

COLLABORATIVE CHANGE: LEVERAGING INTERNATIONAL IDELA PARTNERSHIPS TO BENEFIT YOUNG CHILDREN





This report was jointly written by Save the Children colleagues working on IDELA: Nikhit D'Sa, Lauren Pisani and Frannie Noble. Please direct all correspondence regarding this report to idela@savechildren.org.

For more information about the International Development and Early Learning Assessment (IDELA) please visit <a href="https://www.idela-network.org">www.idela-network.org</a>.

### **ACKNOWLEDGEMENTS**

This report would not be possible without the collaborative efforts of Save the Children colleagues and external partners. We would like to thank Julee Allen, Amy Jo Dowd, Aisha K. Yousafzai, the Aga Khan Foundation, American Institutes for Research, EducateMe, Ichuli Consulting, International Care Ministries, RISE Egypt, Save the Children Mozambique and Ubongo for their contributions,



### **TABLE OF CONTENTS**

Foreword	4						
Introduction	6						
Create a common metric	9						
Why was IDELA developed?	9						
How was IDELA developed?	9						
Support partnerships	11						
Growing collaborative IDELA partnerships							
Growing use of IDELA across countries and regions	13						
Test solutions	18						
Varied settings for ECE delivery							
Program effectiveness with room for growth							
Harness data for decision-making	27						
References	30						

5-year-old Julissa puts on her backpack as she prepares to walk home from her early learning and development program in El Salvador.



4-year-olds Thandar, left, and Saw read books in their pre-school classroom in Myanmar.

As an academic, my research and training focus to design, integrate and evaluate early childhood interventions over the last twenty years has always been conducted in partnerships with practitioners whether with Lady Health Workers in Pakistan, Disabled People's Organizations in Uganda, home visitors in Bosnia and Herzegovina or early childhood educators in Rwanda. There is much to celebrate with the scientific progress and global commitments to early childhood development; however, my work with frontline workers is a constant reminder of the challenges that remain to achieve target 4.2 of the Sustainable Development Goals (by 2030, to ensure that all girls and boys have access to quality early childhood

development, care and pre-primary education so that they are ready for primary education).

Achieving access, equity and quality in early childhood programs is hindered by a lack of robust evidence from implementation research and impact evaluations, knowledge brokering and collaborative partnerships between communities of research, practice and policy. The International Developmental and Early Learning Assessment (IDELA) developed by Save the Children is a global good which empowers us to overcome these challenges.

IDELA has been established as a reliable measure of early learning and development used in 60 countries around the world by a range of partners. It is an exemplar of a global good because:

- The creation of IDELA was informed by a robust, evidence-based and rigorous testing in a range of socio-cultural contexts.
- IDELA is designed to bridge research and practice because the data collected is intended to inform program quality improvements.
- The tool is available to the public and does not require licenses and fees, which often prevent programs from evaluating the effectiveness of their interventions on children's outcomes.
- Technical support, evidence and information about IDELA is available online.
- This community of practice is responsive to user needs and demands.
- The online community of practice promotes visibility to the diverse range of programs and evidence generated from partners using IDELA around the world.

These features have led to a high level of uptake of IDELA through active partnership engagement resulting in equity, local ownership and leadership in evidence generation in the field of early childhood learning and development. These data then also support program evaluations, monitoring and quality improvements to advance scale.

This report includes case studies from around the world, illustrating how IDELA has leveraged partnerships to benefit young children by enabling practitioners and policy makers to make evidence-based decisions to expand, replicate and improve early childhood programs. We each have a role to play in advancing the science of early childhood development to benefit the youngest members of our communities. As a researcher, I remain committed to working with partners to contribute to this effort. Learning from the IDELA story over the last ten years can help us make global goods more effective and user friendly.

#### Aisha K.Yousafzai, Ph.D.

Associate Professor of Global Health, Department of Global Health and Population, Harvard T.H. Chan School of Public Health Visiting Faculty, Department of Paediatrics and Child Health, Aga Khan University.



Children at a Save the Children ECCD center in Sumba, Philippines benefit from pre-school programming where they can learn from play, expression and social interactions.



4-year-old Krishna, left, and 5-year-old Nitesh receive support from their pre-school teacher while building with English alphabet blocks during a pre-school session at an early education center in Nepal.

Evidence highlighting the importance of investments in early childhood development (ECD) has come to the fore in recent years, so much so that the United Nations included access to quality early care and education in its 2015 Sustainable Development Goals (UNICEF, n.d.). During the earliest years of a child's life, approximately one million new neural connections are formed every second (Center on the Developing Child, 2009). These connections are influenced by the interplay of a child's genetics, environment and experiences. These connections build a child's brain architecture – the foundation upon which all later learning and behavior depend. Early care, stimulation and learning opportunities through quality classroom and home environments provide children a better chance for success in school and life, especially in low and middleincome countries (LMICs) (Britto et al., 2017). Investments in early learning also produce positive effects on health and contribute to breaking cycles of poverty and violence. (Campbell et al., 2014; Heckman, 2010).

It is clear that quality early learning opportunities are critical in shaping a child's lifelong capacity for learning, but understanding which approaches work best in varied contexts across LMICs is still limited. There are multiple published studies documenting the results of successful early childhood education (ECE) pilot programs in LMICs (Grantham-McGregor et al., 2007; Rao, 2010; Aboud & Houssain, 2011; Dowd et al., 2016, Borisova et al., 2017), but also others where new initiatives were not found to be successful.

For example, a study of new pre-service teacher training program in Ghana found that the program improved knowledge and implementation of the national curriculum, but had no impact on children's learning outcomes (Wolf, 2018). Feedback from teachers suggests that being placed in low-resource schools without adequate professional support after their training substantially decreased their ability to implement newly acquired skills

and knowledge. Similarly, a recent analysis of ECE impact using national samples of students in 16 LMICs to investigate the lasting effects of ECE attendance on literacy skills in primary school finds mixed results. ECE attendance was significantly related to stronger literacy skills in primary grades in only half of the countries studied (Gove et al., 2018).

In this moment, when momentum for ECE is increasing rapidly around the world, it is critical that the field gain a detailed understanding about what works. Building global knowledge about whether programs work, in which contexts and for which children, will enable the global ECE community be more effective in ensuring that children are developmentally on track to achieve their full potential.

To accomplish this, reliable measures of early learning and development are needed – both at the local and national level. At the local level, reliable child development measures support program quality by identifying strengths and weaknesses that can direct future activities. At the regional and national levels, data help governments monitor their progress towards ECE goals and provide information about initiatives in which to make future investments. At any level, valid and reliable child outcome data allows stakeholders to better understand not only whether an initiative or program is working for the average child, but also for which groups of children it does not yet work. As a direct child assessment, IDELA offers a depth of information that is difficult to achieve with data from only parents or schools. This granular data is critical to achieve the global goal of all children becoming ready for primary school.



Young students in Sumba, Indonesia race to complete a game involving numbers, shapes and grouping of similar items.

IDELA is one measurement tool around which a collaborative network of ECE practitioners, researchers and policy makers have driven a conversation about the importance of rigorous and reliable data on the development of young children. IDELA was highlighted in the most recent ECD special-issue of *The Lancet* (Black et al., 2016) as an influential development in the field. Past reports about IDELA have focused on the IDELA partnerships (Save the Children, 2017a), the status of child development and equity across

countries and programs (Save the Children, 2018) and key learnings about children's early learning and development (Save the Children, 2017c). In this report, we present the process by which a measurement tool can catalyze ECE practitioners, researchers and policy makers to become a global network working toward the collective goal of improving the education of young children.



Figure 1. Four phases in which partners use measurement to mobilize change for children



4-year-old Thoon plays outside during recess in Myanmar.



