

## INNOVATORS ADVANCING CHILD LITERACY



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# ALL CHILDREN ARE AREADING

Around the world, nearly 58 million children are failing to learn because they are not in school.<sup>1</sup> But access is only part of the problem. Poor quality of education hampers learning even for those in school. More than 90 percent of primary-age children in low-income countries and 75 percent of children in lower-middle income countries – more than 330 million children – are not expected to read or do basic maths by the end of primary school.<sup>3</sup>



### WHY FOCUS ON ALL CHILDREN READING?.

Literacy unlocks human potential and is the cornerstone of development. It leads to improved health, better education, greater employment opportunities, and safer and more stable societies.

Children who do not develop reading skills during early grade education are likely on a lifetime trajectory of limited educational progress and economic opportunities. Early grade reading competency is critical for continued retention and success in future grades.



Literacy not only affects the child, but the whole country as the educational achievement of a country's population is directly correlated with its economic growth rate.

With so many children's lives and learning at stake, and progress lagging, it seems clear that non-traditional approaches are needed to increase reading outcomes—and future opportunities—for children. Hence, the urgency and need for a Grand Challenge—to ensure our world has All Children Reading.

All Children Reading: A Grand Challenge for Development, with your involvement, seeks to improve children's reading in the early grades so they can succeed in school and have more opportunities as adults.

### MORE GOOD REASONS TO INVEST IN CHILD LITERACY

- UNESCO reports that an increase in the average educational attainment of a country's population by one year increases annual per capita GDP growth from
  2 percent to 2.5 percent.<sup>4</sup>
- Globally, one year of school increases earnings by
  10 percent, on average.<sup>5</sup>
- If all women completed primary education, there would be 66 percent fewer maternal deaths.<sup>6</sup>
- If all children in low-income countries left school knowing how to read then 171 million people could move out of poverty, which would be equivalent to a 12 percent cut in world poverty.<sup>7</sup>

### A QUEST FOR SOLUTIONS -



In 2011, USAID launched its Grand Challenge for Development model to engage innovators across many disciplines, locations and areas of expertise, increasing the odds of finding and accelerating revolutionary, cost-efficient advances to solve important global problems, including child literacy.

The Grand Challenge for Development initiative is rooted in two fundamental beliefs about international development:

 Science and technology, when applied appropriately, can have transformational effects

Engaging the world in the quest for solutions is critical to instigating breakthrough progress

### ALL CHILDREN READING: A GRAND CHALLENGE FOR DEVELOPMENT .



All Children Reading: A Grand Challenge for Development, a partnership between USAID, World Vision and the Australian Government, leverages science and technology to source, test, and disseminate scalable solutions to improve children's early grade reading in developing countries. **Round 1**, launched in 2011 funded 32 early grade literacy innovators working in 22 countries with a focus on teaching and learning materials and education data.

Launched in 2014, **Round 2** has four components—grant competition, prize competitions, research and partnerships—and seeks technology-based innovations to improve early grade reading outcomes in developing countries, with three focus areas:

- 1. Mother tongue instruction and reading materials: Promoting the creation and delivery of reading materials in languages children express and understand
- 2. Family and community engagement: Providing technologies, approaches, and content to help families and communities in low-resource settings support early grade literacy
- **3. Children with disabilities:** Enhancing early grade reading outcomes for learners with disabilities.

UNESCO states that most children with disabilities in developing countries are not attending school, and there is "no inclusion of those with physical, emotional or learning disabilities within the education system."<sup>8</sup>

Fifty percent of the world's out-of-school children live in communities where the language of instruction in school is rarely, if ever, used at home.<sup>9</sup>

An analysis of data from 22 developing countries and 160 language groups revealed that children who had access to instruction in their mother tongue were significantly more likely to be enrolled and attending school, while a lack of education in a first language was a significant reason for children dropping out.<sup>10</sup>



Sourcing technology-based solutions through innovative grants, prizes, partnerships, and research to improve child literacy.

#### INNOVATION IS RECIPROCAL

Literacy is a global challenge. Through All Children Reading, innovators and communities around the world work interdependently to develop and test solutions to advance child literacy.

> FAITH COMMUNITIES & LEADERS

PRIVATE COMPANIES & STARTUPS

SCHOOLS & TEACHERS

#### UNIVERSITIES, RESEARC & INVENTORS

#### AREAS OF FOCUS

- 1 Mother tongue instruction and reading materials
- 2 Family and community engagement
- 3 Children with disabilities

#### CHALLENGE OPP

#### Grants

Spur and foster technology-based innovations to address gaps and barriers that perpetuate low literacy levels.

#### WANTED: INNOVATORS, SOLVERS & PARTNERS

It takes a variety of stakeholders to solve global challenges. All Children Reading: A Grand Challenge for Development Partners (USAID, World Vision and the Australian Government) invite the engagement of companies, non-profits, and individuals to improve child literacy.



#### ORTUNITIES

#### Prizes

Solicit the development of specific products, approaches, or applications that complement grant innovations and fill voids in addressing child literacy.

#### RESEARCH

Through rigorous, independent research, we seek to identify and analyze the effects of technology on literacy rates to optimize the allocation of resources, inform decisions, and enhance solutions.



### **GRANT AND PRIZE COMPETITIONS**

Multiple grant and prize competitions were available throughout Round 2 of All Children Reading. The **grant competition** was designed to spur and foster technology-based innovations to address gaps and barriers that perpetuate low literacy levels. Twelve winners, representing the most promising, creative, and impactful solutions, were selected from a competitive process that elicited 213 proposals from 50 countries.

The following **prize competitions** solicited the development of specific products, approaches, or applications that complement grant innovations and fill gaps in addressing child literacy.

- **ENABLING WRITERS** A competition to spur the development of software solutions that allow authors to easily create and export texts in mother tongue languages.
- **GLOBAL DIGITAL LIBRARY** The ideation of an early grade reading materials "repository" to up/download and print materials to improve access, particularly to local language reading materials, for early grade school children in developing countries.
- **MOBILES FOR READING** The challenge for this category of the Big Ideas@Berkeley competition is to develop novel mobile technology-based innovations to enhance reading scores for early grade children in developing countries.
- TRACKING AND TRACING BOOKS A global competition seeking an easy-to-use technology to enable stakeholders to know which books are being provided to students, have the ability to track books in transit, and trace them to their classroom destination.
- TECHNOLOGY TO SUPPORT EDUCATION IN CRISIS AND CONFLICT SETTINGS A challenge to source ideas for innovative, technology-supported approaches for children to maintain access to basic education despite disruptions experienced during

#### NO LOST GENERATION SUMMIT TECH PRIZE

Development of inspiring Arabic and English storybook templates and illustrations, on STEM topics, that are open source for use in other languages.

#### **EDU**APP4SYRIA

crisis or conflict.

The development of a smartphone application that can build foundational literacy skills in Arabic and improve psychosocial wellbeing for Syrian refugee children aged five to 10.

#### SIGN ON FOR LITERACY

Seeking innovative solutions the provide deaf children a foundation of sign language.

#### BOOK BOOST: ACCESS FOR ALL CHALLENGE

Incentivizing innovative, more cost efficient and transformative processes to encourage content creation actors to reduce the cost of production of quality, accessible mother tongue print and digital children's book titles.

### **LITERACY INNOVATORS AT WORK** GRANT COMPETITIONS .





#### ROUND 1 (2011-2013)

- 1 Across Radio
- 2 Africa Educational Trust
- American Institutes for Research
- 4 The Asia Foundation
- Center for Civil Integration and Inter-Ethnic Relations
- ComTech University of Nairobi
- 7 Drakkar, Ltd.
- 8 Eco-Development
- Ecole Supérieure d'Infotronique d'Haïti
- Development Center, Inc.FHI 360
- 12 Friends of Matènwa, Inc.
- 13 Georgia State University
- 14 Human Network International
- 15 Initiative Africa
- 16 Lubuto Library Project, Inc.

