
TEACH *for* MONGOLIA

TEACH FOR MONGOLIA

“CATALYST STUDENTS” PROJECT

www.teachformongolia.mn
contact@teachformongolia.mn
+976 7775 7711

EXECUTIVE SUMMARY

Mongolia is warming at nearly twice the global average rate, and about 77 percent of its territory is affected by desertification. In rural areas, climate change is not only an environmental issue but also closely tied to education inequality and livelihood vulnerability. These challenges are deeply interconnected in daily life, yet are often addressed in isolation. In Mongolia, herders are among the most vulnerable groups to climate change impacts such as dzuds, pasture degradation, water scarcity, and desertification.

Over the past two years, Teach for Mongolia NGO has been implementing Mongolia's first large-scale rural climate education initiative—the Catalyst Student project—reaching 15 schools across 11 provinces and engaging more than 750 students, most of whom come from herder family backgrounds.

The project equips rural students with skills in climate education, project-based learning, and community leadership. Students identify local environmental challenges and design practical, community-based solutions with support from teachers and mentors.

The Catalyst Student project bridges classroom learning and real-world issues, positioning rural students not only as learners but also as active problem-solvers. It also serves as a scalable model for integrating climate and sustainability education into schools across Mongolia.

● 2025

6 provinces, 9 soums, **10 rural schools**
270 students (8-12th grade), 18 teachers
11 student-led projects



● 2026

11 provinces, 13 soums, **15 rural schools**
489 students (8-12th grade), 34 teachers
13 student-led projects

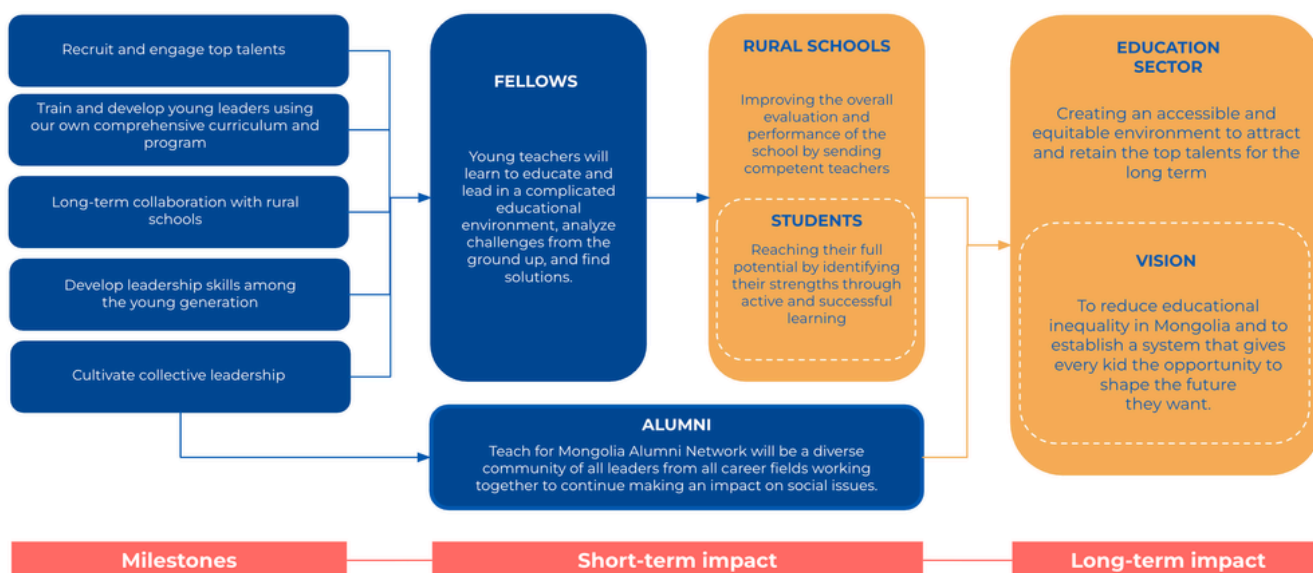




ABOUT TEACH FOR MONGOLIA

Teach for Mongolia NGO was established in 2022 to create an education system in which every child—regardless of social, economic, or geographic circumstances—can access quality, equitable education and build the future they aspire to. We also seek to reduce educational inequality and support committed, knowledgeable, and capable leaders who wish to contribute to the development of Mongolia’s education sector.