Royale, 3, plays with her friends in her daycare in Texas.

### WHY WAS IDELA DEVELOPED?

In 2011, Save the Children was re-envisioning and expanding the scope of its work in ECE. During this period, early childhood learning experts were concerned about the academicization of ECE settings which was occurring as the global education field shifted focus from access to learning. Save the Children decided to focus on the role of play in promoting foundational skills and setting an age appropriate course for supporting school readiness (Dowd et al, 2016). To accompany this program re-direction and expansion, Save the Children sought an ECE measurement tool to evaluate the impact of programs across a diverse portfolio and help make datadriven decisions. At the time, no single tool existed that was adaptable, easy to use and proven to be rigorous in LMICs so Save the Children began creating its own child development and learning tool. It was designed to measure skills that allow children to successfully transition into primary school classrooms, based on existing curricula and standards found around the world. The tool developers decided that the resulting tool would become a public good. They believed other global organizations supporting ECE could benefit from an open-source tool

that provided objective understanding of how programs influenced children's learning and development.

### **HOW WAS IDELA DEVELOPED?**

#### STEP 1

**Research.** This review, conducted in 2011, identified a number of tools currently in use in different parts of the world, but none that met all of Save the Children's needs.

#### STEP 2

Development & testing. This development process started with the creation of a 65-item measure covering four developmental domains: physical development, language/literacy, math/cognitive development and social-emotional development. The initial items were either newly developed or inspired and adapted from existing assessments such as the Denver Developmental Screening Test, the Ages and Stages Questionnaire, the Bayley Scales of Infant and Toddler Development, the Early Development Instrument and the East Asia-Pacific Early Child Development Scales, among other tools (Bayley, 2006; Bricker & Squires, 1999; Frankenburg & Dodds, 1967; Janus & Offord, 2007; Rao et al., 2015).

#### STEP 3

Iteratively pilot testing. The pilot tool was tested to understand item function and psychometric properties. Save the Children carefully field tested items in order to narrow the tool down to the most reliable and feasible set of items for children between 3-6 years of age. This pilot process extended over a period of three years and multiple sites across 12 countries (Bangladesh, Bhutan, Egypt, Ethiopia, India, Indonesia, Mali, Malawi, Mozambique, Pakistan, Rwanda and Zambia).

To select the final set of 22 items, Save the Children relied on both qualitative and quantitative analytic methods. Qualitatively, the implementation team collected feasibility data to understand the complexity of adapting each item, feasibility of administration, material requirements, children's comfort with items, ability to standardize training and administration and relevance of items across country sites. Quantitatively, the different items were assessed for their ability to capture the range of child development, internal consistency, inter-rater reliability and construct validity (Pisani, Borisova & Dowd, 2018).

#### STEP 4

Psychometric testing. Academic partners at New York University's Global TIES for Children (Transforming Intervention Effectiveness and Scale) were engaged to conduct detailed psychometric testing on the 22-item tool. Construct validity testing used exploratory and confirmatory factor analyses and identified that the tool contained four distinct factors aligned with the hypothesized domains, as well as a single over-arching construct of children development (Wolf et al., 2017). Further construct validity analyses replicated this item structure in four additional data sets, and found that, by and large, the items are not invariant across countries (Halpin et al, 2018).

Today, IDELA is an easy-to-use, rigorous global tool that measures children's early learning and development and provides ECE programs, donors and government partners with clear evidence on the status of children ages 3.5 to 6. IDELA covers four developmental domains: motor development, emergent literacy, early numeracy, and social-emotional skills. Figure 2 provides an overview of the skills measured in each of the IDELA domains.

### SKILLS MEASURED ACROSS THE

# DOMAINS IN IDELA

### Emergent Literacy

Print awareness
Expressive vocabulary
Letter identification
Phonological awareness
Listening comprehension

### Social-Emotional Development

Peer relationships
Emotional awareness
Empathy/Perspective taking
Self-awareness
Conflict resolution

### Motor Development

Hopping

Copying a shape

Drawing a human figure

Folding paper

#### **Emergent Numeracy**

Measurement and comparison
Classification/sorting
Number identification
Shape identification
One-to-one correspondence
Simple operations
Puzzle completion

**Figure 2.** The four domains measured by IDELA and corresponding assessment tasks



Syrian children play football in the yard outside Save the Children's child friendly space (CFS) in one of the camps for displaced people in Syria.

One of the aims of the IDELA development team was to ensure that the tool was openly and freely accessible to researchers, practitioners and policy makers in the ECE sector, especially those working in LMICs. Our hope was that the use of a reliable and valid tool would allow implementers to not only assess the impact of their interventions but also start conversations in the global ECE community about which interventions work for young children, and in which contexts children were being left behind. By allowing uptake of the tool outside Save the Children, and streamlining an MOU signature process through the IDELA website, this goal has been achieved. IDELA thus stands in contrast to a number of tools owned by universities or publishers that required licenses and fees to use.

# GROWING COLLABORATIVE IDELA PARTNERSHIPS

Three distinct periods mark growth in IDELA use. From 2011 to 2014 IDELA was developed and tested, available only to Save the Children offices. In 2014, the tool became available to the public and external partnerships increased. Finally, the launch of the IDELA website in 2017 catalyzed a new phase in the life of the tool, building on the tool's professional reputation and giving it a central, online hub for learning and discussion. Partners continue to learn of IDELA through presentations and published research, but now also find the tool organically through online searches. Between the growth of the website and networking amongst

Partner and project totals reflect data submitted by partners through February 2019. We recognize that there may be gaps in this data. partners, global use of IDELA continues to expand. As of February 2019, IDELA has been used by 67 external partners<sup>1</sup>.

Since the launch of the IDELA website, use of the tool has shifted from being largely Save the Children offices to being predominately external partners. Prior to the launch of the website, 31 Save the Children offices were using the tool along with 22 external groups. As of February 2019, 67 external organizations and 36 Save the Children offices are using IDELA. This means that external partners now make up over 60% of IDELA users.

#### **ECE Learning Hub**

Data visualizations, reports and additional content from global IDELA users.

### Community of Practice

Online forum, access to webinars, and opportunities to connect with other ECE practitioners.

# IDELA ONLINE www.idela-network.org

#### **IDELA Toolkit**

A comprehensive suite of resources including the assessment, translations, data analysis tools, training materials and videos.

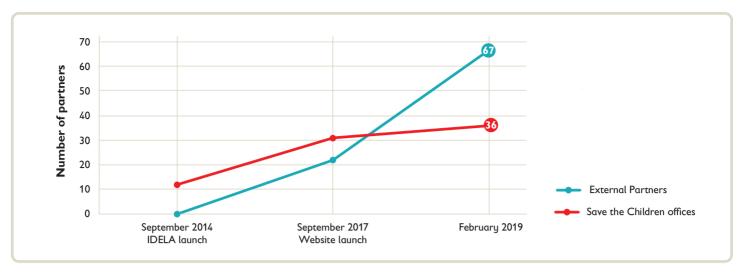


Figure 3. Growth of IDELA partners since launch in 2014

## MULTI PARTNER COLLABORATION OFFERS NEW INSIGHT INTO PROGRAMMING IN THE PHILIPPINES

Cross-partner collaboration between International Care Ministries (ICM), Innovations for Poverty Action (IPA) and the Global TIES for Children at New York University recently brought IDELA to ICM's work in the Philippines. ICM is a nonprofit organization with over 25 years of experience working on poverty reduction in the Philippines.