- Molteno Institute for Language and Literacy
- 18 Olinga Foundation for Human Development
- 19 Open Learning Exchange (OLE) Ghana
- 20 Perkins International
- 21 PlanetRead
- 22 PRAGYA
- 23 Pratham Education Foundation
- 24 Save the Children Malawi
- 25 Save the Children Sri Lanka
- 26 Sesame Workshop Initiatives India
- 27 Step by Step Benevolent Foundation
- 28 Urban Plant Mobile
- 29 Whiz Kids Workshop
- 30 Worldreader
- World Education, Inc.
- 32 YMCA Senegal



- A Agora Center
- B The Asia Foundation
- C Benetech
- D Catholic Relief Services
- E Creative Associates
- Institute for Disabilities Research and Training, Inc. École Nationale Supérieure des Mines de Rabat
- G Kampuchean Action For Primary Education
- B Little Thinking Minds
- Oeuvre Malienne d'Aide à l'Enfance du Sahel
- Qué Funciona para el Desarrollo, A.C.
- ĸ Réseau d'Acteurs pour le Renouveau de l'Education
- Resources for the Blind, Inc.
- M Sesame Workshop Initiative India Pvt. Ltd.

### AGORA CENTER, THE UNIVERSITY OF JYVÄSKYLÄ

Jyväskylä, Finland | Research Institution



#### INNOVATION

Using mobile reading game, GraphoGame™, to assist struggling students and certify Zambian teachers in local language literacy instruction required by the National Literacy Framework

LOCATION IMPLEMENTED Eastern Province, Zambia



#### CHALLENGE

Research has shown that teaching and reading in a child's mother tongue language lays a strong foundation for learning to read and makes it easier for them to learn a national language later. In 2013, the Government of Zambia released the National Literacy Framework which requires early grade teachers to teach in local languages. Many teachers in Zambia were educated in English and therefore lack information and pedagogical training in literacy instruction in local languages.

#### SOLUTION

#### GraphoGame™ Teacher Training Service (GG-TTS)

GraphoGame™, a literacy game for children researched in 20 countries, will be used as a sustainable, cost-effective mobile intervention to improve teacher in-service training and support student's basic reading skills. GG-TTS allows teachers to self-study information on the implementation of the new local language curriculum and practice correct literacy instruction pedagogy. Upon completion, teachers will receive certification demonstrating that they can implement the new National Literacy Framework, are able to identify students who are struggling with basic reading skills and can use GraphoGame™ to support their instruction. GraphoGame™ adapts to individual performance and is currently available in Cinyanja, offering customized reading support for students in the Eastern Province.

#### **PROJECT REACH**

Approximately 540 students in 30 schools

#### COLLABORATORS/PARTNERS

Center for the Promotion of Literacy in Sub-Saharan Africa (CAPOLSA) at the University of Zambia

#### FOCUS AREA

Mother tongue instruction & reading materials

Continuous Professional Development (CPD) should include the latest developments in the use of technology in education. Technology such as GraphoGame<sup>™</sup> can help teachers improve their phonemic awareness, which will help them effectively impart literacy skills to learners. For in-service CPD, it will be important to effectively train model teachers to demonstrate to their fellow teachers how they can use GraphoGame<sup>™</sup> for their own benefit and for the benefit of their learners. GraphoGame<sup>™</sup> is not only about the learners, it should be used to benefit both learners and teachers.

> Dr. Jacqueline Jere-Folotiya Lecturer in the Department of Psychology at the University of Zambia, GraphoGame<sup>TM</sup> researcher

### THE ASIA FOUNDATION

San Francisco, CA | Non-profit



#### INNOVATION

Delivering a mobile application in Dari and Pashto languages that is student-focused, interactive and can be used for self-study and as a teacher's aide

LOCATION IMPLEMENTED Kandahar and Nagarhar provinces, Afghanistan



#### CHALLENGE

Despite progress in education enrollment in Afghanistan over the past decade, schools still suffer from a lack of materials that appeal to children in grades 1–3. While there is increasing emphasis on technology and literacy in today's classrooms, young students in Afghanistan continue to struggle with traditional chalkboards and black and white textbooks, and child literacy remains low.

#### SOLUTION

Students across eight schools received interactive and engaging literacy lessons through an Android application on a chip inserted either in a phone or HDTV. Students also received educational kits, and 6,728 storybooks were provided to 58 classroom libraries across target schools. Administrators, teachers, parents and students also received training on methods for engaging literacy instruction.

#### **PROJECT REACH**

8,206 children, 178 teachers and 2,726 parents across eight schools.

COLLABORATORS/PARTNERS Ministry of Education and Liwal Limited

#### FOCUS AREA

Mother tongue instruction and reading materials, children with disabilities, family and community engagement

The Afghanistan Ministry of Education has a growing emphasis on early grade reading, which provides the foundation for future learning in any subject. The combination of use of technology with a literacy-rich environment with storybooks together with parental engagement has made this project a visible success.

> Jan Agha Wahidi Program Manager, The Asia Foundation – Afghanistan

#### BENETECH Palo Alto, California USA | Non-profit



#### INNOVATION

Delivering accessible, grade-level reading books to children who are blind/low vision by adding Marathi human-narrated audio capabilities to stories that can be read on lowcost audio devices in conjunction with Bharati braille

LOCATION IMPLEMENTED Pune, Maharashtra, India



#### CHALLENGE

Mother tongue language instruction is optimal for early reading acquisition, in both braille and audio, among students who are blind/low vision. It is a challenge to deliver accessible books in mother tongue languages where no text-to-speech (TTS) engine exists to read these books aloud, and the cost of creating a high-quality TTS engine is extremely high. In Maharashtra India, classrooms lack accessible reading materials that allow students to learn at their own pace through various modalities: braille reading, print reading, and/or listening.

#### SOLUTION

#### **Bookshare India**

This innovation makes reading materials accessible to children in Pune, India through the development and launch of a pilot project focused on adding Marathi human-narrated audio capabilities to Bookshare, the world's largest digital accessible library and Benetech's flagship Global Literacy initiative. Primary school students who are blind/low vision will be provided with accessible Marathi educational content that can be listened to on low-cost audio devices while they simultaneously read braille. Since a TTS engine is not available in Marathi, this fills a critical gap by providing students with the ability to have a multimodal learning experience using hard-copy braille texts combined with human-narrated audio for storybooks in Marathi. Teachers will be trained to use the Bookshare platform and schools will be visited weekly by a local "Story Uncle" to encourage reading and inspire students.

#### **PROJECT REACH**

Three schools, nine teachers, and more than 70 students with the potential for expansion to students across Maharashtra State

#### COLLABORATORS/PARTNERS

Pratham Books Access Braille

BooksUniversity Research Co. LLCailleXavier's Resource Centre for the Visually Challenged

#### FOCUS AREA

Mother tongue instruction & reading materials Children with disabilities Most of the world's primary school students who are blind face almost insurmountable odds in learning to read. The capabilities that we will develop and test for impact in this project, allowing us to provide specialized books in their mother tongue languages that are optimal for early reading acquisition, will allow us to costeffectively take Bookshare to scale in many least developed countries around the world, benefiting those who need it most.

> Kristina Pappas Bookshare International Program Manager, Global Literacy, Benetech

### CATHOLIC RELIEF SERVICES

Baltimore, Maryland USA | Non-profit



#### INNOVATION

Using innovative technologies for braille production/translation - most notably, the Mountbatten Pro (MB Pro) and its supporting tool, the Jot-A-Dot portable Brailler, to improve reading for children who are blind/low vision in Lesotho

LOCATION IMPLEMENTED Maseru, Lesotho



#### CHALLENGE

A 2010 Education Statistics Report released by the Lesotho Ministry of Education and Training revealed that about 5.3% of the national primary school population in 2010 are blind/low vision. Teachers of these students expressed extreme difficulty in accessing braille materials adapted from the national curriculum to meet the needs of their students. Teachers, therefore, improvise lesson plans to accommodate these students which often hinders the ability of students to transition into mainstream schools. The World Health Organization (WHO) reports that there is an extreme cost burden of reading for people who are blind/low vision. Their report states, "There are estimated 285 million [people who are blind/low vision] worldwide and 90% of them live in developing countries. At this moment the cost of a braille printer is more than \$2,000 for a basic version. Thus many millions of people across the world have limited access."

#### SOLUTION

#### Literacy for Visually Impaired Persons (VIPs)

The Literacy for VIPs program will provide training and braille technology to teachers at the St. Bernadette Resource Center for the Blind to assist their instruction of students who are blind/low vision. The Mountbatten Pro Brailler (MB Pro) features include an ergonomic braille keyboard, memory, speech feedback, and, most importantly, the ability to translate from braille to print and print to braille (including through Bluetooth connection). This print-to-braille/ braille-to-print feature allows for greater assistance to teachers who may not be literate in braille and therefore facilitates teaching to persons who are blind/low vision for mainstream teachers. The Jot-a-Dot portable brailler gives young learners a speedy, portable method for learning braille and prepares them to use larger, more powerful braillers. Coupled with individualized education plans for students who are blind/low vision, this combination of training and technology will greatly improve early grade reading scores.

