



Science



Exploring, Learning, Thriving

Measuring rainfall, observing how plants grow in different soils, and discussing how to keep food fresh during a power outage are everyday experiences that spark curiosity and form the basis for scientific thinking.

For over 60 years, EDC has helped educators turn such everyday observations into opportunities for learning. Ready Right Now Science (RRN-S) supports inclusive hands-on science education in low-resource settings. It encourages learners to ask questions, investigate their environment, test ideas, and apply knowledge to real-life challenges, ranging from climate stress to public health to equity in everyday life.

In pre-primary, early grades, and programs for youth and out-of-school learners, RRN-S learners use their literacy and numeracy skills and engage their social-emotional resources through learning scenarios. These scenarios deliberately weave together reading, writing, and mathematics within scientific inquiry, developing critical thinking, problem solving, decision-making and collaborative skills that are essential to later success in school and life.

RRN-S is a natural precursor to EDC's **Work Ready Now** and **Our World, Our Work** initiatives in secondary and vocational STEM for youth. With science as a space where thoughts and ideas matter and skills come together, learners begin to see new futures for themselves. Early engagement with science skills, practices, and habits of mind fosters equity, enabling all students to develop the competencies necessary to pursue STEM careers. It responds to national ambitions to harness STEM resources locally and to build strong climate-adaptive green and blue economies.

Science education completes the foundational skills puzzle, ensuring that learners not only master the mechanics of literacy and numeracy but also have the habits of mind and hand to put those skills to use for themselves and for their communities.



Ready Right Now Science encourages learners to ask questions, investigate their environment, test ideas, and apply knowledge to real-life challenges.



Systemic Partnerships

RRN-S enhances countries' long-term investments in literacy and mathematics, leveraging the school grounds and the daily lives of students and their communities, preparing teachers to serve as skilled guides for students engaging with science, and tapping into and promoting curiosity.

RRN-S equips teachers and volunteer educators with the tools and confidence to guide inquiry-based learning using simple, accessible materials and the local environment. Universal Design for Learning (UDL) principles ensure learners of all abilities and backgrounds can access and participate in hands-on investigations. Science becomes a collaborative process where learners build knowledge, resilience, empathy, and a sense of agency—skills they need to thrive in school, at work, and in civic life.

RRN-S supports governments to strengthen science education from the ground up—reviewing curricula, aligning policies, and co-developing low-cost, scalable materials and tools to ensure equitable representation and promote the participation of girls, women, and people with disabilities in science. We emphasize the integration of science across subjects and the importance of building strong foundational competencies for lifelong learning, climate resilience, and inclusive economic participation.



Families and Communities

RRN-S links classroom content with broader issues in school communities, such as clean water access, sustainable agriculture, and waste reduction. Students see themselves as problem-solvers and contributors to community well-being, preparing them for leadership roles in community development and their local economies.

This culture of shared responsibility helps education systems and communities collaborate to prepare all learners to thrive, live, and be well.



RESULTS FROM MALI:

- Both **teachers and learners increased their knowledge** and demonstrated positive changes in their attitudes and beliefs about science, as well as in their self-efficacy in applying science to solve problems.
- Teachers' **instructional practices improved**, and their confidence in acting as agents of change grew.
- Classrooms reflected **increased student engagement** and exploration as well as teacher explanation, elaboration, evaluation, and integration of science with literacy and math.
- **Communities engaged with schools and learners** as young as grade 2 to address local climate change-related challenges.

ABOUT EDC

EDC works with partners worldwide to advance every person's journey to [learn](#), [work](#), and [be well](#). Since 1958, we have been a catalyst for community-led initiatives that promote sustainable change and advance solutions to the world's most pressing challenges.



Education Development Center

Boston | Chicago | New York

CONNECT WITH US

[in](#) go.edc.org/linkedin
[f](#) go.edc.org/facebook
[@](#) go.edc.org/instagram