ICM has had a longstanding partnership with IPA working together to conduct rigorous impact assessments of ICM's programs. Knowing ICM wanted to further develop its work with young children, IPA reached out to the Global TIES for Children for their expertise in child development and early education. Global TIES had been working with Save the Children to assess the IDELA's psychometric properties and compare the tool's function across different country contexts. IDELA's use in multiple countries around the world, its ability to capture holistic development, and the fact that it had already been adapted to and used within the Philippines all made IDELA the right fit for ICM. ICM made an additional connection to the Save the Children Philippines office to use the Tagalog language version of IDELA and then ICM developed IDELA's first Waray language version.

Throughout 2017 and 2018, ICM has been working to continually improve and advance its implementation of Family Academy, investigating why some families choose to participate and others do not, the role of coaches, and how Family Academy might change the parentchild relationship. Across different waves of program implementation, as ICM identified its key objectives for the program and refined its research questions, ICM used IDELA as its instrument for measuring children's development. Pre- and post- measures completed during this development phase show that IDELA was able to capture children's advancement. Across multiple domains, from personal awareness to letter and number recognition, the children in Family Academy are improving. However, to be able to identify the developmental impact of Family Academy programming specifically, and not measure just the natural development of children, ICM implemented one wave of Family Academy as a randomized controlled trial. At the end of 2018, ICM completed the endline for this evaluation, and is currently conducting data analysis to determine results.

Globally, ECE stakeholders have long called for collective efforts to ensure equitable access to quality early learning opportunities. IDELA facilitates dynamic conversations around what works for young children by offering insights on the failures and successes of ECE interventions. Through IDELA, diverse partners have the ability to assemble information, supported by a shared metric and language. Stakeholders can look beyond individual programs to examine the wider evidence on early learning investment with common measures and indicators. Bolstered by robust evidence, partnerships have the capacity and common narrative to make data-informed decisions for young children's learning. Within such partnerships, key stakeholders contribute to and benefit from the growing body of evidence. As a holistic and rigorous tool, IDELA's positioning within partnerships strengthens concerted efforts to explore solutions for quality early learning opportunities.

### GROWING USE OF IDELA ACROSS COUNTRIES AND REGIONS

Since launching IDELA in 2014, Save the Children has seen the use of the tool's implementation expand to dozens of new countries. From pilot testing the tool in sites across 12 countries, IDELA is now in use in 65 countries.

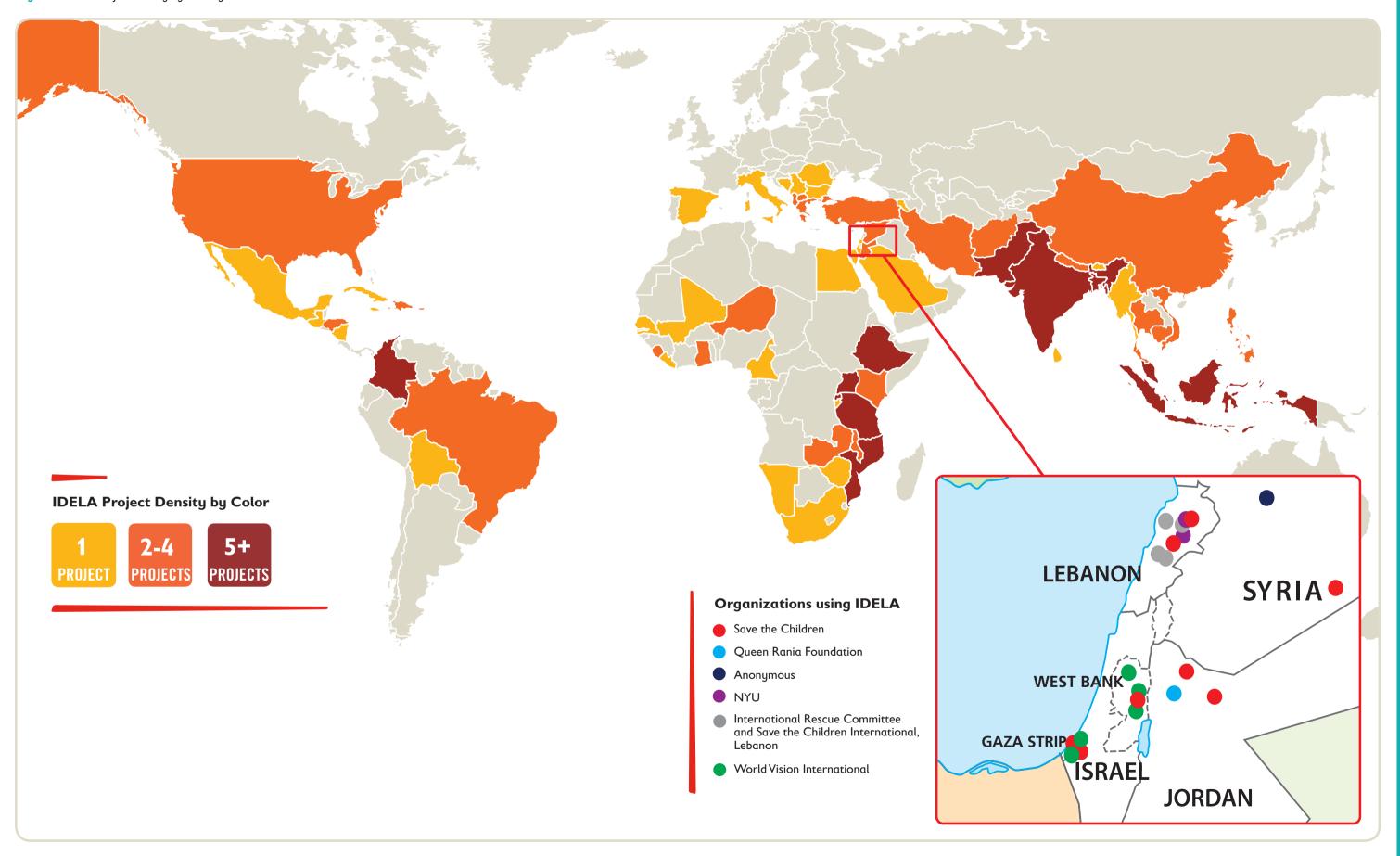
Driven by the expanding partner network, IDELA use has grown substantially since the public launch in 2014. IDELA has now been used by multiple organizations in all world regions. The region with greatest growth in IDELA use is the Middle East and Eastern Europe. Tool use in the area includes refugee and internally displaced people, developing contexts and marginalized communities within high income countries; this highlights the versatility of IDELA. Eastern and Southern Africa and South Asia have also experienced substantial growth in IDELA use in recent years.

IDELA is being used relatively less frequently in high income countries (HICs), although recently a number of European countries began initial IDELA research. This represents a non-traditional flow of knowledge generation. Typically, tools are developed and heavily used in HICs before they are used in LMICs, but IDELA use has followed the opposite path with heavy use in LMICs and later adoption in HICs.



In rural areas of Uganda, Save the Children supports the needs of young learners by training teachers and empowering parents and communities to engage in early learning and school involvement.

Figure 4. IDELA Project Density by Country



14

Figure 5. IDELA regional growth by number of projects



It is especially important to have current and reliable data on children's development in situations of forced displacement where the environment and population shift frequently. These studies demonstrate strong efforts to better understand what works for children and families affected by conflict and forced displacement, both within diverse refugee populations and host communities. Recent studies using IDELA have examined optimal schedules for ECE programming refugee camps, development outcomes for young children living in host communities in Lebanon, and a baseline for literacy rates among children living in Syrian regions formerly controlled by ISIS. The challenges of undertaking this work are immense, but the evidence generated about what works and what does not offers huge potential for supporting the needs of some of the world's most vulnerable children in areas of ongoing conflict IDELA. plays a central role in these studies, allowing practitioners a reliable, adaptable tool for these varied contexts and programs.

