Strengthening School Leadership through an improvement science approach

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The relationship between leadership and improved educational outcomes is increasingly acknowledged in Kenya (The Republic of Kenya, 2008; Eacott and Asuga, 2014), but like in many other Global South countries, school leadership is under-researched (Asuga et al, 2015) and investment in school leadership under-funded. Worldreader, in collaboration with Open University in the UK, introduced an implementation science approach and the use of PLAN, STUDY, DO, and ACT (PDSA) cycles to test creative solutions towards improving reading outcomes in children. School leaders and researchers worked together to design, implement and assess innovations to the learning loss and literacy challenges facing their schools post Covid-19. In particular, school leaders were introduced to Booksmart, a digital reading program, and conducted a series of experiments to determine how best to leverage mobile technology for improved reading growth in students in their schools.

The project mentored school leaders in person and online and introduced a four-step Plan-Do-Study-Act (PDSA). School leaders tracked their personal learning journeys with the PDSA methodology. The project works in public schools in six primary schools in Mukuru Kwa Ruben, an underserved settlement in Nairobi’s industrial district, and six primary schools in Limuru, a rural area close to Nairobi. The Worldreader BookSmart App was introduced into the project schools to support improvements in literacy in classrooms, homes, and community settings.

The project was implemented by the Foundation for Information Technology Education and Development (FIT-ED) in partnership with Worldreader. The project’s three Co-Principal Investigators (CPIs) were from the Open University, UK. The IDRC grant to FIT-ED funded activities in the Philippines and Kenya, while a separate grant to SUMMA covered activities in Chile.

The overall objective of the research was to understand how a learning science approach targeting school leaders could contribute to improved quality and equity and continued learning and well-being of girls and boys in the Global South during the prolonged school closures of the COVID-19 crisis, and future emergencies. Specific objectives of the research included:

- Understanding how school leaders can be mentored to implement and assess innovations to improve learning outcomes.
- Evaluating the effectiveness of mobile technology in supporting literacy improvement.
- Assessing the impact of the PDSA methodology on school leaders' personal learning journeys.

The project’s findings will contribute to the development of evidence-based strategies for improving educational outcomes in the Global South.
Globally, education stakeholders recognize the need to address challenges in education quality and learning outcomes. School-level interventions are a crucial part of responding to these challenges. Resource availability and student- and teacher-related factors have been studied extensively, but relatively little attention has been given to the role of school leaders (Bush, 2013; UNESCO, 2016). Scholars and researchers argue that school leadership plays an important role in transforming education delivery and improving learning outcomes (Leithwood et al, 2008; Pont et al, 2008; Robinson, 2007).

School Leaders In Kenya

Globally, education stakeholders recognize the need to address challenges in education quality and learning outcomes. School-level interventions are a crucial part of responding to these challenges. Resource availability and student- and teacher-related factors have been studied extensively, but relatively little attention has been given to the role of school leaders (Bush, 2013; UNESCO, 2016). Scholars and researchers argue that school leadership plays an important role in transforming education delivery and improving learning outcomes (Leithwood et al, 2008; Pont et al, 2008; Robinson, 2007).

The relationship between leadership and school outcomes is increasingly acknowledged in Kenya (The Republic of Kenya, 2008; Eacott and Asuga, 2014), but like in many other Global South countries, school leadership is under-researched (Asuga et al, 2015). There is a particular dearth of literature on leadership at the primary school level. The limited research available shows that, despite a rapid increase in school leadership development courses and the statutory requirement that school leaders take preparatory courses every year (Asuga et al, 2015), most school leaders feel unprepared or lacking in competence for their role (The Republic of Kenya, 2008). School leadership training in Kenya which is typically offered by universities, professional associations and development consultants has also been described as mostly impromptu, often disorganized and simply geared towards conforming to universalized notions of leadership (Asuga et al, 2015). Eacott and Asuga (2014) emphasize the importance of context-specific understandings of educational leadership, and recommend an indigenous conceptualization of the meaning of school leadership in the context of present-day Kenya.

Worldreader

Worldreader, a digital reading organization focused on improving reading outcomes of children in the Global South, introduced Booksmart, its digital reading app, to school leaders and employing the PDSA cycles tested a series of hypothesis focused on how to engage teachers and parents in using new technologies for literacy development. Data generated from Booksmart was shared with school leaders and discussed between them.

