and implement the basic and other training and activities for the professional development of teachers within this content through the open selection of training programs developed by the government and NGOs, which will increase the participation of all stakeholders. Additionally, we can employ mentors in places where there is a shortage of qualified teachers through retraining of mentors, retraining of teachers through electronic and distance learning;
- h. To improve the quality of teaching, we should develop and approve professional standards for teachers outlined in the "Skilled Teacher" program. The procedure for continuous professional development of teachers and awarding teaching rights and professional degrees to teachers specified in the Law on Education and the Government Action Plan should be updated. Furthermore, a methodology for improving working conditions, calculating performance-based wages (basic salaries, bonuses, and allowances) should be developed and implemented. Immediate action must be taken to effectively organize enforcement activities
- i. To improve the efficiency of the education sector, we need to organize and update the registration and statistics of teachers and staff in the information system. This requires eliminating errors, connecting the system with other government systems, and making regular updates. We also need to develop better policies and responses for senior teachers, taking into account the relatively increasing life expectancy of Mongolia. To achieve this, we need to increase the availability of new types of data and information, improve their quality, and make them more accessible for training and research purposes. One way to do this is by ensuring the availability of integrated statistical information regarding education sector resources.

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