SCHOOLS 2030

HOLISTIC
LEARNING
INNOVATIONS

HANDS-ON LEARNING

Country: Afghanistan

Target Age: 8 to 12

Learning Areas: Science | Critical Thinking | Literacy | Numeracy | Collaboration | Communication | Creativity

THE CONTEXT

Rahmat High School is one of the oldest and most respected educational institutions in Shughnan district, Badakhshan province, Afghanistan, established in 1317 (Solar Hijri). With 1,246 active students drawn from three villages, the school serves as the primary educational hub for the entire district. Most families depend on agriculture for their livelihood, and the school represents a deeply valued pathway to a better future. Since 2021, Grade 4 and Grade 7 classes have been part of the Schools2030 programme, bringing student-centred learning, hands-on activities, and innovative teaching practices to this remote community.

Rahmat High School — Shughnan, Badakhshan

Student during assessment process

THE CHALLENGE

How might we make learning more meaningful and hands-on?

Student assessments revealed persistent gaps in literacy, numeracy, science, and communication — with students receiving largely passive, lecture-based instruction.

- Teachers gave limited individual attention to students who needed extra support
- Lesson content was rarely connected to students' everyday lives or local context
- Hands-on and role-play activities were almost entirely absent from classrooms
- Environmental and local materials were rarely used in Science or Mathematics

Parental involvement was very low — families were not meaningfully engaged with the school

ASSESSMENT&INTERVIEW

Listening First — Understanding the Real Needs

Community member interview — parent engagement session

Student interview — understanding learning preferences

What students told us:

"We learn better when lessons include hands-on activities, group tasks, and interactive methods."

— Students, Rahmat High School

What parents revealed:

Many parents were not actively supporting their children's education. Engagement between families and the school was infrequent and largely informal — highlighting a major gap in the support system.

THE INNOVATION

HANDS ON LEARNING

The innovation centred on two principles: connecting learning to real life, and replacing passive instruction with hands-on discovery. Teachers redesigned lessons to use locally available materials and interactive group activities, making abstract concepts tangible for every student.

In Science, students built DNA models, periscopes, car models, microscope specimens, and cell structures using everyday materials, making abstract concepts tangible and memorable. In Dari Language, the harms of narcotics were taught through group debate and practical demonstration, with students divided into teams to research and present material and moral harms, developing both language and critical thinking skills. Throughout all activities, 21st-century skills — group collaboration, peer teaching, critical thinking, and public communication — were woven into every lesson, building capacities that extend far beyond the formal curriculum.

Students examining their hand-crafted DNA model in a Science class

THE IMPACT

Dramatic improvements in literacy, numeracy, science, and creativity

Across all five learning areas, students showed measurable improvement from baseline to endline assessments:

- **Literacy:** 31% → 72%
- **Numeracy:** 18% → 58%
- **Science:** 23% → 62%
- **Creativity:** 20% → 71%
- **Communication:** 71% → 79%

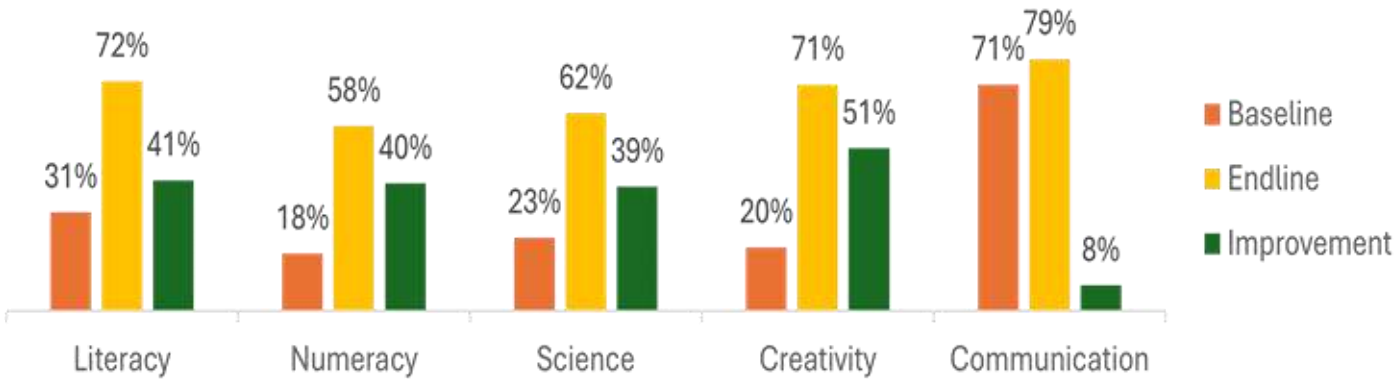
Students who once hesitated to participate began leading activities, presenting findings, and asking deeper questions. Teachers gained confidence in activity-based instruction and began using evidence and reflection, rather than assumptions, to shape their practice. The Human-Centred Design process grounded decision-making in real student and parent voices, creating shared ownership of the school's learning culture. Crucially, hands-on learning became embedded in teaching — not a one-time event, but a lasting shift in how learning happens at Rahmat High School.

Student-created models — DNA, vehicles, helicopters — built from local materials

LEARNING ASSESSMENT

Evidence of Impact — Baseline to Endline Results

Across all five learning areas, students showed measurable improvement from baseline to endline assessments — reflecting the positive impact of hands-on, student-centred innovation at Rahmat High School.



Literacy	Numeracy	Science	Creativity	Communication
31% → 72%	18% → 58%	23% → 62%	20% → 71%	71% → 79%
baseline → endline	baseline → endline	baseline → endline	baseline → endline	baseline → endline

Self-assessment evidence — 2-minute improvement reflections per student across learning areas

A Journey of Personal Transformation

Engaging in the Human-Centred Design process became a defining milestone in my career. Before this experience, many of my decisions were guided by assumptions. The HCD approach shifted my mindset — encouraging me to rely on evidence, reflection, and the lived experiences of students.

MEET THE TEACHER

Awaz Baik — Teacher, Rahmat High School, Shughnan

Awaz Baik

Teacher, Rahmat High School · Shughnan, Badakhshan

I am Awaz Baik, a teacher at Rahmat High School in Shughnan, Badakhshan. Participating in the Schools2030 program has been a transformative milestone in my professional journey.

Through the Human-Centred Design process, I moved away from assumption-based decisions and began listening deeply to my students and their families. I learned to design learning experiences rooted in real needs — using local materials, group activities, and practical demonstrations to bring lessons to life.

The changes I have seen in my students — their confidence, curiosity, and willingness to engage — are the greatest reward of this journey.

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