Within its programs, Teach for Mongolia selects and recruits young leaders, graduates of top domestic and international universities—who are driven to bring positive social change. These Fellows serve as full-time teachers for two years in rural and remote areas suffering from teacher shortages. Our Fellows work to positively impact local children and parents, expand educational access, create opportunities for students to grow, and ensure that every child can shape the future they dream of. Beyond the core Fellowship program, Teach for Mongolia has been implementing two initiatives through its rural-placed teachers over the past two years: the Catalyst Student climate education project and the Rural School Leadership Program for principals, strengthening both student learning and school leadership in rural areas.



CATALYST STUDENT PROJECT

The Catalyst Student project aims to develop students into solution-oriented innovators equipped with 21st-century skills, enabling them to drive positive social and environmental change. It addresses key global and local challenges, including **climate change**, **environmental degradation**, **sustainable development**, and **entrepreneurship**, through a **Project-Based Learning (PBL)** approach.

In rural Mongolia, students, many from herder families, are directly affected by issues such as desertification, dzud impacts, water scarcity, and waste management challenges. However, the national curriculum does not include structured climate education, and schools in rural areas often lack extracurricular opportunities. Teachers, meanwhile, have limited tools and guidance to integrate climate and sustainability topics into classroom learning. Catalyst Student project addresses these gaps by engaging students in identifying real community problems and co-designing practical, implementable solutions. Through the PBL approach, students investigate local challenges, collaborate with teachers and mentors, and develop solutions that can be tested and applied in their communities.

The project bridges classroom learning with real climate challenges, positioning rural students as active problem-solvers and strengthening both climate awareness and science-based engagement and approaches in rural education.



PROJECT ACTIVITIES

The Catalyst Student is a six-month project that starts with establishing school-based Catalyst Clubs led by teachers. Students & teachers then complete a four-module training on climate literacy and project-based learning, develop proposals, and selected ideas receive seed funding and mentorship for a three-month community-based implementation. The program concludes with a final conference in Ulaanbaatar, where students showcase their projects and share results with national stakeholders.

Recruitment & Training - 2 month

Students and teachers participate in a structured four-module training that includes practical exercises and toolkits, focused on climate literacy, project-based learning, problem identification, and solution design. This builds the foundational skills needed to develop practical, science-based community projects.

Project implementation - 3 months

Selected student proposals receive seed funding and mentorship to implement their ideas over a three-month period. Students work in their communities to test, refine, and apply their solutions to real local challenges.

Final conference - april every year

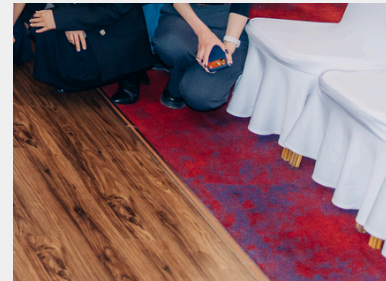
Completed projects are presented at a final conference in Ulaanbaatar, bringing together students, educators, national stakeholders, and ensuring student voices are included in broader policy and sector discussions. The event highlights student achievements and promotes knowledge sharing and scaling of successful solutions.

**STUDENTS AS
CHANGEMAKERS FOR
CLIMATE RESILIENCE**

**CLIMATE
ACTION
STARTS IN
CLASSROOMS**



**YOUTH-LED
CLIMATE
SOLUTIONS**





11
PROVINCE

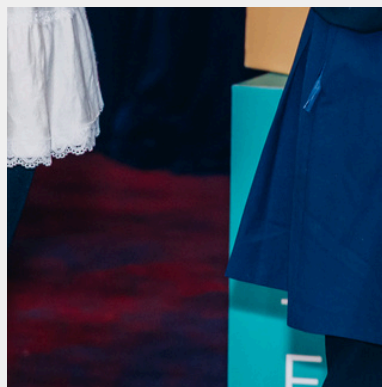
15
RURAL
SCHOOLS

+750
STUDENTS
WE HAVE
REACHED

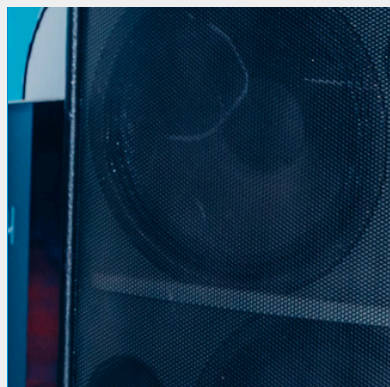
100
STUDENTS
WE HAVE
EMPOWERED
BY PROJECTS
SOLUTIONS



52
TEACHERS
TRAINED



22
STUDENT-LED
PROJECTS
IMPLEMENTED



KEY IMPACT & OUTCOME (2024-2026)

Since its launch, the Catalyst Student Project has expanded rapidly across rural Mongolia. In 2024–2025, it reached 6 provinces, 9 soums, and 10 schools, engaging 270 students and 18 teachers through 10 Catalyst Clubs, and supporting 11 student-led environmental projects. In 2025–2026, the program grew to 11 provinces, 13 soums, and 15 schools, involving 484 students and 34 teachers, with 11 additional student-led projects implemented.

