



# **Local Content for African Libraries (LOCAL) Final Project Report**

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# Introduction

Libraries are powerful agents of change and pillars of our communities. By providing access to books and a variety of community resources, libraries work to drive forward national development agendas and act as essential resources for providing equitable access to information.

As part of the wind down of the Bill & Melinda Gates Foundation’s Global Libraries initiative (Global Libraries) in 2013, Global Libraries created an advisory group that developed a vision for a successful public library sector in Africa. The vision imagined “libraries as Development Hubs central to the growth and wellbeing of communities.” As its final act, Global Libraries convened a network of library support organizations to act as Africa Legacy Partners charged with changing the underlying conversation around libraries and empowering the field by working collectively to ensure libraries are aligned with community goals, are recognized as engines of development, and are funded as key community assets. Legacy partner efforts were centered on a “Legacy Framework” to move this process forward using four levers to drive and sustain change across the African library field. These included: network and knowledge sharing, leadership capacity building, impact and advocacy, and research and innovation.

As a Global Libraries legacy partner, Worldreader, in partnership with the African Library and Information Associations and Institutions (AfLIA) launched the Local Content for Africa Libraries (LOCAL) initiative in 2017 as a contribution toward the Research and Innovation lever of the legacy framework. Established in 2013, AfLIA was designed to be the trusted voice of the African library and information community in Africa’s development with the mission to empower the library and information community to actively promote the African development agenda through dynamic services that transform livelihoods.<sup>1</sup> With AfLIA as a key partner in designing the project and selecting the countries of implementation, LOCAL leveraged digital reading technologies to improve access to local language early-grade-reading content throughout library networks in Ghana, Zambia, and Uganda, culminating in a toolkit to guide the replication of digital reading programs throughout African Libraries.

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<sup>1</sup> See AfLIA website for further information at <https://web.aflia.net/>



Local language learning in the early grades can accelerate achievement of reading and literacy outcomes by supporting young learners with content in languages they speak and understand. Studies show that children most easily acquire reading skills in their mother tongue and that, with appropriate instruction, materials, and support, those skills can be transferred to other languages.<sup>2</sup> Unfortunately, written content in many local African languages is scarce, leaving learners with little exposure to books, especially storybooks, in their own languages. LOCAL sought to address this material gap for students.

Sharing the ultimate goal of the Global Libraries Initiative, which is to improve people's lives, this report details the findings of the LOCAL project and the result of efforts to support and enhance libraries as integral parts of the communities they serve.



<sup>2</sup> Ouane & Glanz, 2010; Brock-Utne, 2007; Tomas & Collier, 2002.

# Project Overview

Having a digital reading device is like having a library in your hands. Digital reading devices provide library patrons with instant access to a collection of hundreds of books that can be easily transported into the community.

In March 2017, Worldreader launched the Local Content for African Libraries (LOCAL) project in partnership with the African Library and Information Associations and Institutions (AfLIA). AfLIA was instrumental in selecting the three countries for implementation of the LOCAL project according to regional demand for local language support and library infrastructure. As a result of collaboration between AfLIA and Worldreader, the project first launched in Ghana under the leadership of the Ghana Library Authority and later expanded to Zambia and Uganda in 2018 under the leadership of the Library and Information Association of Zambia (LIAZ) and the National Library of Uganda (NLU), respectively. The project paired digital technology and locally created ebooks with extensive training, capacity building, and support to help libraries develop the resources and knowledge they need to provide children with access to local storybooks and content in their mother tongue and English.

## LOCAL Project Snapshot

Country	Regions	Libraries Supported	Devices Distributed	Books per Device	Total Books Distributed
Ghana	Volta, Ashanti and Central	9	450	200 (including 20 Fante, 20 Asante-Twi, and 20 Ewe titles)	90,000
Zambia	Lusaka and Copper Belt	10	500	200 (including 30 Nyanja and 30 Bemba titles)	100,000
Uganda	Central and Western Uganda	10	500	200 (including 30 Luganda and 30 Runyoro-Rutooro titles)	100,000

Through this project, Worldreader aimed to create an evidence-based replicable model for librarians to support early literacy development in their libraries by increasing the amount and availability of locally produced and local language early-grade-reading materials. To this end, throughout the three years of the project, Worldreader distributed 1,450 devices each loaded with 200 books to 29 libraries across Ghana, Zambia and Uganda. In total Worldreader provided 290,000 digital books to the libraries, including 87,000 local language titles.

