

MSc Thesis

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MSc THESIS

Exploring multifaceted challenges of delivering quality education in rural Mongolia (Galuut soum)

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1. INTRODUCTION

The level and quality of education are firmly focused to drive development and remain an important poverty eradication tool, together with an improved quality of life, but not free from hiccups. The geographical and socioeconomic factors of rural areas further magnify manifold roadblocks in the way of delivering quality education. This thesis hence explores these challenges within the context of Galuut soum, a small rural settlement located in Mongolia with a population of about 4200 people. This is where this very exploratory research sits, with focus on the only primary school in an isolated area that serves close to 400 students, to give detailed exploration on the educational landscape characterizing this community.

It is within this purview, therefore, that the student's background, the conditions and resources of the school environment, the qualifications and challenges faced by the teachers, and the social dynamics of the school are analyzed. In this respect, the thesis identifies the major constraints lying in the way of quality education provision within Galuut and offers viable strategies toward improvement. Accordingly, this paper focuses on the specifics of a single school, delving into the peculiarities of educational delivery within a school that is set in one of the most tightly knit communities and hence providing insights toward the wider challenges experienced by similar rural settings in Mongolia and beyond.

This, therefore, sets the introduction to a comprehensive review of how educational practices, environmental conditions, and community interactions all converge to shape and determine the learning experiences of the children in Galuut. This thesis aims to contribute to the discourse on rural education through the undertaking of a localized study, offering insights that may inform policy decisions and educational strategies within these comparable communities.

Research Questions:

The following are the main research questions that have been identified for research in accordance with its objectives and to achieve the desired objectives of the research:

1. How does the availability and condition of school infrastructure (such as buildings, classrooms, libraries, and computer labs) impact the quality of education received by students in rural Galuut soum?

2. How does the availability of learning resources, such as textbooks and technology (computers, tablets), influence the educational experience of students in rural?
3. What is the role of extracurricular activities in the social and academic lives of students in rural Mongolia? How does participation in these activities correlate with students' academic performance and personal development?

This would mean that as much as the research design in question is being carried out with regard to the delivery of quality education in rural Mongolia, particularly in Galuut Soum, secondary data collection was highly utilized together with primary data collection. The main data can further be used to understand Galuut's context in regards to socio-economic issues and even trends in education, with which the literature, government reports, and educational studies offer help. In this context, primary data will be collected through questionnaires to the students on the school infrastructure and availability of resources. The data analysis will involve the statistical questionnaire response evaluation.

2. LITERATURE REVIEW

2.1. Educational Challenges in Rural Settings

Such challenges, according to literature, are in form of geographic isolation, limited resources, and inadequately trained teaching staff. Studies by scholars such as Miller and Reid (2015) and Hanover Research (2014) identify factors such as geographic isolation, limited resources, and insufficient teacher training as critical barriers. According to these studies, rural schools have less funding, fewer chances in education technology, and fewer highly qualified teachers compared to urban schools. It is recommended that the most effective method for the growth of rural education be the teaching of people about the country and the countryside (Malecki, 2003). By beginning with the requirements of students' individual development, paying attention to the location of individual survival and life, and cultivating students, it is committed to fitting the operating logic of rural society, digging and improving the cultural genes in the historical development of the field, and beginning with the needs of students' individual growth (Delle et al., 2011). The distinctive enhancing of schools is the key to the high level, high quality, and balanced development of regional education, and these schools are the foundation upon which the high-quality development of rural education must be based (Schafft, 2016), it is of long-term importance to improve the attractiveness of school activities, implement rural cultural characteristics, and create a strong foundation for educational and learning outcomes (Reeves, 2009). According to Xiaohe Li et al., 2023. "Education in rural areas should be helpful to rural livelihood and rural development. It has the potential to guarantee that every kid in rural areas obtains an education that is both equitable and of high quality, and it may simultaneously improve the overall quality of moral, intellectual, physical, and aesthetic aspects of rural life". Students in rural area, education should be encouraged to acquire the fundamental learning skills necessary for further study or employment development, and the development resources should be reserved for the students' long-term growth and potential for sustainable development (Ahluwalia, 2008).

Geographic isolation in Mongolia remains a big barrier in other rural context settings of the world. As for communities who are far away, like the Galuut soum, less access to education provided by large resources and opportunities that are available comes with the less concentration of people from urban centers. The impacts include not only that of the isolation on the students' attendance,

since the distances covered are usually long and at torrid weather conditions, but also on recruitment and retention of qualified teachers, who most of the time are unwilling to move into remote areas without proper facilities and professional assistance.

Literature on the topic of education is emphatic about the fact that schools in rural areas of Mongolia, as in many other countries, suffer from an acuteness of educational resources. With the exception of most countryside areas, the textbooks, technology, learning materials associated with the whole educational experience may be difficult to get by in Galuut Soum. These constraints disable the school to offer diverse and participatory educational content, hence directly affecting the outcome of students' learning.

This problem is only exacerbated with such remoteness from communities such as Galuut soum when discussing Mongolia and its ability to attract and retain qualified teachers in these rural areas. In the areas, teachers often multitask, teaching many grades in a class due to a small population of students, whereby a teacher has to have a broad base of knowledge and flexible teaching skills. In addition, professional development opportunities are few, and professional isolation sometimes causes job dissatisfaction and staff exit that further destabilize the learning environment.

There is a need to bring education in parallel with local cultural values and life skills in communities where traditional nomadic lifestyles are still being commonly practiced. A research conducted by Watson et al. (2016) gives space to the home cultures and lifestyles to influence educational practices and student engagement.

In light of this, inclusion of local history, values, and practices in educational curricula holds an important place in making learning relevant and meaningful to them. So, for communities such as those in Galuut, Mongolia, this approach means due respect and conservation of local traditions that are so much a part of day-to-day life and cultural identity; thereby, further enhancing educational outcomes. Researched evidence indicates that if students see representations of their cultures in the curriculum, there is recorded higher academic performance and level of engagement (Smith, 2017).

2.1.1. Adapting education for nomadic lifestyles

These nomadic populations thus pose perhaps the most unusual educational challenge of all: the need for flexible and adaptive educational models. For instance, in Mongolia, where the majority of its population are still engaged in nomadic herding, the life of a nomadic family completely contradicts the traditional school calendar and curriculum. Johnson and Gray (2018) rightly note that the educational systems in those areas populated by nomadic groups will have to gear themselves toward adapting to the realities of the context. These adaptations may range from the development of modular curricula, which can make room for the movement of nomads in seasons, to the establishment of mobile schools or use of distance learning technologies. Mongolia is one of the least densely populated countries in the world. Mongolia has a large number of nomadic peoples, and throughout history, the majority of the population has made a living through animal husbandry and nomadic farming. The majority of the population of more than three million lives in cities and only 32% in rural areas. The share of the population living in rural areas decreased slightly, and the share of herders in the total population remained at 20 percent until 2015 (Batjargal Batkhuyag and Tungalag Dondogdulam), 2018. More than 80 percent of Mongolia's sums are located more than 100 km from the provincial capital. About 40% of the population are nomadic pastoralists who live 10-55 km from the center of Soum. According to the law on pre-school education, children who are unable to attend regular kindergartens will receive alternative education through mobile teachers and tent (home) kindergartens financed by the state budget. These home gardens represent an innovative approach adapted to the social, economic and cultural context of the nomads. Operating under the auspices of a regular kindergarten, they are transported by truck to remote areas, where they stay for up to six weeks in the summer and feed 10 to 15 herder families with a maximum of 25 children. These facilities are open for a full eight hours and children can stay overnight with teachers. Recent evaluations show that home kindergartens outperform residential kindergartens in terms of interaction quality, although they lag behind in other quality indicators (UNESCO 2022).

Social class and socio-economic status are the main influences on educational achievement. Examples from writers like Coleman (1988) indicate that lower economic conditions are highly linked to the poor outcomes in education. In most instances, the economic struggles in rural Mongolia force children to engage in child labor. This results in negative bearing on school

children, including high rates of absenteeism and low achievement, considering the strong need to be present at work.

2.1.2. Navigating economic barriers in rural education

Economic difficulties have always been great challenges to children's education in most rural communities, not an exception to Galuut, Mongolia. The need to involve children in earning family income often takes most of their time and energy for schooling; their attendance becomes irregular, thus their performance drops. According to Thompson and Biddle (2020), students from economically disadvantaged geographical regions are always seen struggling to balance the level of educational commitments and work, which fatally reduces their chances of connecting and benefiting from educational opportunities. This is most pronounced in the rural areas where economic activities are intricately woven with the seasonal nature of agriculture or herding.

It is more likely that low-income households do not have access to a variety of amenities, including schools that are considered to be of good quality (Burgess et al., 2019) and among pupils who live in low-income neighbourhoods, there is a lack of social mobility and poor academic achievement, according to another line of data (Chetty et al., 2014). The socioeconomic status of a person is not the only environmental factor that has an impact on their academic performance (Welch et al., 2007) Rurality, for instance, is linked to a number of characteristics, including low schooling rates, low mobility rates, and poor educational results after primary and secondary schools (Davies et al., 2021).

While unquestionably having a role in support for educational endeavors, the case is not such in economically and educationally challenged areas. Not just in rural Mongolia, but also, parents continue to be under-resourced or uninformed about how they may effectively help support their children educationally. Patel and Jensen (2019) add that financial difficulty and low educational levels of parents, combined with the multifactorial ecology of schools, account for a low level of parental involvement in children's schooling, which ranges from assistance with homework to information from teachers or parent participation in school activities. Such lack of involvement may likely precipitate a disconnect between home and school, further straining an already complicated set of educational challenges that students may face.

Indeed, the existing literature on rural education reform suggests a number of strategies that could ameliorate these challenges. Other examples include innovative teaching and learning strategies, community involvement, and change of policy. In this case, while community members will be part of school activities, they need to be involved in the process of decision-making that deals with the school, which will help in the creation of a congenial environment for learning.

In this respect, therefore, such community resources and local knowledge flowing into schools could then make the difference for the educational gains. In addition, strong community-school relations result in shared responsibilities for students' success, creating a rich learning environment drawing on local wisdoms and heritage. Williams and Sanchez (2021) further note that through the use of community resources, schools have the ability to develop education that is context relevant and offers every subject being studied context, consequently raising not only student engagement but also their ability to apply the knowledge obtained in life.

Policy interventions and more funding are very critical in curbing infrastructural and resource deficiencies that often gut rural schools. In such a view, it implies that advocating for targeted policy changes that will lead to an increase in investments in rural education will lead to an improvement in school facilities, technology access, and teachers' training programs. These enhancements are essential to leveling the educational playing field to ensure that students coming from rural areas have equal opportunities for success (Kim and Park, 2022).

In linking these global challenges with Mongolia's situation, this paper highlights those common features of rural education problems, common across the world but, emphasis is also given to those that are specific and should, in turn, get focused attention through localized interventions. This relationship will, therefore, enable the improved guidance of improvement recommendations in the Mongolian education sector so that particular attention will be given to the rural needs of the Galuut soum population.

2.2. General overview of Mongolia

Mongolia is an exceptional example of how huge landscapes and ancient ways of life may coexist in perfect harmony for an extraordinary amount of time. It has a population density of around 2.1 persons per square kilometre, making it one of the least densely inhabited nations in the world, despite the fact that it is the 18th largest country in the world and encompasses an area of more

than 1.5 million square kilometres (World Bank, 2021). The contrast of enormous geographical expanses and a sparse population is one of the defining characteristics of Mongolia. This dichotomy creates a unique environment for the social, economic, and educational dynamics that occur inside the country.