Beyond scale, **the project has improved student competencies** compared to non-participants, **including a 9.8% increase in teamwork skills and a 6% increase in problem-solving skills.** This is especially significant in rural schools facing STEM teacher shortages, where the project helps bridge gaps through structured training, mentorship, and climate-focused, real-world learning.

STUDENT-LED SOLUTIONS:

BATNOROV SOUM, KHENTII PROVINCE- Trash to Treasure team

Students from Berk International School launched the Trash to Treasure initiative, transforming paper waste into reusable products through recycled paper production. By reducing paper waste and promoting reuse, the project contributes to climate change mitigation by lowering waste-related CO₂ emissions and encouraging more sustainable consumption practices. Through the initiative, students gained hands-on experience in circular economy principles, environmental responsibility, and sustainable entrepreneurship.



11th-grade students

Problem

During school examination periods, a large amount of paper waste is generated from used test papers and answer sheets. Most of these papers are discarded after use, contributing to unnecessary waste and environmental pollution.

Solution

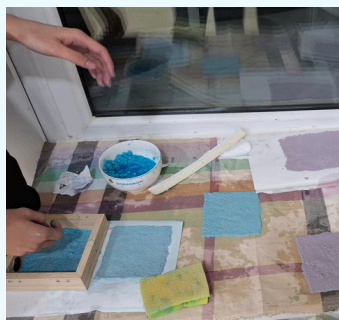
Trash to Treasure collects used paper from school exams and recycles it into eco-friendly notebooks. Instead of throwing away valuable paper resources, the project gives them a second life as practical school supplies.

Project Process

Project team conducted research and collected the raw materials needed for the product



They began the production process of their products



The final product was completed successfully



STUDENT-LED SOLUTIONS:

SHARIIN GOL SOUM DARKHAN-UUL PROVINCE- Green Key team

In Shariin Gol Soum, the Green Key team organized a climate awareness campaign to educate students, parents, and community members about environmental responsibility and climate action. Their initiative demonstrated the power of youth-led advocacy in creating behavioral change, reaching 1,988 people through in-person activities, including 1,259 students and 729 adults in the local community. Through social media outreach, the campaign also generated more than 80,000 views, significantly expanding climate awareness beyond their town.



12th-grade students

Problem

Many students and community members have limited awareness of climate change, environmental protection, and the importance of sustainable daily habits. This lack of knowledge can lead to irresponsible behaviors that harm the environment.

Solution

The team organized a climate awareness campaign to educate peers and community members about environmental responsibility. Through outreach activities and awareness sessions, they encouraged positive behavioral change and inspired the community to take action for a green future.

Project Process

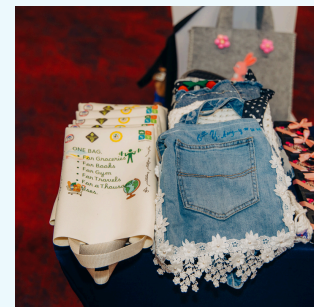
The team met with the soum governor and obtained permission to organize a car-free day



They organized a “Veggie Day” campaign to promote healthy and sustainable food choices while raising awareness about reducing carbon emissions through more environmentally friendly diets.



They engaged students in upcycling activities, turning waste clothes into reusable bags and tote bags



STUDENT-LED SOLUTIONS:

KHATGAL SOUM KHUVSGUL PROVINCE- Viora team

In Khuvsgul Province, the Viora team developed an eco-fuel made from sawdust and animal fat, repurposing locally available waste materials that are typically discarded in herder households. Their innovation addresses local heating needs while promoting cleaner, more efficient energy use. The fuel demonstrated lower emissions compared to conventional market alternatives, contributing to more sustainable household energy solutions.



8th-grade students

Problem

In Khuvsgul province, communities face challenges in accessing affordable and environmentally friendly fuel for heating, especially during harsh winter conditions.

Traditional fuel use also contributes to environmental pollution.

Solution

The Viora team developed an eco-fuel product using sawdust and animal fat as alternative raw materials. This innovation provides a locally available, more sustainable fuel option that meets heating needs while reducing environmental impact.

Project Process

Project team conducted research and collected the raw materials needed for the product



They began the production process of their products



The final product was successfully completed and demonstrated lower emissions, making it more environmentally friendly than conventional market fuels.