Along with this primary output, the project had four desired outcomes among community children, caregivers, and librarians:

**Outcome 1:** Increased interest in regularly visiting the library to read

**Outcome 2:** Increased interest in and ability to use digital reading devices

**Outcome 3:** Increased interest in reading local language materials

**Outcome 4:** Librarians have greater skills, knowledge, and confidence to support and facilitate early literacy

To support these outcomes, Worldreader trained 24 librarians in Ghana, 22 librarians in Zambia, and 23 librarians in Uganda on the usage of the digital reading devices and integration of the digital content into the library environment. This included a technical device training session, as well as a training for librarians on how to conduct reading activities with young children, how to use the digital readers to mobilize resources in their communities, and how to conduct outreach to neighboring schools and community centers. The librarians were in turn responsible for training patrons and other library staff on how to use and access the devices at the library, and for conducting activities both in and outside the library to support the program.

Findings from LOCAL show that digital reading through libraries can support communities by providing locally relevant and local-language books, and early-grade reading support from librarian staff. By leveraging digital devices to reach surrounding communities, LOCAL libraries reached children in surrounding schools and community centers with access to quality reading

content to support their learning.

While the intervention led to increases in patronage in a majority of libraries in all three countries and regular digital reading among early learners in both mother tongue and English – more support is needed for librarian outreach activities into the community to increase membership numbers and reach more school readers with local content to support their learning. In order to sustain these activities, community buy-in is crucial in the form of funding support, community volunteers to support in-library local language reading activities, and more targeted efforts to engage parents through library activities and the value of reading with their children.

## Local Content Acquisition

As the primary output of the project, Worldreader’s first point of focus was acquiring digital books in local languages and English from local publishers. In order to determine the most relevant local languages to pursue, Worldreader first conducted a landscape review of existing early-grade reading content in each geography.

The landscape review sought to determine the availability of books for early-grade readers in mother-tongue languages and English, amongst publishers in each country. Worldreader’s Publisher and Author Relations Team held meetings with publishers across the region and conducted surveys with publishers in all three countries, receiving responses from 17 Ghanaian publishers, 19 Zambian publishers and 14 Ugandan publishers. Results of the landscape review informed the selection of languages and library regions to target for project implementation.

<b>Table 1: Overview of Content Landscape Review</b>			
<b>Country</b>	<b>Ghana</b>	<b>Zambia</b>	<b>Uganda</b>
% of respondents with children’s books in their catalogue	100%	84%	93%
% of respondents with children’s books available in local languages	65%	79%	93%

Languages included in Survey <sup>3</sup>	Ga, Nzema, Dangme, Dagbani, Akuapim-Twi, Gonja, Fante, Ewe, Asanti-Twi, or Dagaare	Bemba, Nyanja, Tonga, Lozi, Kaonde, Lunda, Luvale, Chewa, Tumbuka, Mbunda, Borotse, Lenje	Luganda, Runyankole, Lusoga, Rukiga, Lang'o, Acholi, Ateso, Lugbara, Adhola, Bari, Pokot, Lumasaba
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Results of the landscape reviews showed that there were children’s storybooks and early grade reading content available in a variety of written mother tongue languages across all three countries. As noted in the table above, all of the Ghanaian publishers reported children’s books in their collection, while just 65% had some children’s books in local languages compared to Zambia where 84% of publishers reported children’s books but 79% of respondents had at least some of those children’s titles available in a Zambian language. Conversely, all publisher’s in Uganda reported local language titles among their children’s books.

With an eye for sustainable access to the local language books, Worldreader examined how much content was available in each language, and how much estimated revenue books in each language brought to each publisher. The survey in Zambia showed that Bemba, Nyanja and Tonga were the languages with the most existing titles and earned the most revenue for publishers working in Zambia. In addition, results showed that Lozi, Kaonde, Luvale and Lunda have a considerable readership compared to other Zambian languages. Although not listed as high-revenue earners, some publishers are still making some amount of money from them. Of the surveyed publishers, only 20% reported that all of their mother tongue titles were “born-local” rather than translated from another language.

In order to explore potential sustainable revenue streams for local language content, the survey asked publishers to estimate the revenue brought in from books in different languages and to identify the top consumers of their content. Respondents in Zambia reported the top purchaser of Zambian local language children books (non-textbooks) are NGOs, while individuals purchase the least.

In Uganda it was evident from the landscape survey results that Luganda,

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<sup>3</sup> Languages were selected for the survey based on their usage in early grade educational programming in each country.



Runyankole-Rukiga and Lusoga are the frontrunner languages in terms of revenue earnings, existing titles (especially by established publishers) and speaker-population. However, top revenue earners for small publishers/content creators spread even to minority languages such as Runyoro-Rutooro, Ngakarimojong, Acholi, Lang'o and Pokot.

