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IDRC GRANT / SUBVENTION DU CRDI : - STRENGTHENING SCHOOL LEADERSHIP TOWARDS IMPROVING SCHOOL RESILIENCY



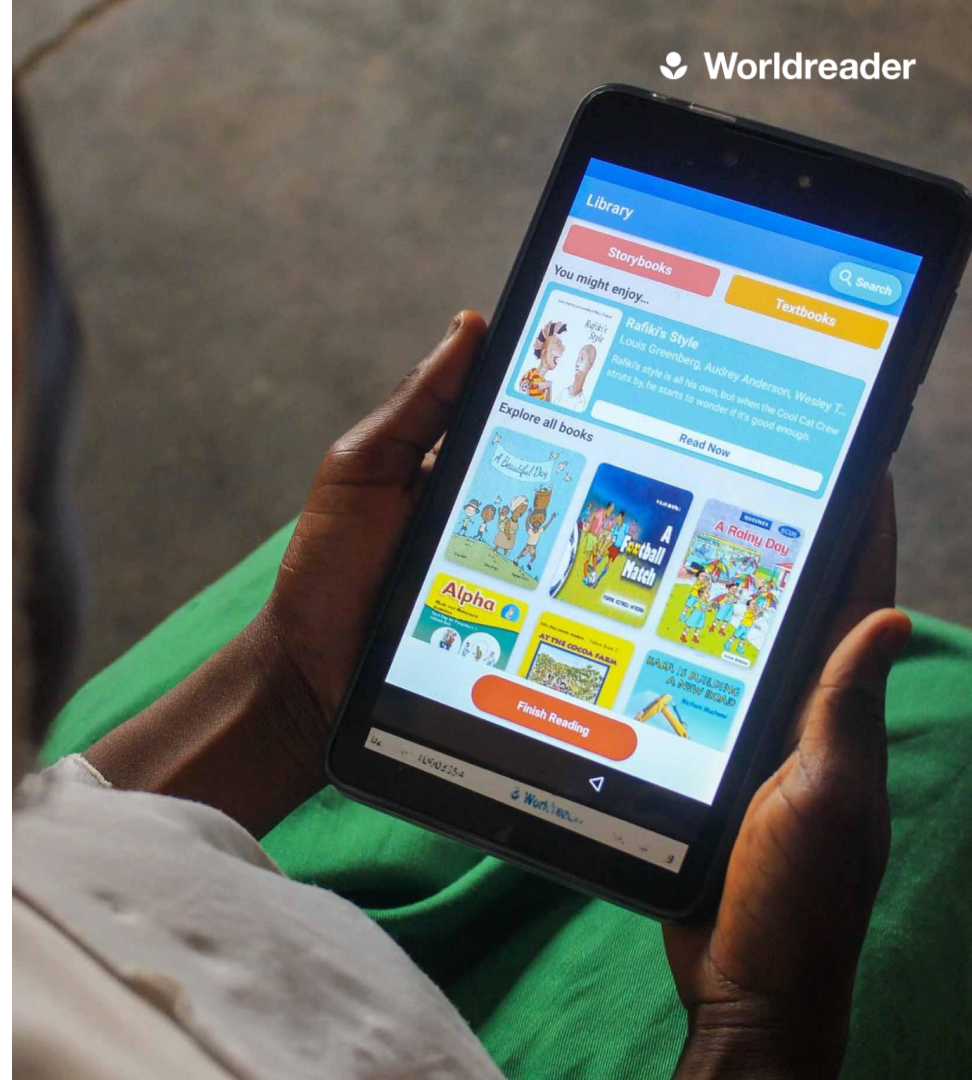
Continuous Improvement Science: Strengthening School Leadership and Improving School Resiliency

October, 2022

 **Worldreader**

Overview

- About Worldreader
- Research question
- Rationale
- Intervention
- Data Collection
- Results
- Discussion

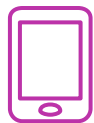


Readers build a better world.

Worldreader is a nonprofit organization that brings high-quality, affordable digital learning to children in under-resourced communities



Our approach



21st century technology

We reach readers with a digital library via affordable state-of-the-art devices such as tablets, and mobile phones.



The right content

We deliver relevant, dynamic content with agility to our readers through acquisition, enrichment, and curation services.



Supportive programming

We train schools, libraries, and families to help them get the most out of our reading programs.

