Worldreader

CreceLee Case Study
Executive Summary

June 2021

"When we read together, we value our children and give them a different life perspective." - CreceLee Parent, 2020

Project Overview

2020 was an unprecedented year for education. In over 150 countries throughout the world (*UNESCO*)[1], the coronavirus pandemic forced governments to close schools and shift to virtual learning strategies for millions of students. In Peru, over 9.9 million school aged children have been impacted by the COVID-19 pandemic (*UNESCO*).[2] On March 16th 2020, schools in Peru cancelled the beginning of the traditional school year and on March 20th the government announced its digital education strategy, a program for all students in preschool, primary, and secondary school titled **Aprendo en Casa** (I Learn at Home). The program provided continuity of classes through radio and television programming aligned with the national curriculum and provided various activities, guidelines, guides and educational resources via the AeC online web portal (MINEDU, 2020c).

"CreceLee," a digital reading program for children 3-12 years of age in schools with low reading scores, was initially designed to contribute to improved reading outcomes via a classroom-based tablet intervention providing a school-to-home pipeline through books available on mobile phones in the home. The COVID-19 pandemic required the project to rapidly pivot to a home-based reading program for students and their families delivered exclusively through mobile technology and Worldreader's BookSmart[3] reading application. This dramatic change in programming provided an opportunity to explore impact questions such as:

- How can Crecelee and Booksmart provide critical support to distance teaching and learning during school closures?
- Can we meaningfully engage and onboard teachers and parents in digital reading?
- How can we support local and national government strategies to keep children learning?
- What enablers and barriers exist to an equitable digital reading solution?

---

[1] School closures caused by Coronavirus (Covid-19)
[2] School closures caused by Coronavirus (Covid-19)
[3] BookSmart is an Android and web-app that contains a digital library with 200 Spanish books aligned to Peru's Plan Lector (National Reading Program) and a "Book of the Week" instructional format with engaging activities that parents can use to foster learning in the home.

This case study is the synthesis of early findings generated during Worldreader's national COVID-19 response starting in April 2020 and into a 4-month pilot from April - December 2020 with Crecelee partners World Vision Peru[4] and GRADE[5].

Crecelee's rapid response was two-fold. Initially Crecelee coordinated with the Ministry of Education (Minedu) to integrate BookSmart within the AeC platform. This provided students across Peru with access to the BookSmart app and a collection of 105 Minedu-approved books. Minedu worked with Worldreader to integrate book excerpts from the BookSmart library into the AeC platform. Second, CreceLee partners piloted the remote reading intervention with five public schools (IEs, as per their acronym in Spanish) in the District of Chancay (North of Lima). A total of 600 second and third grade (elementary) students, five principals and 27 teachers participated in the project. The selected schools were located in urban and peri-urban areas reporting lower-than average learning achievement and had no previous ICT-related programs.

World Vision selected schools from their areas of operation and the project team conducted all on-boarding, training and data collection virtually using telephone, virtual meetings, and messaging apps such as WhatsApp and Telegram. The pilot provided teacher training to 27 teachers and focused on the collection of books and simple pedagogical activities parents could do with their children pertaining to reading and learning. The intervention integrated the use of online learning tools such as discussion forums via WhatsApp and Canvas, online homework and educational games.

Overall CreceLee prioritized:

- **Parental and teacher Involvement** in learning and generated at-home digital reading programming for 470 individuals;
- **Use of available technologies** for reading such as mobile phones, videoconferencing for training and the social messaging platform WhatsApp to support school-to-home communication;
- **Improved reading habits** aligned with the National Reading Curriculum and Aprendo en Casa.

---

[4] World Vision is a world-leading Christian development, advocacy and humanitarian aid organization in child protection, with a presence in nearly 100 countries around the world. It has a broad and profound understanding of the dynamics of education in families in urban and rural communities, given its long trajectory.
[5] The Grupo de Análisis para el Desarrollo (GRADE) (Development Analysis Group) is a private, non-political-party, non-profit research center. Its mission is to develop applied research to stimulate and enrich the debate, design and implementation of public policies.

Findings

The COVID-19 response resulted in the following early findings:

- The application provided access to **255 different books** for CreceLee students, approved by the Ministry of Education Basic Regular Education Directorate ("Dirección General de Educación Básica Regular (DIGEBR)").
- **34% of students read using the app at least once,** and 21.9% read at least one day a week, for 15 minutes or more.
- **Pilot participants read 1,814 books**, for a total of **16 books read per day** (7 books per student, on average over the length of the project)**.**
- **Average reading time per student was 33 minutes per week,** just shy of the targeted 45 minutes of average weekly reading time.
- The study found a **positive association between both family socioeconomic status[6] and availability of a mobile phone within the home, to the use of the BookSmart application**, both in terms of reading frequency and reading time.