#### **PROJECT REACH**

35 students with potential expansion to students who are blind/low vision in all mainstream schools in Lesotho

#### COLLABORATORS/PARTNERS

St. Bernadette Resource Center for the Blind Lesotho National League of Visually Impaired Persons Lesotho National Federation of Organizations for the Disabled

The Ministry of Education and Training The Examination Council of Lesotho Harpo Adaptive Technologies, Perkins School for the Blind.

FOCUS AREA Children with disabilities

### **CREATIVE ASSOCIATES INTERNATIONAL**

Washington, DC USA | For-profit



#### INNOVATION

Mobilizing community members to submit favorite local stories and folktales and distributing the stories, along with comprehension questions, to early grade students and their families via SMS

LOCATION IMPLEMENTED Eastern Province, Zambia

### C CREATIVE

#### CHALLENGE

In Zambia, children's ability to master foundational literacy skills has been inhibited by limited access to reading materials, especially in local languages. Despite recent gains in student reading scores and reading instruction, the lack of supplemental materials in local languages prevents parents and community members from supporting children in reading outside of school. Without these materials, children do not have adequate opportunities to practice reading, and continue to demonstrate poor reading skills.

#### SOLUTION

#### Makhalidwe Athu ("Our Way of Staying")

This project mobilizes community members to help author early grade reading materials by submitting their favorite local stories and folktales through SMS message, voice recording or web form. A literacy expert edits these stories to be grade-level appropriate and parents receive them through a series of SMS messages along with comprehension questions to ask their children. This method facilitates parental involvement in their child's reading and reinforces the importance of practicing reading on a daily basis.

To evaluate the impact of this project, USAID has contracted National Opinion Research Center (NORC) at the University of Chicago to conduct a rigorous impact evaluation. Data will be collected through an Early Grade Reading Assessment (EGRA), household survey and learner questionnaires at baseline and end line.

#### **PROJECT REACH**

Approximately 1,200 students and 40 school communities

COLLABORATORS/PARTNERS

BreezeFM BongoHive University of Zambia (UNZA) Lubuto Library Project

FOCUS AREA Mother tongue instruction & reading materials Where children's books are rare, it follows that literacy is low. But we can look beyond these old limitations and innovate to bring reading to children and communities. That's what Makhalidwe Athu is doing.

> Charito Kruvant Cofounder and CEO, Creative Associates International

creativeassociatesinternational.com



### INSTITUTE FOR DISABILITIES RESEARCH AND TRAINING, INC.

Wheaton, Maryland USA | For-profit



#### INNOVATION

Building an assistive technology that enables users (especially educators) to easily create and publish Moroccan Sign Language (MSL) supported educational materials for students who are deaf/ hard of hearing

LOCATION IMPLEMENTED Marrakesh, Ouarzazate, Agadir, Fez, Taourirt, Tangier, Salé and Meknes, Morocco

### M IDRT

#### CHALLENGE

Education of children who are deaf/hard of hearing in Morocco is very dire. Approximately 85% do not attend school, and many girls are kept at home. Most teachers who work with this population do not have any training in special education, and there is a dearth of sign language interpreters to assist them with translation for sign language-dependent students in the classrooms. Literacy rates among populations that are deaf/hard of hearing are very low.

#### SOLUTION

### Moroccan Sign Language Assistive Technology for Reading Improvement of Children who are Deaf/Hard of Hearing

This innovation is building an assistive technology, MSL Clip and Create, that enables users to access a dictionary containing Moroccan Sign Language graphics, video clips, and supporting concept graphics to easily create and publish MSL-supported educational materials for their students who are deaf/hard of hearing. The dictionary, previously developed by the team, contains 3,000 Moroccan Sign Language graphics and video clips representing 5,500 words in Modern Standard Arabic with supporting concept graphics. This software will revolutionize the way teachers create MSL instructional materials, thus increasing the amount, type, and quality of such materials. MSL instructional materials will foster comprehension of Arabic text, including idioms and STEM terminology/symbols, for purposes of literacy improvement, curriculum enhancement, and communication. Teachers and parents will also be trained on the use of the assistive technology and strategies for its implementation in the teaching of reading to children who are deaf/hard of hearing. Efficacy research will address the impact on teachers' ability to create MSL-supported instruction materials and on their students' reading achievement.

#### **PROJECT REACH**

Eight schools for the deaf/hard of hearing, 60 students, 40 teachers 20 parents and other key national stakeholders with the potential for national and international expansion

#### FOCUS AREA

Children with disabilities

Education of deaf children in Morocco is very dire and more than 85% do not attend school. Our All Children Reading grant is a timely and great opportunity for us to carry this torch of concern and innovation to this marginalized segment of society.

Abdelhadi Soudi, Ph.D. Head of the Center for Languages and Communication (CLC) and Ingénierie Linguistique, Technologie et Handicap (ILTH) at the École Nationale Supérieure des Mines de Rabat (ENSMR)

### KAMPUCHEAN ACTION FOR PRIMARY EDUCATION

Kampong Cham, Cambodia | Non-profit



#### INNOVATION

Transforming readers into basal electronic formats with interactive features, including multi-modal presentations that build on children's oral Khmer language skills

LOCATION IMPLEMENTED Kampong Cham Province, Cambodia



#### CHALLENGE

According to a World Bank study, approximately 25% of lower primary grade children in Cambodia demonstrate sub-standard levels of proficiency in mother tongue Khmer language literacy. While this is an improvement from a 50% failure rate identified in national testing conducted in 2010, it is still an unacceptably high number.

#### SOLUTION

#### E-Books for Khmer (E4K)

This innovation is adapting 24 Ministry of Education, Youth, and Sport (MoEYS) Grade 2 and 3 readers into 72 basal electronic formats with interactive features, including multimodal presentations that build on children's oral language skills. The e-readers integrate digitized testing exercises that evaluate the child's reading level and provide teachers with a valid student assessment. Teachers will be trained to use these evaluations to teach literacy using differentiated classroom literacy structures (levelled reading groups) that focus on student's individual learning needs, allowing them to gain confidence at the reading level appropriate to their skills. Additionally, the e-reader apps will be distributed commercially through the participation of private sector partner, Thun Thean Seksa. Through commercial distribution the application will make learning Khmer fun and attainable for children across Cambodia.

#### **PROJECT REACH**

10 primary schools, 30 teachers, and 1,000 students directly, an additional 2,000 subscribers with commercial market penetration, and has the potential for national expansion

#### COLLABORATORS/PARTNERS Thun Thean Seksa

#### FOCUS AREA

Mother tongue instruction & reading materials

KAPE believes that its new ACR project will be cutting-edge because it uses a technological solution to individualize reading tasks to the appropriate level of difficulty of a Cambodian child, the first time this has ever been done in Cambodia.

> UI Run National Technical Adviser

### LITTLE THINKING MINDS

Amman, Jordan | For-profit



#### INNOVATION

Building an online levelled and differentiated early grade Arabic literacy learning platform supported by after school literacy clubs for students

LOCATION IMPLEMENTED Amman, Jordan



#### CHALLENGE

In Jordan, textbooks overwhelmingly teach reading through whole words, instead of first introducing letter phonics and voweled variations. This approach to teaching Arabic has not yielded efficient results, and places complex demands on young children for literacy acquisition, as demonstrated by recent poor Early Grade Reading Assessment results (2012-13). Jordanian public schools require literacy programs that can address the current gaps in early grade reading while considering limited per capita education resources and the need for cost effective solutions.

#### SOLUTION

#### Qysas (Stories): An Arabic Levelled Digital Library for Every Classroom

This innovation aims to build a comprehensive, interactive and animated Arabic early grade literacy program (50 eBooks). The program will introduce reading through a leveled reading program; provide automated corrective feedback and recommendations for a child-centered and differentiated approach to learning; and be accessible through an online platform and mobile application in schools and at home. This project will be rolled out in 10 ICT-enabled Jordan Education Initiative (JEI) Discovery Schools. To complement the online platform, Little Thinking Minds will run after school literacy clubs for participating students, twice a week for a full academic year.