### GROWING COLLABORATIVE PARTNERSHIP

As the use of IDELA has grown, the global IDELA partnerships have come to be characterized by two main themes: multi-partner collaborations and institutional expansion across multiple program sites. Since IDELA was launched in 2014, there has been an increase in the number of ECE-focused practitioners, researchers, and policy makers who have partnered to understand the effect of ECE programming on children. This has often taken the shape of an implementing organization and a research institution collaborating on an evaluation. It has also resulted in more dynamic partnerships between donors, implementing organizations and research institutions around learning for continuous program improvement. This was the case for New York University's Steinhardt School of Culture, Education, and Human Development, and its work with Innovations for Poverty Action (IPA) and International

Care Ministries in the Philippines, profiled in depth on page 7. A similar partnership exists between NYU, IPA and three ministries promoting quality ECE in Ghana:The Ghana Education Service, Ghana's Ministry of Education, and the National Nursery Teacher Training Center.

The second type of partnership is intra-organization. This has generally manifested as large international non-governmental organizations – like Save the Children, World Vision, Roma Education Fund, Global Fund for Children, or Food for the Hungry – conducting IDELA trainings in a specific region or country. Those staff are then sent to other countries and regions to lead the research or train their colleagues in other parts of the organization. An example of this kind of intra-

organization pollination is provided in the case study below, featuring Food for the Hungry (FH). FH now uses IDELA in 12 of the 20 countries in which it operates.

While a colorful map shows great growth in use of IDELA globally, it is the data and learning coming from these uses of IDELA where real progress is to be found. The uptake of IDELA by more than 60 external partners represents active engagement across the globe to better understand what works in ECD centers, homes and other learning environments. Organizations working collaboratively to introduce and implement IDELA further this mission. We anticipate continued growth in both the breadth and the depth of IDELA partnerships.

### INSTITUTIONAL EXPANSION: FOOD FOR THE HUNGRY

Food for the Hungry (FH) operates relief and development programs in 20 countries and prioritizes child-centered measurement of its work and impact. FH began IDELA uptake with a training in Bangladesh, which included FH offices from across Asia. IDELA was then rolled out for FH programs in Rwanda and Guatemala. This collaborative effort has enabled FH to extend its work; M&E staff from Bangladesh flew to Rwanda to support data collection and FH staff from the Latin America and the Caribbean reinforced the training and survey administration in Nicaragua and Peru.

FH used IDELA data to develop domain-specific guidance to address areas on lower skill development. In Guatemala, FH staff were surprised by low IDELA scores. Although FH Guatemala already focused on child stimulation programming for children 0-2 years, the results from IDELA motivated leadership to include ECE for children aged 3-6 years in the country strategy. The office also hired new ECE specialists to support the strategy change.

Using IDELA as a standard measurement tool across different countries allows FH to share a common language around child development. The common

language extends from ECE staff to M&E colleagues, those in leadership and others who had no previous knowledge of ECE within a development context.

"Now, when we talk about ECE using IDELA, we also have a common baseline knowledge," says Jana Torrico, Acting Director for Education Programs. "Because we trained our staff with the same IDELA materials, including basic ECE theory, it allows for understanding across staff, especially across cultures and language barriers. For example, when we refer to early literacy with staff, they automatically think of skills like print awareness, expressive vocabulary, first sounds and letter recognition." This common language also allows for greater ease of sharing and applying common intervention ideas across countries and regions.

The strength of a common metric also extends outside of FH. A collaboration with Save the Children in Uganda helped to accelerate the process of IDELA translation to local languages. FH required five different translations, and found the SC had already completed two. FH has now focused its attention to full translation of the remaining three languages needed.



Students at an ECCD center in Nampula Province, Mozambique practice counting with sticks.

As IDELA partnerships increase, the types of studies conducted and research questions posed also diversify and grow. Some partners have used IDELA to examine equity issues between different groups of children or understand the profile of children's learning and development in a specific context. Other partners have looked to monitor program improvement from one year to the next using IDELA. However, 74% of the 120+ use cases for IDELA partners have focused on some kind of program evaluation or impact study. IDELA was initially designed with this purpose in mind; for ECE practitioners and researchers in the global south to understand the impact of different types of ECE intervention approaches and modalities.

In order to understand how IDELA has been used in evaluations, we conducted a review of study reports that were published in either journal articles or the grey literature on the IDELA website (idela-network.org). We focused on impact evaluations using IDELA as the primary assessment tool. There are likely several other evaluations that have used IDELA but the study reports were not made public at the time of writing this report. We identified 20 studies that met our criteria (see box).

Seven of these studies randomized inclusion in an ECE intervention while 13 studies implemented a quasi-experimental approach by including a comparison group. The studies were conducted in sites across 11 different countries and included 10 different organizations and institutions. We provide a brief overview of these studies in Table 2.

#### Criteria for inclusion in Review

- Published online between September 2014 and September 2018.
- Used IDELA as the primary instrument to assess children's learning and development
- Used a quasi-experiment (comparison group) or randomized control design
- Measured learning and development of same children at two time points (minimum) or assessed differences between intervention modalities at one time point
- Presented study design and sampling strategy in the report

# The review focused on three main questions: 1. What are the settings where the impact of ECE programming has been evaluated using IDELA? 2. What are the intervention approaches that have been used in ECE program evaluations where IDELA has been used? 3. What changes in children's learning and development have been observed across the varied ECE interventions? ECCD teacher Simon, 21, teaches a class on the outskirts 19 of Lodwar in Turkana Central sub-county, Kenya.

Table 1. Overview of studies included in the review		Intervention site			Intervention approach						Туре		Study method		Sample	
Country	Authors	Classroom- based	Home- based	Both	Arts-based learning	Cash Transfer (CT)/ financing	Learning through technology	Parenting education	School readiness camps	Teacher training	White paper	Peer- reviewed article	quasi- experimental	Randomized control trial	Age (Range at post-test)	Number of children assessed
Bangladesh	Borisova,Ara, Deb Nath & Pisani			1				1			1		✓		5-7	600
Bangladesh	Guajardo & Deb Nath	1						1		1	1		✓		4-6	463
Bhutan	Pisani, Dyenka, Sharma, Chhetri, Dang, Gayleg & Wangdi			1					1			1		<b>√</b>	3-6	1001
Bhutan	Save the Children & Ministry of Health, Bhutan		1					1			1		1		3-5	244
Bulgaria	Huillery, de Laat & Gertler	1				✓					1		✓		3-6	5158
Ethiopia	Dowd, Borisova, Amente & Yenew	1								1		1	✓		4-6	360
Ethiopia	Borisova, Pisani, Dowd & Lin			1				1		1		1		<b>√</b>	4-6	357
Ethiopia	Gebreanenia & Sobieski	1						1		1	1		✓		4-6	249
Ethiopia	Amente,Takele & Pisani			1				1			1		✓		5-6	688
Ethiopia	Melese & Seiden	1						1		1	1		✓		5-7	780
Ghana	Wolf,Aber & Behrman	1								1		1		<b>√</b>	4-6	3345
Ghana	Wolf	1								1		1		<b>√</b>	4-6	1604
India	Bora, Bajantri, Raj, Roy & Seiden	1						1		1	1			<b>√</b>	4-6	305
Malawi	Phiri, Nkhonjera, Mabeti, Kamiza & Seiden	1			1			1		1	1		✓		4-5	553
Malawi	Save the Children	1					✓			1	1		✓		4-6	1204
Mozambique	Bonilla, Spier, Carson, Ring, & Sirma	1						1	<b>√</b>	1	1			✓	5-6	1069
Nepal	Lohani & Basnet	1			1			1		1	1		✓		4-6	326
Rwanda	Pisani, Borisova, Dusabe & Nzabonimpa			1				1		1	1		✓		4-6	439
Rwanda	Pisani, Borisova, Dusabe & Nzabonimpa			1				1		1	✓		1		4-6	617
Tanzania	Borzekowski		1				✓					1	<b>√</b>		3-6	568

### **VARIED SETTINGS FOR ECE DELIVERY**

A review of the published studies carried out using the IDELA tool finds many different settings for ECE programs around the world. Across the 20 studies, 12 were focused on programs delivered in government or community supported ECE classrooms, six had both classroom and non-classroom components, and two were solely focused on non-classroom based interventions. Further variety existed within these broad program settings; the different intervention approaches fit into six broad categories: arts-based learning, cash transfers/financing, learning through technology & media, parenting education, school-readiness camps, and teacher training (Figure 6).