According to Bat-Erdene (2010), Mongolia has the largest percentage of young people in the world, with 61% of the population being under the age of 30 as of 2010. According to the Mongolian Statistical Information Service (NSO) (2021), the average life expectancy in Mongolia is 70 years. The population consists of 50.5% females, 49.5% males, and 38% children between the ages of 0 and 18 years old. A parliamentary system with 76 seats is in place in Mongolia, and the president serves as a symbolic figurehead for the country. With a Human Development Index (HDI) of 0.737, Mongolia is categorised as a Medium Human Development Country (Human Development Reports, 2020). This places Mongolia in the 99th position out of 189 countries.

The educational system of Mongolia can be broken down into two separate periods: the first one is before 1990, and the second one falls after 1990. During the reign of Ugudei Khan, the year 1233 saw the establishment of the very first school. The following year, in 1868, an academic school was created with fifteen boys ranging in age from 12 to 19. In the years that followed, the Ministry of Education was established in 1921, and in 1961, the Committee on Higher Education was established (Ministry of Education and Science, 2021).

Citizens of Mongolia were obligated to get free primary education with the adoption of the constitution in 1992. In accordance with the education legislation, every individual is afforded equal access to his or her education, regardless of factors such as race, gender, nationality, sex, religion, disability, social rank, or economic condition. Additionally, education should be ethical and egalitarian, accessible to all people, and continued throughout their lives. In accordance with these articles, Mongolia would move towards a public education system that places an emphasis on equal educational opportunities (Constitution of Mongolia, 2021). According to Yembuu (2010), subsequent legislation included the Education Law as well as laws that were unique to certain sub-sectoral areas of education, such as the Pre-school Education Law, the Primary and Secondary Education Law, the Vocational Education Law, and the Higher Education Law. In 2008, the government of Mongolia agreed to expand the school curriculum to a 12-year system,

which brought Mongolia's educational system in line with international standards (Yembuu, 2010). This was another significant reform in the education sector that took place in 2008.

Since 1990, Mongolia has transformed its education system, moving away from socialist-era practices. The country has introduced international standards and now focuses on training personnel to support a market economy and a democratic society. In September 2005, Mongolia reformed its education sector by introducing new standards and transitioning to a 12-year general education system. Concurrently, the school entry age was lowered from 8 to 6 years.

Even though many Mongolian schools have access to top-notch educational programmes, there is still a big gap in the quality of education between urban and rural areas. Furthermore, there is a strong correlation between citizen education and economic stability as well as local growth. Enhancing education in rural areas is essential for supporting economic growth, empowering people, reducing inequality, and advancing community development.

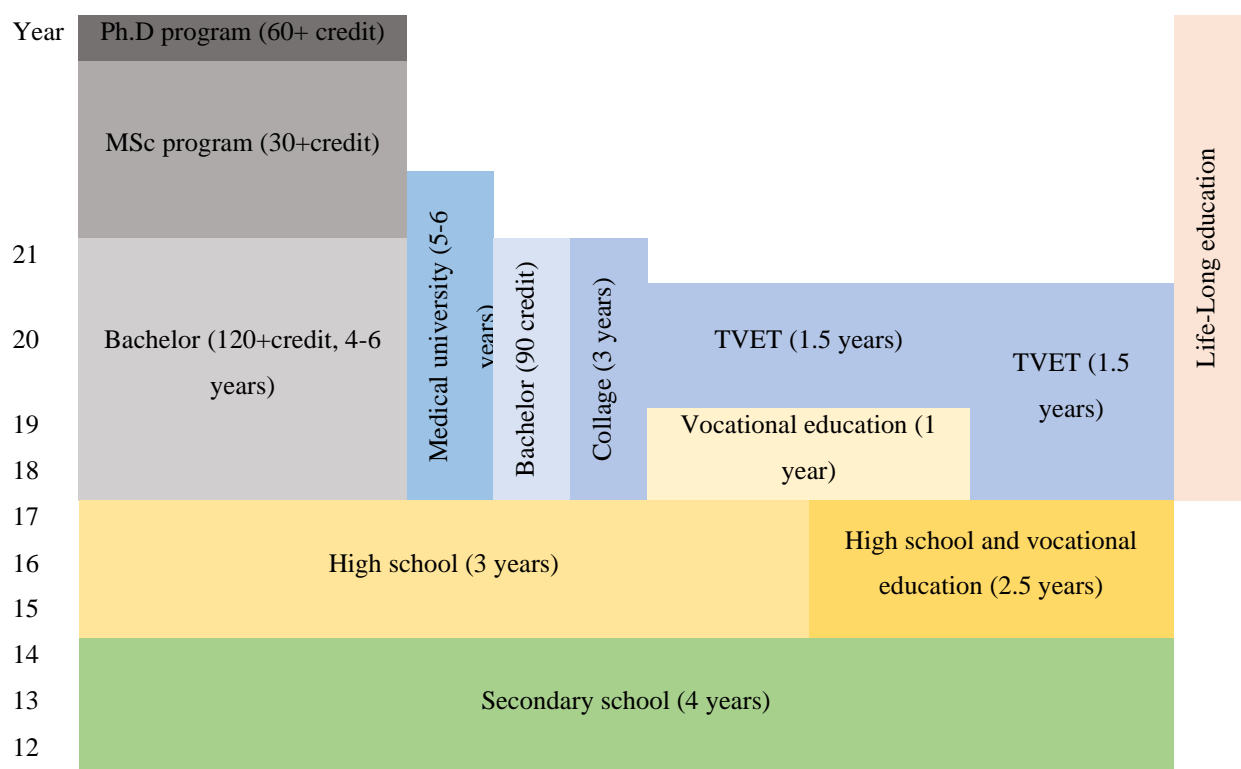
Human growth, safe living, and the principles of family life welfare and learning efficiency are the main priorities of Mongolia's long-term curricular sustainability strategy for the year 2050. The first step, which will take place between the years 2021 and 2030, will involve the establishment of an equitable education system and the provision of equal access to quality education for all people (MES, 2020). By participating in this programme, children in elementary and secondary schools will have the opportunity to acquire fundamental work skills and to collaborate with their peers from all over the world. Schools have the potential to become centres for human development. Schools will not only provide children with an education and skills, but they will also help them develop into stable, positive-minded, obedient, noble, and patriotic individuals. In addition, schools will help children develop a knowledge of Mongolian culture. To accomplish this, we need to have a conversation about the reality that the curriculums of elementary and secondary schools are always being updated. According to the Ulaanbaatar Ministry of Education (MES, 2020), changes in the programme that take place frequently have a detrimental impact on the level of academic achievement achieved by students. Following that, Technical Vocational Education and Training (TVET) has successfully implemented a strategy to implement quality assurance and internal and external accreditation, as well as a training programme that has been established and implemented in accordance with the demands of the labour market and technological advancements.

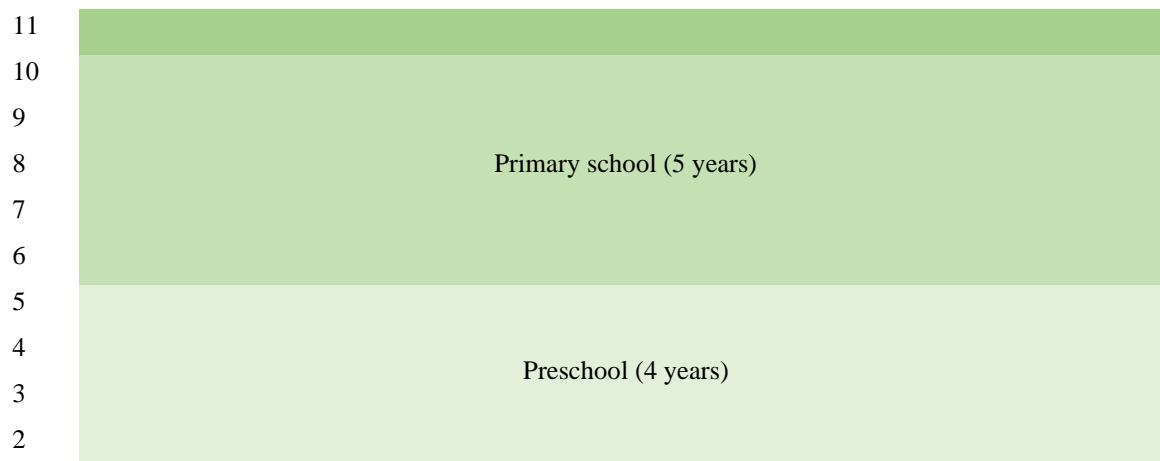
To achieve these objectives, however, there are a great many obstacles to overcome. There are several examples, such as the legal environment, coherence, human resource capacity, demographic transition, teacher supply, infrastructure, pre-service and in-service teacher training, and quality assurance. Educational opportunities that are accessible to all citizens, regardless of their age or gender, should be made available in order to take the concept of lifelong learning to a new level (MES, 2020). Furthermore, it is crucial to address issues related to funding and budget allocation in order to ensure the sustainability of educational programmes. Additionally, collaboration with various stakeholders, including government agencies, non-profit organisations, and private sector partners, is essential for the successful implementation of lifelong learning initiatives.

2.3. Mongolian School Education system

The education system of Mongolia is a combination of formal and informal education and consists of pre-school, primary, secondary, vocational and higher education (CBR, 2019).

Table 1. Educational system of Mongolia





Source: CBR, 2019

According to Uranchimeg Tudevdagva et al, 2023. “Mongolia is one of the youngest nations in the world. Children up to 14 years old in total 1,095,258 which is 32.12% of the whole population. Young people between ages 15 and 24 are in total 454,602, which is 13.33% of the population. Active working population between ages 25 and 59 is 1,597,695 which is 46.85% of the population”.

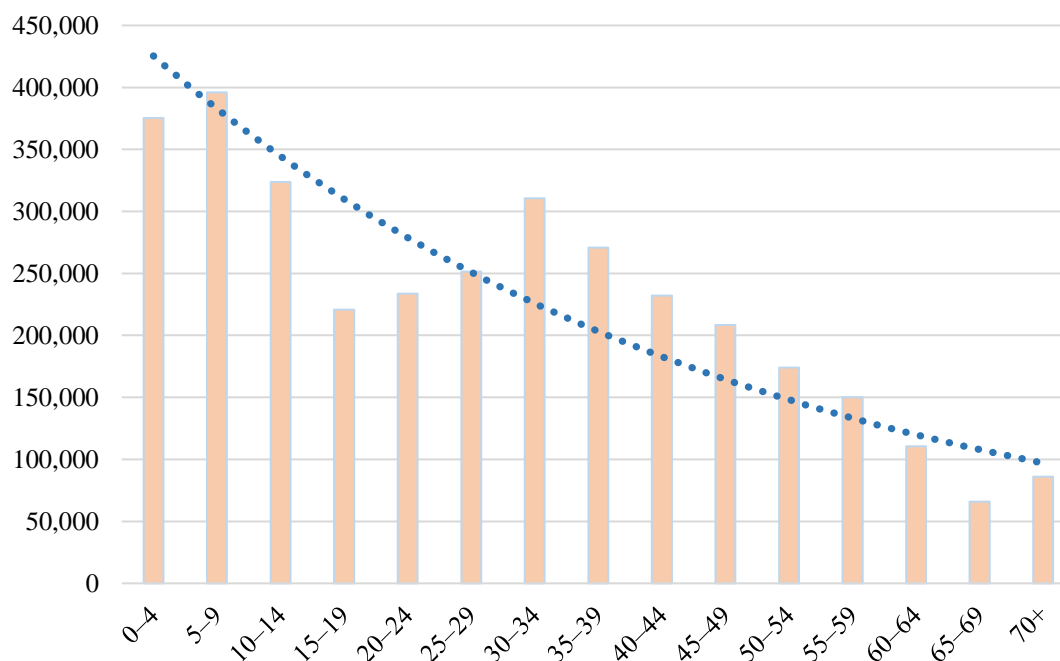


Figure 1. Age group of Mongolian population

Source: Uranchimeg Tudevdagva et al, 2023.

