

ECO-MIND: THINK GREEN, ACT GREEN

Country: Kyrgyzstan

Target Age: 10–15 Years

Learning Areas: Literacy | Science | Numeracy |

Critical Thinking | Taking Responsibility



THE CONTEXT

Otunchiev secondary school Kyrgyz Republic, Osh oblast, Gulcho village

Otunchiev School, located in the heart of Gulcho village—the administrative center of Kyrgyzstan's Alay district at 1,600 meters above sea level—serves more than 1,230 students. With 108 students in Grade 9 and 159 in Grade 4, it plays a central role in the education of a community of over 30,000 residents. The school stands as a cornerstone of learning and opportunity in this mountainous region, shaping the academic and personal development of its young people.

Yet many students, particularly in Grade 9, face significant challenges in reading comprehension. They struggle to analyze, synthesize, and interpret information from texts, a skill fundamental to critical thinking. This weakness extends beyond academic performance—it affects their capacity to make informed decisions, solve problems, and engage thoughtfully with the world around them. Strengthening reading and critical thinking skills is therefore essential to preparing students for both future studies and the demands of modern life.



Students of Grade 9 during the lesson Photographer: Erkgul Olokova, design team leader





Interview with Grade 9 students
Photographer: Nuriza Kaldybaeva/design team member



At the HCD training Photographer: Farida Torobekova/Schools2030 coordinator

THE CHALLENGE

How might we develop critical thinking and improve reading comprehension by integrating climate change topics into our curriculum?

Interviews revealed that climate change is a deeply relevant issue for the Gulcho community, where shifting weather patterns directly affect farming and livestock—the main sources of livelihood in this densely populated but land-limited area. The community's daily experiences with these changes have made climate issues both tangible and urgent, particularly for young people who see their future tied to the land.

Teachers, students, and parents alike noted that many learners struggle with reading comprehension and critical thinking, particularly when engaging with complex or real-world topics. In response, the design team chose to focus on improving these skills by integrating climate change themes into the curriculum—using a familiar, meaningful issue to strengthen students' ability to read, analyze, and think critically about the world around them.



THE SOLUTION

EcoMind: Think Green, Act Green

The *EcoMind*: *Think Green*, *Act Green* initiative was an innovative program designed to strengthen students' reading comprehension and critical thinking while deepening their understanding of climate change. This dynamic, hands-on project engaged students in three groups—each with a distinct focus but united by the goal of addressing environmental challenges through inquiry, creativity, and action.

The **Research Group** explored climate issues from a scientific perspective, analyzing both qualitative and quantitative data to understand the environmental changes affecting their village, region, and planet. They interpreted graphs, compared sources, and drew evidence-based conclusions, sharpening their ability to evaluate information and think critically about complex issues.

The **Design Group** transformed ideas into tangible solutions by planning and implementing ecofriendly initiatives within the school. Their work led to visible improvements, including a shift to reusable "eco shoppers" and the introduction of recycling bins for paper, glass, and plastics. They also installed special collection bins for plastic bottles, encouraging responsible waste management. Through these efforts, students learned how to turn abstract concepts into practical, creative actions that benefit their community.

The **Eco Group** focused on environmental awareness and community engagement. They improved the school's green spaces through landscaping projects and led outreach activities across the village—organizing campaigns and creating educational materials that promoted sustainable living. In doing so, they developed key communication and collaboration skills while inspiring others to take part in environmental stewardship.

Across the three groups, students practiced reading and interpreting information, analyzing complex issues, and communicating ideas clearly. By approaching climate change through research, design, and community action, the *EcoMind* program not only enhanced academic skills but also fostered a sense of responsibility, creativity, and collective purpose toward building a greener, more thoughtful future.



Students planting flowers for the classrooms, adding greenery to their learning space.

Photographer: Farida Torobekova/Schools2030 coordinator

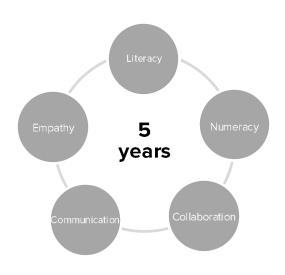


Students placing waste into segregated bins for recycling, promoting eco-friendly habits.

Photographer: Farida Torobekova/Schools2030 coordinator



Competencies Targeted

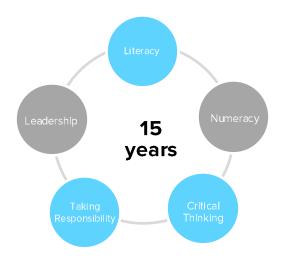


5-year-old Domains

10-year-old Domains

Total	159
Girls	98
Rove	61





15-year-old Domains

Total	108
Girls	64
Boys	44



Research group of Grade 4 during the discussion Photographer: Farida Torobekova/Schools2030 coordinator



Design group during the discussion Photographer: Erkul Olokova\ desing team leader

THE IMPACT

Improved reading impacting performance across mathematics, science, and a range of socio-emotional skills.