Knowledge Generation

- Deepen understanding of how an improvement science approach can strengthen instructional school leadership towards school resiliency in a range of Global South contexts.

Capacity Building

- Build the capacity of school leaders for data-driven decision-making and problem-solving leading to improvement.

Policy and Practice influence

- Inform education policy and practice on strengthening instructional school leadership and building school resiliency using the improvement science approach.

Project Description

TECHNICAL APPROACH

In response to the challenges described above, the Strengthening School Leadership Towards Improving School Resiliency project worked with school leaders to build their capacity to use data to develop and test solutions to problems of practice in a blended (online/ offline) improvement science approach. School leaders and researchers worked together as a Networked Improvement Community (NIC) following a series of PDSA cycles (Plan, Do, Study, Act) to design, implement and assess local adaptations to school, classroom and community processes which foster and develop individual and collective resilience in learning with particular attention to digital practices. This approach focused on the integration of Worldreader’s Booksmart application into P3 classrooms at 12 schools in Kenya and the use of reading data to inspire parental support in their child’s learning and regular reading practices to support learning and build school resiliency.

In doing that, the project aimed to contribute to strengthened practice of school leaders in a range of marginalized contexts through use of data-driven decision-making, and to contribute to policy and practice through establishing the extent to which an improvement science approach offers a methodology for school leaders to affect pedagogic change in their school systems.
Project Activities Summary

The action research project had a duration of approximately 16 months, although Covid-19 constraints reduced the implementation period directly with school leaders to approximately 9 months.

Phase 1
March 2021 - July 2021
Goodwill from Stakeholders. Key actors and district officials were identified to support project implementation. Networked Improvement Community (NIC) formation. Participants for the NICs were chosen and introduced to each other.

Phase 2
August 2021 - June 2022
Booksmart training. Teachers and school leaders were trained to use the Booksmart app with students. PDSA Implementation. School leaders were supported to plan, do, study, and act to solve a reading challenge with their school.

Phase 3
July 2022 - August 2022
Knowledge sharing. Data was generated and analyzed and disseminated locally and at national and international conferences.

Delivery Model

Phase 01

Stakeholder committee formation.

To ensure that project activities were properly contextualized and responsive to the needs of the target beneficiaries, Worldreader reached out to key actors from sub-county to school levels. The stakeholders offered support and expressed their interest in capacity building around the improvement science approach at school level. Some of these stakeholders included the sub-county directors from the Teachers Service Commission, TSC whose mission is to professionalize the teaching service for quality education and development.

Networked Improvement Community (NIC) formation.

NICs were formed to enable dialogue and collective action across groups, including school leaders, researchers, and Grade 3 teachers from Mukuru and Limuru were invited to participate in these communities. These NIC meetings facilitated peer learning, dissemination of best practices, problem sharing and solving as well as capacity building forums. NIC meetings were virtual and in-person and happened quarterly.
Phase 02

**Booksmart training.**

School leaders and classroom teachers were trained to download and use the Booksmart app with students. This technical training introduced schools, school leaders, and Grade 3 teachers to the Booksmart app and the basic literacy skills needed to use the app, as well as information about the benefits of reading. Booksmart generated data on reading behaviors of students, parents, and teachers and this data was a critical piece of information school leaders used to measure the impact of their interventions. This data was complemented by other data sources in schools such as attendance, meeting notes, and teacher/parent testimonials.

**PDSA implementation.**

School leaders were guided through Plan, Do, Study, Act (PDSA) cycles, which fostered iterative and formative learning and took the school leaders on average through three PDSA cycles within the 9 months. School leaders also used locally-developed, practical measurement tools to assess the impact of their literacy-related actions. Tools were aligned to specific contexts, actions and outcomes.

Phase 03

**Knowledge sharing.**

Worldreader worked with county-level stakeholders and with key influencers in the international development space in several knowledge-sharing and policy advocacy activities, including publication and dissemination of grey literature; participation in national, regional and international knowledge-sharing events (e.g., the CIES, UKFIET, and Kenyatta University Education and Lifelong Learning conferences); and direct engagement with sub-county-level education officials in Kenya. For these activities, we leveraged our ongoing work in the TPD@Scale Coalition for the Global South and the respective networks of the 20 members of the Coalition.