The present objective of preschool is to provide a pre-primary education that is accessible, based on standards, and of high quality for all children in a setting that is safe, healthy, and environmentally friendly. This environment should also encourage the participation of parents and provide support for children's preparation for school. A total of 247040 children will be attending kindergarten in Mongolia in the year 2020, with 889 state kindergartens and 565 private kindergartens (NSO, 2021). The government provides financial assistance to all public kindergartens; however, it does not provide financial assistance to private kindergartens.

**Table 2. Educational institutions for all levels, at the beginning
of the academic year 2018-2023**

Classification of educational institutions	2018/2019	2019/2020	2020/2021	2021/2022	2022/2023
Kindergartens	1135	1439	1454	1453	1413
<i>State</i>	889	910	948	972	985
<i>Private</i>	546	529	506	481	238
General educational schools	803	820	839	848	859
<i>Primary</i>	80	78	72	72	74
<i>Secondary</i>	115	113	109	109	109
<i>High</i>	608	629	658	667	676
Technical and vocational educational institutions	86	80	75	76	77
<i>State</i>	51	50	46	43	48
<i>Private</i>	35	30	29	33	29
Higher educational institutions	94	95	88	88	69
<i>State</i>	18	21	20	20	16
<i>Institutes and colleges</i>	4	7	6	6	2
<i>Universities</i>	14	14	14	14	14
<i>Private</i>	76	74	65	65	50
<i>Institutes and colleges</i>	55	53	43	43	30
<i>Universities</i>	21	21	22	22	20
Public/religious	-	-	3	3	3

Source: Ministry of Education and Science

According to (Country Background Report (CBR),. 2019). In order to meet the global goal of increasing access to and the quality of primary education, Mongolia has set a special goal of enrolling children aged 7 and 6 years old in primary and secondary education. This is done in order to bring Mongolia's primary and secondary education systems into alignment with international standards, as well as to shorten the amount of time that students spend in school from 10 years to 11 and 12 years in a short amount of time. The implementation was successful. This event is one of the most significant accomplishments that has been made in terms of establishing the fundamental conditions necessary for the international recognition of Mongolia's educational system. The successful implementation of this initiative has not only improved the quality of education in Mongolia but has also paved the way for further advancements in the country's educational system. By aligning with international standards, Mongolia is now better positioned to compete on a global scale and provide its students with a more comprehensive and competitive education.

Table 3. Students studying in all levels educational institutions, at the beginning of the academic year and sex

Indicator	2020/2021			2021/2022			2022/2023		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
	Thousand persons								
Total	1116.7	549.7	567.0	1096.1	538.8	557.3	1196.2	591.5	604.8
Total number of children in pre-school education	247.0	126.0	121.0	191.0	97.6	93.4	266.	136.1	129.9
Total number of pupils studying in general education school	680.8	341.1	339.7	712.4	357.2	355.2	746.4	374.9	371.5
Primary	356.9	182.6	174.3	371.5	190.0	181.5	382.0	195.5	186.5
Secondary	222.1	1112.3	109.8	238.4	120.7	117.7	251.3	127.8	123.5
High	101.8	46.2	55.6	102.5	46.5	56.0	113.1	51.6	61.5
Technical and vocational	40.2	24.2	16.0	42.6	25.5	17.1	38.0	23.8	14.3

<i>educational institutions</i>									
State	28.7	17.9	10.8	30.2	19.0	11.2	27.4	17.9	9.5
Private	11.5	6.3	5.2	12.4	6.5	5.9	10.6	5.8	4.8
Total number of students studying in higher educational institutions	147.3	57.8	89.5	149.	58.	91.	145.3	56.4	88.8
State	76.8	32.1	44.7	79.1	32.4	46.7	79.7	32.4	47.3
Private	63.6	23.2	40.4	62.5	22.8	39.7	58.8	21.4	37.4
Public/religious	6.9	2.6	4.3	7.4	2.8	4.6	6.7	2.6	4.1
Students studying abroad	1.4	0.6	0.8	1.1	0.5	0.6	0.5	0.2	0.3

Source: Ministry of Education and Science

Primary school lasts for six years, lower secondary school lasts for three years, and upper secondary school lasts for three years. In Mongolia, general education is mandatory and is broken up into three different schools. A total of 680,800 students will have been enrolled in general education programmes in Mongolia by the year 2020 (NOS, 2021). 356900 of these children are enrolled in primary school, followed by 222100 students in lower secondary school, and then 101,800 students in upper secondary school. These students are attending 839 schools across the nation, including 672 public schools and 167 private schools. In terms of the number of schools, the city of Ulaanbaatar is home to 276 schools, while the province of Gobi-Sumber in Mongolia is home to the fewest number of schools, with only five. The distribution of schools across Mongolia reflects the varying population densities in different regions. Despite the differences in school numbers, efforts are being made to ensure access to education for all children in Mongolia. According to Lavis, (2010), there are no social safety nets in either rural or urban areas. Furthermore, herders and older adults who reside in soum (district) and aimag (province) centres have restricted access to education, health care, infrastructure, information, and employment opportunities, as well as a limited number of opportunities for human development and economic growth.

2.4. Background of the Study Area

2.4.1. The social situation of region

Bayankhongor province is located in the southwestern part of Mongolia, known for its diverse landscapes that range from desert steppe to mountainous regions. Galuut soum, a significant administrative and cultural unit within this province, is situated in the northern part of Bayankhongor. This positioning within the province places Galuut strategically near the Khangai mountain range, enhancing its natural beauty and providing it with various geographical and climatic conditions that influence its economic activities, primarily based on agriculture and livestock herding. As one of the 21 soums in Bayankhongor province, Galuut plays a pivotal role in the overall development of the region. Its economic activities not only support local livelihoods but also contribute to broader provincial goals of economic stability and growth.

Bayankhongor province, one of Mongolia's significant administrative divisions, plays a crucial role in the nation's agricultural sector. In 2022, the province's economic structure was distinctly categorized into three main sectors: agriculture, production, and services. Agriculture dominated, contributing 49.1% to the regional GDP, followed by services at 37.1%, and production at 13.9% (Bayankhongor province's Statistical Department, 2022). This distribution underscores the province's strong reliance on agriculture and pastoralism, reflecting its economic backbone and societal livelihood.

The province is a significant player in Mongolia's livestock industry, ranking 6th in the country with a total of 4.01 million animals. This extensive livestock population underscores the region's capacity and its vital contribution to the national economy. Within this context, Galuut soum emerges as a key contributor, managing 275.2 thousand animals, which constitutes 6.75% of the total livestock of the province. This substantial share highlights Galuut's importance in bolstering Bayankhongor's agricultural sector and its overall economic framework.

2.4.2. Galuut soum of Bayankhongor province

Despite its considerable contribution to agriculture, Galuut soum, like many parts of rural Mongolia, faces challenges related to its economic development. The heavy reliance on agriculture and livestock rearing subjects the local economy to vulnerabilities such as fluctuating market

prices, climate variability, and limited access to technology and infrastructure improvements. However, these challenges also present opportunities for development and innovation, such as the potential for modernizing agricultural practices, improving animal health and productivity through veterinary services, and exploring sustainable practices that could mitigate the impact of environmental factors.

Today, the number of citizens living in Galuut amounts to 4,199, according to the Statistical Department of Bayankhongor of 2022. Accordingly, the demographic composition of the area presents itself as 1,993 women and 2,206 men, where 612 live in the central soum or town area, and the remaining 3,587 are settled in the surrounding rural locales. The soum is the smallest administrative unit of the country, consisting of 6 bags, being boarded with Ikh Tamir soum of the province of Arkhangai.

Geographically, Galuut is dramatically poised against the background of the Khangai mountainous area, covering 504.7 thousand hectares of various types of relief; it includes mountains, valleys, and steppes. The landscape characteristics are marked by variations in altitude from a minimum of 2117 m above sea level to a maximum of 3539 m above sea level. People inhabiting it are subject to worse climatic conditions since the center of the Soum locates in the northern valley, near the Bayankhongor Khairkhan Mountain, where there is a rigid permafrost zone.

Culturally, the area of Galuut is very rich with meaning and spiritual importance, symbolized through a number of scared mountains. These form part of the ecological identity of the area but also are central to spiritual and cultural narratives. It is this historical admiration to the mountains together with local myths and feasts that add up to make the cultural heritage of Galuut and strengthen the bond shared by the people.

The Government of Mongolia, 2016, awarded "Top State Soum" to Galuut as the supreme recognition of high-class administrative standards and development. A great advancement and leadership sign at the provincial level. "This award has placed Galuut in the spotlight as an example of good practice for local governance and community development within rural Mongolia."

The elementary and secondary school at Galuut Soum fulfills an educational need of a varied student population against enormous odds. In 2022, the figure of this school was 487 students, constituting around 2.6 percent of all students within the province. In this context, the distribution

of students into those four levels of studies is just a reflection of the demographic trends and educational needs within the community in a lesser scale.

Student Distribution is subdivided into the following three main levels of education:

- ✓ Grades 1-5: This is the highest segment, with 250 students, representing 48.9% of the population of the school. This very clearly shows strong enrollment within the elementary level, which is a very foundational part of the early childhood educational system.
- ✓ Grades 6-9: Students amounting to 182, are in these grades and include students at the middle school level. That is 35.4% of the students. It's at these stages that the formative years are being shaped, which will take them into higher secondary education and consolidate their academic and social skills.
- ✓ Grades 10-12: These students, 55 in number, form 15.7% of the total population of learners. This level is very important in the preparation of the learner toward further education in tertiary institutions or vocational training.

With 30 teachers in the school, there seems to exist a good ratio of pupils with teachers, which might help toward more personalized learning and attention. It's centrally and conveniently located in the soum, considered to be one of the leading institutions for the community. On the other side, the central location of a school brings logistic problems for students coming in from remote areas.

3. RESEARCH METHODOLOGY

3.1. Aims of the research, presentation of the hypotheses of the study

This study focused on the Galuut soum and investigated the satisfaction of students studying in rural schools in Mongolia. The aim was to analyze the problems, needs, and aspirations of students in remote areas. The first part of the research is based on secondary data, and the second part is based on primary data.

Secondary Data Compilation:

Conduct an extensive review of academic literature, government reports, NGO publications, and educational studies that focus on rural education challenges in Mongolia. This review will help understand the historical and socio-economic background of Galuut Soum and identify existing educational trends and previous interventions. Examine national and regional educational statistics to compare Galuut's educational metrics (like literacy rates, teacher-to-student ratios) with other rural areas. This step helps in setting a benchmark and understanding broader trends that might affect local education.

Primary Data Collection:

Distribute structured questionnaires to students within Galuut Soum. These questionnaires will gather quantitative data on various factors such as school infrastructure quality, resource availability, teacher preparedness, and student engagement.

Data Analysis:

Use statistical tools to analyze questionnaire data, aiming to identify patterns and correlations between educational outcomes and factors like infrastructure, resource availability, and teacher effectiveness.

A set of research objectives has been outlined to address the specific issue identified in the research. The following are the research objectives:

- 1) How does the availability and condition of school infrastructure (such as buildings, classrooms, libraries, and computer labs) impact the quality of education received by students in rural Galuut soum?