Over the academic year, students took an active role in climate resilience projects, designing and leading their own initiatives to address local environmental challenges. The program involved around 250 students across Grades 4 and 9, encouraging ownership, teamwork, and applied learning. As one Grade 9 student reflected, "I realized the importance of using information correctly. It's crucial to verify data, analyze its strengths and gaps, and draw accurate conclusions."

Endline assessments showed strong progress across both grades. Grade 9 students improved their literacy scores by 28%, rising from an average of 51% at baseline to 79% by the end of the program, while Grade 4 students achieved a 16% gain. These literacy improvements also boosted performance in other subjects and enhanced vital soft skills such as problem-solving and critical thinking.

By linking learning to real-world climate issues, the initiative sparked new interest in STEM subjects and led to measurable gains in reading, mathematics, and science—demonstrating the power of experiential, purpose-driven education.

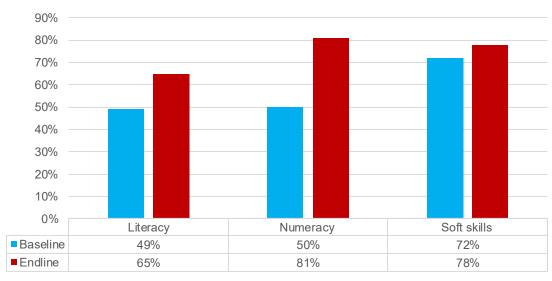
"Reading proficiency serves as a foundation for academic success and personal growth, equipping students with the cognitive and interpersonal skills needed to excel in various areas of life."

Erkgul Olokova, teacher, design team leader



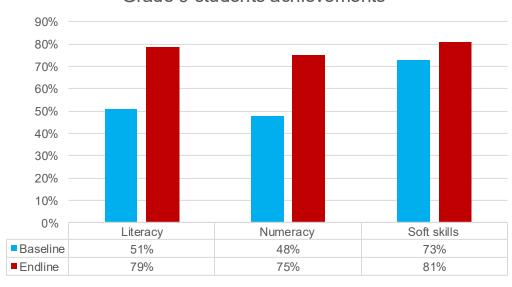
THE IMPACT (CONTINUED)

Grade 4 students achievements



■ Baseline ■ Endline

Grade 9 students achievements



■ Baseline ■ Endline



Meet the Teachers



Erkgul Olokova

Russian language teacher design team leader

With over 20 years of experience in education, my greatest passion lies in implementing innovative approaches and working with students' ideas. I believe the education system must recognize and cater to the individual interests and talents of students. This is why I advocate for introducing specialized training starting in the 10th grade, allowing high school students to delve deeply into subjects that align with their future professions. This approach will help minimize the burden of unnecessary coursework and allow students to focus on honing essential skills.



Nuriza Kaldybaeva

Kyrgyz language teacher

The education provided in our school should be modern, practical, and flexible, ensuring that each student not only accumulates knowledge but also learns how to apply it in real life. It is crucial to me that the school curriculum fosters critical thinking, the ability to analyze information, and the skills to assess it in the context of reality.



Inabat Ergeshova

Primary school teacher

With over 20 years of experience as a primary school teacher, I have come to deeply understand that school is not just a place for imparting knowledge; it is where the future generation is nurtured and shaped. The role of a teacher goes beyond teaching academic content; we are responsible for guiding young minds, instilling values, and preparing students to be responsible, thoughtful citizens. The growth and progress of both our society and country are closely tied to the work we do in the classroom.



Meet the Teachers



Elmira Rysbaeva
Primary school teacher

Education in our school should combine academic knowledge with practical life skills. We should focus on student-centered teaching, using project-based learning and digital tools. Critical thinking, creativity, communication, and teamwork are essential. Education should be high quality and not overwhelming. Tolerance, financial literacy, and career guidance must be included. A supportive and safe learning environment is key. Teachers should continually develop their skills. These changes will prepare students for the future.



Aizat Orozalieva

English language teacher

I'm Aizat, an English language teacher for 6 years. What I love most about my work is the chance to inspire my students and watch them grow, develop, and gain confidence in themselves. I believe that teaching is not just about delivering knowledge, but about making lessons engaging, practical, and unforgettable. The joy I feel comes from knowing that I can shape their futures, help them uncover their talents, and guide them in developing essential life skills. For me, teaching is more than a job—it's a passion that gives me purpose and drives me every day.



Jainagul Kadyrbek Kyzy

English language teacher

Jainagul is working for 10 years in school. Education in our school should balance academic knowledge with life skills. We must use student-centered approaches, focusing on their needs and interests. Modern methods like project-based learning and digital tools make education engaging. Critical thinking, creativity, communication, and teamwork are essential for the future. Education should be high-quality without overwhelming students. We should promote tolerance and respect for our culture and other cultures also.



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