CHILDHOOD EDUCATION INNOVATIONS

Transforming education through new ideas and approaches.

SEPTEMBER/OCTOBER 2019

Fostering creativity in African schools

Digital curriculum for social good

Mobile phones and literacy in India and Jordan

The potential of DJ pedagogy

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CHILDHOOD EDUCATION INNOVATIONS

ON THE



Technology is changing the landscape of our world. Technology-related innovations are helping to improve access to and quality of education around the world, and thus helping to ensure children reach their full potential.

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HIGHLIGHTS FROM THIS ISSUE

Technology gives us a unique opportunity to address the reading imbalance and put tools into parents' pockets that they can use to help promote early learning, engagement, and play.

—"Worldreader: Leveraging mobile phones for reading to young children in India and Jordan," Wendy Smith and Annya Crane

Children are natural music makers, and thrive during open-ended learning conditions. Playing and having fun is the work of a child and the optimal condition from which they achieve sustained learning.—"DJ Pedagogy in the Childhood Experience," *Jamie Solis*

Fostering creativity in our young people is the best hope for the future. It is the foundation for a new socio-economic model.—"Creativity As Visual Thinking: Mobile Art School in Kenya," *Alla Tkachuk*

Education needs to focus on learning that fulfills societal needs for sustainability and allows humans to "flourish," while also addressing the needs of the human brain.—"Libre—Nourish the Brain So the Future Can Flourish," Renuka Rautela and Nandini Chatterjee Singh

By feeding students' innate curiosity about the world around them, they will develop an ability to be critical with the sources of information they access.—"Teaching Media Literacy:

Harnessing the charm of storytelling with NUSHU," Eva Dominguez

The vision is to make ECD a routine part of pediatric health care, much in the same way as immunization is already being handled today.—"The Earlier, the Better: Making ECD routine for families," *Arjun Sawhney*

Although ECE providers may be used to soldiering on alone, adopting some co-operative principles can provide access to the tools and resources they need to thrive in challenging times.—"Co-op Model for Early Care: Cutting costs and improving quality," *Del Williams*

We learned that so many students had negligible exposure to art and culture and the little orientation that was provided often was restricted to the level of annual events. We believed this situation needed to be remedied immediately to ensure students' holistic development.

—"Beyond the Textbook: Performing arts go high tech," Rakesh Gupta

In place-based approaches, students learn to see themselves as members of civic and ecological communities who have a shared stake in improving the world around them.—"Reclaiming Education as a Public Good: Place-based teacher education," Susan Santone

Education Diplomacy skills play a key role in moving beyond research to achieve a commitment to targeted action.—"Education Diplomacy at the Intersection of Gender Equality and Quality Education," *Sarah Fuller*

It is important to evaluate our approach and work to transform education in ways that support both boys and girls in reaching their full potential.

—"Gender Achievement Gaps: Reexamining the transformational debate," James M. Pedersen

Also in this issue:

Global Learning XPRIZE



Access to education can be increased, even for previously marginalized populations, by harnessing technologies, such as mobile phones, that have become affordable options for communication and connectivity around the world.

EADER:

Leveraging mobile phones for reading to young children in India and Jordan

WENDY SMITH AND ANNYA CRANE, WORLDREADER WITH MARGARET CAIN AND RACHEL HEAVNER

orldreader, the nonprofit organization with a mission to create a world where everyone is a reader, is proving that mobile phones can be used as tools for engaging parents in reading to their young children. Knowing the cognitive and developmental benefits of reading to children from an early age, Worldreader set out to leverage the ubiquity of mobile phones, developing a habit of reading and improving early learning at the household level.

Today, most people living in poverty have access to a data-enabled phone. There are over 8.8 billion mobile phone connections on the planet and mobile phone ownership continues to rise among low-income households in developing countries.¹

Increasingly, mobile phones are providing access to communities in need. In India alone, over one billion



people possess a mobile phone. Even 85% of Syrian refugees living in Jordan own a mobile phone. Every day, mobile technology drives new behaviors, communities, and economies at unprecedented rates. These technological shifts provide unique opportunities to reach parents and caregivers at scale in ways previously not explored.