**How and to what extent
does an improvement
science intervention
provide a methodology
for pedagogic change
involving ICTs in Kenya?**



Research approvals and permits

RE: Strengthening School Leadership Towards Improving School Resiliency: An Improvement Science Approach

This is to inform you that SU-IERC has reviewed and **approved** your above **independent (Worldreader)** research proposal. Your application reference number is **SU-IERC1079/21**. The approval period is **23rd August 2021 to 22nd August 2022**.



Rationale



Importance of school leaders

Researchers argue that school leadership plays an important role in transforming education delivery and improving learning outcomes



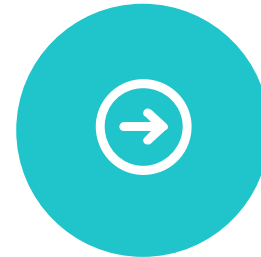
Lack of research

The impact of school leaders on student outcomes is an under-researched area, especially at the primary school level



Feeling unprepared

Despite an increase in school leadership development courses, many school leaders feel unprepared or lacking in competence for their role. School leaders in Kenya faced significant challenges during Covid 19 and felt unprepared for the learning and teaching challenges.



The way forward

Researchers recommend an indigenous conceptualisation of the meaning of school leadership in the context of present-day Kenya

Intervention



Who

12 school leaders:
head teachers and
deputies



Where

public schools:
7 in Mukuru and
5 in Limuru



When

December 2020 -
June 2022

Timeline

BookSmart Training

School leaders, teachers and parents were taught to use BookSmart and the insights dashboard

2021

2021

Reflection and Data Collection

School leaders reflected on their experiences and learnings

2022

2022

NIC Formation

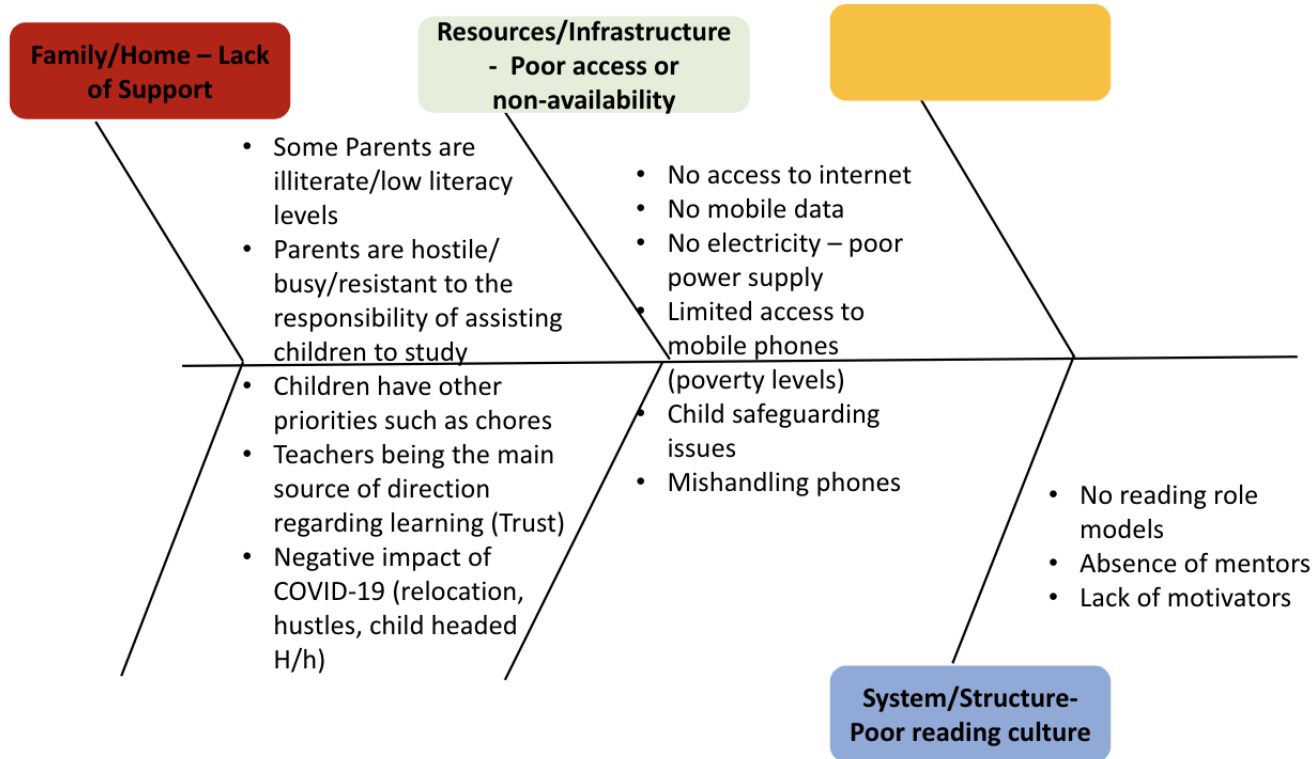
Networked Improvement Communities (NICs) were formed to support the intervention