#### **PROJECT REACH**

10 schools and 350 students with the potential for national and regional expansion

#### COLLABORATORS/PARTNERS

Integrated Services - Indigenous Solutions Jordan Education Initiative Abdul Hameed Shoman Foundation

#### FOCUS AREA

Mother tongue instruction & reading materials

Our inspiration came about after not finding suitable early reading materials for our own kids in Arabic. It became very apparent that there was a dire need in the market for educational and literacy materials that make Arabic language acquisition easy for early grade learners, while reflecting our rich culture and instilling a love for our Arabic language.

> Rama Kayyali Jardaneh Managing Partner of Little Thinking Minds

Young student enjoys reading books on the platform developed by innovator Little Thinking Minds.

© LITTLE THINKING

### OEUVRE MALIENNE D'AIDE À L'ENFANCE DU SAHEL

Bamako, Mali | Non-profit



INNOVATION

Providing families in Mali with immediate access to communitydeveloped print and digital reading resources through mobile technology and local libraries

LOCATION IMPLEMENTED Segou, Mali



#### CHALLENGE

While Mali has witnessed a significant increase in parental involvement in education over the last 15 years, parent-to-child interactions that build children's readiness to read are infrequent. Discussions with parents in rural Mali indicate that engaged parents, who enroll their children in school and track their progress, lack awareness of simple activities they can employ to prepare their children for school and support them as they begin to learn to read.

#### SOLUTION

#### Your Child, Reading and You (YCRY)

The YCRY project focuses on improving early grade reading in Mali through the creation and production of community-developed reading materials accessible via communitymanaged libraries. With the support of Beyond Access and Education Development Center (EDC), OMAES will train librarians and provide resources for parents and students in 15 school communities. Through the implementation of EDC's low-cost mobile reading tool, Stepping Stone, YCRY will offer relevant, interesting, local language reading resources (e.g. illustrated children's books and reading skill builder activities) in a digital format with instructional audio. Families will have immediate access to numerous reading resources they can use to help their children succeed as well as a trained librarian to facilitate their engagement. The project will ultimately increase parent-child interactions while building children's readiness to read.

#### **PROJECT REACH**

Approximately 675 students in 15 school communities

#### COLLABORATORS/PARTNERS

Beyond Access Education Development Center

#### FOCUS AREA

Family & community engagement

Our goal is to succeed at bringing about a shift in the perception of reading, starting with rural Mali. By bringing innovative, culturally-specific and local reading materials to the communities, we aim to inspire parents to become interested in reading such that they can assist children in the villages to learn.

Dr. Boureima Allaye Toure Executive Director

### QUÉ FUNCIONA PARA EL DESARROLLO A.C.

Mexico City, Mexico | Non-profit



#### INNOVATION

Fostering parental engagement through use of "Mundo de Libros," a technology-based tool that matches students with grade level-appropriate Spanish reading materials that align with their abilities and interests

LOCATION IMPLEMENTED Mexico City, Mexico



#### CHALLENGE

Due, in part, to a lack of appropriate reading resources and low parental involvement in children's education, students in Mexico have not achieved basic levels of reading proficiency and lack agency in their reading decisions. Many primary school children in Mexico cannot read at grade level and the gap among children with lower reading skills increases as they grow older.

The Program for International Student Assessment (PISA) in 2012, revealed that approximately 41% of 15-year-old Mexican students performed below basic reading level and 15% showed serious difficulties understanding simple text. Research has proven that family involvement and access to level-appropriate reading materials are fundamental for the development of reading skills and good reading habits, especially for early grade readers. Unfortunately, the reading curriculum in most Latin American countries often follows a "one size fits all" approach and does not consider book-leveling strategies.

#### SOLUTION

#### Mundo de Libros (World of Books)

This project will be based in community libraries giving early grade readers access to books in Spanish, classified by topic and difficulty level, according to their individual reading skills and interests. In addition, workshops will be conducted to promote parental involvement and guide parents on how to best support their child's reading process and detect possible reading difficulties.

#### **PROJECT REACH**

Approximately 500 children through eight community libraries with the potential for expansion to schools in any Spanish-speaking country

#### COLLABORATORS/PARTNERS

Fundación Proacceso ECO A.C.

FOCUS AREA Family & community engagement Children learn to read at a different pace. However, the current model followed in Mexico is "one suit fits all." We seek to employ technology to change this by recommending books tailored to the reading-level and interests of each child.

Arturo Aguilar Esteva Executive Director (Que Funciona para el Desarrollo) and Assistant Professor of Economics (ITAM)

### **RÉSEAU D'ACTEURS POUR LE RENOUVEAU DE L'EDUCATION**

Bamako, Mali | Non-profit



#### INNOVATION

Using mobile technology to help teachers in Mali view, learn and apply new teaching techniques in their classrooms using the balanced literacy approach

LOCATION IMPLEMENTED Bougouni and Sikasso, Mali



#### CHALLENGE

Despite the Government of Mali's (GoM) commitment to improve education outcomes, early grade students struggle to achieve basic competencies in reading and writing. In 2006, the State Report on the National Education System revealed that many students leave primary school without the ability to read independently and fluidly. Similar evaluations since 2009 demonstrate that Malian primary school students are still far from possessing the reading writing skills required to meet the Ministry of National Education (MEN) standards.

To address this issue the GoM developed a standards framework for early grade reading-writing instruction which includes training teachers in improved methodologies and strategies, the production and distribution of grade-appropriate supplemental reading and instructional materials, and reading assessment. The challenge in a low resource environment is how to provide support to teachers, especially in rural areas, as they strive to implement these new strategies in their classrooms.

#### SOLUTION

#### Our Children Learn to Read

This project aims to improve early grade reading by training teachers from 25 schools in the "balanced literacy" approach and providing them with on-going support. The MEN in Mali adopted and incorporated the "balanced literacy" approach into its bilingual education curriculum to improve literacy instruction in the early grades. Through this project, selected teachers and school directors will be trained in the seven strategies of balanced literacy and receive a full-package of accompanying instructional materials in Bamanankan. Through the Stepping Stone application, developed by Education Development Center, these teachers will receive tablets loaded with video clips of teachers in typical Malian classrooms successfully using the seven strategies. Additional support will be offered via refresher trainings and field visits.

#### **PROJECT REACH**

625 students, 50 teachers and 25 principals in 25 school communities

#### COLLABORATORS/PARTNERS

Education Development Center (EDC) Malian Ministry of National Education

#### FOCUS AREA

Mother tongue instruction & reading materials

Using technology to train teachers step by step is cost effective and dramatically reduces the time of training in a vast country like Mali.

> Boubacar BOCOUM RARE Administrator

### **RESOURCES FOR THE BLIND, INC.**

Manila, Philippines | Non-profit



#### INNOVATION

Providing training and technology for the Department of Education (DepEd) in the Philippines to create and upload accessible versions of supplementary reading materials and provide equipment to students who are blind/low vision

LOCATION IMPLEMENTED Luzon, Visayas and Mindinao, The Philippines



#### CHALLENGE

Despite nationwide enrollment of about 3,000 students who are blind/low vision in inclusive education programs, none of the reading proficiency programs in the Philippines have made reading assessment tools or supplemental reading materials available in a format accessible to them. This has limited their participation in annual school reading assessments and from using the supplemental reading materials provided by DepEd.

#### SOLUTION

#### **Reading Beyond Sight**

This project will provide students who are blind/low vision access to more than 500 volumes of online supplemental reading materials and lessons (Grade/level 1-3 reading materials in Filipino, English, and 15 Mother Tongue dialects) created by the DepEd as well as other materials created under the Every Child a Reader Program (ECARP) and related programs. The project will also provide assistive technologies and training to the intervention schools.

An Early Grade Reading Assessment (EGRA) will be conducted in Braille, using instruments in English and Filipino. The EGRA-Braille adaptation process is new and School-to-School International, on behalf of the All Children Reading Partners, will be guiding the grantee through an adaptation workshop. A questionnaire will also be used to capture the different types of disabilities, the results of which will be factored into the analysis. Results dissemination workshops are planned following the baseline and end line assessments with key stakeholders in inclusive education in the Philippines.

#### **PROJECT REACH**

140 students who are blind/low vision in 15 schools throughout the Philippines

#### COLLABORATORS/PARTNERS Philippines' Department of Education

#### FOCUS AREA

Mother tongue instruction & reading materials, Children with disabilities Using technology will address the accessibility concern of students with visual impairment in the early grades, in particular the reading assessment tools and reading proficiency supplemental materials that are available online.