**Project Participants**

Limuru and Mukuru communities, the local sites of this research project, are both located in Nairobi, the urban capital of Kenya. Mukuru is an industrial settlement near the relatively expensive city centre with a population largely made up of low-income workers, petty traders and jobseekers (Ruben Centre, n.d). Limuru, renowned for the production of one of the best quality teas in the world, is home to parents who are mostly casual labourers working on tea farms or a shoe factory located in the area. Both communities are marked by a high level of poverty, which puts basic education out of reach of many families without any support. As such, child labour is rampant and children tend to divide their time between working and attending school (Ruben Centre, n.d). Literacy levels are very low among school children, as are drop-out rates, which amount to about 44% of children in these communities. Headteachers in these communities are largely confronted with the difficult task of running under-resourced schools and dealing with parents who cannot afford the required fees for their children.

In Kenya, 12 school leaders were invited to participate in the study. Five were drawn from Mukuru, an urban area, and seven were drawn from Limuru, a rural area. In selecting the school leaders and schools, Worldreader sought to include a range of personal and professional characteristics (i.e., gender, age, educational background, length of tenure in the current post, etc.) and school contexts (size, community support, student retention and levels of student achievement, level of resourcing including ICT facilities and equipment, etc.). Selection of participants was undertaken in consultation with the stakeholder committee, and participation in the study was voluntary.

Four additional factors influenced the selection of the schools for this project.

**Standing relationships and collaboration.** For the schools in the Mukuru region, the headteachers are school leaders that Worldreader has known for a long time. They have been in the same professional network (Kenya Union of Teachers) and Worldreader has collaborated with them on a number of school activities, both curricular and non-curricular, such as music festivals, interschool sports and drama festivals. New collaborations with other school leaders were also established throughout these long-standing relationships. Therefore, new school leaders were identified for the research as a result of existing contacts.

**Availability of resources and facilities.** There is only one private school drawn from the Mukuru area (Gatoto Community School). This is because Mukuru is an under-resourced area, with most of the private schools lacking stability. They are open and closed without warning since they lack the capacity to remain operational throughout the duration of the school calendar. Therefore, Worldreader considered selecting Gatoto Community School given that it is under-resourced and this would give us a better learning opportunity. In Limuru, more private schools were selected for this program than public schools. This was determined by
The increase in readers and pages read, which began for most schools in April 2022, coincided with a workshop in which teachers designed the plans for their final PDSA cycle. The workshop built on previous training in which school leaders learned about the steps of the PDSA cycle and how they can be applied to education settings and their school challenges.

At the workshop, school leaders began by reflecting on areas they wanted to improve, including low literacy levels, lack of reading mentorship, and limited reading engagement time between parents and their children. To address these problems, school leaders discussed activities in their NICS that they believed would work in their own schools. Their ideas included setting aside time in the school timetable for reading, increasing the number of children visiting the library, incentivizing teachers to read with children, storytelling time in class to increase students’ confidence and exposure to books, and encouraging parents to use the Booksmart app with their children at home. The PDSA cycle and subsequent sharing through the NICS supported local solutions to individual and shared problem and knowledge generation and sharing.

PDSA cycles proved to be an effective methodology to test hypotheses, generate data, execute a series of trials and reflect on their impact. School leaders mobilized fellow education stakeholders at the school and district level to work together on these “micro-challenges” and testable solutions, thereby rallying networked support to school-based problems. Finally, the positive relationships created by school leaders during the PDSA cycles created a network of support that was dynamic and positive in generating more dialogue, knowledge generation at the school or district level, and support in times of difficulty.

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Another objective of this project was to build the capacity of school leaders to make data-driven decisions and problem-solve in order to improve schools. School leaders reported positive changes in their practice and interviews captured their changes in attitude around problem-solving, leadership, and problem-solving. Teachers in the study reported an increased capacity to test and evaluate strategies that could prove helpful in creating a reading culture, engaging meaningfully with parents, supporting students’ language development, and the use of data to make decisions about the reading outcomes of their students.