PDSA Cycles

School leaders were supported to plan, do, study, and act to address an area of improvement in their school community

Identifying improvement areas

Fishbone Chart on Challenges to Developing Literacy among Primary School Pupils in Kenya





The challenges may be the same,
but the solutions may not be.

School leader in Mukuru

Improvement science approach



Plan

Who, what, when, where, how, and data collection



Do

Carry out the change or test and collect data



Act

Document what was learned and plan the next cycle



Study

Analyze and summarize data (quantitative and qualitative)

“Plan” and “Do”

Improvement Areas	Possible Interventions
<ul style="list-style-type: none">• Low literacy levels• Lack of reading mentorship• Limited reading engagement time between parents and their children	<ul style="list-style-type: none">• Setting aside time in the school timetable for reading• Increasing the number of children visiting the library• Incentivizing teachers to read with children, telling stories in class to increase students' confidence• Encouraging parents to use the Booksmart app with their children at home

Data collection

Quantitative	Qualitative
ICT-enabled reading data Dashboard data	Focus group discussions
	Key stakeholder interviews
	Context analysis

“Study” through the BookSmart dashboard

How many readers are using the platform?

289 readers

Since May 26th 2021



How many pages have been read in the last 7 days?

584 pages

In the last 7 days



How long do participants read each day, on average?

18 minutes

Since May 26th 2021



How long have participants spent reading in total?

15 days 2 hours 56 minutes

Since May 26th 2021



How many books have been opened in total?

5,140 books

Since May 26th 2021



How many books does each reader complete on average?

11 books

Since May 26th 2021



Which book category is the most popular?

Storybooks

Since May 26th 2021



How many activities have been completed in total?