> Randy Weisser Executive Director

Alexa's school is a participant in Resources for the Blind's "Reading Beyond Sight" pilot which is creating 500 volumes of online, accessible, supplementary reading materials and lessons in two languages and 15 dialects.

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### SESAME WORKSHOP INDIA TRUST

India | Non-profit



#### INNOVATION

Providing families with a smartphonebased mobile app, based on India's Marathi dubbed version of Sesame Street (Galli Galli Sim Sim), to promote mother-tongue literacy skills.

LOCATION IMPLEMENTED Maharashtra, India



#### CHALLENGE

Across India, pedagogy, quality of education, and the lack of participation by families and communities in promoting reading skills are challenges to enhanced learning outcomes. Rote learning is the most common approach to teaching literacy which leads to failures in comprehension, letter/word recognition and fluency. This is demonstrated by the fact that 46% of children in grade 1 are unable to recognize a letter in their mother language and nearly 60% of children in grade 5 are unable to read grade 2 level text. In a context of such educational challenges, new approaches to learning and family and community engagement are vital to improving children's literacy skills.

#### SOLUTION

#### Play.Connect.Learn (PCL)

This innovation leverages the exponential growth of television and mobile coverage in rural India to foster the informed participation of families and communities in promoting early, basic and proficient reading skills in the mother tongue. The Marathi dubbed version of Galli Galli Sim Sim, a children's television program based on the award-winning Sesame Street program, reaches 2.2 million children on the local language channel of public broadcaster, Doordarshan Sahyadri. PCL is building a mobile application, featuring the characters of Galli Galli Sim Sim and accessible on low-end smartphones, which will use a progressive learning mechanism that allows children to read and learn at their own pace. By partnering with local development agencies and utilizing Sesame Workshop's proven learning methodologies, PCL will strengthen linkages between communities and local resources/formal education systems.

#### **PROJECT REACH**

50,000 children in two districts of Maharashtra State with the potential for expansion across the state and to three additional regional languages

#### COLLABORATORS/PARTNERS

Existing NGOs in the selected districts of Maharashtra

#### FOCUS AREA

Mother tongue instruction & reading materials, Family & community engagement

### **PRIZE:** ENABLING WRITERS

This prize sought the development of a software solution that allows authors to easily create and export texts in mother tongue languages to help early grade students learn to read. The prize competition included development, field testing in four countries, and a comprehensive review of its functionality.





### SIL INTERNATIONAL

ORGANIZATION LOCATION Dallas, Texas, USA

#### PRIZE

Winner \$100,000

#### INNOVATION SUMMARY

Bloom software enables people to write and print original books in their own language or adapt reading materials from other languages. Bloom was designed with new computer users in mind and has features to guide them in simple book making, so people need far less training than alternatives such as Word, Publisher, or InDesign. Bloom enables communities to create the volume of early grade reading materials needed to help children become successful and excited readers.

#### COLLABORATORS/PARTNERS

John Hatton of SIL International leads the Bloom development team, whose contributors include Eberhard Beilharz, Phillip Hopper, Marlon Hovland, Susanna Imrie, Gordon Martin, Stephen McConnell, David Moore, Marvin Nichols, Andrew Polk, John Thomson, and Len Wallstrom. SIL LEAD, Inc. also collaborated in the development of this version of Bloom.

WEBSITE bloomlibrary.org "Children don't need complicated books. They need pictures and text that are appropriate to their culture, age, and reading ability. Bloom helps people write this kind of book by taking the focus off the technology and its bells and whistles and letting people concentrate on what they want to communicate to children."

> Paul Frank Executive Director, SIL LEAD



### **USTAD MOBILE**

ORGANIZATION LOCATION Dubai, United Arab Emirates

PRIZE

**Finalist** \$12,000

#### INNOVATION SUMMARY

This open source software helps writers make both decodable and levelled readers for learners. It can produce output for print and mobile, including low cost feature phones. More than half of the world uses alternative punctuation to end sentences: this is recognized and supported by the software when calculating statistics such as sentence length.

WEBSITE ustadmobile.com





### **UNLEASH KIDS**

ORGANIZATION LOCATION Cambridge, Mass., USA

PRIZE Finalist

\$12,000

#### INNOVATION SUMMARY

iLoominate allows a user to write books that are appropriate for beginning readers with lists of appropriate words for each level. They can share the stories by publishing them to a local digital library. In Haiti, educators customized the software for Haitian Creole by working with Unleash Kids to generate rules for sorting words in a dictionary, with a focus on syllable structure.

WEBSITE iloominate.org

### **PRIZE:** MOBILES FOR READING

#### 2014-2015

This prize sought novel, mobile technology-based innovations from interdisciplinary university student teams, with the goal of enhancing early grade reading scores in developing countries. Solutions could also adapt or apply existing mobile-based technologies in new and innovative ways.



### COLLEGE OF WILLIAM & MARY

ORGANIZATION LOCATION Williamsburg, Va., USA

**PRIZE 1st Place** \$10,000

#### INNOVATION SUMMARY

This software enables teachers and students to read, write, and share books using a local digital library and a kid-friendly storytelling application. The student team collaborates with Haitian teachers to incorporate these tools in the classroom. Research components include comparing reading results of students using technology to others reading the same books and receiving the same lessons through traditional paper and pencil approaches.

#### COLLABORATORS/PARTNERS

Sandra Edwards-Thro, Lydia Boike, Aidan Fielding, Zhane Richardson, Unleash Kids, Library for All and Mother Tongue Books

WEBSITE lascaliteracy.org



### MONASH UNIVERSITY

ORGANIZATION LOCATION Melbourne, Victoria, Australia

#### PRIZE

**2nd place** \$8,500

#### INNOVATION SUMMARY

MyReadingTablet (MRT), a solar-powered reading device equipped with breakthrough WordSwitch technology, allows diverse learners to navigate complex texts, despite limited reading proficiency, by switching unknown words for another. The device will be equipped with hundreds of pre-loaded e-books. MRT is equipped with technology that allows children to customize their reading level, resulting in improved classroom culture and enabling children to more readily read genre's that spark their interest. The device also tracks the students' reading level and improvements.

#### COLLABORATORS/PARTNERS

Gemma Gooding, Thomas Heeren, Kate Hou, Lisa Fu and Kiki Adhinugraha

WEBSITE monash.edu

#### PRIZE PARTNER:





### UC BERKELEY

ORGANIZATION LOCATION Berkeley, Calif., USA

#### PRIZE

**3rd Place** \$7,500

#### INNOVATION SUMMARY

Padhne.De takes an existing interactive voice response model for community communication and allows older students to record short readings and micro-lesson plans, complementing children's existing modes of instruction, like teachers, tutors, and textbooks.

#### COLLABORATORS/PARTNERS

Laurent Arribe, Vibhore Vardan, Laura Desmond-Black, Timothy Meyers, Shomik Sarkar and Hasnain Nazar

#### WEBSITE

bigideas.berkeley.edu/winners/padhne-de-uc-berkeley



### UC BERKELEY

ORGANIZATION LOCATION Berkeley, Calif., USA

#### PRIZE

Honorable Mention \$2,000

#### INNOVATION SUMMARY

Gyaan is an ecosystem for collaborative, inquiry-based, leveled reading that merges task-based and storytelling approaches to increase reading comprehension in early-stage readers.

#### COLLABORATORS/PARTNERS

Siddharth Agrawal, Sufia Siddiqui, Ankita Bhosle and Divyakumar Menghani

#### WEBSITE

bigideas.berkeley.edu/winners/gyaan-uc-berkeley

# **PRIZE:** TECHNOLOGY TO SUPPORT EDUCATION IN CRISIS AND CONFLICT SETTINGS

This prize sourced ideas for innovative, technology-supported approaches for children to maintain access to basic education despite disruptions experienced during the following crises or conflict settings: health crisis (such as the Ebola crisis), natural disaster, and conflict zones. All Children Reading also provided seed funding for winners to pilot their ideas.



### OUTERNET, INC.

#### ORGANIZATION LOCATION Chicago, III., USA

PRIZE

Conflict Zone - 1st place (tied) \$5,000

#### INNOVATION SUMMARY

Outernet's free data multicast transmits a continuous feed of digital media over seven geostationary satellites, providing global coverage to their signal. Outernet's Lighthouse receiver stores these files and saves them on its internal drive, which can then be viewed with any browser, on any Wi-Fi enabled device, by connecting to the Lighthouse's hotspot. In situations where conflict has strained educational resources and disrupted communications, Outernet can reestablish basic education services for students.

