

# Early Childhood Development and Education

The early years of a child’s life set the stage for healthy development and positive long-term outcomes more than any subsequent stage of life. Yet an estimated 250 million children worldwide do not get a healthy start because of poor nutrition, lack of early stimulation, and other risk factors associated with poverty. Investing in early childhood development and education (ECDE) maximizes opportunities for young children to achieve their potential, with far-reaching positive implications for future generations.

Our expertise in ECDE informs interventions that help children thrive and achieve their developmental potential.

- **Integrated ECDE.** We collaborate with government partners to design, deliver, and monitor integrated ECDE interventions. Applying the Nurturing Care Framework, we integrate health, nutrition, education, responsive caregiving, and protection services for young children with and without disabilities, as well as for their families.
- **Pre-primary education.** We work with ministries of education to develop teaching and learning materials and to train teachers of young children. We promote developmentally appropriate practices while respecting local definitions of quality, and we build the capacity of policy makers and educators to effectively manage pre-primary education.
- **Research.** We conduct rigorous, relevant studies of ECDE programs in communities, homes, and school settings. Our research in executive function, language, nutrition, health, caregiving, and social-emotional learning helps advance the understanding of factors affecting child outcomes, with a focus on improving the lives of vulnerable populations.
- **Assessment.** We develop innovative assessment tools that measure children’s development and early learning. With that data, we help policy makers evaluate programs, acquire and employ data for decision making, and improve early childhood services for young children and their families.

## World Health Organization Nurturing Care Framework



## Project and Research Highlights

**CAMBODIA. Integrated Early Childhood Development Activity,** U.S. Agency for International Development (USAID) (2020–2025). This multi-platform, multi-sector integrated project brings together interventions to improve caregiving practices, nutrition, health, sanitation, protection, and gender equity in targeted households, and is being implemented in partnership with the Royal Government of Cambodia. A cluster randomized control trial with longitudinal analysis is measuring the impact of interventions on caregivers’ behaviors and children’s development.

**JORDAN. Early Grade Reading and Math Initiative, USAID** (2015–2022). RTI works with the Ministry of Education supporting reading and math in kindergarten and grades 1–3. RTI supports Ministry efforts to expand access to high-quality kindergartens through an accelerated school-readiness program preparing children to successfully transition to primary school. RTI has also partnered with the Ministry of Education and the Ministry of Social Development to map and analyze the existing provision of nonformal kindergarten across Jordan and to determine coverage gaps, especially among marginalized and refugee populations. This analysis has led to policy recommendations for achieving universal kindergarten enrollment, such as pursuing public–private collaboration.

**KENYA. The Tayari Early Childhood Development and Education Program,** Children’s Investment Fund Foundation (2014–2019). Tayari aimed to increase the school readiness of pre-primary children in Kenya, including cognitive, physical, social, and emotional well-being. By 2019, Tayari had reached 145,000 children in 1,500 early childhood centers in selected counties in Kenya. Tayari’s activities included

developing learning materials for pupils and teachers, training teachers and giving them instructional support, and using integrated technology solutions to track child development outcomes. Additionally, Tayari promoted improved hygiene practices, water treatment, and health-related record-keeping in schools to reduce illness-related school absenteeism. An independent evaluation of Tayari found an effect size of 0.36–0.37 standard deviations (considered moderate) on student learning outcomes in emergent literacy and math.

**LIBERIA.** *Read Liberia Activity*, USAID (2017–2022). This five-year education project is improving early grade reading skills for students in grades 1 and 2 in 640 schools across six counties: Nimba, Bong, Grand Bassa, Montserrado, and Margibi. *Read Liberia* also piloted a kindergarten program with 2,700 students from 60 schools, with the goal of improving oral vocabulary for emergent literacy. **Liberia Transforming the Education System for Teachers and Students** (USAID, 2021–2025) strengthens pre-service education for pre-primary and early primary grade teachers, to ensure that qualified teachers enter the workforce.

**TANZANIA.** *Tusome Pamoja*, USAID (2016–2021). The USAID Tusome Pamoja, or “Let’s Read Together,” project provided sector support to the national pre-primary and primary education sector through intensive, targeted assistance in four mainland regions and Zanzibar. Tusome Pamoja aimed to improve emergent academic skills for roughly 1.4 million children through improved instructional practice, system strengthening, and community engagement. The pre-primary component was piloted in Mtwara and emphasized the use of storybooks and dialogic reading strategies to support the development of foundational oral language and emergent literacy skills of pre-primary students. Each teacher received 24 large-format picture books for reading aloud and an accompanying teachers’ guidance document. An impact evaluation showed that the intervention had a significant positive effect on children’s emergent literacy and executive function skills.

**TANZANIA.** *Early Learning Partnership System Research*, World Bank (2017–2018). RTI performed a situational analysis of pre-primary education, with a goal of informing policy making and contributing to the global body of research on pre-primary education systems. An initial situational analysis concentrated on five elements of the subsector: teacher workforce, financing, the role of parents in early learning, non-state provision of pre-primary education, and the political–economic context. Following the situational analysis, RTI collaborated with the Government of Tanzania to develop a systems research agenda which informed priorities for piloting and improving pre-primary education in those five domains.

**TANZANIA.** *Measuring Early Learning Quality and Outcomes*, United Nations Children’s Fund (2016–2017). RTI implemented this instrument to measure school readiness and classroom quality in mainland Tanzania and Zanzibar, with a nationally representative sample to provide a much-needed snapshot of pre-primary learning outcomes and quality. This assessment enabled the government to better understand the quality of the pre-primary classroom and school environment, and children’s school readiness skills at the start of grade 1. The government has used the findings to inform pre-primary sector planning, and as a baseline measure for growth in early learning and the quality of school environments.

## Executive Function

- Executive function refers to cognitive processes and abilities for organizing information, planning, solving problems, sustaining attention, and orchestrating thought and action in support of goal-directed behavior. Executive function skills are central to a child’s ability to learn how to learn.
- RTI has developed an innovative, tablet-administered tool to measure executive function in young children. EF Touch consists of a battery of tasks that measure inhibitory control, working memory, and cognitive flexibility. It is unique in that its platform within RTI’s Tangerine® software enables easy-to-use and scalable assessment, including in low- and middle-income countries.
- EF Touch was originally piloted in Kenya, where it successfully demonstrated its feasibility to measure these skills in young children in a lower-middle-income country. It was incorporated into a longitudinal study within the Tayari Early Childhood Development and Education Program in Kenya and was included in the baseline assessment for the impact evaluation of the USAID Read Liberia kindergarten pilot.

### Partner with us

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