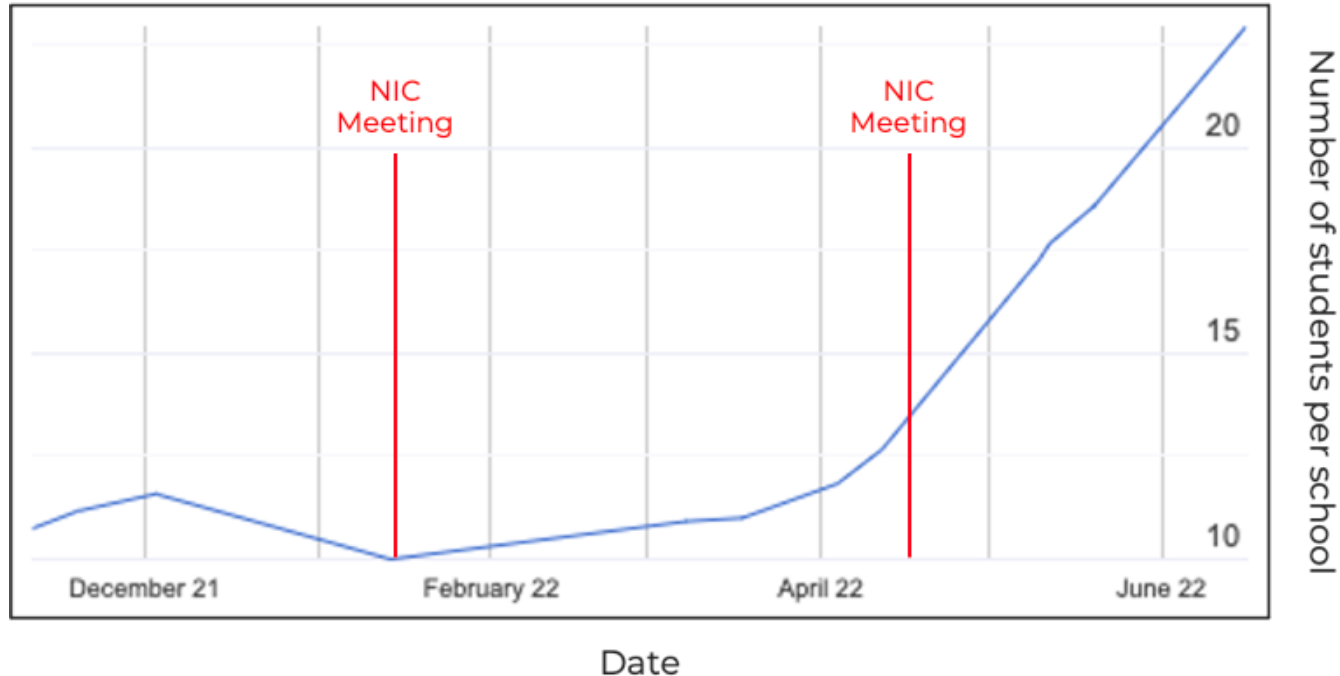
72 Activities

Since May 26th 2021



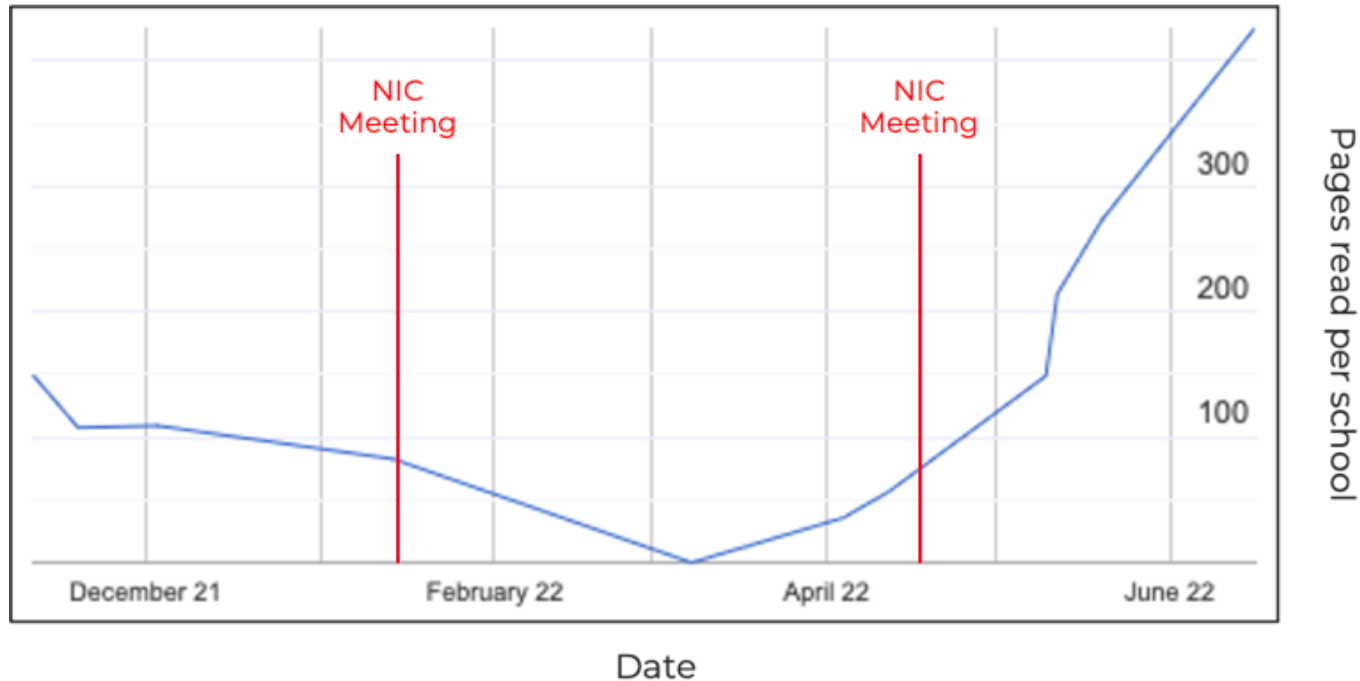
ICT-enabled reading data: App accessed

Students who accessed BookSmart during the previous week



ICT-enabled reading data: Pages read

Pages read per school during the previous week



Emerging Themes

**Parent-school
Relationships**

Student Impact

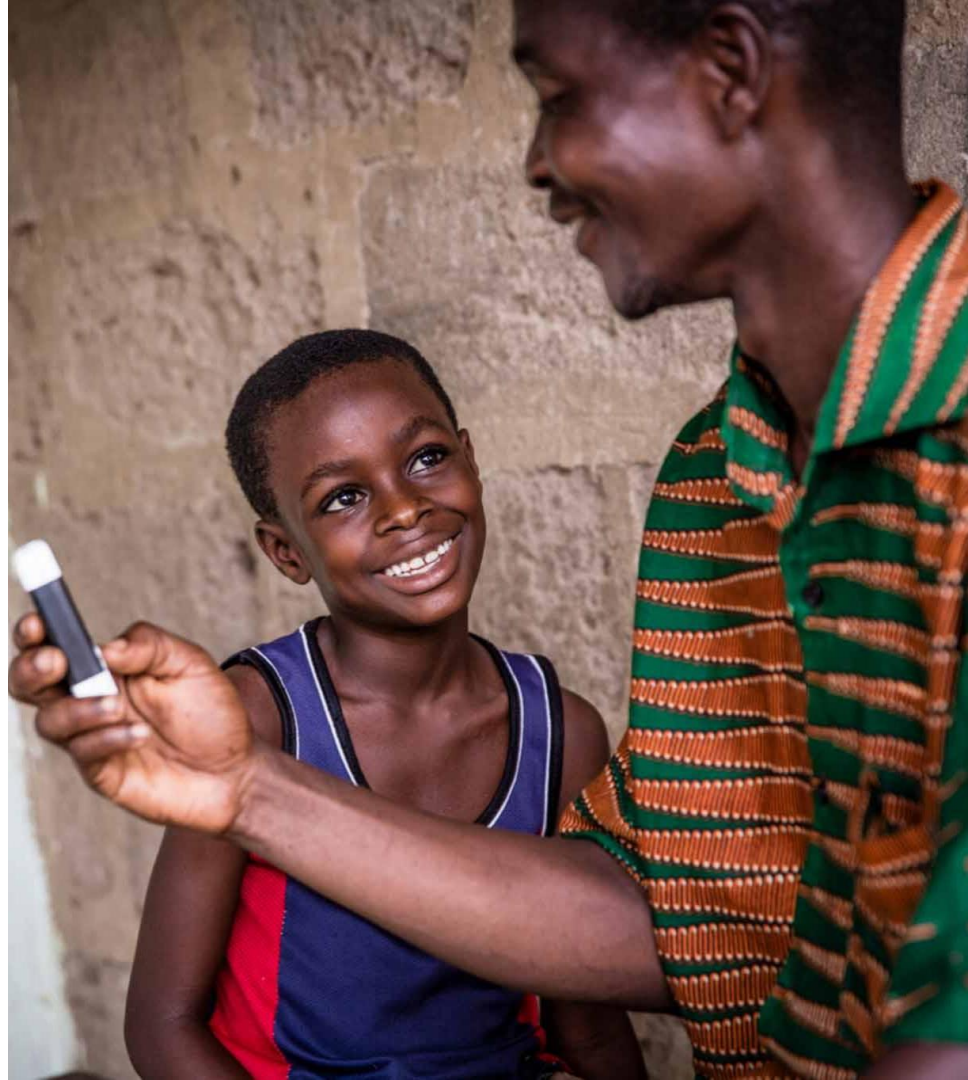
**Data-Based Decision
Making**

Reading Culture

Parent Relationships

Enhanced relationships between schools and parents

Inspired by mutual problem-solving within the NIC, one school leader decided to try problem-solving with parents. He listened to their concerns about reading at home (for example, parents not feeling confident in their reading skills or not having internet access) and facilitated “shared discussions” to determine solutions that worked at the individual level.



Student Impact

Increased students' interest in reading, public speaking skills, vocabulary, and creativity