Addressing a Problem

Around 250 million children will not develop or learn at the pace of their peers in wealthier nations; by the age of 5, they have fallen sometimes permanently behind before ever stepping foot in a formal classroom. To highlight the two geographies where Worldreader's intervention took place, let's consider the challenges in India and Jordan:

In India – Despite recognition that "earlier is better" and that learning starts in the home, there's just one book for every nine children in India. Worldreader discovered

> that the majority of children in the target group of literate, lowincome households with access to a mobile phone lived in a home literacy environment entirely devoid of children's storybooks. Few parents fully appreciate the benefits of reading with their chil-

- LALITA, INDIAN MOTHER

My daughter likes it when

I read to her. She asks me

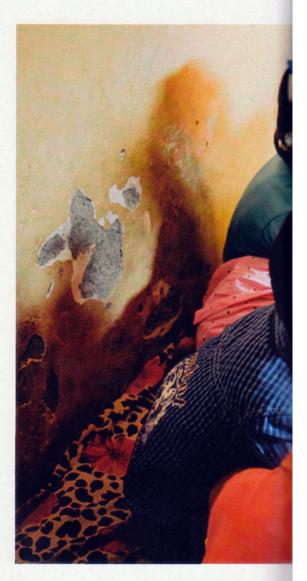
to repeat the story 10 times.

dren and understand reading as exclusively associated with school activities. Reaching parents with print books and appropriate messaging has proven to be too slow or costly to ensure that children start school ready to learn.

In Jordan – Registered Syrian refugees make up 10% of Jordan's population, according to the UN High Commissioner for Refugees. The Jordanian government's own estimates place the actual number at close to 1.4 million.

While the government goes to great lengths to provide schooling for both Syrian and Jordanian children, seemingly insurmountable barriers to quality education remain. Vulnerable populations in Jordan have very little access to books. Buying print books is a costly exercise and reading for pleasure is not a valued activity.

Technology gives us a unique opportunity to address the reading imbalance and put tools into parents' pockets that they can use to help promote early learning, engagement, and play.



The Intervention: Worldreader Kids

In 2015, Worldreader and a network of public and corporate partners began research to find out how mobile phones could be used to engage parents and caregivers in reading to their young children in India, at scale, launching Worldreader Kids. In 2017, as a result of the research in India, Worldreader expanded the program to Jordan in response to the refugee crisis, with the aim of providing social-emotional content and early learning supports for displaced communities.

The Worldreader Kids app is available through a web browser or as a downloadable Android application. Through it, Worldreader Kids provides a growing collection of hundreds of children's books and learning resources (currently available in English, Arabic, and Hindi) to foster parental engagement in early learning.

Today, working closely with governments, NGOs, and community organisations, Worldreader is helping

to change the lives of children in India and Jordan, by working with parents like Mayada in Jordan and Lalita in India to read on the Worldreader Kids App. Mayada left Syria in 2012 because of the conflict and wants to provide her four daughters with the best life conditions and education. For conflict-impacted families like hers, who have had to leave everything behind and start over, books are a precious commodity. The families often face a constant struggle to keep children in school and learning at grade level.

"The mobile phone app helps bring the family together. Our oldest daughter [13] sits down with us to listen and she participates by giving her opinions on stories as we discuss them. She has struggled with her self-confidence and benefited a lot from one





of the stories that I used as an example to improve her self-confidence."

-Mayada, Syrian refugee living in Jordan

In India, Lalita was forced into marriage at 14, but now has the means, through the Worldreader Kids App, to read to her two young daughters every day in support of their education.

"My daughter likes it when I read to her. She asks me to repeat the story 10 times."

—Lalita, Indian mother

Both Worldreader Kids interventions have demonstrated that the key to successfully fostering attitude and behavior change in parents is on-the-ground support through influential institutions paired with a large-scale digital behavior change campaign to create widespread awareness.