- 2) How does the availability of learning resources, such as textbooks and technology (computers, tablets), influence the educational experience of students in rural?
- 3) What is the role of extracurricular activities in the social and academic lives of students in rural Mongolia? How does participation in these activities correlate with students' academic performance and personal development?

3.2. Hypothesis

1. Students facing significant educational challenges (such as lack of resources, inadequate teacher support) are more likely to have lower academic aspirations and motivation.
2. Limited access to essential learning resources such as textbooks and modern technology negatively impacts the academic performance and engagement levels of students in rural Galuut.
3. Participation in extracurricular activities significantly enhances students' social skills and correlates with higher levels of personal satisfaction with school life.

4. RESULTS

4.1. Student's demographic

To understand better, I made an analysis of student demographics based on a survey conducted in Galuut soum. Understanding the distribution of gender, grade, and age among students is pivotal for addressing educational challenges specific to rural areas.

The data was collected through a survey and includes three main demographic variables: gender, grade, and age. The total sample consists of 97 students attending local schools.

The Figure 2 shows gender distribution of survey respondents in Galuut soum.

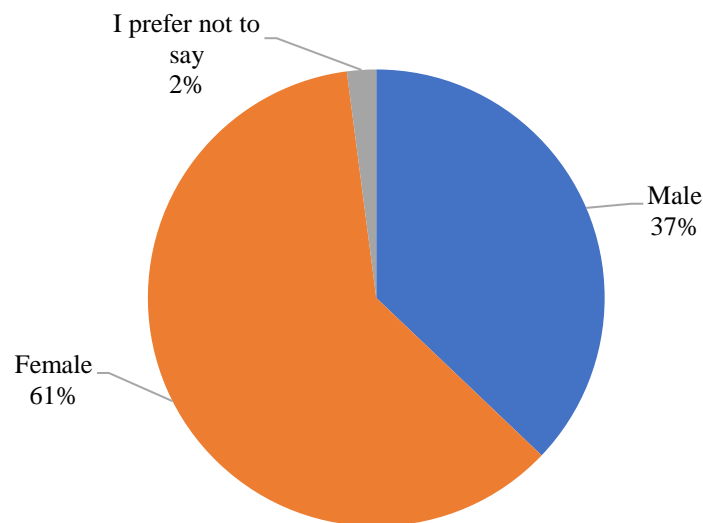


Figure 2. Gender of survey respondents (%)

Source: Own research and edition, 2024

The survey shows a higher proportion of female students 59 (61%) than male students 36 (37%) in the population, which may reflect higher engagement or retention rates among females in educational settings in this region.

The Figure 3 shows grade distribution of survey respondents in Galuut soum.

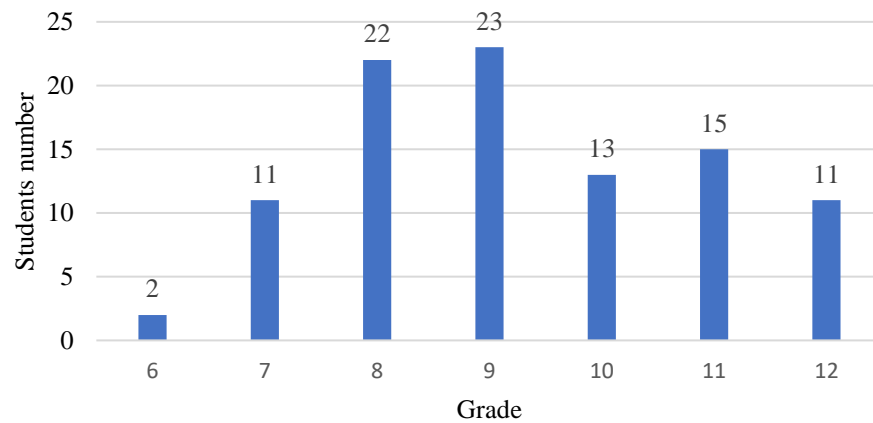


Figure 3. Grade distribution of survey respondents

Source: Own research and edition, 2024

The distribution is skewed towards the middle grades (8th and 9th), which have the highest student counts. This could indicate a bottleneck or higher retention at these levels, while the lower numbers in the earliest and final grades may point to issues with entry into and completion of secondary education.

The Figure 4 shows age distribution of survey respondents in Galuut soum.

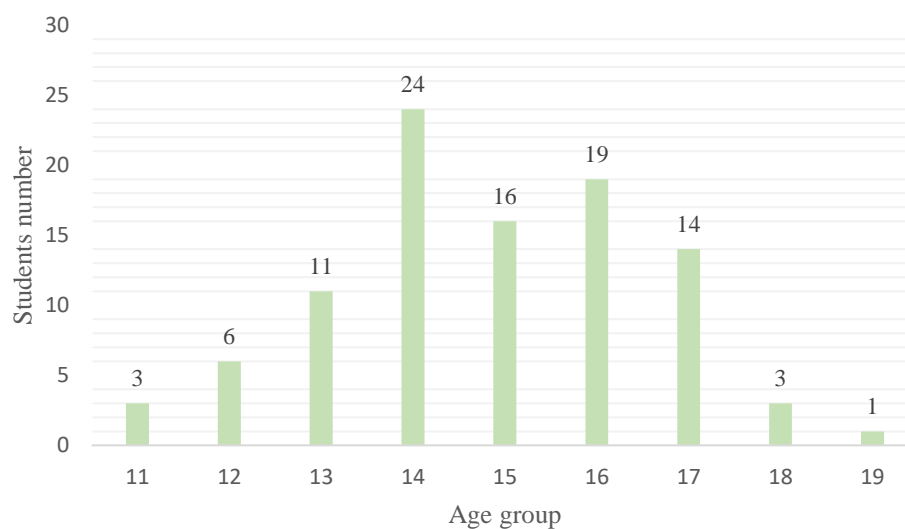


Figure 4. Age distribution of survey respondents

Source: Own research and edition, 2024

The peak in the age group distribution at 14 years suggests a high concentration of students in the middle school years. The sharp decline in numbers at ages 18 and 19 highlights potential drop-off as students approach the end of secondary schooling, which might be due to economic, cultural, or educational factors affecting older students.

I have tried to analyse the correlation between grade, gender, and age using the SPSS software 'Pearson correlation analysis'. Pearson correlation analyses among grade, gender, and age from a dataset with 95 observations (N = 95). It is important to note that the analysis didn't include 'prefer not to say' from two respondents.

Table 4. Correlations between grade, gender and age

Correlations				
		<i>Grade</i>	<i>Gender</i>	<i>Age</i>
Grade	Pearson Correlation	1	-.082	.920**
	Sig. (2-tailed)		.428	<.001
	N	95	95	95
Gender	Pearson Correlation	-.082	1	-0.002
	Sig. (2-tailed)	.428		0.983
	N	95	95	95
Age	Pearson Correlation	.920**	-.002	1
	Sig. (2-tailed)	.000	.983	
	N	95	95	95
**. Correlation is significant at the 0.01 level (2-tailed).				

Source: Own research and edition, 2024

Grade and Gender:

Pearson Correlation: -0.082 - This is a weak negative correlation, indicating that there's a very slight tendency for gender values to decrease as grade increases, or vice versa. However, the correlation is very weak.

Significance (Sig. 2-tailed): 0.428 - This p-value indicates that the correlation is not statistically significant. We would not reject the null hypothesis of no correlation based on this p-value, suggesting no meaningful relationship between grade and gender.

Grade and Age:

*Pearson Correlation: 0.920*** - This is a very strong positive correlation, indicating that as age increases, grade also tends to increase, which is expected as older students are usually in higher grades.

Significance (Sig. 2-tailed): 0.000 - This very small p-value (typically < 0.01) indicates that the correlation is highly statistically significant at the 1% level. We reject the null hypothesis of no correlation, confirming a strong positive relationship between age and grade.

Gender and Age:

Pearson Correlation: 0.002 - This value represents a negligible correlation between gender and age, suggesting no meaningful relationship.

Significance (Sig. 2-tailed): 0.983 - This p-value is very high, indicating that the correlation is not statistically significant. We would not reject the null hypothesis of no correlation based on this value.

Summary: Grade and Age are strongly and positively correlated, which is consistent with typical educational progressions where age and grade level are aligned.

Gender shows no significant correlation with either Age or Grade, indicating that gender is independent of these variables in this dataset.

The statistical significance noted with two asterisks (**) at the 0.01 level for the Grade-Age correlation underscores its robustness, confirming that age can be a very reliable predictor of grade in this sample.

Table 5. Correlation between Gender and the evaluation of teaching quality

Correlations			
		<i>Quality</i>	<i>Gender</i>
<i>Quality</i>	Pearson Correlation	1	.191
	Sig. (2-tailed)		.063
	N	95	95
<i>Gender</i>	Pearson Correlation	.191	1
	Sig. (2-tailed)	.0.63	
	N	95	95

Source: Own research and edition, 2024

Correlation coefficient (0.191): This shows that there is a weak positive correlation between Gender and the evaluation of teaching quality. In this sense, women rate the quality of education slightly higher than men, but the correlation is not strong.

P-value (0.063): This value is slightly above the conventional alpha level of 0.05, which indicates that this correlation is likely trending.

Thus, there is an association that female students rate teaching quality slightly higher than male students, but the fact that this result does not reach conventional levels of statistical significance suggests caution in interpreting this as a clear relationship.

4.2. School's infrastructure

Research question 1: In rural Galuut soum, the condition and availability of school infrastructure are key factors influencing the quality of education. A survey of students provides insights into their perceptions and needs regarding their educational environment.

Based on the survey data from the students regarding the condition of the school building and classrooms, the responses are distributed as follows (Figure 5):

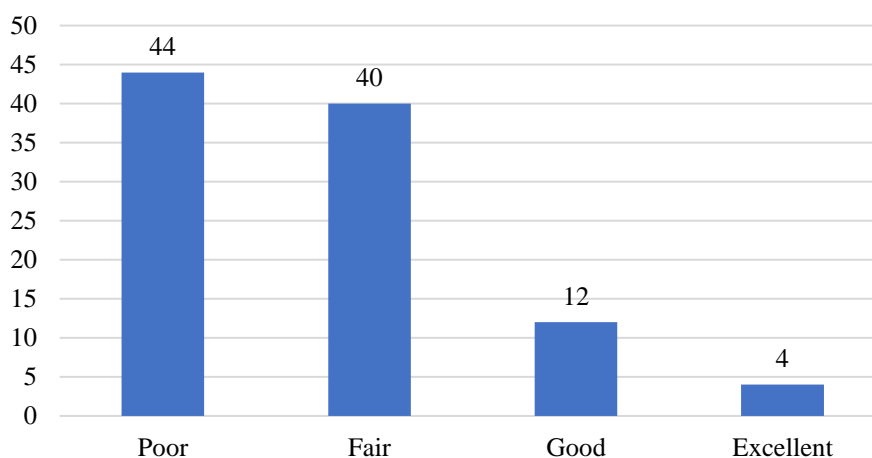


Figure 5. Condition of school buildings and classroom

Source: Own research and edition, 2024

A significant majority of the students (84%) have rated the condition of the school facilities as either "Poor" (44%) or "Fair" (40%), indicating a general dissatisfaction with the current state of the school's infrastructure. Only a small fraction of the students consider the conditions to be

"Good" (12%) or "Excellent" (4%). This feedback highlights a crucial need for improvements in the school's physical environment to enhance the learning experience and safety for all students.

Figure 6 shows accessibility of libraries and computer labs of Galuut soum's school regarding to the survey respondents.

