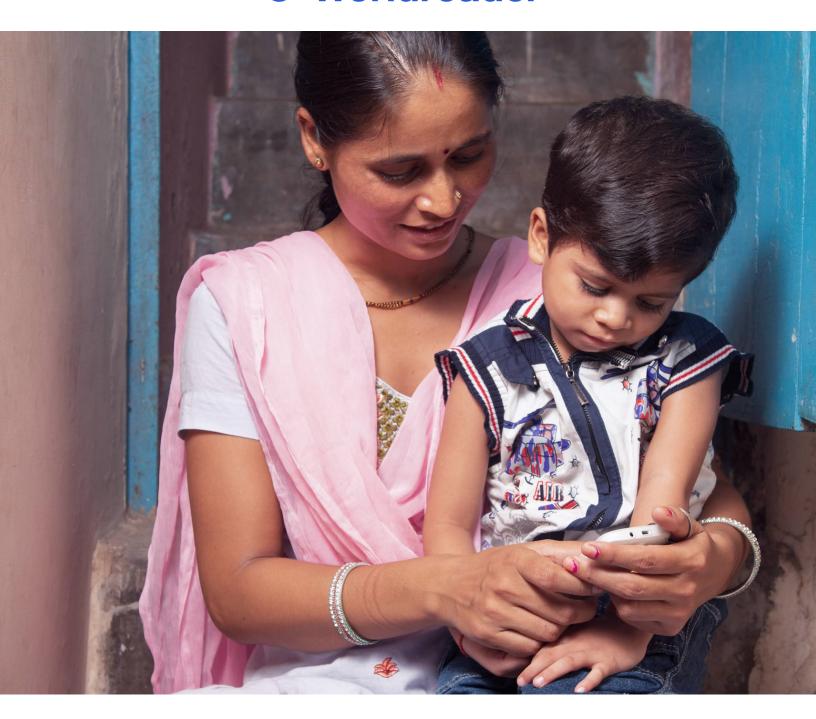
Worldreader

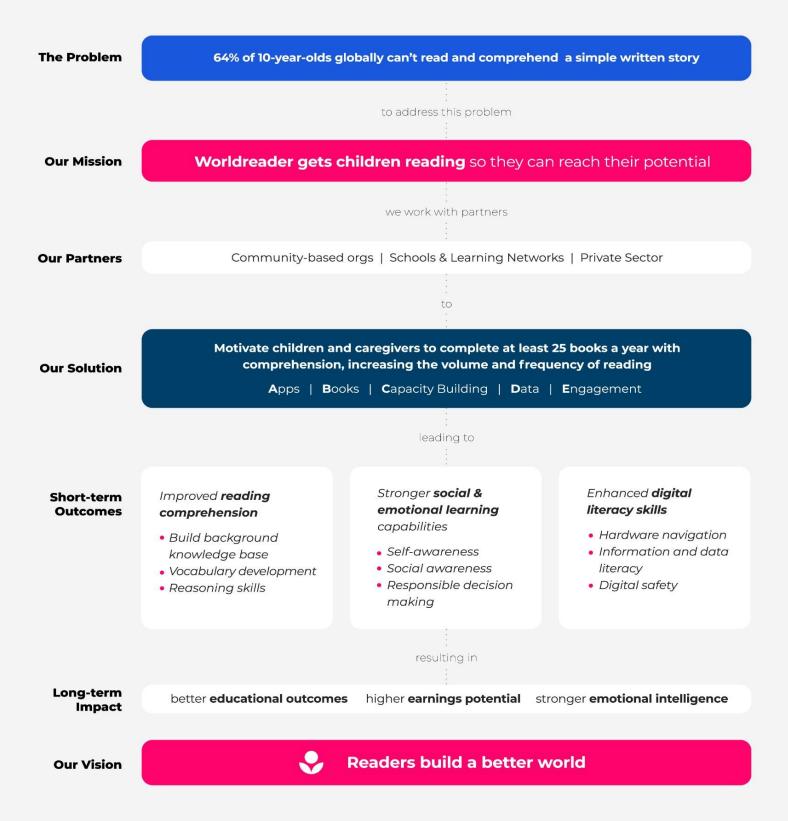


Theory of Change

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Problem Statement

The world faces an unprecedented learning crisis. According to UNICEF (2022), "Over a third of 10-year-olds globally are estimated to be able to read and understand a simple written story." The remaining 64% (up from 52% pre-pandemic) are unable to reach minimum proficiency in reading comprehension. These children will not reach their potential and stand to face even greater challenges in the future. This will result in what the World Bank and UNESCO (2022) already estimate to be a total loss of \$17 trillion in lifetime earnings for students worldwide. And the implications are not limited to the children themselves. Our future depends on this and future generations being able to read – society needs educated and skilled citizens to build a better world. We must get children reading today.

Our Mission

Worldreader gets children reading so they can reach their potential.

We work globally with partners to improve reading outcomes in children aged 3-12. We develop and provide evidence-based reading programming to community-based organizations, schools and other learning institutions, and the private sector, resulting in children's improved reading comprehension, social-emotional competencies, and digital literacy skills.

Our Focus

Worldreader motivates children and their caregivers to complete 25 unique books a year in order to build reading comprehension and strengthen

¹ In the US, 67% of 4th grade students does not reach reading proficiency standards (NAEP, 2022)



social-emotional and digital literacy skills. Worldreader offers its reading programs to children 3-12, while placing a special emphasis on children 3-8 years of age.

Worldreader promotes reading early in a child's life because it pays off in the long term. It is now universally accepted that investing in a child's early years has the highest return on investment. Dr. Heckman's research notes the "brain [is] developing rapidly to build the foundation of cognitive and character skills necessary for success in school, health, career and life." The Center for Disease Control also affirms "the first 8 years builds a foundation for future learning, health and life success." Investing early is critical for children to attain their potential.

