

CSD Education

Center for Sustainable Development
EARTH INSTITUTE | COLUMBIA UNIVERSITY

EDUCATION PROGRAM BRIEF

2023



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INTRODUCTION

Center for Sustainable Development (CSD)

www.csd.columbia.edu

Our Mission is to help countries and communities achieve sustainable development in all its dimensions - economic, social, and environmental - by translating the Sustainable Development Goals (SDGs) into meaningful policies and solutions.

Our research projects, policy work, technical advising, and convening initiatives span across SDGs including environment, education, gender, and health & well-being.

We advance sustainable development across thematic & country-specific contexts.

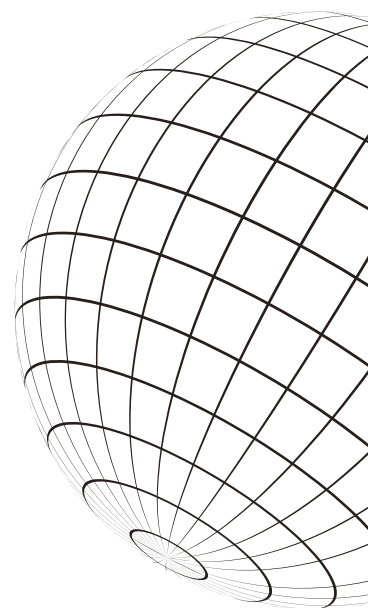
Education for Sustainable Development

CSD's Education team uses the SDG 4 framework to engage with NGOs and local and national governments to use action research on life-long learning opportunities internationally.

The team works at the intersection of environment, education, gender social justice and economic development.

Sustainability and partnership building are at the core of CSD-Education's program design research.

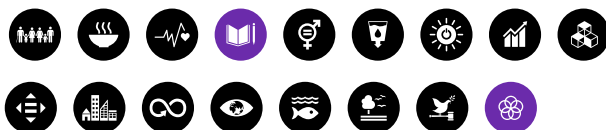
This brief summarizes some of the expertise areas of the education team, highlighting some of the current and prior education projects and initiatives.



TRANSFORMATIVE EDUCATION

Mission 4.7

www.mission4point7.org



Mission 4.7 brings together leaders from government, academia, civil society, and business to accelerate the implementation of Transformative Education around the world. CSD Education leads the Mission 4.7 Secretariat.



COMMUNITY OF PRACTICE

Mission 4.7 supports the Sustainable Development Solutions Network (SDSN) - USA in developing a Community of Practice (CoP) working group with the objective of working together towards SDG 4.7 in the United States.



"WE CHAMPION" SERIES

The “We Champion” speaker series showcases best practices and innovative approaches to Transformative Education from across the Mission 4.7 community and beyond. The series facilitates further collective thinking around SDG 4.7 implementation and gather momentum on various thematic areas pertaining to SDG 4.7.



TRAININGS & WORKSHOPS

The objectives of trainings and workshops for educators and teachers include: understanding how to integrate SDG themes into lesson plans; understanding learning crises and how the SDGs can help; discussions of solutions for transformative education in various global contexts and global networking.

SUSTAINABILITY EDUCATION

Knowledge & Advocacy

www.edsd.csd.columbia.edu

Combining knowledge and advocacy to take informed actions for promoting a healthy, flourishing and sustainable world.



ECO AMBASSADOR PROGRAM

The Eco Ambassador Program features contents created in partnership with youth and communities to build knowledge & connect with researchers, practitioners, educators and students, who are exploring, learning and advocating for a more sustainable lifestyle and community through education.



CITIZEN SCIENCE & TRAINING

Training & mentorship are offered by experts from the various departments within the Climate School, including the CSD team and its network, as well as Lamont-Doherty Earth Observatory. They support youth-led research on sustainable development challenges & solutions. Further, global fieldwork includes water testing for fluoride levels and exploratory study on environmental education in India.

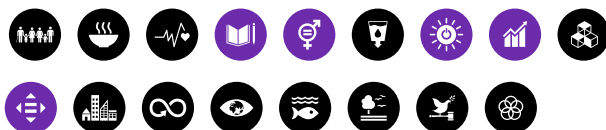


ECO-ADVOCACY

Eco Ambassadors also build skills for local activism and organizing to advocate for science-backed sustainable development solutions to decision-makers & Spread awareness among classmates, family & friends of ways to practice more eco-friendly lifestyles. Skills include hard skills such as learning ArcGIS StoryMaps with our partner, SDGs Today to be able to communicate and deliver messages through storytelling. Eco Ambassadors' StoryMaps selection is [here](#)

ICT & JOB READINESS

ICT Center Model

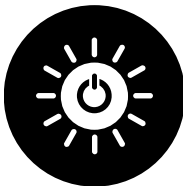


“ICT Center” model for Information and Communication Technology (ICT) for women’s entrepreneurship and empowerment brings a unique combination of sectors such as energy (powered by solar energy), education, gender to meet the Sustainable Development Goals (SDGs).