Create a reading culture. School leaders expressed an increased interest in—and perceived capacity to create—a reading culture in their schools. They connected reading culture with increased academic performance, particularly in composition writing. A popular feature of the Booksmart app was that the available books on the mobile app were diverse, interesting, and connected to many different class subjects. School leaders explained that these books and the easy access to hundreds of books in the home made them feel prepared to keep students engaged with reading in and outside the classroom, and to empower other teachers in the school to increase the time they spent reading with students.

Engage with parents. One of the problems of practice identified by multiple school leaders was a lack of meaningful engagement with parents, particularly related to reading and literacy development. 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. These new ways of working with parents were a direct output of the research and adoption of Booksmart in the home.

Support language development. 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 had 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”. By putting in place systems to increase reading at school, leaders were able to ameliorate their identified problem of limited language development. Ms. Leah Wanjiru from St. Paul’s University added that “I would have never thought that I would teach a language but now, one of the positive thing is that like now, if I am given Grade 4-5 English to teach, I can comfortably teach.

Make data-based instructional decisions. One way Worldreader supported school leaders to implement PDSA cycles was by providing them with data about students’ use of the Booksmart app. Leaders were encouraged to use this data to make decisions about whether to continue with an intervention or to change course. A leader from Limuru explained that, when looking at the data, “you work harder if you find that you are dragging behind” and “get encouraged when you see [an intervention] working.” In some schools, leaders discontinued an intervention and tried something new when they saw that student reading was not increasing. 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.
Policy And Practice

The third objective of this project was to support improved education practices and decision-making using the improvement science approach. According to the school leaders who participated in the project, one of the most helpful components of the experience was NIC meetings, where they were able to discuss problems and potential solutions with others who lead similar schools and face common challenges.

Although school leaders had participated in meetings with other school administrators in the past, those meetings were often very “official” with “strict programs” that left little room for interaction. In contrast, NIC meetings prioritized the exchange of ideas by utilizing small group work and oral presentations. School leaders explained that the benefit of this type of interaction was that they were able to discuss problems in their schools and generate solutions together.

One example of this was a participant describing a plan to encourage older siblings to read with their younger siblings at home. This addressed a persistent problem with at-home reading: parents consistently report not having enough time to read with their children after school. The sharing of practices between NICU members led to a mitigating strategy, which was to engage older siblings into household reading.

The head teacher of a school in Mukuru clarified that “the challenges may be the same, but the solutions may not be.” He said that if he already has potential solutions in mind and then gets additional ideas from other leaders, he has a larger pool of ideas to pull from when problem-solving.

The NIC meetings required initial inputs from Worldreader, including identifying participants, scheduling meetings, creating meeting agendas, and leading the PDSA process. After receiving training about key components of the improvement science approach, local education officials are able to continue PDSA cycles and expand to new NIC communities over a sustained period of time.

Risk Management

The introduction of new ways of working and the adoption of PDSA cycles were very new to school leaders. This led to challenges and unforeseen efforts necessary to bring school leaders on board, particularly in times of school closures, COVID-19, and learning loss. Risks and mitigating actions were taken and are captured below:

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<tr>
<th>Risk</th>
<th>Level</th>
<th>Mitigating Actions</th>
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| Delays at various stages of the project due to the coronavirus pandemic. | High | • Lead institutions in the target countries were well-entrenched in the respective education systems and provided reliable feasibility assessments in a timely manner.  
• The research leveraged on existing projects of the implementing and partner institutions, and was informed by the contingency planning of those projects.  
• An improvement science approach of continuous review and adaptation taken for project management.  
• Most work was undertaken virtually without the need for travel.  
• Improvement solutions brought in various stakeholders including teachers since school leaders were unable to maintain contact with their students. |
| Difficulties in engaging education stakeholders during a pandemic as this might not be seen as a priority. | Medium | • The identified problems of practice were aligned with National COVID-19 response plans and addressed priorities within these plans |
| Increased fragility and possible conflict at research sites. | Medium | • Change of research site  
• Prioritized safety of research teams and participants over convenience and visibility |
| Selection of quality problem of practice that has little relevance to girls/ marginalized groups in the schools’ student cohort. | Low | • Sensitized the stakeholder committee and participants to equity issues (in particular, barriers to girls’ full participation in learning activities) |
| Work in schools highly restricted due to government rules. | Low | • The timeframe for implementation (8 months) allowed for flexibility |
All teachers who participated in this project used a similar improvement science approach, but chose their own school-level problems to address. They also designed and implemented solutions using resources already available at their school. As Worldreader’s role was primarily technical—introducing teachers to the PDSA cycle, fostering a community of practice to support implementation and anchoring work on Booksmart, –the exit strategy was focused on empowering government authorities to train teachers in the improvement science approach and to establish and set aside some district level budget for NICs.