Yet starting early requires active engagement with children's caregivers, and most often in their own home or community environment. Caregivers are the first teachers of children. Worldreader works directly with caregivers, and through partners with direct access to caregivers, to have them read to and with their children at an early age. Through early reading, caregivers offer the key to lifelong learning. Heckman noted in 2021, that "... childcare programs... are only successful when they kind of 'turn on' the parents....That's the secret for them ... It's engaging the family..."³

To build the volume and frequency of reading required for children to attain the reading outcomes they need for success, Worldreader motivates children and their caregivers to complete 25 unique books a year with comprehension. This metric stems from research and reality. Research states that children need at least 40+ reading books a year to support reading gains.⁴ Today, children who need the most support in reading often do not have book-rich environments nor a family practice of reading together. Worldreader enables children and caregivers to take the first step, completing and celebrating their first, fifth, 15th and 25th plus book in order that together they build critical reading skills.

Worldreader's approach on early childhood and caregiver engagement in the home learning environment reinforces the formal education system. Early

² Invest in Early Childhood Development: Reduce Deficits, Strengthen the Economy (Heckman Institute)

³ <u>The Important Role of Family Structure and Environment in Children's Skill Formation</u>, (Institute of Family Studies, Oct. 2020)

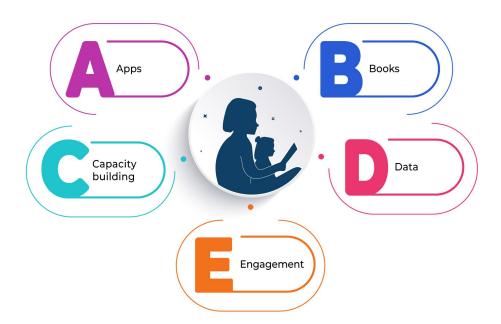
⁴ Palmer et.al., 2016, Global Book Fund Feasibility Report." (p.21)

reading investment ensures that children have the pre-literacy skills needed to acquire formal reading instruction received during early primary grades. Engagement of caregivers with their children furthers education instruction through reading practice outside of the classroom, where reading instruction and practice is often limited and time bound at school.⁵ The American Academy of Pediatrics (2015), found that "greater home reading exposure is positively associated with activation of brain areas supporting mental imagery and narrative comprehension, controlling for household income."⁶

From the World Bank to local schools, all are addressing this critical reading crisis by engaging caregivers and their children as key partners to get children reading.