TRAININGS & CURRICULUM

CSD designs curriculum framework and provides technical guidance on the operationalization and contextualization of content to site-specific needs. The core contents of the ICT Center, based on needs assessments, included trainings on: digital and computer skills, language, communication, business, accounting, environment and life skills.



COMBINING EDUCATION & ENERGY

The ICT Model devised by our team & i4SD envisioned concrete ways to provide income-generating skills for women through targeted skills training with the use of sustainable and renewable energy. The process documentation of operationalizing the Center can be found [here](#) and [here](#).

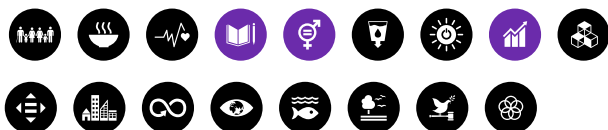


JOB READINESS & GENDER

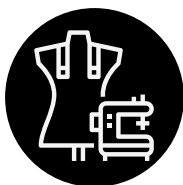
Recognizing the global digital gap disadvantaging women, the ICT Center Model gives special attention to giving access and opportunities for women and girls for training that improve their chances for potential employment opportunities. Our Center Model has replicated in India, Uganda, Myanmar and Rwanda and we look forward to scaling further!

SEL & VOCATIONAL TRAINING

SEL, Gender, Education, Vocation, Employment



Social Emotional Learning (SEL) is a key component to the well-being of all students, teachers, and members of schools, families and communities. CSD approaches SEL along with gender empowerment, vocational training and focus on vulnerable populations.



VOCATIONAL TRAINING

To support the digital, entrepreneurship and interpersonal skills needed for potential employment opportunities, CSD Education provided vocational training to women artisans in India, Myanmar, Rwanda and Ghana. The training contents included business planning and marketing, as well as digital skills component to help the apprentices have skills to be able to research new market opportunities, promote their products, and communicate with potential buyers beyond their own communities.



SEL IN CONFLICT AREAS

With the American University of Nigeria and Kent State University, CSD Education joined efforts to boost quality education in northeastern Nigeria via training 100 education managers, improving the instructional skills of 5,000 teachers, and focusing specific training for female teachers in 200 primary schools with reach to 200,000 primary students. The project aimed to address the resulting acute educational needs in a conflict zone while laying a foundation to rebuild and transform the education system, to integrate peace-building and safety considerations into school communities.

FOUNDATIONAL LEARNING

Early grade literacy for building strong foundations



CSD Education has been working with education psychologist Dr.Helen Abadzi to address learning gaps many students face in primary school and ensure that all students are learning basic literacy skills through the Literacy in 100 Days method.

CSD education team's witnessed the stark learning gaps in foundational literacy and numeracy across 10 sub-Saharan countries' sites where the staff worked. Since 2015, CSD has developed content, teaching method, training, follow-up and monitoring in India, Malawi, Rwanda, Burundi, to support the learning gaps in literacy that hinder students' learning trajectories.



TLM DEVELOPMENT

CSD team conducts a hands-on teaching and learning material (TLM) development for its literacy projects. This includes a textbook review to identify letter frequencies that informs designing content as reading and instruction materials. We develop materials for learners as well as guides for teachers so a consistent literacy method can be followed.

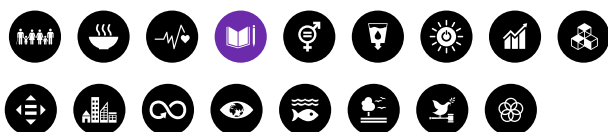


TRAININGS

We train teachers, school leaders, community education workers, as well as national Ministry-level education officers so that literacy acquisition and remediation using a consistent method can be supported at all levels of the education system.

EDUCATION DATA

Data informs education planning & policy



Education data usage in educational planning involves the use of real-time data, building relevant user-case scenarios, training education personnel at various levels of countries' education system so that there is overall coherence in the collection, usage and analysis of data for education purposes.



GEO-SPATIAL DATA

Working with Columbia University's Center for International Earth Science Information Network (CIESIN), CSD education supported Geo-referenced Infrastructure and Demographic Data for Development (GRID3), which facilitates the collection, analysis, integration, dissemination, and utilization of high-resolution population, infrastructure, and other reference data in support of national sectoral development priorities, humanitarian efforts, health, and sustainable development goals (SDGs). The project aims to increase developing countries' capabilities for mapping population distribution as a way of ensuring that everyone, especially the most vulnerable, is counted, refining development priorities and extending and improving the scope and efficacy of countries' development efforts. CSD has been applying the GRID3 geo-referenced maps to align in the Nigerian Education Policy to aid in decision making.