COLLABORATORS/PARTNERS IREX

WEBSITE outernet.is





### XAVIER PROJECT

ORGANIZATION LOCATION Nairobi, Kenya

PRIZE

Conflict Zone - 1st place (tied) \$5,000

#### INNOVATION SUMMARY

Xavier Project and Eneza Education will provide educational content to out-of-school refugee children for free, ensuring that children access education even in emergency situations or protracted displacement. Eneza provides engaging and learner-centered educational content relevant to the local context via basic mobile phone technology. Xavier Project enrolls refugee children onto the platform for free. After a successful pilot in Nairobi, this program will expand to Dadaab refugee camp, home to almost half a million refugees, where barely 50% of refugee children access primary education.

COLLABORATORS/PARTNERS Eneza Education and UNHCR

WEBSITE xavierproject.org

### PRIZE PARTNERS: Rorad





### TELETALEEM

#### ORGANIZATION LOCATION Islamabad, Pakistan

#### PRIZE

**Conflict Zones - Honorable Mention** \$1,500

#### INNOVATION SUMMARY

This innovation brings remote learning to conflict situations that have little infrastructure and few opportunities for teacher development. It is based on a self-contained learning van equipped with a very small aperture terminal (VSAT)-based internet dish, a computer server, 45 Android tablets, wireless routers to support the tablets, uninterrupted power supply (UPS), and an electrical generator. The van is used to deliver "just-in-time" teacher training which is synced with current lessons. A master teacher trainer delivers the training using a virtual classroom environment from a remote location.

COLLABORATORS/PARTNERS Save the Children

WEBSITE teletaleem.com





### **VOTO MOBILE**

ORGANIZATION LOCATION Kumasi, Ghana

PRIZE

**Health Crisis - 1st Place** \$5,000

#### INNOVATION SUMMARY

VOTO powers an interactive, personalized and measurable platform for engaging students on basic mobile phones through interactive voice response. The focus on mobile phones provides a way to reach most families, connecting the content of radio lessons to voice and text. For example, students call a hotline to respond to a live-poll or to take a quiz, students receive a call with the audio corresponding to the recently received SMS. The flexibility of the platform allows the content to be adjusted to any language, any subject matter and to the education priorities in country.

WEBSITE votomobile.org

# **PRIZE:** TECHNOLOGY TO SUPPORT EDUCATION IN CRISIS AND CONFLICT SETTINGS





### DIMAGI, INC.

#### ORGANIZATION LOCATION Cambridge, Mass., USA

#### PRIZE

Health Crises - Honorable Mention (tied) \$1,500

#### INNOVATION SUMMARY

Using the CommCare platform, Dimagi aims to partner with organizations to develop and share free, easy-to-use, localizable mobile apps to strengthen the education response to Ebola and other crises. This innovation would: 1) develop curriculum-aligned apps that reflect Ministry of Education priorities and complement educational radio programs; 2) preposition interactive, "supplemental" apps that children can play at their own pace to make gains in literacy, numeracy, and life skills; and 3) enable responders to measure children's learning outcomes and assess program effectiveness. For rapid deployment and the broadest reach, these applications would be made available on the CommCare Exchange, an open-licensed "app store" that allows applications to be shared, modified, and used freely throughout the CommCare community.

WEBSITE dimagi.com



### THE WIDERNET PROJECT

ORGANIZATION LOCATION Chapel Hill, N.C., USA

PRIZE Health Crises - Honorable Mention (tied) \$1,500

#### INNOVATION SUMMARY

The eGranary Education Platform is an offline system useful in situations where students lack reliable infrastructure, Internet connectivity, or the ability to gather. It uses wired and wireless technologies to provide widespread access. Battery-powered versions, with a 12-volt server, networking, clients, and projectors, create flexible classroom deployments virtually overnight.

Deployed in over 1,000 locations across Africa and Asia, from urban universities to rural schools, the eGranary platform leverages Open Source resources, worldwide experts, local community leaders, volunteers, and group members in the diaspora in the development of customized collections that can be created and maintained by field partners, including ministries, educators, NGOs, and local community members.

#### COLLABORATORS/PARTNERS

Content comes from over 2,000 websites, including Wikipedia, the Khan Academy, MIT OpenCourseware, MIT Blossoms, and TED

WEBSITE widernet.org




## STANFORD LEARNING, DESIGN AND TECHNOLOGY PROGRAM

ORGANIZATION LOCATION Stanford, Calif., USA

### PRIZE

**Natural Disaster - 1st place** \$5,000

### INNOVATION SUMMARY

This initiative aims to leverage existing supply deliveries and distribution channels to increase access to learning in situations of crisis or conflict, where there may be school interruptions. Through creative re-use of packaging materials like cardboard boxes, communities turn short-term deliveries into a platform for longer-term skill building. In partnership with regional innovation centers, learning resources are adapted to the local context and integrated into supply boxes for delivery.

### COLLABORATORS/PARTNERS

Caritas Uganda Pader Branch, Tet Center Community of Amoko-Lagwai, ResilientAfrica Network, Makarere University and Transformative Learning Technologies Lab at Stanford Rethink Relief, part of the International Development Innovation Network headquartered at the MIT D-Lab

### WEBSITE

gse-ldt.stanford.edu/students/ma-projects/beyond-boxesintegrating-learning-opportunities-supply-deliveries-and





## HIFADHI AFRICA

ORGANIZATION LOCATION Nairobi, Kenya

PRIZE Natural Disaster - Honorable Mention \$1,500

### INNOVATION SUMMARY

Low-cost and low-power Raspberry Pi computers will be used to deliver a massive e-learning library, named RACHEL (Remote Area Community Hotspot for Education and Learning), which is free and continually updated. Coupling Raspberry Pi with a self-powered Wi-Fi dongle will create a hotspot for learners. A heavy duty solar powered battery and android tablets will give learners meeting under trees the ability to access thousands of materials, from tutorials to full textbooks, via the e-learning library. RACHEL will be deployed in remote pastoralist areas.

### COLLABORATORS/PARTNERS

Rotarian Robert Cairns and World Possible

WEBSITE beta.hifadhiafrica.org This prize sought solutions to track books destined for early grade classrooms and learning centers in low-income countries and allow stakeholders—ranging from parents to Ministry of Education—to easily access tracking information.



## COMMUNITY SYSTEMS FOUNDATION

ORGANIZATION LOCATION Ann Arbor, Mich., USA

PRIZE Finalist - Moving to Phase II \$10,000 for Phase I

### INNOVATION SUMMARY

OpenEMIS Logistics tracks the delivery of items to schools using a web interface, a mobile app and SMS technologies. It is an open source solution that is designed to work online and offline. It leverages other OpenEMIS technologies which manage data on schools, students and staff to achieve better data for better outcomes.

COLLABORATORS/PARTNERS UNESCO

WEBSITE communitysystemsfoundation.org





## JOHN SNOW, INC.

ORGANIZATION LOCATION Arlington, Va., USA

### PRIZE

Finalist - Moving to Phase II \$10,000 for Phase I

### INNOVATION SUMMARY

John Snow, Inc. will partner with World Education, Inc. to develop an innovation that combines functionality from three existing software applications. With the use of simple barcodes it will support tracking and tracing of textbooks by education officials throughout the system and enable parents, teachers, and local officials to receive up-to-date information on the status of books and materials. The system will make use of a variety of technology—from basic mobile phones using SMS and interactive voice recordings to smartphones for reading barcodes to Web interfaces for data management and custom report design.

### COLLABORATORS/PARTNERS

World Education, Inc., Lifeline Nepal, Grameen Foundation and VOTO Mobile

WEBSITE jsi.com/JSIInternet

## **PRIZE:** MOBILES FOR READING

2015-16

This competition was seeking the development of novel mobile technology-based innovations or methods that can improve reading outcomes for children in developing countries. Innovative topics proposed could focus on the enhancement of and/or the development and creation of new tools/methods.