The school leaders were encouraged to extend access to Booksmart to other grades to increase access to relevant digital content through BookSmart.

Sub-county-level education officials were involved in the project from the start. This type of engagement was designed to increase their buy-in to the improvement science approach. In turn, they demonstrated an increased commitment to empowering teachers to problem-solve and make data-based decisions, even after the project was over.

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**Annex A: Interview Schedules**

**Phase 1 interviews: September 2021**

**Headteacher Interviews at Project Inception**

**A. School Leader’s role:**

1. You must have several responsibilities as a school head. Could you please describe what a typical day for you as a school head looks like? [Prompt: What activities do you do?] What new responsibilities or activities have you taken on because of the Covid-19 pandemic?

2. Which among your daily activities take up most of your time? [Prompt: Why is this so? Does this have anything to do with the current circumstances of Covid-19? How so, if yes?]

3. Are there any specific activities that you have to do on a weekly and/or termly basis? [Prompt: Could you describe these, if yes? Has the pandemic affected how you carry out any of these activities?]

4. What do you see as your main priorities at the moment? [Prompt: Who do you talk to about them? Why have you prioritized these activities/actions?]

**B. Your recent experiences**

5. Can you tell me about an occasion recently when you felt pleased with what you had achieved / successfully solved a problem? [Prompt: Why did you feel happy? Why was this achievement significant? What skills / support / previous experiences / knowledge did you draw on? What challenges or barriers did you feel you overcame?]

6. Could you share a problem which you are currently trying to address in your school? [Prompts: What strategies / approaches are you using to try to resolve the problem? Who do you discuss this with? (Where do you seek support?)]

**C. Being part of a community**

7. (Drawn from the survey answer). I notice that you regularly/ occasionally meet with other...
school leaders. Can you tell me a little about how this works? For example: Who organises, where / how do you meet? How often? What do you talk about? What do you find most helpful about these meetings? How might they become more useful to you?

8. (Drawing from context documents) The Teachers Service Commission (TSC) appears to be a key regulatory agency for the teaching workforce in Kenya. Do you have any official responsibilities to the TSC as part of your role as a head teacher? [Prompts: What duties/ tasks are attached to these responsibilities? How frequently are you mandated to carry them out? What other types of interactions do you have with TSC officials outside these tasks?]

D. Your own development

9. I'm interested in your professional journey to your current role. What different kinds of training did you have for your role as a school leader? Which were the most useful? Why?

10. Since you became a school leader, what have been your experiences of formal professional development programmes? [Prompts: How often? Format? Focus? How useful have you found these? Why/why not?]

E. BookSmart Project:

11. What do you hope to gain by being part of the NIC/working with other school leaders?

12. Look at the individual plans. What progress has been made, are you happy with the progress, are you frustrated/facing any challenge, what resources did you have/need/use to achieve the progress if at all? What will you do differently this month?

13. Share their school specific data...log-in together and look at it.

14. On a scale on 1-10 what is your confidence in digital resources being relevant to your community to meet the reading support needs of learners/teachers.

Phase 2 interviews: February 2022

| Improvement priority/goal/objective in this project [including key strategy/plan for BookSmart roll-out] |
| Key background information [e.g. School size/pupils/teachers. (for Uganda - number of P3 & P4 students/parents in contact with); Headteacher’s experience etc.] |
| BookSmart roll-out Plan (key strategy) |
| Progress with roll-out/plan implementation [Number of teachers enlisted; Successes & challenges/positive & negative experiences; key focus of most recent feedback etc] |
| Level of readership/Status of school engagement based on backend data |
| Any other interesting observation/relevant information |

Project Participation Status

1. Could you briefly recap what specific activities you have carried out in the last few weeks to support the roll out of the BookSmart App in your school? [Prompts: Who have you been involved? When and when did these happen?]

2. Since the roll out of the App, have you used data from BookSmart’s dashboard to make any decision/change/further improvement plan or action? (If yes) Please give a/some example/s of how you have used the dashboard data [Prompts: Has the data been helpful/useful? How?]