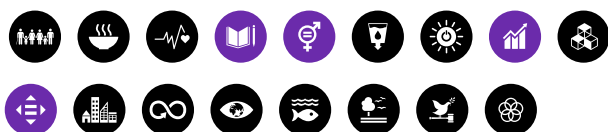


M-EDUCATION DATA POLICY

Working with Millennium Promise, a New York-based non-profit, the education team provides technical assistance on framing policy on e-data for education. This will include providing guidelines on indicator framework, frequency of data collection, use of data at both local and national levels. This white paper was used as the basis for moving paper-based data collection to digital mapping of schools with relevant indicators to track the progress of schools and student performance.

DATA ANALYSIS

Data informs education planning & policy



Education data usage in educational planning involves the use of real-time data, building relevant user-case scenarios, training education personnel at various levels of countries' education system so that there is overall coherence in the collection, usage and analysis of data for education purposes.



DATA ANALYSIS & SCHOLARSHIP MANAGEMENT

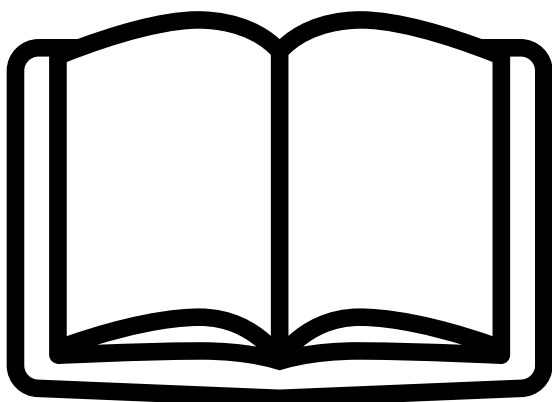
Under Ericsson's flagship education program, Connect To Learn, CSD Education supported the scholarship management and qualitative data design, collection and analysis of the program, whose purpose is to empower teachers, students and schools to deliver a quality 21st-century education and provide young people worldwide with digital skills. The program has four focus areas: access to digital connectivity for schools, girls in ICT, education in humanitarian contexts and youth empowerment through digital skills.



NATIONAL EDUCATION PLANNING

Working with the Ministry of Education and Sciences of Paraguay, CSD Education conducted research to inform education policies in Paraguay. The scope of work for the collaboration included: 1) data collection and analyses to produce an education sector analysis on Paraguay; 2) based on the research and sector analyses, assist in the design and implementation of a series of national summits at which diverse stakeholders across Paraguay will meet to come to consensus on a vision and purpose for the reform, and 3) co-design a roadmap for implementation reform based on the findings of the summits and research-based sector analysis.

PUBLICATIONS



RECENT PUBLICATIONS

CSD Education team continues its work in documenting its research, program, planning and thought pieces. Below list highlights some of the latest publications by its team members.

2022

- "Education for Sustainable Development" in A Global Compact for a Time of Crisis.
- "What Will It Take to Meet the Sustainable Development Goal for Education?" in Ethics in Sustainable Development, Columbia University Press.
- "Spaces for youth perspectives through communication and arts for education for sustainable development," in Iyengar, R. and Caman, O.K. (Ed.) Rethinking Education for Sustainable Development: Research, Policy and Practice. Bloomsbury.
- "Action for A Sustainable Future: The Key Role of Civic Education" in Iyengar, R. and Caman, O.K. (Ed.) Rethinking Education for Sustainable Development: Research, Policy and Practice. Bloomsbury.

2021

- "The Potential for Quality Education When Teachers Internalize an Affective Education Approach as a Base for Skill Development" in Wiseman, A.W. and Kumar, P. (Ed.) Building Teacher Quality in India: Examining Policy Frameworks and Implementation Outcomes (International Perspectives on Education and Society, Vol. 41), Emerald Publishing Limited, Bingley.
- "Educators' Perspectives on Environmental Education in India: A Case Study in School and Informal Education Settings," in Iyengar, R. and Kwauk, C. (Ed.) Curriculum and Learning for Climate Action: Toward an SDG 4.7 Roadmap for Systems Change. UNESCO-IBE on Curriculum, Learning and Assessment.
- "Eco-Conscious Community Development in Non-Formal Education" in Iyengar, R. and Kwauk, C. (Ed.) Curriculum and Learning for Climate Action: Toward an SDG 4.7 Roadmap for Systems Change. UNESCO-IBE on Curriculum, Learning and Assessment.

More publications upcoming!

CSD Education




**We thank you for your interest.
We look forward to a collaboration in
our efforts to contribute to meeting
the SDGs.**



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