### PRIZE PARTNER:







## DOST EDUCATION

ORGANIZATION LOCATION San Francisco, Calif., USA

#### PRIZE 1st Place \$10,000

### INNOVATION SUMMARY

Dost, or "Friend" in multiple languages, is a mobile platform that helps low-income moms in developing countries engage in their child's education. Through short, pre-recorded voice messages delivered via a call to feature mobile phones, Dost offers parents a low-cost and highly scalable approach to access the knowledge they crave and unleash their child's potential. Dost is unique because it delivers action-oriented content to functionally illiterate moms through the technology already in their hands. Collaborators/Partners Sneha Sheth, Sindhuja Jeyabal & Devanshi Unadkat

WEBSITE dosteducation.com "It's too late in primary school—the research shows we have to start working on early literacy from birth. Parents are motivated to promote learning at home and give their kids the best education. We support them in doing that."

> Sneha Sheth CEO, Dost Education

## PRIZE: EDUAPP4SYRIA

This prize sought the development of a smartphone application that could build foundational literacy skills in Arabic and improve psychosocial wellbeing for Syrian refugee children aged five to 10.





## FEED THE MONSTER

ORGANIZATION Apps Factory

#### PRIZE Winner \$650,000 (innovative tender)

### INNOVATION SUMMARY

"Feed the Monster" is an innovative smartphone puzzle game that helps children learn Arabic. The game is designed in a way that does not require any prior knowledge. It guides the player through learning the Arabic alphabet to vowels, words, and then reading short paragraphs drawn from the Syrian Arabic language arts curriculum. In addition, the game focuses on improving the psycho-social wellbeing of children by introducing them to skills and techniques that help them manage their emotions through the use of SEL (Socioal Emotional Learning) mini games. The immersive game experience is achieved through a journey of discovery and friendship. Collaborators/Partners The project is a collaboration between three partner entities: Apps Factory, the Center for Educational Technology, and the International Rescue Committee.

WEBSITE feedthemonsterapp.com





NTNU







## ANTURA AND THE LETTERS

ORGANIZATION Cologne Game Lab

### PRIZE

Winner \$650,000 (innovative tender)

### INNOVATION SUMMARY

"Antura wa al Huruf" (Antura and the Letters) uses the properties of play to achieve its pedagogical and psychosocial goals, featuring principles such as stealth learning, flow, and player psychological modeling. The narrative context tasks the player with helping an old keeper watch over the living letters - wild little creatures. With the help of the keeper's dog, Antura, the player embarks on a journey through multiple mini games, which correspond to content from Syrian elementary school curriculum. Collaborators/ Partners The project is the result of the successful collaboration of three partner entities Cologne Game Lab, Wixel Studio, and Video Games Without Borders.

WEBSITE antura.org/en/home

"We are very happy that our international team was selected to participate to this project. It's inspiring to see experienced people from the Middle East, North Africa and Europe work together for the same cause. These children are our energy and motivation, we really hope to give them the possibility to blossom in this difficult context"

Prof. Dr. Emmanuel Guardiola team leader and project initiator at Cologne Game Lab



@ReadingGCD 41

## **PRIZE:** BOOK BOOST: ACCESS FOR ALL CHALLENGE

This competition sought business models rooted in optimizing and increasing the number of accessible books at the onset of development, or "born accessible." ACR GCD awarded innovative, cost-effective solutions for producing quality, accessible mother tongue print and digital book titles for children with disabilities.



•••• eKitabu

## EKITABU

ORGANIZATION LOCATION Nairobi, Kenya

### PRIZE

**Winner** Up to \$162,000

### INNOVATION SUMMARY

eKitabu will catalyze the born accessible book chain in Kenya to create a library of open source, accessible digital titles, and will adapt its open standards-based toolkit for local content developers. A Content Development Challenge with prizes for local developers will create born-accessible content for the new Kenyan curriculum.

WEBSITE ekitabu.com



SIL C LEAD

## SIL LEAD

ORGANIZATION LOCATION Washington, D.C.

PRIZE

**Winner** Up to \$162,000

### INNOVATION SUMMARY

SIL LEAD is enhancing its widely used Bloom software with accessibility features, allowing current and new users to create born-accessible reading materials in underserved languages. Bloom support services are also expanding to include an online dashboard system to track title use, training materials, and a Bloom library website that meets accessibility standards.

WEBSITE sil-lead.org





The Asia Foundation

## THE ASIA FOUNDATION

ORGANIZATION LOCATION San Francisco, Calif.

PRIZE Semi-Finalist \$12,000

### INNOVATION SUMMARY

Building on the successful launch of Asia's first free, opensource library of children's books, The Asia Foundation's Books for Asia team made the library platforms and book collection accessible to people who are blind or low vision, starting with Indonesia in 2018 and scaling to other developing countries in the region.

WEBSITE letsreadasia.org





## WORLD EDUCATION, INC.

ORGANIZATION LOCATION Boston, Mass.

PRIZE

Semi-Finalist \$12,000

### INNOVATION SUMMARY

The Reading Equality with Accessible Design (READ) project builds on the Enabling Writers Workshop Program, through which World Education developed a foundation for creating books for beginning readers in Nepali and six of Nepal's minority languages. READ would incorporate accessibility considerations into title development workshops, engage persons with disabilities, and work with communities and newly formed local governments to promote and institutionalize a model for low-cost accessible book title development.

WEBSITE worlded.org

## **PRIZE:** SIGN ON FOR LITERACY

This competition sought technology-based innovations to increase sign language and literacy outcomes for Deaf children in low resource settings by providing greater access to sign languages, early grade reading materials, and reading instruction by engaging families, schools, and communities.



•••• eKitabu

## EKITABU

ORGANIZATION LOCATION Nairobi, Kenya

### PRIZE

Finalist Up to \$250,000

### INNOVATION SUMMARY

eKitabu will launch Studio KSL as a resource to help the Deaf Community and local content creators integrate sign language videos into early grade readers, thereby producing visual storybooks for primary literacy in support of Kenya's new inclusive education policy. This will lower the cost of producing quality visual storybooks and help to document regional differences in Kenyan Sign Language (KSL).

WEBSITE ekitabu.com



## enûma

## ENUMA

### ORGANIZATION LOCATION Berkeley, Calif.

### PRIZE

Finalist Up to \$250,000

### INNOVATION SUMMARY

Enuma will add a sign language mode to its popular Kitkit School tablet-based early learning app. This functionality will provide sign language and visual support to the curriculum, enabling deaf children and their communities to access early sign language learning resources. Enuma also will develop a Kitkit Sign Language Editing App to enable communities to modify the sign language videos and resources.

WEBSITE

enuma.com

### PRIZE PARTNERS:









GALLAUDET UNIVERSITY MOTION LIGHT LAB

## ORGANIZATION LOCATION Washington, D.C.

PRIZE Finalist Up to \$250,000

### INNOVATION SUMMARY

Motion Light Lab at Gallaudet University created SignShare, an open source platform that enables users to create and share signed stories and resources and upload them to a digital library, with the goal of encouraging content production and sharing in any language, anywhere in the world. The platform also serves as an information center with tutorials, research on literacy development for deaf children, tips, guides, templates, lesson plans and classroom worksheets.

WEBSITE motionlightlab.com/signshare



**ManosUnidas** 

## MANOS UNIDAS

ORGANIZATION LOCATION Storrs Mansfield, Conn.

#### PRIZE

Finalist Up to \$250,000

### INNOVATION SUMMARY

The Señas de Sentido (Signs of Meaning) project will create an interactive, community-led corpus of Nicaraguan Sign Language (NSL) signs and their relation to Spanish words; an app for smartphones and tablets designed to facilitate learning and use of NSL; and a literacy outreach program focused on children and their families living in rural areas of Nicaragua who do not have access to special education.

### WEBSITE

manos-unidas.org

## **PRIZE:** SIGN ON FOR LITERACY



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NATIONAL TECHNICAL INSTITUTE FOR THE DEAF

### ROCHESTER INSTITUTE OF TECHNOLOGY'S NATIONAL TECHNICAL INSTITUTE FOR THE DEAF

ORGANIZATION LOCATION Rochester, N.Y.

### PRIZE

Finalist Up to \$250,000

### INNOVATION SUMMARY

RIT/NTID will develop open source software that enables communities to create literacy content in their country's local and national sign languages. The content can then be shared via an open-content digital library of folktales viewable via any web browser. The digital library can be hosted locally on Linux-based computers and mobile devices and remixed by individuals (including children) with simple text and video editing tools.

WEBSITE ntid.rit.edu "Deaf education is a critical gap that, left unfilled, would leave millions of deaf children around the world without access to literacy and education. The innovations sourced by the Sign On For Literacy prize will help fill this gap and ensure deaf children have access to literacy and education, a fundamental human right.