Our Solution

In order to motivate children and caregivers to complete at least 25 unique books a year with comprehension, Worldreader utilizes its ABCDE solution:



⁵ Most Language Arts curriculum globally allotts up to 90 mins a day for teachers to cover reading instruction and writing.

⁶ <u>Home Reading Environment and Brain Activation in Preschool Children Listening to Stories</u>
John S. Hutton, MD; Tzipi Horowitz-Kraus, PhD; Alan L. Mendelsohn, MD; Tom DeWitt, MD; Scott K. Holland, PhD; the C-MIND Authorship Consortium, Pediatrics (2015) 136 (3): 466–478.



Apps: As a digital reading pioneer, Worldreader anchors its service model on digital delivery. COVID-19 normalized digital learning on a global scale to the point that the United Nations claims digital learning as a key platform for transforming education in order to meet the Sustainable Development Goals. With the proliferation of mobile phones, roughly 91% of the world's population has a built-in learning tool in their pocket. Worldreader serves its readers through a mobile application named BookSmart that works even on low-end phones, tablets, computers, and digital TVs.

Our technology suite allows us to reach larger portions of society more cost-effectively than traditional physical book reading programs, offers a more personalized and engaging reading experience for the reader, and provides actionable feedback to readers and data to partners and funders.

Books: To get children reading, children must have access to books rich in quality and diverse in theme. ¹⁰ Worldreader's 3000+ title <u>digital library</u> serves readers globally across five major languages by sourcing existing content from first-tier and smaller local publishers worldwide, yet remains agile to create material addressing gaps in the market such as books in minority languages, gender-responsive texts, social-emotional texts, etc.

In conjunction, Worldreader creates reading comprehension, social emotional and play-based skill-building activities designed for caregivers/facilitator's engagement with their children as one of several prompts to support dialogic reading.¹³ Books and activities build children's volume and frequency of reading, laying the foundation to reverse the reading crisis trajectory.

⁷ See https://www.un.org/en/transforming-education-summit/digital-learning-all

⁸ See https://www.bankmycell.com/blog/how-many-phones-are-in-the-world.

⁹ BookSmart, available on all major platforms from Android to iOS to other OS's like KaiOS and accessible to all with on/off line functionality, works on devices from \$10 feature-phones to Chromebooks to the newest iPhones, iPads and SmartTVs.

¹⁰ Palmer et.al., 2016, Global Book Fund Feasibility Report." (p.11). "Reading books—including story books, information books, and topic books, and also referred to as supplementary reading materials (SRM) or readers—are particularly important to building the foundational skill of literacy and may be even more essential inputs than textbooks in the early grades."

¹¹ Worldreader's digital library has Spanish and English Children's Oxford University Press dictionaries.

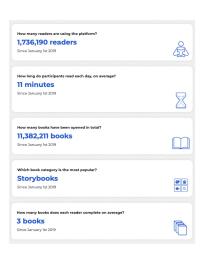
¹² Arabic, English, Hindi, Kiswahili, Spanish with additional collections such as Ukrainian, My Special Word (SEL collection).

¹³ Children and adults having an engaging conversation about a book.

Capacity Building: Caregivers and reading champions/facilitators in community-based organizations and learning institutions are the key influencers in young children's lives. These influencers require training and support to spur children to complete 25 books per year with comprehension. With caregivers, Worldreader focuses on building confidence in their capacity to read to and with their children, modeling dialogic reading with supportive digital tips, celebrating reading milestones achievements, online and within their community. It further supports these caregivers with basic digital literacy skills enabling them to use their mobile phone as a critical learning tool for their children. This builds confidence to be a "good reader" with their child (ren) and leads to a more dynamic and positive reading engagement between caregiver and child (ren).

