Changing Behaviors to Encourage Reading

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Why Behavior Change?

Worldreader believes readers build a better world. While there is ample evidence to support this vision, reading is not a high priority in many communities around the globe. For families working long hours and struggling to keep food on the table, finding time to read with their children requires targeted prioritization.

As one of the early pioneers of digital reading in the Global South going back to 2010, Worldreader’s work has always required a certain degree of behavior change when it comes to technology adoption. Yet, the greater need for behavior change focuses on a much more basic principle – convincing parents and educators of the value of reading both in and outside the classroom. Reading in the home is particularly critical when it comes to supporting early childhood development in young children ages three to eight.

In many geographies where Worldreader works, reading is understood as an academic pursuit meant for scripted textbooks. Little value is placed on leisure reading, despite it being a proven method for developing early vocabulary and language skills, and supporting cognitive development in young children\(^1\). The commonly used Hindi and Swahili languages both illustrate this point by allocating a single verb for the two actions of ‘studying’ and ‘reading’.

Through years of experience working to bolster reading in vulnerable communities around the globe, Worldreader has learned that providing access to books and information about the importance of reading is not enough to create lifelong readers. Early behavior change research in India\(^2\) showed us that true behavior change to support sustained reading

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\(^{2}\) For more information about the Read to Kids India Pilot see the final report “Leveraging Mobile Technology for Parental Engagement in the Early Years” available at https://comms.worldreader.org/wp-content/uploads/2018/05/READ2KIDS_digital-1.pdf
practices at scale requires a combination of traditional marketing and digital strategies coupled with programmatic support.

Worldreader’s behavior change strategy

Behavior change campaigns typically follow a specific sequence in order to move a target audience from awareness of an issue towards a behaviour resulting in a specific outcome. The campaign must provide a supportive environment which will enable people to initiate, sustain and maintain positive and desirable behavior outcomes. An effective campaign must also adapt to, and consider the context of, the community it serves.

![Stages of behavior change](Diagram)

Worldreader’s behavior change strategy thus focuses on moving target communities of readers from awareness of the value of reading towards sustained and frequent reading, leading to improvements in desired outcomes such as those focused on learning gains, workforce readiness, and gender equity.

After exploring many different behavior change models, Worldreader chose the socio-ecological model to drive effective campaigns according to where users sit within a digital reading ecosystem. SEM is a theory-based framework that helps to understand the effects of personal and environmental factors on someone’s behavior. There are five hierarchical levels of the SEM that

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3 See UNICEF Communication for Development (C4D) framework available at https://sites.unicef.org/cbsc/index_65736.html
influence human behavior. In Worldreader’s SEM model these are:

- Individual – the reader
- Interpersonal – parents, peers, teachers, librarians
- Community – institutions like schools, libraries, early childhood centers, and adult-learning centers
- Organizational – publishers and product support teams
- Policy/Enabling environment – governments, foundations, supporters, partner NGOs, multilaterals, industries and media.

The most effective approach to changing the behavior of a target audience uses a combination of interventions at all levels of the SEM model, with an ultimate focus on changing a reader’s behavior.

Worldreader supports this framework with six principles of effective behavior change campaign design outlined by Dan Ariely at the Center for Advanced Hindsight at Duke University. These principles include: simplicity, concreteness, pre-commitment and loss aversion, choice architecture, incentives, and social proof. The above have been integrated into Worldreader’s products and past behavior change campaign design.

Through simplicity and defaults Worldreader aims to keep its app design simple to avoid users having to make too many choices. This has been done through easy access links and speed dial buttons leading users directly into Worldreader’s book collections. This also appears through recommended
reading content and collections tailored to specific age groups and types of readers. These recommended books remove the barrier of choice for many users who want to quickly access reading content, while still allowing choice for those who are willing to further engage and navigate the collections.

The principle of **concreteness** similarly implies a need to make instructions specific and focused. This principle appears both in behavior change training strategies and things like the simple **two-minute instructional video** for how to use Worldreader’s BookSmart Home application.

The principle of **pre-commitment and loss aversion** derives from the concept that “the pain of losing something is greater than the pleasure derived from gaining something”. By having users commit to reading to their children up-front, and clearly explaining the value of reading to their children, for example, parents and caregivers will be much more likely to change their behaviors to develop a habit of reading in the home.

**Choice architecture** refers to designing settings in such a way that they will lead to a desired behavior. For Worldreader integrating this principle has meant reducing as many barriers as possible to users accessing books on Worldreader reading platforms. This has also led to Worldreader working on the design of a recommendation engine to suggest and feature content in line with reader interests and skill levels based on past reading behavior. **Incentive** principles are also incorporated, primarily on Worldreader’s Android platforms, through gamified features like badges and in-app rewards for book completion. It is important to ensure that these types of incentives motivate reading and don’t conflict with one another. For example, it is important to decide at product and campaign design if incentives will be geared towards motivating a social parent-child interaction, or a transactional relationship of engaging with more content at a greater frequency.