> Deborah Backus World Vision's project director for ACR GCD

## NO LOST GENERATION SUMMIT TECH **PRIZE**

This competition sought scalable and born-accessible approaches to developing illustrations and early grade stories on a variety of STEM (science, technology, engineering and math) topics to be made available under Creative Commons license on the Global Digital Library.



## ASAFEER EDUCATION TECHNOLOGIES

ORGANIZATION LOCATION Dubai, United Arab Emirates

PRIZE Winner \$100,000

### INNOVATION SUMMARY

The 100 Adventures in Science & Life ebooks are available in the Asafeer app and online in the Global Digital Library, an initiative of the Global Book Alliance that offers free digital and print-ready books in more than 15 languages. All books will be accessible to children with disabilities and available under creative commons license so other authors can translate the stories or use the illustrations to develop new content.

WEBSITE 3asafeer.com You see a lot of initiatives about staying healthy and fit, but you don't see enough push toward making reading a habit. And if the majority of a region is not reading, then education will not be seen as important.

Amro Abu-Hmaidan Founder, Asafeer Education Technologies

# EVOKE: LEADERS FOR



**EVOKE: Leaders for Literacy** is the latest in the award-winning, multi-player, online gamebased EVOKE suite of experiences empowering youth to develop 21st century skills while collaboratively solving urgent social challenges. Through powerful storytelling and an engaging, interactive educational experience, youth develop an understanding of global challenges, and collaborate with online social networks and their communities to become change agents for challenges such as child literacy, human trafficking, and world hunger.

In EVOKE: Leaders for Literacy, youth "Agents"— motivated by evidence-based game methodologies and entertainment—develop skills such as collaboration, creativity, critical thinking, empathy and reasoning as they complete 48 activities to fulfill eight missions to advance global child literacy.

### **RESEARCH RESULTS**

Through this game-based approach, youth demonstrated agency in creating solutions to address child literacy challenges in their communities. See complete research results at AllChildrenReading.org.

The EVOKE: Leaders for Literacy Campaign is a joint initiative of:











48 | AllChildrenReading.org

## **RESEARCH**.

Research is one of the four pillars of All Children Reading's Round 2 activities. ACR GCD research initiatives are focused on three areas.

### TECHNOLOGY-BASED EARLY GRADE READING PROJECTS

 10 robust external evaluations of ACR GCD's technology-based early grade reading pilots, which include early grade reading assessment (EGRA) baseline and endline results as well as recommendations around the projects' scalability.

Research Institute: School-to-School International

 Development and piloting of the first ever early-grade reading sign language assessment (EGR SLA), piloted in Morocco, with grantee, Institute for Disabilities Research and Training, using Moroccan Sign Language (MSL)

Research Institute: School-to-School International

 Impact evaluation on Creative Associates International's "Makhalidwe Athu" (Our Way of Staying) ACR GCD-funded project in Zambia assessing crowdsourced stories shared with family and community members via SMS.

Research Institute: NORC at the University of Chicago

 A mixed methods study to evaluate the effectiveness, efficiency, scalability, and sustainability of the m-learning component (the Aan Khmer app) of the Total Reading Approach for Children Plus (TRAC+) project in Cambodia.

Research Institute: University of Western Australia

### **DIGITAL GAMING**

 Quantitative and qualitative impact evaluation on two winning games, Antura and the Letters and Feed the Monster, sourced through the EduApp4Syria global competition.

Research Institute: INTEGRATED

 Guide to Developing Digital Games for Early Grade Literacy for Developing Countries defines key principles for consideration in the development of digital games for literacy and includes twelve case studies.

Research Institute: All Children Learning: A Grand Challenge for Development and Digital Learning for Development (DL4D)

 A quasi-experimental evaluation on our EVOKE: Leaders for Literacy learning game that empowers youth to be social agents of change to address the global challenge of child literacy. (coming soon)

Research Institute: Mthente Research and Consulting Services

### EDUCATION IN CONFLICT AND CRISIS

Education in Conflict and Crisis: How
 Can Technology Make a Difference?
 is an academic landscape overview of
 ICT for education in crisis and conflict
 complemented by a three-module
 practitioners overview of utilizing
 technology for refugee and IDP education.

Research Institute: BMZ/GIZ, World Vision International, Inter-Agency Network for Education in Emergencies, Creative Associates International, and All Children Reading: A Grand Challenge for Development Mother and son review book recommendations based on the child's reading level and interests on platform developed by Qué Funciona para el Desarrollo (QFD). Books were available in a library also provided by QFD.

WORLD VISION/STAFF

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## PARTNERSHIP OPPORTUNITIES ...

Interested in advancing literacy innovations? We welcome partnerships contributing **financial or technical investment** to the design and rollout of a competition or for the **testing and scale-up of winning solutions.** 

A key component of the Grand Challenges for Development model is that only through concerted action can we hope to find solutions to the largest, solvable problems that are holding back progress for individuals and communities in developing countries. We invite the partnership of companies, universities, foundations, individuals and others.

### FORMS OF PARTNERSHIP INCLUDE, BUT ARE NOT LIMITED TO:

- Sponsorship of a competition
- Providing technical sector expertise (monitoring & evaluation, education, literacy, ICT), including participation on review panels
- Scaling piloted innovations
- Contributing to a technology evaluation fund
- Dedicating resources to the testing and piloting of specific technologies/ solutions in new environments

### WHAT WE OFFER

Investing with All Children Reading: A Grand Challenge for Development offers several opportunities:

- Access to 100+ countries where the ACR GCD Partners have a presence
- 7+ years of experience investing in 80+ promising early grade reading innovations
- A flexible funding mechanism
- Integration of design thinking principles for all challenges.

### JOIN US!

To explore partnership opportunities that align with your business or development goals, please contact us at:

www.AllChildrenReading.org | info-acrgcd@worldvision.org

## PARTNERS.

## GRANT COMPETITION PARTNERS \_\_\_\_\_

BILL& MELINDA GATES foundation



## PRIZE COMPETITION PARTNERS .











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## RESEARCH PARTNERS \_\_\_\_\_

 IDRC
 CRDI

 International Development Research Centre
 Centre de recherches pour le développement international

















SCHOOL-TO-SCHOOL INTERNATIONAL



EVENT PARTNERS \_\_\_\_\_



ALLIANCES ......



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LAB-OPM

THE GLOBAL BOOK ALLIANCE

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### ENDNOTES

<sup>1</sup> Education For All Global Monitoring Report 2000 – 2015: Achievements and Challenges. UNESCO. Page xii [http://en.unesco.org/gem-report/report/2015/education-all-2000-2015-achievements-and-challenges#sthash.GcAYe0t6.dpbs]

<sup>2</sup> Education For All Global Monitoring Report 2013/4. UNESCO. Page i. [http://unesdoc.unesco.org/images/0022/002256/225654e.pdf]

<sup>3</sup> UNESCO Institute for Statistics. (2017). More Than One-Half of Children and Adolescents Are Not Learning Worldwide. Fact Sheet. Paris: UNESCO. [Accessed 26 January 2018].

<sup>4</sup> Education For All Global Monitoring Report 2013/4. UNESCO. Page 19.

<sup>5</sup> UNESCO Global Monitoring Report 2013/2014. UNESCO. Page 13.

<sup>6</sup> UNESCO Global Monitoring Report 2013/2014. UNESCO. Page 15.

<sup>7</sup> The Economic and Social Cost of Illiteracy: A Snapshot of Illiteracy in a Global Context. World Literacy Foundation. Page 11. [http://www.world literacyfoundation.org/The\_Economic\_&\_Social\_Cost\_of\_Illiteracy.pdf]

<sup>8</sup> Children out of School, UNESCO. [http://www.unesco.org/education/efa/ global\_co/policy\_group/children\_out\_of\_school.pdf]

<sup>9</sup> A Global Compact on Learning: Taking Action on Education in Developing Countries. Center for Universal Education at Brookings. Page 27.

<sup>10</sup> Improving Learning Outcomes through Mother Tongue-Based Education. Research Triangle Institute. Page 1. [http://www.rti.org/brochures/eddata\_ii\_ mother\_tongue\_instruction.pdf]

ALL INNOVATOR PROFILE PHOTOS ARE COURTESY OF ORGANIZATION UNLESS OTHERWISE NOTED.

Young students participating in Benetech's project in India enjoy listening to Marathi audio stories while following along in a Bharati braille book. ©USAID INDIA/STAFF

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