3. Aside from the dashboard, are there other ways that you have been monitoring reading as well as the use of BookSmart among your learners at home (and/or in school)? [Prompts if yes: what do you do to get this additional feedback? What kind of feedback, from whom (parents, learners)? and how often? | Prompts if no: would you like to get complimentary data or feedback other than that from the dashboard? What kinds of data would you like and why/how will it help? How might you go about gathering this information?]
Annex B: PDSA Cycle

Learnings about educational practice

Participation in this project has helped me to:

- Appreciate how digital devices (phones and tablets) can support literacy development
- Improve my own digital literacy
- Understand more about the background of my learners and their needs
- More readily try different methods in the classroom with my learners
- Approach learners with a greater level of patience
- See that all children can achieve their full potential with appropriate support
- Perceive myself as a learner
- Give learners more responsibility within literacy lessons
- Appreciate how digital books can extend learners’ experiences (different places and situations)
Changes in leadership practices and skills

Participation in this project has helped me to:

- Strengthen my collaboration with parents
- Understand that good teamwork is needed to execute plans well
- Enhance my confidence and self-esteem
- Appreciate the importance of thorough planning and regularly reviewing plans
- Strengthen my collaboration with peer school leaders
- Increase my ability to navigate challenges
- Be more receptive to new ideas
- Improve my problem solving skills
- Become more proactive about planning and executing improvements
- Experimenting with different practices

Annex E: Reference List


Annex D: Fishbone Chart

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

- Some parents are illiterate/low literacy levels
- Parents are hostile/busy/resistant to the responsibility of assisting children to study
- Children have other priorities such as phones
- Teachers being the main source of direction regarding learning (Trust)
- Negative impact of Covid-19 (isolation, hustles, child headed H/h)
- No access to internet
- No mobile data
- No electricity - poor power supply
- Limited access to mobile phones (poverty levels)
- Child safeguarding issues
- Mis handling phones
- No reading role models
- Absence of mentors
- Lack of motivators
- System/Structure - Poor reading culture
- Resources/Infrastructure - Poor access or non-availability
- Family/Home - Lack of Support
A Nairobi Teacher Illustrates A Life-Changing Lesson For Parents In The Community

Many of the schools lining Nairobi (and the thousands of pupils that attend them) are in need of resources and support. Our recent School Leadership Project introduced 12 of these schools to our BookSmart app, giving teachers powerful data about their students’ reading habits and allowing them to make data-led decisions in their classrooms. A project intended to build knowledge and capacity cultivated many fruitful benefits.

A school injects light into an under-resourced community

Gatoto Primary, a school that participated in the project, is situated in the Mukuru slums, an industrial area of Nairobi. A great number of the pupils’ caregivers in this area are not employed, and those who are work as laborers in nearby factories. Those who struggle to find stable jobs find alternative means to provide for their families, whether it’s selling produce at the market or washing clothes for income.

Financial difficulties among parents make paying school fees incredibly difficult. “In terms of school fees, we charge a little, a few coins to be able to run the school,” teacher Peter Nyabuto Omimi explains, “and yet again even as we charge that, there are those who completely cannot pay and there are those who can pay half way.”

Since Gatoto is classified as a private establishment and not a public one, the school does not enjoy any government funds to provide resources for its 1,000 plus pupils. They largely rely on external donors to keep them going.

But the school does its best to bring resources to the community. Along with its primary program, Gatoto offers a community support program where families in need can receive access to food aid and HIV/AIDS medication, and a post primary program, where students receive help getting into high schools to continue their education.
An educator’s impact radiates from classrooms to households.

Peter Nyabuto Omimi has been a teacher for 20 years, and a headteacher at Gatoto for five. Peter’s favorite subjects to teach are the languages, Kiswahili and English, but he leads classes in religion and social studies as well. He’s passionate about being in the classroom, but new Competency Based Curriculum (CBC) has increased the administrative lift on his role.

Peter has been encouraged by the positive effect BookSmart has had on his classroom, but an undeniable benefit has been the newfound connections he’s made with parents. Parents with access to smartphones were encouraged to download the BookSmart app and spend time reading at home with their children. Sensing some hesitancy, Peter called a meeting with all grade three parents.