The two studies focused on non-center based interventions differed substantially. One study from Tanzania measured the impact of a new educational television program on children's learning and development, whereas another study from Bhutan evaluated a parenting program delivered by community health workers designed to reach rural communities. The six studies with non-center based interventions that accompanied school-based programming were all some form of parenting education. Generally, parents were being trained on developmentally appropriate games and activities designed to foster early learning skills at home.

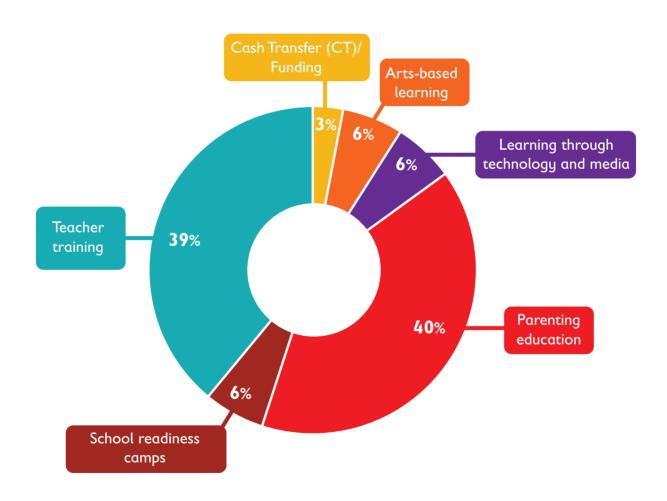


Figure 6. Percent of intervention approaches (n=33) across the 20 studies

### IDELA, UBONGO AND AKILI AND ME

Ubongo is a Pan-African social enterprise that creates localized edutainment to empower kids to reach their full potential. Ubongo used IDELA to develop and test 52 episodes of a new television series, Akili and Me, designed to offer young children access to early childhood education concepts even if there were not enrolled in formal ECE programs. The creation of Akili and Me was a response to Ubongo's desire to create beneficial and adaptable content for little learners across the continent. The Ubongo team used a human centered design process to prototype content, characters and concepts, test them with young children for engagement and comprehension, and then iterate upon the content to improve its efficacy. Central to the show's creation was its testing to ensure that it was effective at achieving early learning outcomes.

Its efficacy has been evaluated through quasiexperimental and randomized control trials in Tanzania and Rwanda, using IDELA. In Morogoro, Tanzania, 568 children (mean age – 4.8 years) participated in IDELA assessments before and after four weeks of viewing the show. A control group viewed alternative cartoons, but did not have access to Akili and Me. Controlling for the child's sex, age, and baseline skills in the assessed follow up outcome, exposure to Akili and Me significantly improved drawing skills, shape knowledge, number recognition, counting, and English skills. A similar study was conducted in Rwanda, with content adapted to Kinyarwanda, and results are currently pending publication.

So far, 52 episodes of have been produced, and Akili and Me broadcasts on free television in eight African countries with a monthly audience of 8.2 million viewers. Akili and Me is currently available in three languages (with seven others currently in development). In addition to the TV series, Akili and Me is also available on radio, interactive voice response (for basic mobile phones), apps and YouTube. Ubongo is currently developing the third season of Akili and Me which expands topics covered to include health and nutrition, in addition to early cognitive and social emotional development.

The other 12 studies, focused primarily on institutional settings, also represent a wide range of interventions. Most of the classroom-based interventions incorporated some aspect of teacher training, but the content of that training varied. Multiple programs provided supplementary training to ECE facilitators focused on improving developmentally appropriate teaching techniques and use of materials for early childhood classrooms. This type of training is often associated with community-based ECE programs

which tend to employ facilitators who are not formally trained in early education in order to extend ECE services in communities where government-run centers are not available. However, there were also a smaller number of studies related to improving national pre-service teacher training practices. Other groups also tested the added value of training facilitators to deliver arts-based activities within ECE classrooms.

Two studies of classroom-based ECE programs that did not incorporate teacher training, instead focused on an accelerated school readiness program and financing for ECE. A study conducted in Mozambique focused on the rollout of an ECE summer camp program for children prior to entry into primary school. Another evaluation documented the impact of a national initiative in Bulgaria to alleviate the financial burden of ECE attendance for children living in poor households.

The different solutions being tested with IDELA reflect the ECE landscape in different areas of the world. For example, in an upper-middle income country like Bulgaria where government supported ECE classrooms are present throughout the country, there was a pressing question related to equity and removing barriers to enrolment for the most underserved Roma communities. In a lowermiddle income country like India where access to formal ECE classes is increasing rapidly, questions of teacher training and curriculum quality were at the forefront. In low-income countries like Ethiopia and Mozambique, testing alternative approaches to formal ECE like accelerated school readiness programs or parent-focused interventions were relevant because ECE coverage is still very low nationally, and will continue to be sparse for many years to come.

# PROGRAM EFFECTIVENESS, WITH ROOM FOR GROWTH

Fifteen of the 20 studies found a statistically significant relationship between being part of the intervention group and better learning and development outcomes for children. In other words, in 75% of the studies, the researchers found that children who had access to the ECE intervention made gains in their learning and development in at least one of the domains that were better than children in the comparison or control groups. Researchers found significant improvements for children in treatment groups in emergent literacy and emergent numeracy in over 90% of the studies. Researchers found improvements in 67% and 73% of studies for the social-emotional learning and motor development domains, respectively.

One challenge in conducting this review was publication bias. It is likely that there are additional reports that show no differences between children in the treatment ECE and comparison groups. However, these studies may not have been published in academic journals or made available through the IDELA website. These studies are an important part of the sector's learning about what works, what may not work, and why.

Despite the improvements across the development domains described above, the findings from  $14^2$  of the studies highlight the room for growth in all four developmental domains for children in the ECE programs evaluated. We pooled the final scores for children in the best-performing treatment group in each of the four domains and calculated the minimum, mean and maximum scores across the studies (see Figure 7). The average age for children at post-test across the 14 studies was 5.1 years.



4-year-olds June, left, and her friend Thoon play outside in Hpa An, Myanmar. Save the Children's center-based early learning and development program focuses on the physical, cognitive, socio-emotional and language skills of children ages 3-5 years.

 $<sup>^{\</sup>rm 2}$  In six studies, we could not identify the final scores across the four domains.