Through this blended approach of support from community-based organizations and traditional and digital marketing outreach, the pilot in India reached over 203,000 households. Partners directly supported 15,000 families from 177 low-income communities in Delhi. The remaining 188,000 users were reached through a primarily digital campaign aimed at raising awareness on the value of reading. In Jordan, the program reached over 50,000 users through digital marketing and targeted programming through four local community-based partners and mothers' groups.



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The mobile phone app helps bring the family together. Our oldest daughter [13] sits down with us to listen and she participates by giving her opinions on stories as we discuss them. She has struggled with her self-confidence and benefited a lot from one of the stories that I used as an example to improve her self-confidence.

"

- Mayada, Syrian refugee living in Jordan It is increasingly clear that technologies are not an end in themselves. Success relies on leveraging existing support systems to properly integrate and train on new technologies where there is a need. Read to Kids experimented with a number of implementation partners in order to determine the most effective delivery model to reach and engage parents and caregivers.

Worldreader selected partners based on their extensive networks, their ability to scale, and their knowledge of early childhood development, reading, or early education in the region. In India, the selected partners included Hindustan Latex Family Planning Promotion Trust (HLFPPT), a health organization with a network of clinics and a community health outreach program; Society for All Round Development (SARD), a community-based organization focused on improving education outcomes; and Katha, a publishing partner that works in schools and communities. In Jordan, partnerships focused on reaching refugee communities and vulnerable Jordanian families throughout Amman and the surrounding region, through cultural community centers like I-Learn, the children's museum, and libraries, with the goal of integrating with government schools in 2020.

These partners were able to integrate the Worldreader Kids application into their existing programming, train parents on how to use the application, and contribute to Worldreader's behavior change campaign on the ground. The campaign was aimed at communicating the value of reading and making reading to children a habitual activity for parents and caregivers.

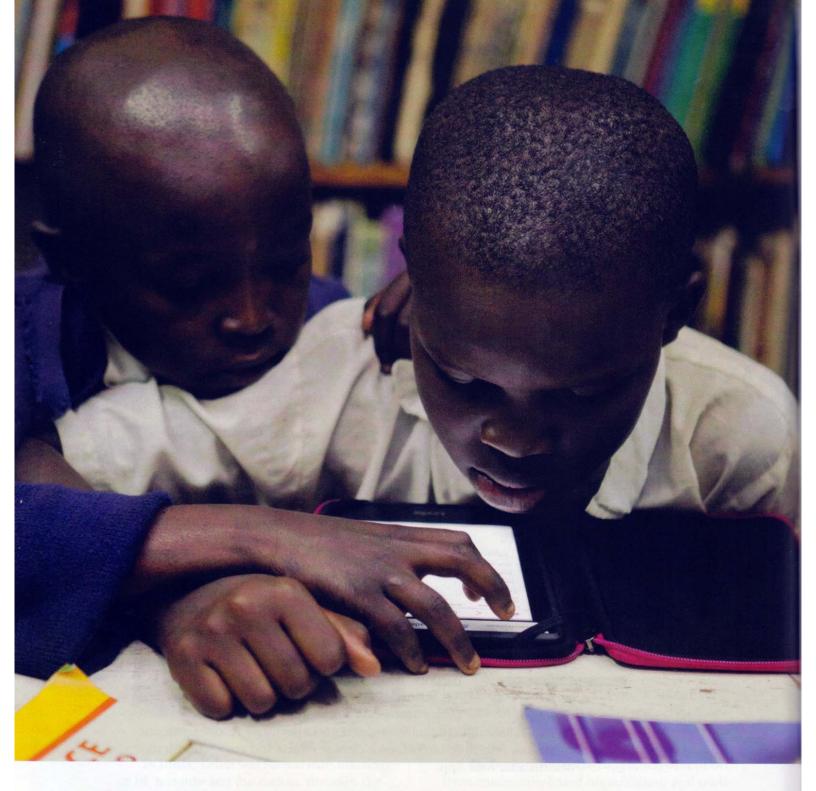
Schools and community workers in India were most effective at changing parent behaviors, yet there es to motivating parents to prioritize reading. Just one

were still challenges to motivating parents to prioritize reading. Just one out of four responded to behavior change efforts and engaged with the Worldreader Kids App.