STUDENT-LED SOLUTIONS:

TSOGTTETSII SOUM, UMNUGOVI PROVINCE- Idea2Impact team

In Tsogttsetsii Soum, the Idea2Impact team developed a greywater recycling solution that reuses household wastewater for secondary purposes such as cleaning and irrigation. In a water-scarce, mining-impacted region increasingly affected by climate change, the project responds to growing environmental stress by promoting efficient water use and reducing unnecessary freshwater consumption. By turning household wastewater into a usable resource, the initiative supports climate adaptation at the community level. It demonstrates practical, low-cost solutions for sustainable resource management in vulnerable rural settings.



12th-grade students

Problem

In Tsogttsetsii soum, Umnugovi province, water scarcity and limited access to clean water resources create challenges for sustainable household and environmental use, especially in a mining region where demand is high.

Solution

The Idea2Impact team developed a greywater recycling system that allows used household water to be collected, treated, and reused for secondary purposes such as cleaning and irrigation.

Project Process

Project team conducted research and collected the raw materials needed for the product



They began the production process of their products



The final greywater recycling mechanism was completed successfully



PROJECT SCALABILITY & SYSTEM CHANGE

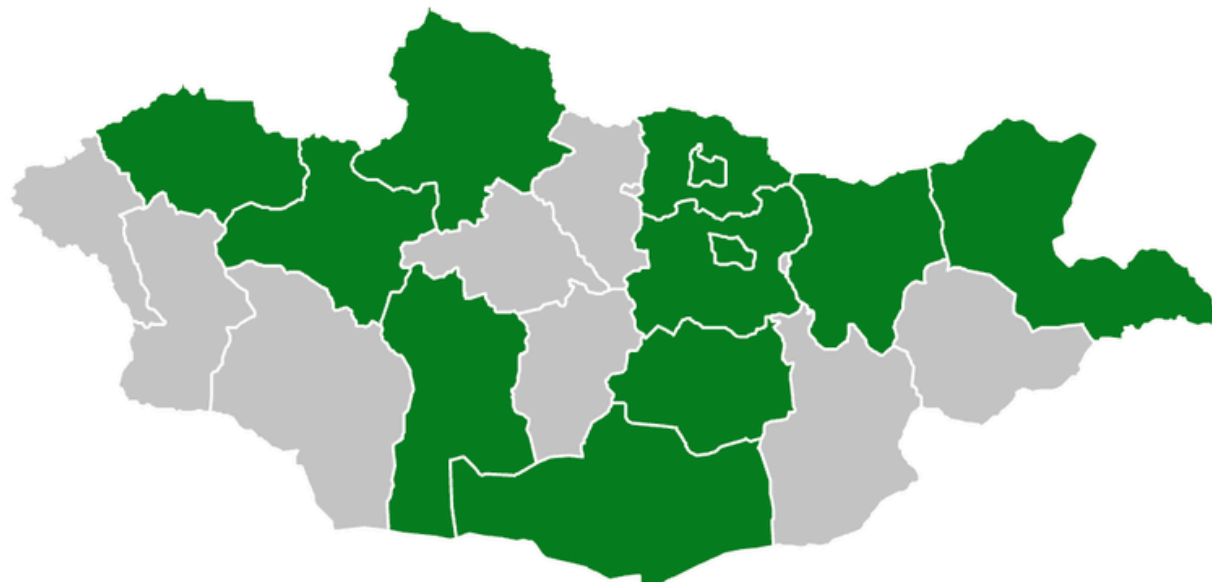


Figure. Catalyst Student Project – Provinces of Implementation

Over the past two years, Teach for Mongolia has successfully secured donor support and piloted the Catalyst Student climate education model across 15 rural schools, engaging more than 750 students, demonstrating its effectiveness in engaging students, teachers, and communities in climate-focused, project-based learning. This pilot has proven that rural students can actively design and implement practical solutions to local environmental challenges when given structured support and opportunity.

Building on this foundation, the next phase is to scale the model from a pilot initiative into a nationwide youth climate education platform, integrating climate learning and student-led innovation into education systems across Mongolia. This shift aims to ensure that climate education is not an isolated project, but a systemic approach embedded within schools, empowering future generations with the skills and mindset needed for a changing climate.

This expansion positions the Catalyst Student project as a leading national example of youth-led climate action and education reform, with strong potential to be showcased at global platforms such as COP17, representing the youth voices, solutions, and leadership of rural students in international climate discussions. Through this system-level approach, Teach for Mongolia aims to strengthen climate awareness & education and institutionalize student-led problem-solving as a core part of education, preparing the next generation of Mongolia's climate leaders.

“CATALYST STUDENTS” PROJECT

FACEBOOK PAGE



INSTAGRAM PAGE