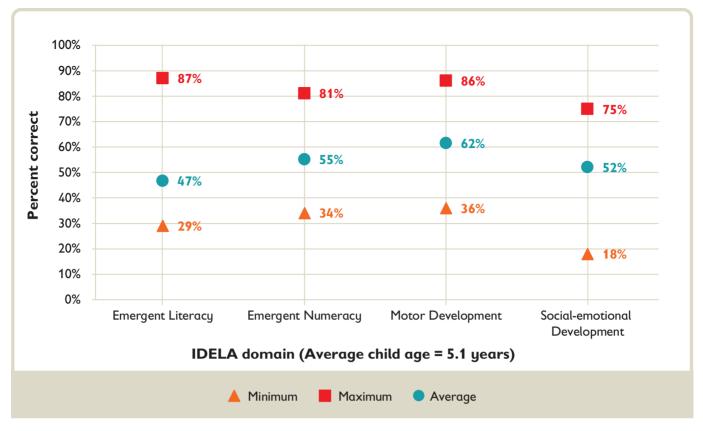


Figure 7. Lowest, highest, and mean post-test domain scores for children in intervention treatment group across 14 studies

IDELA was adapted and contextualized in each context, so our aim was not to compare the final scores across the different studies. Rather, we wanted to provide an illustration for a take-away that was highlighted in the conclusion of multiple studies: even though the ECE programs may have helped children learn as compared to their peers in the control/comparison group, there remains room for growth in their early learning and development skills. As we illustrate in Figure 7, there is a large range in the final scores for children across the 14 studies in each of the four domains, but the mean score for a five year old across these studies suggests that even children in high-quality ECE interventions are still answering about half of the IDELA questions incorrectly. Children still require additional support and instruction to master the skills represented within the tool and needed for successful school transition.

One of the reasons for the low average skill scores could be that the majority of programs across the 14 studies are focused on some of the most vulnerable children in each context. Ten of the 14 studies identified that children had limited or no access to ECE programming prior to the intervention and came from low-resource or marginalized communities. Another factor could be that the average length of the study included in this review was approximately one academic year (6 - 9 months). It is likely that a longer program period would produce more skill mastery. Even considering these limitations, the results of this analysis present interesting results for the field. Much of the ECE policy conversation is centered on providing one year of pre-primary education, and a major concern for the field to consider is whether one year is sufficient to adequately prepare children for primary school, especially if they are coming from marginalized backgrounds.

## MULTI-PARTNER COLLABORATION: ICHULI CONSULTING AND THE AGA KHAN FOUNDATION

Up to 70% of Uganda's 3.6 million children between 3 and 5 years enter primary school unprepared to learn. Research has found that poor teaching skills and a widespread lack of accountability ECE are putting child development at risk (Cambridge Education 2018). In Uganda, policy-makers are paying attention to this research and letting it guide their policy objectives. However, ECE is still not mandated in Uganda and there is no universal pre-primary education.

The Aga Khan Foundation (AKF), in partnership with a private donor, is working to improve the coordination, monitoring and implementation of early childhood services in the Kampala, Wakiso, and Mukono Districts of Uganda. Central to this goal is evidence that the program has a positive impact on children's learning outcomes, caregivers' classroom practices, and the learning environment. The partnership commissioned the Uganda-based research firm, Ichuli Consulting, to complete an evaluation of the program's impact on school readiness, with the goal of understanding the program's effectiveness, to provide government with evidence of impact, and to set the stage for largerscale adoption. The evaluation focuses specifically on outcomes associated with improving children's school readiness in ECE centers. The evaluation covers 40 ECE centers in addition to 40 comparison schools and reaches almost 1,500 children across the three districts.

At the start of the study, the partners undertook an analysis of existing school readiness evaluations used globally, in Africa, and in Uganda to measure children's school readiness, including IDELA, EDI and MELQO. IDELA was selected for use in the evaluation as it represents key components of school readiness that have been agreed upon by experts in Uganda – and globally – as representative of the skills children need to succeed in primary school. The nature of the child assessment approach in IDELA was well suited to the Ugandan context and to the skills of the enumerators completing the assessments. Additionally, the IDELA tool had been used in Uganda before, offering a chance for comparison of outcomes amongst the study group with other previous evaluations. Using IDELA provides the partnership with a broad basis for assessment of key school readiness indicators for six year olds graduating from an ECE program aligned to the international literature and a rigorous global standard.

AKF hopes to use the findings (expected in 2020) from this study to inform scalable approaches to effective ECE programming in Uganda implemented in partnership with local governments and communities. Such a rigorous study will provide a base of evidence about what works, what does not, and why, regarding teacher training, support, development of ECE learning environments and curricula.



24-year-old Claudia volunteers by reading storybooks to her daughter and other students at a kindergarden reading club in El Salvador.

IDELA fills a need in the global landscape as a measurement tool with the ability to support programs aimed at achieving SDG 4.2. The global use of IDELA has generated new information on wide-ranging interventions. Practitioners and policy makers have

been empowered to replicate and scale early learning models as well as to explore shifts in intervention and investment as an immediate result of evidence generated through IDELA.

# CHANGING ORGANIZATIONAL MIND-SET AROUND COLLECTION AND USE OF ECE DATA

The gap between fledgling social enterprises and their ability to maximize impact is getting smaller thanks to the work of Realizing Innovation through Social Entrepreneurship (RISE) Egypt, an organization that supports entrepreneurial startups that address issues of national importance in Egypt.

Educate Me, which operates a community preschool and primary school in Cairo, is one of the first fellowship recipients to work with RISE Egypt. RISE supported Educate Me to consolidate its school model, learn from global peers in the world of education, and integrate an evidence-based approach

to allow scale up. In order to measure the literacy, numeracy, executive function and social emotional learning of the students as compared to a control group of their peers, RISE Egypt looked for open source, reliable, validated, concise tool to measure early childhood development. In 2016 they found IDELA and decided to use it for their study.

In Year 1 data collection, the Educate Me team did not see a big difference in literacy and numeracy IDELA scores between children in the Educate Me program, which was implementing the national Egyptian curriculum, and the government school control group. Because of these findings, Educate
Me made changes to its curriculum, while still
meeting national standards. It also added support
for classroom management and teacher training. It
was the first time the organization had focused on an
evidence-based approach.

This focus and investment on evidence-based approaches is not the norm for Egyptian entrepreneurship. RISE Egypt encouraged this approach, but it took time to become the norm within Educate Me's staff and planning process.

At first, staff wanted to make changes to the curriculum before data was analysed. They sought rapid change and rapid growth in a traditional entrepreneurial mindset. RISE Egypt introduced a more research-based perspective, focused on data, even when the results were not positive.

The strength and nuance of the data began to make an impression on Educate Me. When year 2 results were released in late 2018, the Educate Me team eagerly anticipated the findings. Year 2 results

demonstrated that in every domain EM students made significant learning gains compared to the control group. EM staff discussed what aspects of their intervention had worked, what could be changed and how they would present it to their board, all based on the data.

RISE Egypt founder, Dr. Mona Mwafi, explained, "That mindset change is a success. We see a startup understanding what it means to take an evidence based approach in a challenging developing context. It makes for a robust conversation and it means they're in a different place then they were two to three years ago."

The use of IDELA data for evidence driven decision is putting Educate Me in a better position for future success. They are able to communicate their impact and plans in new and better ways to partners and donors. Recently, they opened lines of communication with the Egyptian Ministry of Education, a relationship that led to an invitation for Educate Me to bring its teacher training model to some Egyptian public schools.

Generating valid information is an important contribution, but an equally important step is turning that data into information that can inform decision-making. Transforming data into actionable information is a process that can take many shapes, and it is especially exciting to see amidst an expanding IDELA partner network.

Individual organizations like RISE Egypt and Educate Me are actively using IDELA data to shift their decision-making process toward a data-driven approach. Similarly, we are seeing organizations like Food for the Hungry, which operates in multiple countries, implement IDELA as a common metric with which to monitoring progress across their portfolio. As a direct child assessment, IDELA also empowers partners to keep children at the center of their strategy. IDELA also enables non-profit or low-resource organizations to move toward child-focused data-driven decision making in a way that was not possible before due to the expense of implementing other proprietary child development assessments.