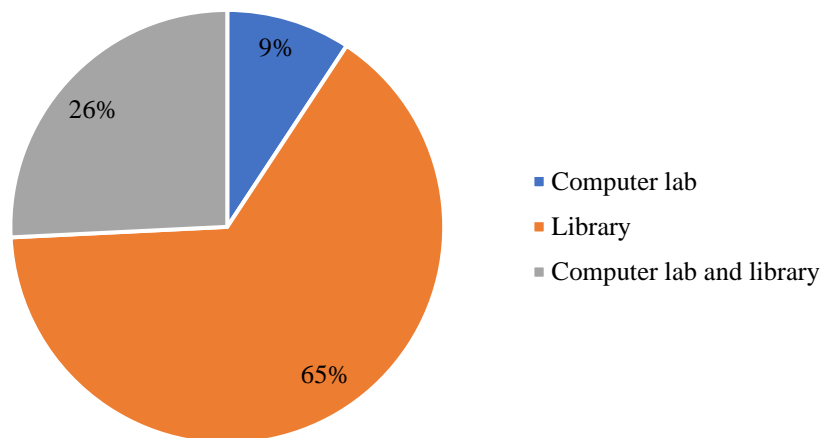


Figure 6. Accessibility of Library and computer lab

Source: Own research and edition, 2024

Access to libraries and computer labs is crucial for enhancing learning opportunities, especially in a rural setting. Among the students surveyed, 63 (65%) have access to a library only, 25 (26%) to both a library and a computer lab, and 9 (9%) have access only to a computer lab. This distribution indicates a considerable gap in digital resource availability, with over half of the students lacking access to comprehensive digital facilities.

Figure 7 demonstrates suggestions for school improvement.

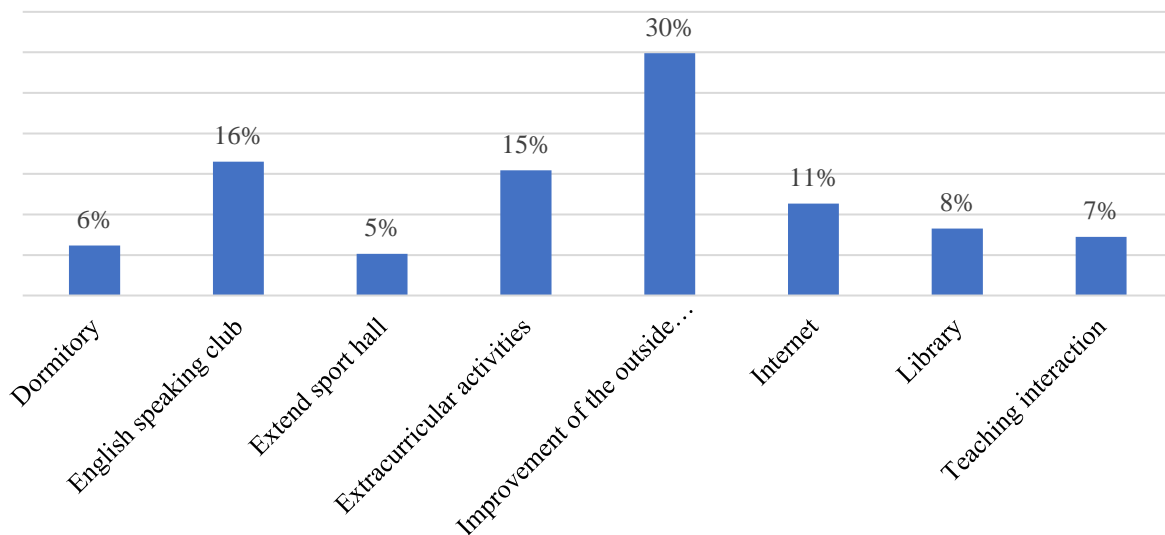


Figure 7. Suggestions for school improvement (%)

Source: Own research and edition, 2024

The data on the survey about "what the students would change in their school to improve learning" depicted very clear areas of change that are preferred. The most serious problem, with about 30% of the votes, is the Improvement of the Outside and Inside Environment of the School. This fact points to the perceived necessity by the students regarding premises related to the physical. This had already been exposed about the malfunctioning school facilities.

Other vital aspects that emanate from the respondent's answer, in fact about 16.5% of it, are the need for more appropriate opportunities for language practice through the creation of an English Speaking Club. In the same line, extracurricular activities were also popularly voted on, getting about 15.5% of the votes, indicating student needs for other varieties apart from the normal curricula.

Also pointed out were the improvements that were needed to be undertaken in both Internet access and the Library resources, which received about 11.3% and 8.3%, respectively, of great importance was the access to information and resources for academic success.

This is then followed by better interaction for teaching (7.2%), expansion of the Sport Hall (5.2%), and improved Dormitory (6.2%). These are less common indications but still point to important areas within a student's life that could be enhanced.

This is generally valuable feedback from their very insightful information to school administration, which shows from some specific areas key improvements and investments that would increase excellence in education or student life quality in general. The improvements would serve to make the learning environment better and also be a direct remedy for what the students were complaining about.

Based on research question 1, how critical the availability and condition of school infrastructure are in influencing the quality of student education in Galuut soum, according to a critical student survey:

- ✓ Facility condition: A 84% of the students rated the facilities in the school as "Poor" (44%) or "Fair" (40%); this really means that there is a whopping percentage that urgently needs renovations at the facilities to improve the learning environment and safety.
- ✓ Access to resources: Data on the question of access to key educational resources presents a very dire situation. Only 65% of the students had access to a library, while 26% had access to both the library and a computer lab. This may be viewed as a digital resource that is inadequate for facilitating the process of learning.
- ✓ Infrastructure Improvement Desired: The students (30%) of the infrastructural improvement more demanded are the improvement of the internal and external school environment. Other greatest areas for development include language development using an English Speaking Club (16.5%) and diversifying extracurricular activities (15.5%).
- ✓ Demographics and Educational Bottlenecks: Higher engagement (61%) among female students surveyed reflects in this table. It is also observed that bottlenenecks (middle grades - 8th and 9th), where student counts are more, show increased difficulties in transitioning and completion of secondary education.

Improvement of such aspects of school infrastructure will directly improve the quality of education and more satisfyingly serve the students' needs in Rural Galuut soum.

4.3. Impact of learning resources

Research question 2: How does the availability of learning resources, such as textbooks and technology (computers, tablets), influence the educational experience of students in rural?

Figure 8 depicts providing of text books.

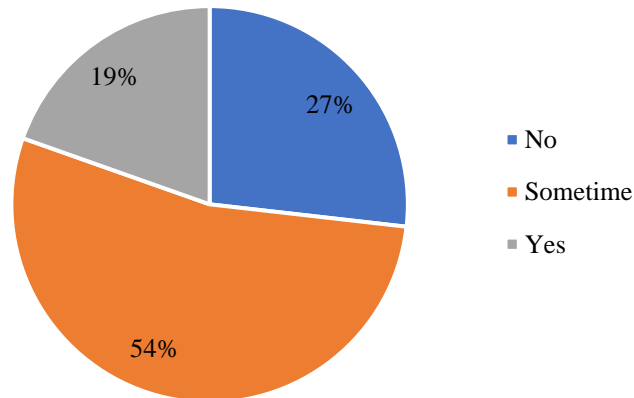


Figure 8. Providing of text books

Source: Own research and edition, 2024

Based on survey respondents, here how they feel that they have enough text books and learning materials for their studies:

A majority, or 54%, report only sometimes having sufficient materials. This inconsistency in access suggests that while resources are available, they are not adequately distributed or are insufficient to meet the needs of all students throughout the school year. About 27% of students indicate that they do not have enough textbooks and learning materials for their studies. This lack can significantly impede their academic progress and understanding, especially in key subject areas. Only 19% of the students feel that they consistently have access to all the necessary learning materials. This highlights a significant shortfall in resource provision, which could potentially impact the overall quality of education.

Figure 9 illustrates usage of technology

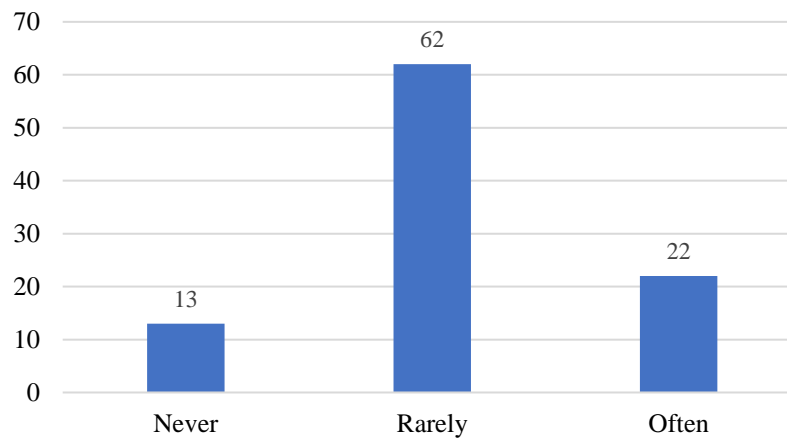


Figure 9. Usage of technology, (%)

Source: Own research and edition, 2024

Based on students' survey, here how often they use technology (computers, tablets) as part of their learning:

The vast majority, or 62%, use technology infrequently. This suggests that while technological resources may exist, they are not fully utilized or integrated into everyday learning activities, possibly due to limited availability or insufficient training for both students and teachers. Only 22% of students often use technology as part of their learning. This group is likely benefiting from enhanced learning experiences and acquiring skills that are crucial in the modern educational and professional world. About 13% of students never use technology, such as computers or tablets, in their learning. This indicates either a lack of available technology or a curriculum that does not integrate these tools, potentially leaving these students disadvantaged in developing digital literacy skills.

The data clearly shows a need for improvements in both the provision of basic educational resources like textbooks and the integration of technology in classrooms. Enhancing access to and consistent use of these resources could lead to a more equitable and effective educational environment, enabling all students to achieve better outcomes.

Resource Gaps: With only 19% of students consistently having access to necessary textbooks and learning materials, and a striking 27% frequently lacking these resources, there is a clear and urgent

need to improve the distribution and availability of educational materials. This could involve increasing the budget for resources, ensuring more equitable distribution across all student groups, or exploring cost-effective alternatives such as digital textbooks.

Technology Integration: The low frequent use of technology (22% often using it) reflects a substantial gap in integrating modern educational tools into the learning process. This situation calls for strategic investments in technology infrastructure, including hardware like computers and tablets, as well as software and internet access. Additionally, teacher training on incorporating technology into their teaching methods would be essential to make effective use of available resources.

Enhancing Educational Outcomes: Addressing these gaps is not just about providing more books or technology, but also about ensuring that these tools are effectively integrated into the educational process to enhance learning outcomes. Regular assessments and feedback from students can help in continuously refining the approach to resource allocation and technology use.

Overall, targeted efforts to bolster resource availability and technology integration can significantly elevate the quality of education, preparing students better for future academic and professional challenges. Addressing these issues can help bridge educational disparities and foster a more inclusive and effective learning environment.