Changing Behaviors—Marketing the Value of Reading

Behavior change is not easy. Encouraging parents and caregivers to recognize the importance of reading to children is the bedrock of the Worldreader Kids program. Behavior change for Worldreader Kids requires parents to understand that they are their child's first teachers, and can help their children get ahead in life with minimal support and simple solutions.

Formative research in both countries revealed some early barriers to reading to children. In Jordan, for example, barriers cited by mothers included lack of time, a shortage of suitable stories, and children being disinterested in reading, especially if they have excessive





homework. Parents in both geographies often did not perceive reading with children at home to be the parent's role. They consider it to be the teacher's job or believe children can read to themselves. Addressing these barriers required in-depth input from local partners, and extensive testing of messaging to inspire parents to view reading to their children as a pleasure and benefit to their children, rather than another burden in an already packed life of responsibility.

Providing on-the-ground support, World-reader's implementation partners used flyers, posters, banners, reading cards, t-shirts, and bags. In addition, Worldreader supported digital behavior change and encouraged frequent reading to children via in-app push notifications with tailored messages to parents based on their behaviors. The behavior change campaigns linked reading to everyday activities, community festivals, or holidays, with the aim of normalizing and mainstreaming reading to

children. Campaigns emphasized the developmental benefits of reading and linked reading to more than just school textbooks.

In India, आज की कहानी, कल की तैयारी ("Today's stories are tomorrow's preparation") became the key message of the campaign. This messaging appealed to parents by linking storytelling to their children's improved school readiness. All messaging in the campaign was in Hindi and aimed to engage families in Delhi in the target group. Throughout the year-long campaign, an estimated 17,000,000 people saw or heard messages about the benefits of shared reading, which were shared through radio, TV, outbound dialing, and out-of-household advertising in the metro system.

The intervention in Jordan took a similar approach, but focused more on digital channels and leveraging the most popular morning radio show in the country. Local partners distributed flyers and posters in target communities and marketing efforts engaged Google, Youtube, and Facebook platforms to reach parents. Worldreader worked through existing mothers' or parenting groups to promote the Worldreader Kids app and enhance existing work focused on positive parenting. Naming the project Tuta Tuta ("And they lived happily ever after"), messaging was tailored to the new audience, focusing on imagination and building a stronger relationship with the parent.

These campaigns showed that digital reading is scalable and affordable. App promotion and downloads cost Worldreader approximately \$0.30 USD per user in India and \$0.45 USD in Jordan. The widespread availability of mobile phones supported affordable access to our digital books. Reading a book a day for 30 days cost the equivalent of two cups of tea, or about \$0.16 USD per month for the end user.

Improving Female Digital Literacy

In many countries, a family may have only one phone and it is often controlled by the male head of household. Cultural or financial barriers to women's participation in reading are prevalent. To tackle these challenges, both male and female heads of household need to be involved in any digital reading intervention,

and recognize the value of leveraging phones and their data as tools for reading.

An unexpected outcome of the Worldreader Kids programming was the impact it has had on mothers. A number of women in the program reported that access to storybooks and participation in the program have helped increase their access to a family phone, led to more investment in mobile phone data plans, and improved their own digital literacy.

Looking to the Future

Worldreader Kids continues to yield valuable insights and results. The next challenge for Worldreader and our partners is to find ways to drive the retention of reading on mobile phones.

We will be looking to further engage teachers and health workers, so they can, in turn, engage parents. We'll be researching which campaigns most effectively support sustained

Worldreader has also begun to engage school networks in both India and Jordan to support promotion of the app to parents, and build digital storybooks into their classrooms using tablets and projectors.

behavior change to embed a reading habit within families, and exploring how we can work even more closely with our partners. Worldreader has also begun to engage school networks in both India and Jordan to support promotion of the app to parents, and build digital storybooks into their classrooms using tablets and projectors.

Worldreader is seeking funding to look at child outcomes and studying what "dosage" of parental mobile reading is necessary to make a difference in a child's school readiness and language development. Engaging parents in early learning is a challenge for many organizations and the applicability of this research is relevant for many programs committed to empowering parents in learning at scale.