In this sense, CreceLee was able to demonstrate multiple benefits, starting with access to immediate, continuous and user-friendly book reading in communities with low reading levels using mobile devices. The pilot took advantage of the fact that **97.7% of Peruvian homes possess at least one mobile phone**, according to official data as of 2020, and fostered more fluid communication with stakeholders through messaging channels such as WhatsApp.

Sixty-eight percent of the families (319) who participated in the pilot project managed to download the BookSmart app on their cell phones despite some challenges reported due to phone memory capacity on their phones and poor phone functionality. Some additional limitations throughout the project included the difficulty in measuring reading skills in an online format, the dispersion of efforts in ICT usage; deficient connectivity among disadvantaged target beneficiaries (only 15% had internet access, though 22% owned a tablet and computer and 95% a mobile phone); and lack of time on the part of parents to support their children's educational development due to overwork in the context of lowered family incomes caused by the ongoing health emergency. Language barriers also posed challenges, since some families spoke Quechua, but the working team did not.

---

[6] Socioeconomic indicators for this study included connectivity, access, and use of technology.

Despite challenges, **80% of interviewed teachers and parents showed positive responses to the project**. Their involvement also helped child beneficiaries to create a virtual community of practice, in as much as 70% of cases sent evidence (videos, photographs or text documents) of integrating digital reading in their homes.

> *"I no longer have to buy the books one at a time, neither do I need to print them. They look perfect from the cell phone or tablet and right now due to the economic insufficiency, that's a plus."*
>
> **- CreceLee Parent**

Recommendations

Synthesizing the CreceLee Project experience, the following recommendations can be made regarding the development of distance education programs:

Generate strategic alliances. The results generated through the collaboration of the project partners far outweighed the individual contributions. Each partner brought their knowledge and experience to the program's success. World Vision contributed the pedagogical approach and strong community presence; Worldreader contributed BookSmart, a digital library, and back-end data, and GRADE, contributed the research framework, monitoring and impact assessment.

Alignment with the education system is crucial. The coordinated work with the Ministry of Education helped secure approval of the pilot and strengthened the overall system by integrating it into Aprendo en Casa for all students. The design, implementation and evaluation of any educational program, including digital reading programs, should coordinate content choices with local education experts for increased uptake and relevance. For example, Booksmart's digital library was approved by the Directorate-General for Regular Basic Education.

Blended learning methods should be developed. To the extent permitted by the Covid-19 pandemic, blended learning methods combine online and in-person learning to strengthen program uptake and impact. The use of inverted class learning methods (with greater student autonomy) and online games are further suggested. ICTs should be used to reinforce digital skills in the educational community with support from teams of NGOs or volunteers. Synchronous and asynchronous sessions can be scheduled with teachers based on the methodology and learning strategy to further support blended learning.

> *"At school there is not a library sufficiently stocked to provide a book to each child. Then again, the application (BookSmart) allows us to reach everyone with the same number of reading material, in a streamlined manner, organized by subject"*
>
> **- CreceLee Teacher**

Leverage availability of existing digital tools to facilitate the rapid implementation of distance learning resources. Use resources and ICT devices readily available to the participants. In the Peruvian context, the project took into account the high availability of cell phones and familiarity with resources such as WhatsApp (used during online support by 76% of participating families). Additionally, the use of learning platforms such as Canvas, supported online training.

Support digital literacy skills development of teachers and families. Explicit and regular remedial training supports actors in the ecosystem to feel confident and informed on the use of digital educational resources and allows for the integration of last mile solutions into training that are both offline, online, and blended. These competencies are cross-cutting and promote adaptation to new digital environments. For example, throughout the pilot project, teacher training was offered on the use of ICTs in the teaching and learning process.

> *"Online reading made us know each other better as a family." - CreceLee Parent*

Integrate all key II.EE School stakeholders, including families. All key players[7] within the II.EE ecosystem should be included in training programs. In this sense, it is necessary to expand strategies that integrate their participation, at different levels, roles and stages of the program. The CreceLee project trained teachers and collaborated with principals, parents, and students.

These recommendations are being incorporated into the design of the 2021-2022 school year in Peru scaling to 55 schools across Peru. The pilot ultimately showed that it is possible to create digital reading habits in distance learning environments and to onboard education ecosystem actors in all aspects of the roll-out. CreceLee's lessons learned during the early phases of the Covid-19 will help guide more permanent and fluid distance and in-person digital reading programs designed to improve educational outcomes. The project hopes to guide and inform other local ICT4E actors in Peru.

---

[7] District Education Officers, School Directors, coordinators, teachers, parents and students.