Worldreader's partners – community-based and learning institution influencers – receive an expanded portfolio of training to encourage and empower caregivers and their children to read. These trainings include integration of digital reading within their established sectoral programs, caregiver and child(ren) communication engagement strategies, reading sessions facilitation, storytelling guidance and modeling, digital literacy skill development and more.

Data: Data drives impact, and Worldreader's real-time insights allow it to get more children reading more. Worldreader's GDPR-compliant data analytics platform enables it to determine who is reading, how much and how regularly they are reading, how to personalize their reading experience, amplify books and activities which drive increased reading, and provide much needed feedback to children, caregivers, partners and funders so they can celebrate or fine tune their reading practice.



Worldreader shares its real-time reading data directly with caregivers and children within BookSmart and through its Insights platform for partners, donors, publishers, governments and other stakeholders, that further reveals the impact of their engagement strategies, toward reading goals.

¹⁴ Community-based facilitators, project managers, and pre-school/nursery facilitators, and other reading proponents etc.

¹⁵ Nicolai, S., Khan, A., Kamninga, T.M., and Seluget, C. (2022). Raising Readers: Kenyan schools' use of technology to improve parent and carers' engagement in literacy learning. [Baseline Report]. EdTech Hub.

Engagement: To increase reading volume and frequency of children to complete 25 unique books with comprehension, Worldreader takes a two pronged and multiple engagement strategy approach.

For caregivers, Worldreader works directly through social media, in-app and public service announcement and other like platforms, drawing on behavior change strategies, to drive caregivers to read to and with their children. These behavior change strategies are further amplified with in-app prompts, guided learning, individual and family incentives, gamification, and integration with other platforms such as WhatsApp and Clever Tap to aid readers on their journey to completing 25 unique books.

For partners, in addition to the caregiver approach, Worldreader works closely with partners to enhance and elevate their community-outreach and caregiver communication strategies. Such strategies include community radio programs, reading festivals and celebrations, reading challenges, and community incentives, and much more. These strategies embrace accepted celebration traditions, while spurring new culture practices of reading.

Short-Term Outcomes

Worldreader's ABCDE model will build reading comprehension, while strengthening social emotional skills and enhancing foundational digital literacy skills.

Reading Comprehension

By targeting 25 unique books per year completed, children build their background knowledge, vocabulary and reasoning, three interrelated skills foundational for improved reading comprehension. Worldreader builds children's background knowledge by curating a broad range of reading books, which include storybooks, fiction, non-fiction, rhyming books and subject-specific texts. These books are sometimes referred to as supplemental reading materials, and are deemed "important to building the foundational

¹⁶ Scarborough, 2001.



skills of literacy ... may be even more essential inputs than textbooks in early grades."¹⁷

Reading diverse texts builds domain-specific knowledge or topical knowledge, which helps readers construct vocabulary and meaning from the texts. Worldreader thus builds vocabulary breadth (number of new words), depth (word properties like definitions, spelling, and pronunciation), and receptive vocabulary (words understood by the reader). We achieve this through in-app support such as word walls, a dictionary, audio-books, and pop-ups that imitate dialogic reading. Increased and diverse reading of books, also builds new strategies for engaging with any book and building reasoning skills such as predicting, summarizing, inferencing, and applying content knowledge to their own lives or other subjects. We support reasoning through in-app strategies like dialogic reading, questioning, using the five W's, and listening to stories.

Background knowledge, vocabulary and reasoning skills are assessed through Worldreader's real-time data, capturing the volume and diversity and frequency of books read, coupled with in- and out-of-app formative assessments. Completing 25 unique books a year with comprehension does not replace but rather complements classroom literacy skill instruction.