Figure 10 demonstrates quality of teaching of teachers

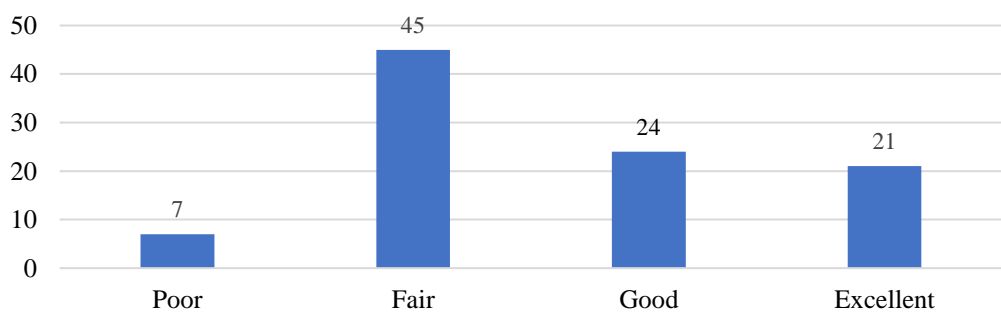


Figure 10. Quality of teaching of teachers

Source: Own research and edition, 2024

The majority, around 46.9% (45), consider the teaching quality to be fair, suggesting that while not outright poor, there is significant room for improvement. About 25.0% (24) of the students feel

that the quality of teaching is good. Another notable group, 21.9% (21), views the teaching as excellent, indicating that a sizable portion of the faculty is highly effective. A small portion, approximately 7.3% (7), rate the quality of teaching as poor.

Figure 11 illustrates teachers' preparation and knowledge of subject

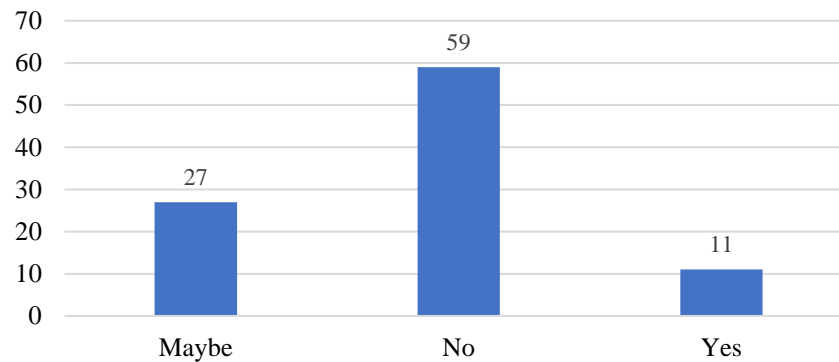


Figure 11. Teachers' preparation and knowledge of subject

Source: Own research and edition, 2024

A significant majority, 60.8% (59), feel that their teachers are not well-prepared or knowledgeable, pointing to a potential major issue in teacher qualification or training. Around 27.8% (27) are uncertain about their teachers' preparation, suggesting inconsistency or lack of visible expertise. Only 11.3% (11) of students believe that their teachers are well-prepared and knowledgeable about the subjects they teach.

Figure 12 shows teacher assistance comfort scale

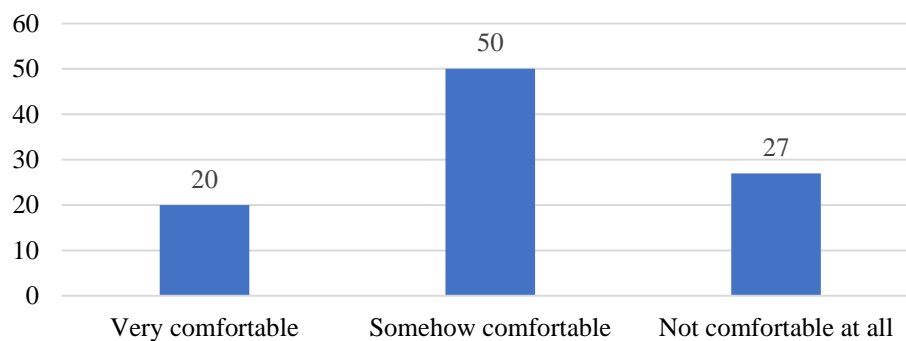


Figure 12. Teacher assistance comfort scale

Source: Own research and edition, 2024

A larger group, 52.1% (50), feels only somewhat comfortable, which might indicate a lack of open communication channels or supportive teaching environment. The remaining 28.1% (27) are not comfortable at all, suggesting significant barriers to student-teacher interaction. About 20.8% (20) of students are very comfortable asking their teachers for help.

Figure 13 demonstrates availability of additional support for study struggles

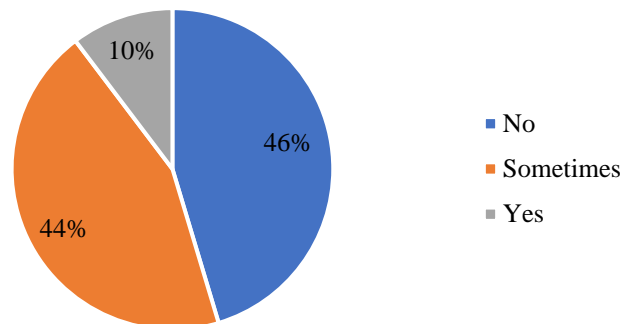


Figure 13. Availability of additional support for study struggles

Source: Own research and edition, 2024

Only 10.4% of students receive additional support when they struggle with their studies. 44.8% sometimes receive the needed support, indicating irregular availability. The majority, 45.8%, do not receive any additional support, which could be detrimental to students who need extra help.

Overall, the survey results indicate that while some students are satisfied with the teaching quality and find a segment of the faculty excellent, there are significant concerns about teacher preparation, comfort in seeking help, and the availability of additional academic support. These issues suggest a need for targeted improvements in teacher training, fostering a supportive educational environment, and ensuring consistent support for students in need. Addressing these concerns could lead to better educational outcomes and a more positive overall student experience.

Figure 14 shows challenges in pursuing education.

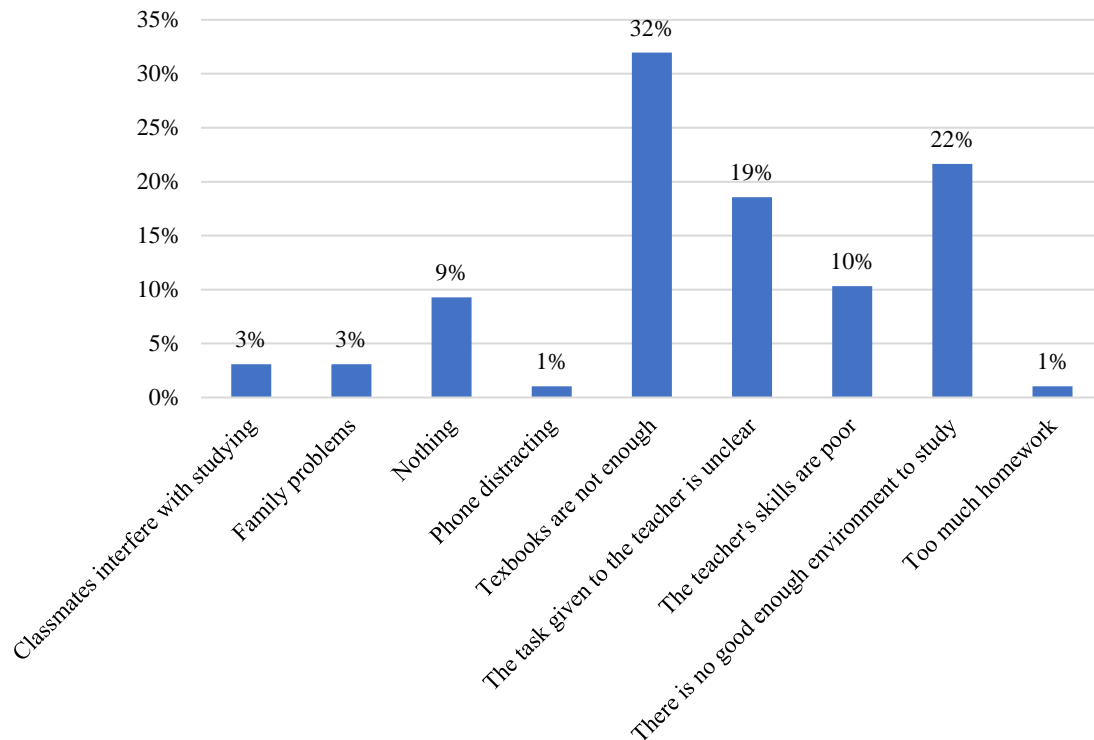


Figure 14. Challenges in pursuing education

Source: Own research and edition, 2024

A substantial 32% of students indicate that a lack of adequate textbooks is a significant hindrance. A significant 22% feel that the physical or psychological environment is not conducive to effective studying. About 19% report that unclear instructions from teachers are a barrier to learning and 3% of students feel that their classmates disrupt their ability to study effectively. Another 3% cite family issues as a challenge to their education. Approximately 9% of students report having no significant challenges. A minimal 1% find phone usage a distraction from their studies. Roughly 10% believe that poor teaching skills are affecting their educational experience. Only 1% see excessive homework as a challenge.

Overall, insufficient textbooks (32%) and inadequate study environment (22%) represent the largest share of the concerns, pointing to critical infrastructural and resource gaps that need addressing. Unclear assignments (19%) and poor teacher skills (10%) suggest issues with teaching quality and communication, which could be improved with better training and clearer educational

guidelines. The survey highlights that while a small percentage of students face personal distractions or too much homework, the majority of issues stem from insufficient resources, inadequate environments, and teaching-related challenges. Addressing these areas through improvements in resource allocation, teacher training, and the creation of conducive study environments could significantly enhance the educational experience and outcomes for these students.

To conclude, many students lack consistent access to textbooks and learning materials, with 27% not having enough and 54% only sometimes having sufficient resources. This shortage can hinder their academic progress and needs to be addressed by improving resource distribution. A majority of students rarely use technology in their learning, indicating a gap in technology integration and access. Enhancing technological infrastructure and teacher training in digital tools is critical. Approximately 46.9% of students find the quality of teaching to be just fair, and a significant number view their teachers as unprepared. Improving teacher training and qualifications is necessary to raise educational standards. Barriers in communication and support from teachers are evident, with many students feeling uncomfortable seeking help and a significant portion not receiving needed academic support. Improving the availability of resources, integrating technology effectively, enhancing teacher training, and fostering a supportive educational environment are essential steps to improving the educational experience and outcomes for students in rural areas. These improvements will help bridge educational gaps and promote a more equitable learning environment.

4.4. Extracurricular engagement

Research question 3: What is the role of extracurricular activities in the social and academic lives of students in rural Mongolia? How does participation in these activities correlate with students' academic performance and personal development?

Figure 15 illustrates involvement percentage of extracurricular activities

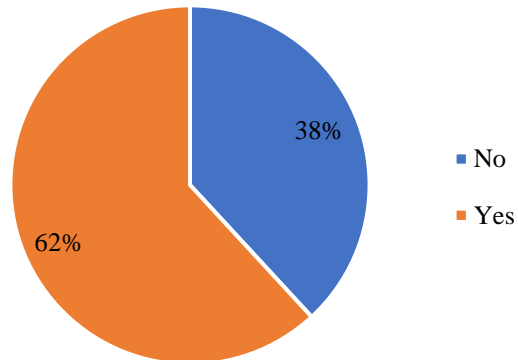


Figure 15. Involvement percentage of extracurricular activities

Source: *Own research and edition, 2024*

A majority, approximately 62% of the surveyed students, are involved in extracurricular activities like sports and clubs, indicating active student engagement outside the classroom. About 38% of students do not participate in any extracurricular activities, which may suggest either a lack of interest or a lack of available options that appeal to these students.

Figure 16 illustrates availability of extracurricular activities among survey respondents.