In the meeting, Peter was met with parents insisting they did not have the time to read with the students after class was dismissed. Peter considered this thoughtfully, and asked the parents with phones to quickly pull up a specific book in the digital library and wait as they complied. He asked one of the parents who could read to stand at the front of the class and begin reading, urging the other parents to time him. After getting through the bulk of the plot, he stopped the reader, and watched as the parents realized less than five minutes had passed.

“Have you gotten any information from that book that he read?” Peter inquired. The parents confirmed by recounting the story’s theme. Then he noted, “We have spent four minutes reading that book, and there are even shorter books than this one. If it was your child and you were supporting their reading, do you think even the water that you would have set on the cooking pot would have boiled by the time you finished this?” They responded with a resounding, “indeed this is very short time.”

Stronger relationships formed between Peter and the parents. He met with some of them individually, learning about specific struggles at home that prevented reading, and working to find solutions when possible. He noted that some of them even came back and told him their experiences on how they found it very easy working with the reading project at home using their mobile phones.

Not only did Peter express that working so closely with parents improved his leadership skills, but he truly feels he took on a serious role of ensuring that this project was implemented in a way that benefited the child in class, the teacher and yes, even the parents.

Self-confidence is flourishing across Kenyan classrooms

St Paul’s Primary School is nestled in Kenya’s lush Tigoni zone. But a large fraction of the school’s 800 pupils are not originally from here. Many of their families migrated from further west, seeking employment on one of the many tea farms the region is known for. Consequently, a significant number of these students do not speak the language spoken in the area, making learning and teaching that much more difficult.

Digital books, data, and the drive for impact

In densely-populated neighborhoods dotting the outskirts of Nairobi, 12 underserved schools including St Paul’s Primary drove change in their communities by participating in a project designed to build knowledge and capacity. With the power of Worldreader’s BookSmart app, educators participating in the School Leadership Project gained data about their pupils’ reading habits, that allowed them to make data-led decisions in their classrooms.

The wages earned by tea pickers are not substantial, and families in the community struggle to get food and necessities. One teacher notes that, “some kids eat in the evening and in the morning they don’t take anything, so when they come in the school they cannot even concentrate.”

“We are not looking at how many books your child would have read by the end of the week.” Peter said, “We are saying you could open the same book even the following day ...the child is not reading just to be able to mention words. The child is reading to be able to, you know, internalize the concept, internalize the story and be able to retell it somewhere else.”
One exceptional educator notices something that changes everything

One of them is Deputy head teacher, Leah Wanjiru Kihuha, a veteran educator with nearly 25 years of experience under her belt. Inspired by her favorite teacher, her mother, Leah always knew she wanted to be an educator. Her love of children is evident not just in the weekdays she spends inspiring her pupils, but the Sundays she dedicates to teaching children at her church.

So what are Leah’s roles as Deputy head teacher? She’s in charge of behavior, ensuring lessons are being attended, observing the teachers, and issuing chalks, pens, and books to the staff and students. But that’s only in addition to the main role – the teaching. Leah teaches science in grade four, five, seven and eight, home science in grade six, and physical education in grade seven. That’s a staggering 26 weekly lessons for one teacher as opposed to the average of 12 in an adequately staffed school.

Since the implementation of the School Leadership Project and the BookSmart app, Leah has noticed incredible benefits in her classroom such as increased comprehension of reading material, but one of the most special perhaps was the self-confidence boost she saw in her young readers. Leah likes to read from BookSmart aloud to her class, offering incentives like a biscuit or cake for those who answer questions about the story correctly.

This healthy competition has created more excitement and interaction with the story and each other than Leah anticipated. Before the project, she notes that many students were too shy to stand in front of the room and answer questions, even if they knew the answer. Now, she notes that even those students that usually struggled to answer at all, are visibly trying to engage – trying to open up. Some who do not even speak the language are making a real effort to participate.

She plans to continue using these tools in the classroom and has even shared the resources with other teachers and a few parents that have smartphones of their own.

“You can see that they want to try and answer the question because there is something you have promised them…,” Leah explains. “I am going to give you this, I am going to give you a pen. So they are competing to answer the question. So even those students that are down, they could not talk, they could not answer anything, you can see that they are trying because they are trying to open up… you can see now even the performance is changing in the class.”