Social Emotional Learning (SEL) Capabilities

In addition to building foundational reading comprehension skills, we know that "cultivating the habit of reading helps the child develop values and social skills faster and stronger. Books allow children to see the world from someone else's perspective; they read about problems which they might never face but this helps them understand the mind frame of those who do. Reading teaches them to be more tolerant and patient with others. This makes social interaction easier for them as they navigate their way through the world as adults" and leads to higher abilities to navigate one's life.²⁰

Again anchored on curating content that not only improves reading comprehension but further fosters social emotional capabilities, children who complete 25 unique books a year with comprehension, will demonstrate

¹⁷ Palmer et.al., 2016, *Global Book Fund Feasibility Report.*"(p.11)

¹⁸ Scarborough, 2001.

¹⁹ How Does Reading Help A Child's Social Development, GetLitt

²⁰ Social and Emotional Skills: Well-Being, Connectedness, & Success. OECD.



self-awareness (understanding one's own emotions, thoughts, and values and how they influence behavior across contexts),²¹ social-awareness²² (how to empathize with others, including those from diverse backgrounds, cultures, and contexts, and responsible decision-making skills (making caring and constructive choices about personal behavior and social interactions across diverse situations.²³ Books offer a robust platform on which to utilize foundational reading skills such as reasoning to further assess social emotional skills, often formatively through scenarios and role plays.

Digital Literacy Competencies

Digital learning is here to stay as UNESCO articulated, and COVID 19 exposed digital learning inequity globally. As a digital reading organization, Worldreader knows digital learning provides personalized learning and the ability to reach millions at scale. Worldreader seeks to address this reading crisis challenge by enabling millions of children to complete 25 unique books a year with comprehension while simultaneously reducing digital literacy inequity. First and foremost, Worldreader strengthens the caregiver and children's foundational digital literacy skills by building mobile hardware navigation skills, information and digital literacy (reading data and milestone achievements), and digital safety knowledge (safeguarding principles). These elements help caregivers and their children safely and more deeply apply the power of their mobile phone for learning – a skill that is not only needed for today but forever in their future.

For partners, Worldreader's training and capacity-building workshops complement caregiver and child digital literacy skills. We provide additional training modules on how to use technology in group reading sessions, apply data literacy through BookSmart and Insights reading data dashboard navigation, foster communication and collaboration through use of WhatsApp and other chat communities, and strengthen digital safety and problem-solving skills so that caregivers and teachers can build safety protocols into their digital reading practices.²⁴

²¹ CASEL, 2022, "Self-awareness"

²² CASEL, 2022, "Social-awareness"

²³ CASEL, 2022, "Relationship Skills"

²⁴ See UNESCO Global Framework of Reference on Digital Literacy Skills.

Long-term Impact

Children with strong reading comprehension and social emotional skills, along with digital literacy competencies, are better equipped to achieve their potential as they journey through life. Children with these skills will demonstrate greater education attainment and will have higher earning potential and stronger emotional intelligence.

Better Education Outcomes

Reading is foundational to education. Research shows that students who do not learn to read by the 4th grade are four times more likely to repeat and eventually drop out of school, and that the education attainment gap between readers and non-readers increases over time.²⁵ The World Bank notes that "if children cannot read, all other education Sustainable Development Goals are at risk."²⁶ The World Bank further states that if we address the learning crisis, it will have the same effect as "eliminating extreme monetary poverty, stunting, or hunger."²⁷

A lack of access to books in relevant languages, poor reading instruction, and limited family involvement in learning are some of the main causes of low reading outcomes.²⁸ As noted by Palmer et. al. (2016), cited above, reading books is essential to developing foundational literacy skills and is key to academic success in the early grades. Worldreader's programs are designed to address all three of these primary causes through curated content relevant to the communities we serve, and capacity building and engagement of caregivers and partners throughout the early and primary education ecosystem.

The learning loss sparked by COVID-19 further emphasized the crucial role of caregivers and communities in a child's learning and highlighted the critical need for solutions that engage the whole family to support children's education. Schools alone will not be able to address the reading crisis. With large class sizes, limited time for reading instruction and practice, caregivers

²⁵ The Link Between Reading Level and Dropout Rates (New York Times, March 2012)

²⁶ What is Learning Poverty (World Bank, April 2021)

²⁷ Ibid

²⁸ Gove, A. and P. Cvelich., 2011. *Early Reading: Igniting Education for All. A report by the Early Grade Learning Community of Practice*. Revised Edition. Research Triangle Park, NC: RTI.



and communities must take a more active role, getting their children to complete at least 25 unique books a year with comprehension.