Follow the research and get involved to help us create a world of readers. www.worldreader.org/learnings.

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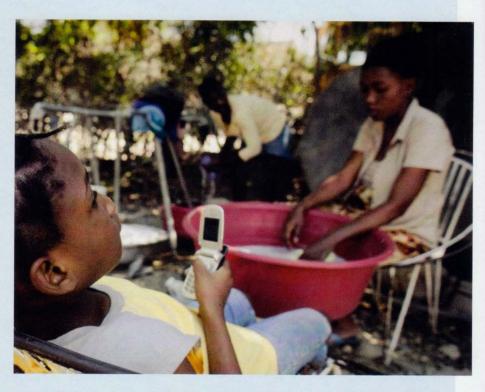
1www.gsmaintelligence.com

Why Use Mobile Phone Technology for Education?

More than 5 billion people around the world are estimated to have mobile devices, and over half of these connections are smartphones. While people in advanced economies are more likely to have mobile phones – smartphones in particular – and are more likely to use the internet and social media than people in emerging economies, 45% of the population in emerging economies have smartphones.

In emerging economies, smartphone ownership rates vary substantially, from highs of 60% in South Africa and Brazil to just around 40% in Indonesia, Kenya, and Nigeria. Among surveyed countries, ownership was lowest in India, where only 24% report having a smartphone.

Findings from a Pew Research Center survey conducted among 30,133 people in 27 countries from May 14 to August 12, 2018.



Mobile Phones in Refugee Camps: A tool for safety, education, and self-empowerment

"In the world we live in today, internet connectivity and smart phones can become a lifeline for refugees, providing an essential means for them to give and receive vital information, communicate with separated family members, gain access to essential services, and reconnect to the local, national and global communities around them," said Filippo Grandi, the United Nations High Commissioner for Refugees.

"Most importantly, connectivity can help broaden the opportunities for refugees to improve their own lives and pursue a vision of a future that would otherwise be denied to them," he added.

A report by UNHCR and Accenture, "Connected Refugees: How the Internet and Mobile Connectivity Can Improve Refugee Well-being and Transform Humanitarian Action," outlines how many refugees view access to a mobile phone and the internet as being as critical to their safety and security as food, water, and shelter. Read the report at https://www.unhcr.org/5770d43c4

This access to mobile phone technology by refugees creates many opportunities for innovation in refugee education.

Phones can provide access to resources, information, languages, curriculum, and more. Read more about in a Brookings Institution story "How teachers use mobile phones as education tools in refugee camps," by Sarah Dryden-Peterson, Negin Dahya, and Dacia Douhaibi. https://www.brookings.edu/blog/education-plus-development/2017/03/14/how-teachers-use-mobile-phones-as-education-tools-in-refugee-camps/

TEACHING TOOL



"Guardians of History"

Voice-activated journey to the past teaches history and encourages children to actively shape their adventure in a choice-driven story with multiple endings

Children and families can immerse themselves in ancient history with Guardians of History™, a new interactive voice-activated game from Encyclopaedia Britannica, where players learn about the past through an engaging timetravel adventure and save history from forces that threaten it. Guardians of History is free to use on all supporting devices.

The first episode, "The Olympia Obstacles," is a fun, choice-driven experience where the player travels back in time to the ancient city of Olympia, Greece. When developing the game's setting, content, characters, story, and imagery, the writers and editors drew from the Britannica's historical archives to ensure historical accuracy. The resulting 40-minute audio experience teaches the player about Ancient Greece through



dialogue, sound, and meaningful choices that lead to eight different endings.

"This is a new frontier of learning, where children enjoy fun-filled dynamic adventures, learn about past civilizations and interact with characters to develop social-emotional skills," said Karthik Krishnan, global CEO of the Britannica Group. "Voice experiences and games are two of the ways that technology, used effectively, can help enhance learning inside and outside classrooms. Britannica is excited to blend modern-day technology and science fiction concepts to continue to inspire curiosity and the joy of learning in new and engaging formats."