Other organizations are sharing IDELA data among project partners in order to make changes to local programming strategy and advocacy. We see an example of this in Mozambique with the partnership between AIR, Save the Children, UNICEF and the Mozambican Ministry of Education. Early evaluation results are already in use by the Ministry of Education to assess program scalability. Multiple partners coming together to advocate with the same information strengthens the message and the pressure on government partners to take action.

The next key step is to foster deeper collaboration between organizations using IDELA to drive change for children. As research with IDELA continues and the partnership network matures, a key opportunity exists for lessons learned to become more collaborative. Already, the creation of new IDELA materials and information about effective interventions is being driven by partners.

IDELA's growing Community of Practice (CoP) fosters collaboration and amplifies the drive from partners. The CoP includes a forum on the IDELA website where partners and the public can ask questions about IDELA, discuss findings and meet international peers.

A supplementary webinar series complements to forum, allowing the IDELA community to meet in real time and engage topics like data analysis and IDELA adaptation and translation in greater depth. IDELA leadership has chosen to make the CoP open to the public to further the open-source nature of IDELA.

Together, they are expanding the evidence available from LMICs about diverse ECE interventions ranging from cash transfers to educational television shows.

Save the Children is committed to continuing to support this collaboration between partners and we believe the next step is for groups working in similar geographic areas or on similar issues to come together to share their study results and create new knowledge hubs for the field. This type of enhanced collaboration can be leveraged for stronger advocacy at local, national and international levels to drive meaningful improvements in ECE provision for children all over the world.

### UNDERSTANDING CHILDREN'S READINESS FOR SCHOOL IN MOZAMBIQUE

Despite a twofold increase in primary school enrolment in Mozambique over the past 15 years, educational outcomes remain largely disappointing (Martinez, Naudeau, & Pereira, 2012). Statistics from the Ministry of Education and Human Development (MINEDH) show that a mere 4% of children aged 0 to 5 participated in formal pre-primary education programming ((Ministry of Education, 2012). Children who enter primary school after a successful pre-primary education program demonstrate higher test-score performance, class participation and effort, and high school completion rates. However, limited implementation and evaluation of accelerated school readiness (ASR) programs to date necessitates further testing to validate their effectiveness.

In Zambezia, Mozambique, Save the Children and UNICEF, in partnership with the Mozambican Ministry of Education, are implementing an ASR program. The program aims to improve readiness in three spheres: children's readiness for school, school's readiness for children, and families' readiness for school. American Institutes for Research (AIR) is conducting the evaluation (Bonilla et al., 2018) to test the effects of the ASR pilot program on children's school readiness and successful transition to primary school.

AIR used a cluster randomized controlled trial in 60 communities from two districts in Zambezia in their study. In all 60 communities, children's school readiness

was assessed at baseline (November 2017), just prior to entering Grade 1 (March 2018), and at the end of the academic year (November 2018). An impact analysis allowed AIR to assess if the ASR pilot program had improved school readiness, relative to the control group. The evaluation used IDELA to measure school readiness not only because the tool was closely aligned to the intervention developed, but also because IDELA had already been tested in Mozambique in areas similar to the evaluation sites.

The midline results indicate that children attending the ASR summer school demonstrated new knowledge and skills. AIR found that the ASR summer school had a significant impact on children's learning and development. AIR also found that the program had a significant positive effect on the likelihood the children in ASR program schools would enroll in first grade.

The results to date are short-term impacts and it remains to be seen if they will be maintained. It is important to note that despite important short-term gains for participants, program beneficiaries still show low levels of mastery in most school readiness constructs, indicating that more work is needed to have children fully prepared for primary school. Nonetheless, the short-term results are being used by the Ministry of Education to assess program scalability, representing a new opportunity to contribute to children's school readiness and successful transition to primary school.

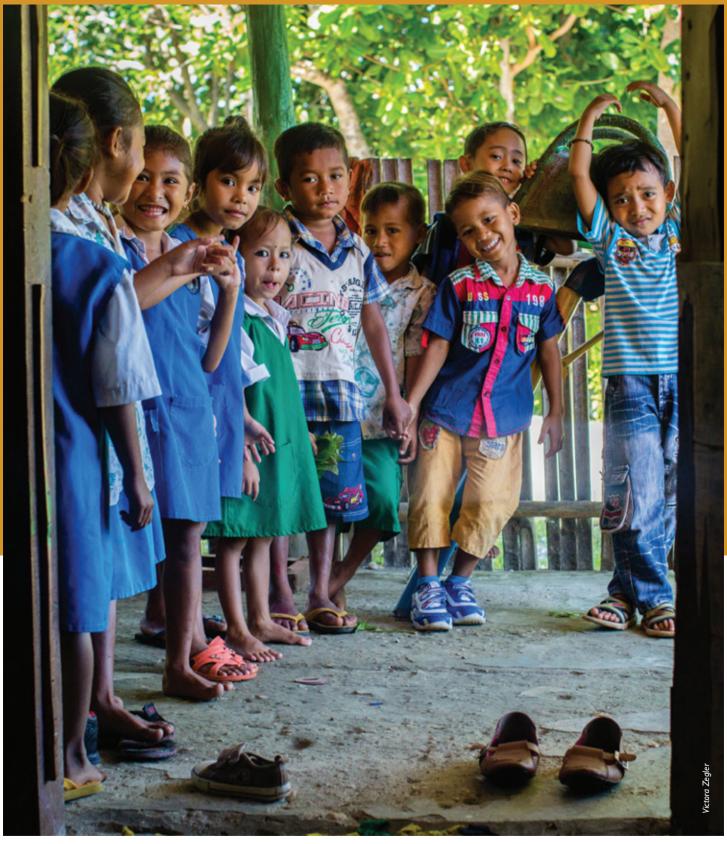
### REFERENCES

- Aboud, F. E., & Hossain, K. (2011). The impact of preprimary school on primary school achievement in Bangladesh. Early Childhood Research Quarterly, 26(2), 237–246. https://doi.org/10.1016/j. ecresq.2010.07.001
- Amente, A., Takele, M., & Pisani, L. (2015). Ethiopia ELMI parenting endline. Addis Ababa, Ethiopia.
- Bayley, N. (2006). Bayley scales of infant and toddler development: Bayley III. Harcourt Assessment, Psych, Corporation.
- Black, M. M., Walker, S. P., Fernald, L. C. H., Andersen, C. T., Digirolamo, A. M., Lu, C., ... Grantham-Mcgregor, S. (2016). Early childhood development coming of age: Science through the life course. *The Lancet*, 389, 77–90. https://doi.org/10.1016/S0140-6736(16)31389-7
- Bonilla, J., Spier, E., Carson, K., Ring, H., & Sirma, P. (2018). Evaluation of the UNICEF Mozambique accelerated school readiness pilot program: Midline report. Washington, DC.
- Bora, P., Bajantri, H., Raj, A., Roy, P., & Seiden, J. (2018). Partnering for early childhood education in India: Impact evaluation endline report. New Delhi, India.
- Borisova, I., Ara, H., Nath, B. K. D., & Pisani, L. (2015). Sponsorship ELM parenting endline. Washington, DC.
- Borisova, I., Pisani, L., Dowd, A. J., & Lin, H.-C. (2017). Effective interventions to strengthen early language and literacy skills in low-income countries: comparison of a family-focused approach and a pre-primary program in Ethiopia. Early Child Development and Care, 187(3–4), 655–671. https://doi.org/10.1080/03004430.2016.1255607
- Borzekowski, D. L. G. (2018). A quasi-experiment examining the impact of educational cartoons on Tanzanian children. Journal of Applied Developmental Psychology, 54 (March 2017), 53–59. https://doi.org/10.1016/j.appdev.2017.11.007
- Bricker, D., & Squires, J. (1999). Ages and stages questionnaire: A parent-completed, child-monitoring system.