Higher Earning Potential

Worldreader aims to increase our readers' future earning potential by working to level the field through reading comprehension, SEL, and digital literacy skills development. Growing evidence demonstrates that the returns on investment in children's early years are substantial compared to equivalent investments made later in life, with analysis suggesting that pre-primary reading can increase earnings in adulthood by 1.3 to 3.5 percent.²⁹

In addition, children who achieve basic literacy skills have greater earning potential, earning 30 to 42% more than their illiterate counterparts.³⁰ Each additional year of schooling raises an individual's earnings by 8-10%, and this change has an even greater effect for women.³¹ In concrete terms and using US data as an example, an individual without a high school diploma averages \$20K a year,³² while one with a high-school diploma earns 50% more at \$30K.³³

Social-Emotional skill development also drives employment and earnings success. The OECD has determined that strong SEL skills are second only to IQ in driving positive employment outcomes, ahead of parental income or socio-economic status. ³⁴ Foundational SEL characteristics like achievement-orientation and responsibility correlate positively with job performance, leading to more stable employment and higher earnings.

Further, digital literacy skills are critical to success in today's workforce. <u>UNESCO</u> (2022) defines digital literacy as, "the ability to access, manage, understand, integrate, communicate, evaluate and create information safely and appropriately through digital technologies for employment, decent jobs and entrepreneurship." The <u>World Bank</u> estimated that 60 percent of global GDP was expected to rely on digital communication technologies in 2022. This figure is only projected to grow over time, meaning that people who are unable

²⁹ The Economics of Early Childhood Investments (2014)

³⁰ World Literacy Foundation (2015)

³¹ World Development Report (2018)

³² By the Numbers: Dropping Out of High School PBS, Frontline, 2012.

³³ The Wage Gap Between College and High School Grads Just Hit a Record High (Money, Feb. 2022)

³⁴ Social and Emotional Skils: Well-Being, Connectedness, & Success (OECD)



to access and use these digital technologies will have limited ability to participate in the workforce and compete for these higher earning jobs.

Simply stated, investing early in children's reading outcomes places them on a trajectory for continued education and a lifetime of higher earning potential.

Stronger Emotional Intelligence

Research is clear that emotional intelligence is the single most important driver of an engaged, results-driven, highly adaptive workforce.³⁵ Emotional intelligence starts early in life, driven by a caregiver's interaction with and reading to and with their children, and then further reinforced within school settings as a child progresses academically. School closures as a result of Covid-19 impeded the development of emotional intelligence. Yet, increased reading volume and frequency complementing the classroom instruction, builds the critical foundational social and emotional learning skills of emotional intelligence. As Schlund stated "Literacy in particular provides rich opportunities for reflecting on the connections between our thoughts, feelings, and actions; taking on someone else's perspective; and using language and writing to navigate social dynamics and build relationships" (Schlund, 2019, 19).

Emotional intelligence skills must start early in life as these skills will affect job performance in adulthood. OECD notes that "social and emotional skills have an even greater effect on other aspects of a person's job performance than employability and income. This is because job performance is largely under the direct control of an individual, while income and employability are more influenced by demographic and background effects." Building emotional intelligence remains a key factor for their lifelong success.

Our Vision

Readers build a better world. Worldreader envisions a world where our readers complete their education, drive their own learning, use their emotional intelligence to effectively contribute to a more just and equitable world and are able to achieve financial stability for their own betterment and the betterment of their communities.

³⁵ Why Emotional Intelligence is a Critical Skill for Your Future Workforce (Achievers, Aug. 2019)

³⁶ OECD (2021), Beyond Academic Learning: First Results from the Survey of Social and Emotional Skills, (OECD, Paris, pg 13)

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