Finally, the principle of **social proof** requires showing users how others are using Worldreader’s applications and the power of technology to access books. It is important to tap into people’s aspirations and their sense of identity to get them to feel that other people are already reading to their children and experiencing clear positive results in their child’s learning. Through the pandemic in 2020, Worldreader has been experimenting with new ways of engaging social proof in its campaigns through reading challenges and WhatsApp messaging groups for parents in school communities. Through these communities caregivers are able to share stories of their child’s progress. Early evidence shows that these are effective methods for motivating parents and caregivers to engage in creative reading activities with their children and lead to more reading on the BookSmart app.
Leveraging digital tools for behavior change in the midst of a pandemic

As a digital reading organization, Worldreader leverages digital tools to change behaviors at scale through combinations of digital and on-the-ground distribution and awareness campaigns. Over the past five years of working on targeted behavior change campaigns in varying contexts, Worldreader determined that the right mix of interventions can begin to move the needle on digital reading uptake. Past projects have demonstrated that digital campaigns are cost-effective, with past campaigns reaching users at just 0.30 USD in India⁴ and 0.45 USD in Jordan⁵.

In the context of the Covid-19 pandemic where house visits and in person training sessions have been put on hold, Worldreader’s behavior change programming shifted to a 100% digital approach. This transition incorporated learnings from past programming to pivot under its Keep Children Reading distance learning program from a blended reach model to a digital-only model that has already led to impressive reading engagement from participating households.

With the six principles of behavior change in mind, Worldreader launched a 14-day reading challenge in June 2020 to encourage regular shared reading at home on the free BookSmart reading platform. Targeting children aged 3 to 8, (5-10 in Peru). The challenge launched in five regions including India, Peru, East Africa, West Africa and South Africa. The challenge included one book to read every day over a 14 day period paired with a couple of post-reading activities for parents to complete with their children. Using the principle of incentive, at the end of the challenge Worldreader distributed a digital certificate to all those children that had completed the challenge by reading all 14 books.

As the first digital-only program conducted by Worldreader, we were pleased to see positive results. From June 1st to June 30th approximately 6,500 people took part in the challenge and participants read more books compared to regular BookSmart activity. Reading challenge participants read 18 books each on the app, on average during challenge period vs. five books on average for those readers that did not take part in the challenge. The program encouraged this participation through push notifications and

WhatsApp as the main digital communication tools for promoting regular shared reading in the household.

**Push notifications** are only available on Worldreader's Android platforms and appear more effective in some regions than others. For example, click through rates\(^6\) registered in Peru went from seven to 14\% in the first week of the challenge compared to an average of 4-5\% in India for the same period. In Sub-Saharan Africa the large majority of users access Worldreader's BookSmart library via the Web App platform where push notifications are not available. In their place, partners used other digital channels to nudge users to keep reading, such as WhatsApp.

Worldreader's teams in India and both East and West Africa successfully leveraged WhatsApp to promote the challenge, send daily reminders of the book to read, and share post reading activities with participants. Project managers created small WhatsApp groups of maximum 20 parents that were managed by our local partners in each region. Daily messages included tips for parents on how to read to children using a mobile phone. These WhatsApp groups also allowed for interaction amongst reading challenge participants, leveraging the social proof behavior change principle. These digital communities of parents encouraged further participation in the reading challenge and interaction with children by providing caregivers with a space to share examples of their experiences and child’s accomplishments. In India, participants would share photos\(^7\) of the activities carried out with their children. This also acted as an informal way for Worldreader to monitor the engagement of reading challenge participants.

In India, our partners SARD & Chrysalis took a step further and created audio files in both Hindi and English to share information regarding the book and activities of the day with their program participants. These audio tips, shared over WhatsApp, were effective amongst low literate parents and provided an elevator pitch on the book of the day, extra guidance on the book to read and the activities to do after reading the book. Worldreader is still exploring how messaging apps can be leveraged to share audio files in other geographies and has begun exploring the integration of these features into the BookSmart application.

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\(^6\) A click through rate measures the success of a digital message or advertisement. In this case, the click through rate was calculated as the number of times a push notification was clicked on to access a book divided by the total number of times the push notification message was viewed.

\(^7\) It is important to note that these approaches were GDPR compliant and no image of participants was used without their authorization. For more information about Worldreader’s data protection policies visit https://comms.worldreader.org/wp-content/uploads/2020/04/Worldreader-Resonsible-Program-Data-Policy_2020pdf.crdownload.pdf
The behavior change principle of simplicity was a key factor in the success of the reading challenge. By providing a daily recommended book to read we aimed to remove the burden of caregivers having to choose which book to read with their child. Having too much choice can often lead to no choice at all. Worldreader’s digital library includes thousands of books from publishers and authors around the world. While this means Worldreader has books for all ages and tastes, this level of choice can act as a barrier for young readers or their parents who either have low levels of tech literacy or who are not confident readers.

The Future of Behavior Change at Worldreader

Since the completion of Worldreader’s first real behavior change study with Project Literacy and Results for Development in 2015, Read to Kids India, Worldreader has continued to iterate and test on different behavior change models around the globe from the Tuta Tuta campaign in Jordan, to this Keep Children Reading campaign response to Covid-19. The more we learn, the more these models improve both through our app design, our accompanying programming, and our targeted partnerships with organizations. While our organizational partners are key to sustaining behavior change by following up with families at the household level to sustain reading behavior in the home and support the learning of children ages 3 to 12, digital alternatives to safely engaging parents have proven possible during the Covid-19 pandemic.

Over the next few years Worldreader is looking to advance its behavior work by building additional interactivity into its reading applications and fine-tuning the formula for reaching readers with the motivation they need to read more. This will include additional gamification, audio and chatbot functionality within the application to build a reading incentive structure, an improved content-recommendation engine, and continued experimentation with various data-driven reader engagement models.

If you are interested in supporting this work, please consider donating to Worldreader today.