  Retrieved from Baltimore, MD: Paul H. Brookes. http://www2.tulane.edu/som/departments/psychiatry/fimh/upload/14-month-asq.pdf
- Britto, P. R., Lye, S. J., Proulx, K., Yousafzai, A. K., Matthews, S. G., Vaivada, T., ... Early Childhood Development Interventions Review Group, for the L. E. C. D. S. S. C. (2017). Nurturing care: Promoting early childhood development. *Lancet (London, England)*, 389(10064), 91–102. https://doi.org/10.1016/S0140-6736(16)31390-3
- Cambridge Education. "ECCE in Uganda: Good potential, yet more to do." *National ECCE Symposium Presentation* (2018).
- Campbell, F., Conti, G., Heckman, J. J., Moon, S. H., Pinto, R., Pungello, E., & Pan, Y. (2014). Early childhood investments substantially boost adult health. *Science*, 343, 1478–1485. Retrieved from www.sciencemag.org
- Center on the Developing Child. (2009). Five numbers to remember about early childhood development. Cambridge, MA. Retrieved from www.developingchild.harvard.edu
- Dowd, A. J., Borisova, I., Amente, A., & Yenew, A. (2016). Realizing Capabilities in Ethiopia: Maximizing Early Childhood Investment for Impact and Equity. Journal of Human Development and Capabilities, 17(4), 477–493. https://doi.org/10.1080/19452829.2016.1225702
- Frankenburg, W. K., & Dodds, J. B. (1967). The Denver developmental screening test. The Journal of Pediatrics, 71(2), 181–191. Retrieved from http://www.ncbi.nlm. nih.gov/pubmed/6029467
- Gebreanenia, Z., & Sobieski, C. (2015). Ethiopia ELM endline. Washington, DC.
- Gove, A., Dombrowski, S., King, S., Pressley, J., & Weatherholt, T. (2018). Persistence and Fadeout of Preschool Participation Effects on Early Reading Skills in Low- and Middle-Income Countries. *Global Education Review*, 5(2). Retrieved from http://ger.mercy.edu/index.php/ger
- Guajardo, J., & Nath, B. K. D. (2016). Bangladesh Shishuder Jonno two-year preschool program: IDELA endline report.

  Washington, DC. Retrieved from https://idela-network.org/wp-content/uploads/2017/06/SJ-two-year-preschool-program-IDELA-Endline-report-final-v2.pdf
- Halpin, P., Wolf, S., Yoshikawa, H., Rojas, N., Kabay, S., Dowd, A. J., & Pisani, L. (2018). Measuring Early Learning and Development Across Cultures: Invariance of the IDELA Across Five Countries. *Developmental Psychology*.

- Heckman, J. J. (2010). The case for investing in disadvantaged young children. In *Big ideas for children:*Investing in our nation's future (pp. 49–58). Retrieved from https://heckmanequation.org/www/assets/2017/01/
  Heckman20Investing20in20Young20Children.pdf
- Janus, M., & Offord, D. R. (2007). development and psychometric properties of the early development instrument (EDI): A measure of children's school readiness. Canadian Journal of Behavioural Science Copyright, 39(391), 1–22. https://doi.org/10.1037/cjbs2007001
- Lohani, J. R., & Basnet, D. (2018). ECE program endline study: Katmandu, Nepal.
- Martinez, S., Naudeau, S., & Pereira, V. (2012). The promise of preschool in Africa: A randomized impact evaluation of early childhood development in rural Mozambique. Washington, DC, and London, UK: The World Bank Group and Save the Children.
- McCoy, D. C., Peet, E. D., Ezzati, M., Danaei, G., Black, M. M., Sudfeld, C. R., ... Fink, G. (2016). Early childhood developmental status in low- and middle-income countries: National, regional, and global prevalence estimates using predictive modeling. PLOS Medicine, 13(6), e1002034. https://doi.org/10.1371/journal.pmed.1002034
- Melese, D., & Seiden, J. (2017). ELM Ethiopia Afar & South Omo endline 2017. Washington, DC. Retrieved from https://www.savethechildren.org/content/dam/usa/reports/ed-cp/ethiopia-ready-to-learn-report.pdf
- Ministry of Education, Mozambique. Education Strategic Plan 2012-2016. (2012).
- Phiri, P., Nkhonjera, J., Mabeti, F., Kamiza, K., & Seiden, J. (2016). Malawi ELM & HEART endline analysis. Lilongwe, Malawi.
- Pisani, L., Dyenka, K., Sharma, P., Chhetri, N., Dang, S., Gayleg, K., & Wangdi, C. (2017). Bhutan's national ECE impact evaluation: Local, national, and global perspectives. *Early Child Development and Care*, 187(10), 1511–1527. https://doi.org/10.1080/03004430.2017.1302944
- Rao, N. (2010). Preschool Quality and the Development of Children From Economically Disadvantaged Families in India. Early Education & Development, 21(2), 167–185. https://doi.org/10.1080/10409281003635770
- Rao, N., Sun, J., Ng, M., Becher, Y., Lee, D., Ip, P., ... Bacon-Shone, J. (2015). Report on technical support for the validation, finalization and adoption of the East Asia-pacific early child development scales (EAP-ECDS).
- Save the Children. (2017a). IDELA: Fostering common solutions for young children. Washington, DC. Retrieved from https://idela-network.org/wp-content/uploads/2017/08/IDELA\_Fostering\_common\_solutions\_for\_young\_children\_August\_2017\_OptimizedWeb.pdf
- Save the Children. (2017b). Study on effect of interactive radio instruction in improving ECD. Lilongwe, Malawi.
- Save the Children. (2017c). Windows into early learning and development: Cross country IDELA findings fueling progress on ECD access, quality, and equity. Washington, DC. Retrieved from www.savethechildren.net
- Save the Children. (2018). Beyond access: Exploring equity in early childhood learning and development. Washington, DC. Retrieved from www.idela-network.org.
- Save the Children & Bhutan Ministry of Health. (2017). Care for Child Development (C4CD) Plus: A pilot project for 3-5 year old children. Thimphu, Bhutan. https://doi.org/10.1007/0-306-47620-7\_4
- UNICEF. (n.d.). Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all. New York, NY. Retrieved from http://mics.
- UN General Assembly. (2015). Resolution A/RES/70/1. Transforming our world: the 2030 Agenda for Sustainable Development. New York: United Nations. http://www.un.org/ga/search/view\_doc.asp?symbol=A/RES/70/1&Lang=E
- Wolf, S. (2018). Impacts of Pre-Service Training and Coaching on Kindergarten Quality and Student Learning Outcomes in Ghana. Studies in Educational Evaluation, 59, 112–123. https://doi.org/10.1016/j.stueduc.2018.05.001
- Wolf, S., Aber, J. L., Behrman, J. R., & Tsinigo, E. (2018). Experimental impacts of the "Quality Preschool for Ghana" interventions on teacher professional well-being, classroom quality, and children's school readiness. *Journal of Research on Educational Effectiveness*, 0(August), 1–28. https://doi.org/10.1080/19345747.2018.1517199
- Wolf, S., Halpin, P., Yoshikawa, H., Dowd, A. J., & Pisani, L. (2017). Measuring school readiness globally: Assessing the construct validity and measurement invariance of the International Development and Early Learning Assessment (IDELA) in Ethiopia. *Early Childhood Research Quarterly*, 41(April), 21–36. https://doi.org/10.1016/j.ecresq.2017.05.001



In Sumba, Philippines ECCD students wait outside their classroom. Save the Children's ECCD work in the Philippines includes parenting programs to ensure young learners are supported at home through parent engagement.