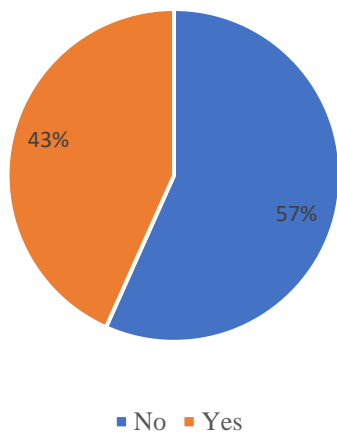


Figure 16. Availability of extracurricular activities

Source: *Own research and edition, 2024*

Roughly 43% believe that there are enough extracurricular activities at their school, suggesting that the school offers a variety of options. However, a majority of 57% feel that the activities provided are insufficient, pointing to a potential gap in meeting the diverse interests and needs of the student body.

Figure 17 depicts description of social life at school

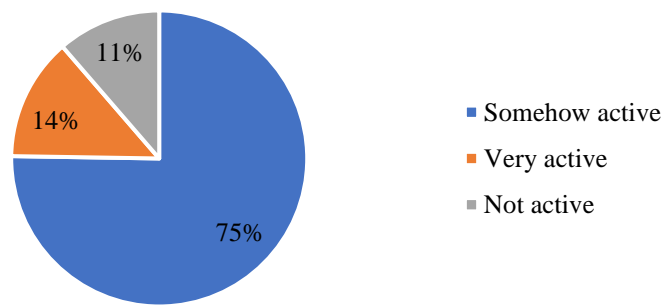


Figure 17. Description of social life at school

Source: Own research and edition, 2024

The vast majority, about 75 %, describe their social life as moderately active, indicating a fair level of social engagement. Only 14% describe their social life as very active, which could reflect a smaller group of highly engaged students. A small percentage, about 11%, report not being socially active, which could be indicative of social barriers or personal preferences.

Figure 18 illustrates academic goals of students

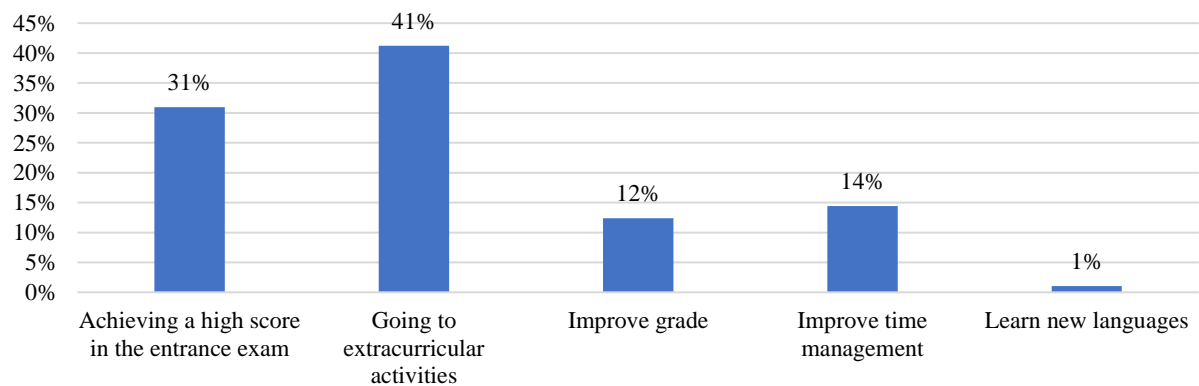


Figure 18. Source: Academic goals of students

Own research and edition, 2024

This goal is prioritized by about 31% of the students, emphasizing a focus on academic performance and future educational opportunities. The highest, with 41% indicating that participating in extracurricular activities is a significant academic goal, possibly for holistic development. About 10% aim to improve their grades, suggesting a focus on academic improvement. Approximately 10% see better time management as a key goal, important for balancing academic and other commitments. Very few, only 1%, have the goal of learning new languages, indicating it's a lesser priority or interest among the majority.

Figure 19 indicates types of motivation to attend class.

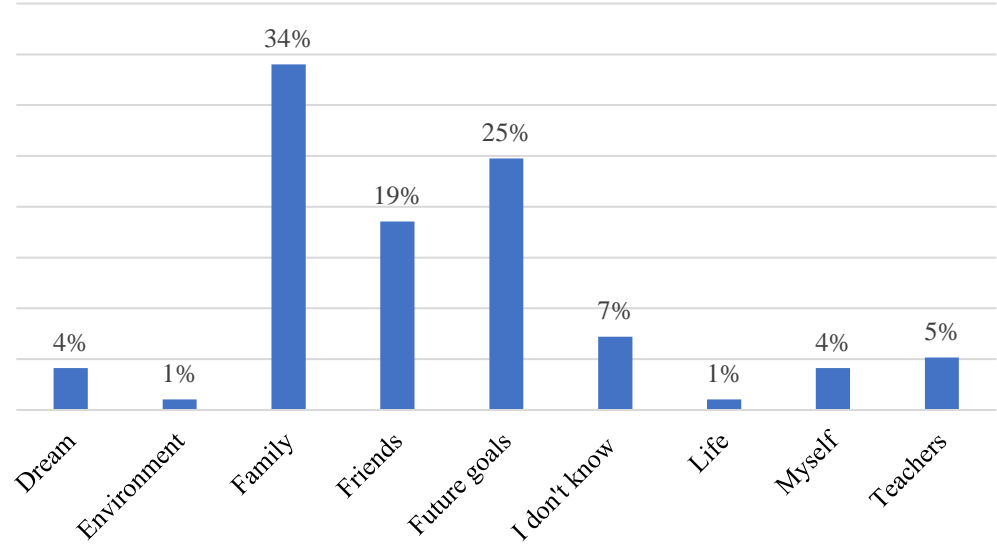


Figure 19. Types of motivation to attend class

Source: Own research and edition, 2024

The largest group, about 34.0% of the students, cites family expectations or support as their primary motivation for attending school, highlighting the significant influence of familial relationships on educational engagement. About 25% are motivated by their aspirations for the future, suggesting a focus on long-term objectives and the role of education in achieving them. Around 19% indicate that their social circle at school, including friends, motivates them to attend, reflecting the importance of peer relationships in educational settings. Approximately 7% of students are unsure about what motivates them, which could indicate a lack of clear personal or educational goals. About 5% are motivated by their teachers, showing the impact of positive

teacher-student relationships on student engagement. Each of these factors motivates about 4% of the students, indicating diverse personal reasons that include personal ambition, the school environment, personal fulfillment, and self-driven goals.

Figure 20 depicts assessing education's impact

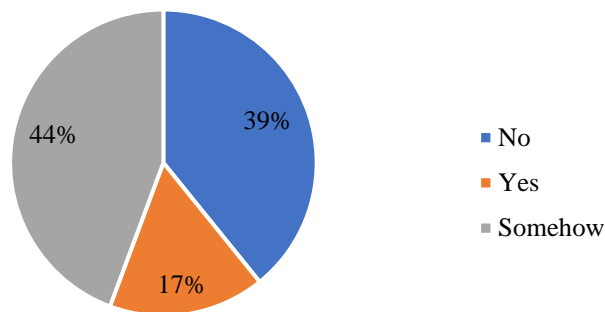


Figure 20. Assessing education's impact

Source: Own research and edition, 2024

The majority, about 44%, feel that their education somewhat prepares them for the future. This indicates a recognition of the benefits of their education, though it also suggests room for improvement. A significant 39% do not believe their education is preparing them well for future challenges. This could reflect concerns about the relevance or comprehensiveness of the curriculum. Only 17% fully believe that their education is adequately preparing them for the future, suggesting a need for educational enhancements to better align learning outcomes with future requirements.

To conclude, the role of extracurricular activities is very significant to students' social and academic lives in the soum; participation in such activities relates to academic performance and personal development in different facets.

The active participation of 62% of the students taking part in the extracurricular activities does not exemplify only, but further underscores that activities are such an important modality for socializing and developing other necessary skills outside the traditional academic settings. 43% of the students agree that the school offers a fair range of options in extracurricular activities, whereas the majority (57%) beg to differ on that. This gap, therefore, indicates that there could be an unmet

need for a wider set of activities that could cover the diversified area of student interests and, therefore, student satisfaction and involvement levels could be subjected to a potential impact.

In the same survey, most of the students describe their social life as "active" (75%), whereby most probably the students' participation in extracurricular activities has been of high importance as a platform for interaction and community building amongst colleagues. This could, however, point to the fact that either opportunities for engagement are very few in number or perhaps the activities are not of the kind that would be interesting to the wider body of students, since only 14% reported to have very active social life.

Correlation with Academic Performance: The specific common academic goals of the students participating in the activities included the need for improvement in grades (9.5%) and time management (11.1%). The direct relationship herein then alludes to the fact that such activities may empower the students through skills like discipline and time management to be able to realize academic success. The significant percentage of students (31.7%) who view participation in extracurricular activities as a key academic goal indicates that these activities are seen as integral to their overall educational experience, contributing to personal growth and better preparedness for future challenges.

Motivation and Educational Outcomes: Family and future goals are major motivators for attending school, implying that students see their education as closely tied to familial expectations and long-term aspirations. Extracurricular activities can reinforce these motivations by providing additional avenues for achievement and personal development. Although only 16.5% of students believe their education fully prepares them for future challenges, the role of extracurricular activities in developing soft skills and additional competencies could be crucial in bridging this gap.

Overall, extracurricular activities play a pivotal role in enriching the social and academic lives of students in Galuut soum. These activities not only facilitate social engagement and community building but also contribute significantly to the development of skills necessary for academic success and future readiness. The data suggests a need for an increase in both the number and variety of extracurricular options to better meet the needs of all students, potentially enhancing both motivation and educational outcomes. Addressing the current gaps in availability and variety could lead to improved student satisfaction, greater social and academic engagement, and a more comprehensive educational experience that aligns with the students' future aspirations and needs.

5. CONCLUSION AND RECOMMENDATION

To conclude and test all three hypotheses, here are the results:

The result is a shadow of difficulty facing, stemming from many infrastructure and pedagogy-related difficulties. The students from the Galuut Soum bear certain academic dreams just as learners would have any other place, mostly motivated by self and outside the source but not because of the surrounding educational environment. Extracurricular focus, as the central academic objective, over more orthodox academic accomplishments, such as grade enhancement, would also explain that children are sourcing forms of fulfillment and development from elsewhere most probably due to the inadequacies in the 'system' of formal education. While this is true for the students in Galuut Soum, with a level of academic aspiration, it holds that the quality of education might remain undisrupted and can potentially be channeled into areas less affected by the challenges that infrastructure and teacher quality might pose on these students. The hypothesis is, therefore, partially supported, which argues while academic motivations continue, their form and focus may adapt in response to the educational environment and its deficiencies. Addressing these challenges could potentially enhance more traditional academic engagement and success among students.

Now, turning to Hypothesis 1, the fact that educational challenges facing young Mongolians tend to lower academic aspirations and academic motivation is failed to be fully supported by the survey data from Galuut Soum. Instead, it points to motivation as a complex interplay where students still remain aspirational but possibly shift the focus of aspiration toward areas that are less dependent on the school's academic resource, like extracurricular activities. The shift may, however, still represent only a partial shift in coping reaction against some form of educational challenge if the traditional academic goals considered only may be.

From the survey results and analysis presented, it is evidently clear that the negative contribution to academic performance in rural Galuut ranges from non-availability of most of the essential learning resources to only a few academic facilities and low levels of student engagement. Data would support this hypothesis as the second one in a strong way, meaning that there exists a direct

relation between the lower supply of resources and issues in the academic involvement and performance of students.

The data, therefore, supports Hypothesis 2 that posits a critical area of need in Galuut Soum. Access to textbooks and technology can help students feel supported and motivated in the classroom to improve students' academic experience, performance, and engagement. This would also mean the resolution of not just the problem of immediate academic need felt by the student but would provide a more equitable platform for providing access to improved future educational and career opportunities for these students.