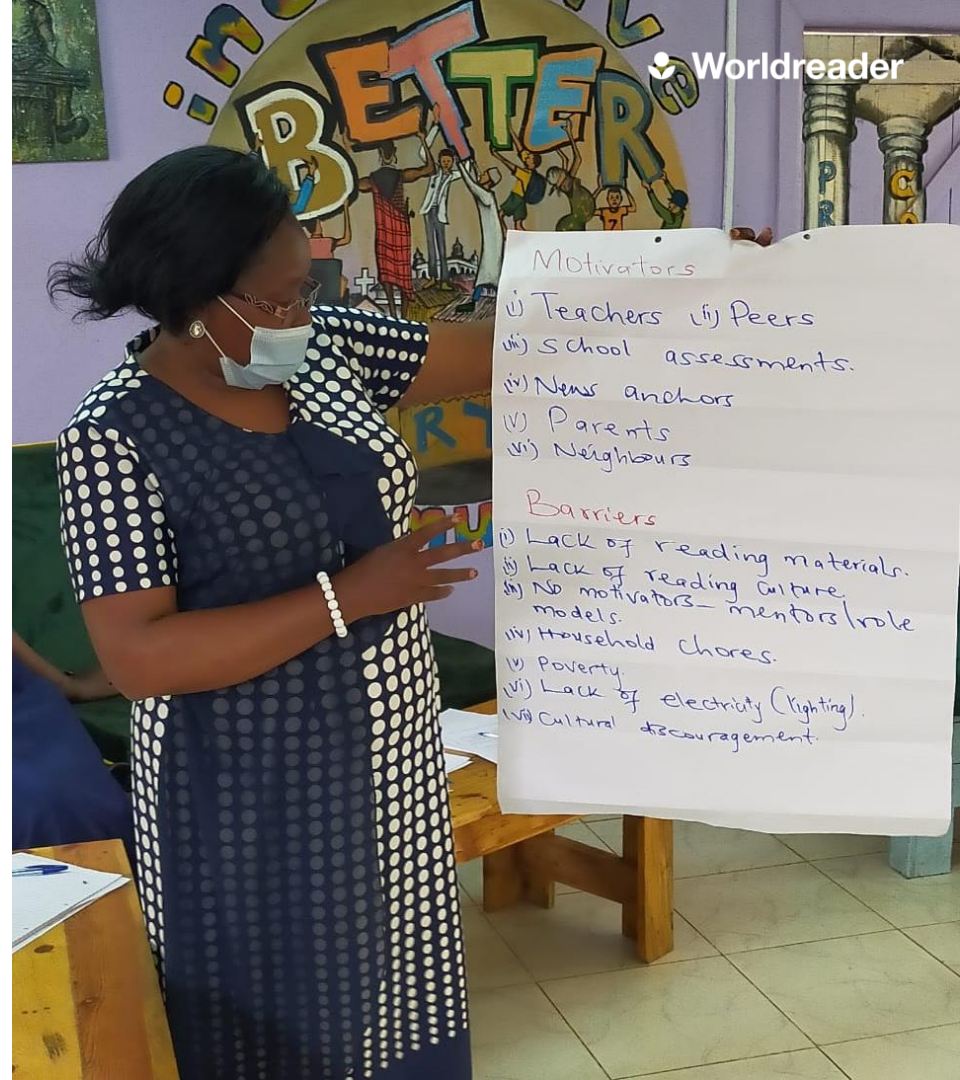
School leaders reported students' speaking skills—particularly in English—increasing as they spent more time reading on the Booksmart app. One leader explained that she has observed more students speaking English in class and described the BookSmart app as “a program that is going to help the child grow in their language command and expression.”



Data-Based Decision Making

Helped school leaders use data to make decisions about interventions

At a school in Mukuru, the headteacher asked classroom teachers to shift from using their phones to using a projector to share books with students. He explained that this shift allowed teachers to reach more students at one time.



Motivators

- i) Teachers
- ii) Peers
- iii) School assessments.
- iv) News anchors
- v) Parents
- vi) Neighbours

Barriers

- i) Lack of reading materials.
- ii) Lack of reading culture.
- iii) No motivators—mentors/role models.
- iv) Household chores.
- v) Poverty
- vi) Lack of electricity (lighting).
- vii) Cultural discouragement.



You work harder if you find that
you are dragging behind and
get encouraged when you see [a
plan] working.

School leader in Limuru

Reading Culture

Increased interest in reading

A popular feature of the Booksmart app was that the available books were varied, interesting, and connected to many different class subjects. School leaders explained that these books made them feel prepared to keep students engaged with reading, and to empower other teachers in the school to increase the time they spent reading with students.



Discussion

- School leaders benefit from opportunities to share ideas
- Digital libraries can make a positive impact on student outcomes
- An improvement science approach like PDSA can help leaders address improvement areas in their schools



Thank you!

www.worldreader.org

Download BookSmart:

1) BookSmart on
playstore

1) bebooksmart.com