It would hence seem, when one looks at their levels of activity in their social lives, that there is a correlation between taking part in extracurricular activities and your own personal satisfaction with school life.

The data proves the Hypothesis 3 in which it is stated that students who take up extracurricular activities will have a much better set of social skills. The participation in extracurriculars turned significant, and active levels of social life among students turned relatively high, suggesting the pivotal role they play in the development of these skills.

The relation with personal satisfaction was more directly visible though less would be reasonably surmised from the active social life reported and the importance put on their extracurricular activities. The overwhelming dissatisfaction, expressed, that there isn't an absolute variety of activities to take part in indicates that while those who are participating are likely benefiting, there's a demand for more or different activities that are likely to increase satisfaction to higher levels.

Extracurricular activities emerged as significantly related to social skills development among students in rural Galuut. Participation in extracurricular activities seemed more positively related to higher levels of personal satisfaction with his school life. Bolstering the range and number of extracurricular options available could likely increase these benefits, leading to greater overall student satisfaction and a more enriched school experience. The hypothesis 3 is supported, and actions to address the gaps in extracurricular offerings could amplify these positive outcomes.

Based on the analysis and conclusions, here are recommendations for the development of education in Galuut Soum:

1. Upgrade school infrastructure:

Start repair and renovation work of the most deteriorated facilities in schools where 84% of students have rated the school's state at "Poor" or "Fair" rating. The structural safety, heating, and basic amenities should be the areas of priority in order to make these areas conducive for learning. Plan for sustainable infrastructure development with eco-friendly materials and designs as a part of the project to reduce long-term maintenance cost and environmental impact.

2. Expand resource availability:

Both access to the library and the computer labs leave a huge gap to be bridged. For example, only 49% of students have access to the library, and even few to the computer labs. It shows that there is a need to expand these facilities and fit them with current resources. The supply for textbooks and learning materials is to be increased to ensure the availability of these items to all students. Where possible, such moves should find partnerships from nongovernmental organizations or even governmental programs for purposes of funding.

3. Enhance Teacher Training and Support:

Instituting ongoing in-service education programs for the teachers. This should be focused on improving the content competency and pedagogical methods of the teachers since 60.8% of the students cited that their teachers were not well prepared. Begin a mentorship program whereby old teachers should be able to guide young teachers on how to teach students at school, hence improving quality and standards in school teaching.

4. Counseling Services:

Develop a counseling service for helping the students with academic and personal difficulties, most specifically the students reporting family problems among other personal issues affecting learning.

5. Diversify and Increase Extracurricular Activities:

Assist in the expansion of the offers to introduce diversified activities that cover broader interests of students, such as arts, science, and vocational skills, which only 56.7% of students feel are not offered in the current available extracurricular activities.

6. Increase Digital Literacy and Availability:

It is stated that the use of technology in school is very low; there is a need to invest in digital infrastructure. The curriculum should, therefore, include the integration of technology to enable them to help in preparing the students for a technologically-prepared world that will enable its global economy.

These recommendations can be elaborated in the following suggested strategic framework, which possibly would lead toward overcoming the identified specific challenges and further assuring the significant improvement in the quality of education provided to the students of Galuut soum. If these suggestions are followed, it could really show the way forward for successful running of these schools as parallel schools of such other rural areas where there are challenges to deliver quality education.

6. SUMMARY

This thesis would, therefore, discuss an understanding of the complex challenges that are impeding the quality education delivery in the rural areas of Mongolia, taking Galuut Soum as a special focus. The study, therefore, intended to find out how such issues as the quantity of school infrastructure, low resource endowment for education, and extracurricular activities affected the learners' educational experiences and thereby outputs in the rural areas.

Key Findings:

Infrastructure and Resources: Most of the students categorized the state of school facilities from poor to fair, indicating a high urgency of infrastructure development. Basic access to learning resources, such as libraries and computer laboratories, was rated relatively poor; it indicated great gaps, among others on digital resource availability affecting learning opportunities.

Educational Experiences: The data showed that many students could only sometimes access necessary textbooks and learning materials and rarely used technology in their learning, as it was either rarely available or used in their courses.

Extracurricular Activities: Approximately 62% of the students were involved in extracurricular activity, which took a big position in the improvement of social skills and general satisfaction with school life. But a majority felt the number and variety of activities offered were not sufficient.

Implications and Recommendations:

Renovate Infrastructure: Renovation and minor repairing of the infrastructure required to be done immediately for a conducive learning environment.

Increase access to resources: The availability of systematic distribution and accessibility of textbooks and technology tools.

Expand Extracurricular Offerings: Lastly, expanding the offerings on the number and quality of extracurriculars would greatly increase how well a student is able to develop themselves and engage with the community.

Teacher Training and Support: Enhance teacher training and support mechanisms for improved quality of the education system.

Conclusion: The above review has clearly and elaborately justified that if the innumerable challenges of quality education in rural Mongolia are addressed through targeted improvements, it will raise the quality of education. This means that while the available and accessible educational infrastructure, resources, and extracurricular options on offer become increased, the students within the rural areas, like Galuut Soum, can generally do much better in education and develop for future challenges.

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LIST OF ABBREVIATIONS

NSO – National statistical office

CBP – Country background report

UNESCO – United Nations Educational, Scientific, and Cultural Organization

HDI – Human development index

NGO – Non government organization

HDR – Human development report

MES – Ministry of Education and Science

TVET – Technical vocational education and training

GDP – Gross domestic product

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APPENDIX 1: USED QUESTIONNAIRES

Topic: “*Exploring multifaceted challenges of delivering quality education in rural Mongolia (Galuut soum)*”, 2024.

Researcher: Sainbilegg.789@gmail.com

Research Mentor: farkas.tibor@uni-mate.hu

1	What is your gender?	<input type="radio"/> Male <input type="radio"/> Female <input type="radio"/> I prefer not to say
2	What grade are you in?
3	How old are you?
4	How do you usually get to school	<input type="radio"/> Walknig <input type="radio"/> Bycycle <input type="radio"/> By parent's vehicle
5	How long does it take you to get to school
6	Rate the condition of school building and classroom (1=poor, 2=fair, 3=good 4=excellent)	<input type="radio"/> Poor <input type="radio"/> Fair <input type="radio"/> Good <input type="radio"/> Excellent
7	Do you have access to library and/or computer lab at school (tick appropriately)	<input type="radio"/> Library <input type="radio"/> Computer lab <input type="radio"/> Library and computer lab
8	Do you feel that you have enough text books and learning materials for your studies	<input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Somtimes
9	How often do you use technology (computers, tablets) as part of your learning	<input type="radio"/> Never <input type="radio"/> Rarely <input type="radio"/> Often
10	Rate the quality of teaching in your school (1=poor, 2=fair, 3=good, 4=excellent)	<input type="radio"/> Poor <input type="radio"/> Fair <input type="radio"/> Good

		<input type="radio"/> Excellent
11	Do your teachers seem well prepared and knowledgeable about the subjects they teach	<input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> maybe
12	How comfortable do you feel asking your teachers for help (1=not comfortable at all, 2=somewhat comfortable, 3=very comfortable)	<input type="radio"/> Not comfortable at all <input type="radio"/> Somewhat comfortable <input type="radio"/> Very comfortable
13	Do you receive any additional support if struggle with your studies	<input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Sometimes
14	Are you involved in any extracurricular activities (Sports, clubs...etc)	<input type="radio"/> Yes <input type="radio"/> No
15	Do you think there are enough extracurricular activities at your school	<input type="radio"/> Yes <input type="radio"/> No
16	How would you describe your social life at school (1=not active, 2=somewhat active,3=very active)	<input type="radio"/> Not active, <input type="radio"/> Somewhat active <input type="radio"/> Very active)
17	What are your academic goals
18	Do you face any challenges in pursuing your education
19	What motivates you to attend school and learn
20	Do you feel your education prepares you well for the future
21	What one thing would you change about your school to make learning better

Thank you for your contribution and time.

APPENDIX 2: DECLARATION

DECLARATION

On authenticity and public assess of final mater's thesis

Student's name: Ganzorig SAINBILEG

Student's Neptun ID: Naw05f

Title of the document: Exploring multifaceted challenges of delivering quality education in rural Mongolia (Galuut soum)

Year of publication: 2024

Department: Department of Rural and Regional Development

I declare that the submitted final master's thesis is my own, original individual creation. Any parts taken from an another author's work are clearly marked, and listed in the table of contents.

If the statements above are not true, I acknowledge that the Final examination board excludes me from participation in the final exam, and I am only allowed to take final exam if I submit another final master's thesis.

Viewing and printing my submitted work in a PDF format is permitted. However, the modification of my submitted work shall not be permitted.

I acknowledge that the rules on Intellectual Property Management of Hungarian University of Agriculture and Life Sciences shall apply to my work as an intellectual property.

I acknowledge that the electric version of my work is uploaded to the repository sytem of the Hungarian University of Agriculture and Life Sciences.

Place and date: Gödöllő, 25.04.2024

Sainbileg.G

Student's signature

SUPERVISOR'S DECLARATION

STATEMENT ON CONSULTATION PRACTICES

As a supervisor of Sainbileg GANZORIG NAW05F, I here declare that the final master's thesis has been reviewed by me, the student was informed about the requirements of literary sources management and its legal and ethical rules.

I recommend final master's thesis to be defended in a final exam.

The document contains state secrets or professional secrets: yes **no**

Place and date:Gödöllő, 25.04.2024



Internal supervisor

APPENDIX 3: ABSTRACT OF MSc THESIS

ABSTRACT OF THESIS

Thesis title: Exploring multifaceted challenges of delivering quality education in rural Mongolia (Galuut soum)

Author name: Sainbileg Ganzorig

Course, level of education: **MSc. Rural Development and Engineering**

Host Department/Institute: **Institute of Sustainable Development and Economics**

Primary thesis advisor: **Dr Tibor Farkas, Head of Department, Associate Professor, Department of Rural and Regional Development/ Institute of Sustainable Development and Economics**

Abstract

This thesis will present an in-depth case study of the complicated educational challenges of rural Mongolia, with a case site of Galuut Soum, to unearth how the current contexts of severe infrastructure deficits, limited resourcing, and few opportunities are co-constitutive and taking effect on the students. The three hypotheses tested in this study are being supported to some extent by the results derived. This is one of the interesting results in which aspirations continue; however, the focus might change from the general academic desires due to the deficiency in resources. The second hypothesis is highly acceptable, whereby the direct relationship of reduced academic performance with scarce educational resources is outlined. Supporting the third hypothesis, it was indicated that participation in extracurricular activities develops social and personal satisfaction skills among the students.

This is a clear indication of the infrastructure needs in the college. School facilities are poorly rated, with 84% of the facilities rated poorly by the students. Accessibility of important resources, such as libraries and computer laboratories, is quite poor. Few facilities accessible in adequate

numbers by students. This study shows how these deficiencies really act as stumbling blocks to academic engagement and academic achievement.

The insights guided the current thesis to make certain recommendations that are supposed as efforts to improve the quality of education in Galuut Soum. The same can be related to the renovation of the infrastructure in school, increased availability of resources, expansion of the extra-curricular activities, and better training of the teachers, along with the starting up of the full-fledged counseling services. All these, when executed in the later part of the recommendations, will certainly bring a sea change within the Galuut Soum educational environment, which would give a beacon to other such similar jurisdictions.

Key words: rural education, Mongolia, Galuut soum, educational infrastructure, extracurricular activities, educational challenges, teacher training