The analysis also showed that over 60% of Ugandan local-language children's books are bought by NGOs, and private and other non-governmental organizations, while street vendors rarely make any purchases. Moreover, most Ugandan publishers (57%) do not license their children books.

The survey found that the number one driver for not publishing content in local languages in Zambia was geography, while Ugandan and Ghanaian publishers most commonly cited low market demand and the lack of a sustainable revenue stream for local language content.

Worldreader's Ghanaian collection already included a number of local language titles due to a previous partnership related to a government initiative to require local language education in the early primary grades. However, survey results showed that Akupem-twi, Fante, Ewe and Asante-twi were the most published local languages among Ghanaian publishers.

As a result of the content landscape review and a needs assessment discussion with each library partner, the languages chosen for the project included the following:

**Ghana:** 20 Fante, 20 Asante-Twi, and 20 Ewe titles

**Zambia:** 30 Nyanja and 30 Bemba

**Uganda:** 30 Luganda and and 30 Runyoro-Rutooro

The remainder of the books provided for the project were in English, but were also acquired locally through partnerships with publishers in each region, in order to keep the books relevant to the context and young learners in the libraries.

## Library Selection

Library selection was a key component of the project. Worldreader and its regional partners determined regions based on the language selected

through the content review. In order to decide which libraries to support through the local project, the regional project managers put out a call for applications to libraries through AfLIA networks after sensitizing libraries in the selected regions to the project and what would be required of participating libraries and librarians. Worldreader, AfLIA, and the local library authority partner in each country (GhLA, LIAZ, NLU) pre-screened the applicants according to a list of criteria including infrastructure, capacity, demographic, interest, content availability, programming, and monitoring and evaluation capacity of the library. The full list of criteria can be viewed in [Annex 1](#).

## Data Collection Methodology

In order to track the effectiveness of the LOCAL intervention, Worldreader collected monthly monitoring reports from librarians, conducted quarterly reports and library visits, and collected a series of qualitative data through semi-structured interviews. Interviews included conversations with librarians, teachers in community schools impacted by the intervention, child patrons at the library, parents, and both library and government stakeholders supporting the project.

Based on the desired outcomes of the project, Worldreader tracked the following indicators through monthly monitoring reports:

Table 2: Overview of Project Outcomes and Indicators	
Outcome	Indicators
Outcome 1: Increased interest in regularly visiting the library to read	<ul style="list-style-type: none"> <li># of patrons visiting the library</li> <li>% change in patrons visiting the library from baseline to endline</li> <li># of registered library members</li> <li>% change in membership numbers from baseline to endline</li> </ul>
Outcome 2: Increased interest in and ability to use digital reading devices	<ul style="list-style-type: none"> <li># of device borrows in-library;</li> <li># of outreach activities conducted to neighboring schools and community centers</li> </ul>
Outcome 3: Increased interest in reading local language materials	<ul style="list-style-type: none"> <li># of reading activities conducted in local language in-library</li> <li># of reading activities conducted in local language</li> </ul>

	outside-library
Outcome 4: Librarians have greater skills, knowledge, and confidence to support and facilitate early literacy	# (and percentage) of librarians "Confident" or "Very confident" of successfully implementing what they have learned; # of librarians completing training # Number of e-reader-specific activities held by librarians (in and outside the library)

The above quantitative data was paired with qualitative surveys and interviews with patrons, librarians, and library stakeholders at the endline of each country's intervention. Worldreader provided AfLIA with quarterly reports on the progress of the LOCAL project and data from the monthly reporting indicators.

### **Comparative Data: Baseline & Endline**

Worldreader sought to identify the impact of the LOCAL project by establishing the situation of the libraries before project implementation (baseline) and at the point of transition (endline).

The key respondents identified were teachers, child patrons, librarians and stakeholders who were deemed to contribute towards implementation. The purpose of the tools were to establish the following:

1. The level of engagement that the children have been involved in the project; to know how the digital reading project changed their reading habits, if at all; to gauge the relevance of the content that was curated for the project
2. Change in library patronage and membership; available digital resources and their use; use of local language content; outreach activities
3. The level of integration of the digital reading program at school level; to understand if the local language content has been beneficial to the teachers; determine the collaborative reading efforts between schools and libraries.
4. Systems strengthening of libraries and sustainable library-based digital reading program design from library stakeholders and ministry officials.

The findings from the comparative data analysis is discussed below.

## Limitations on Data Collection

There were a number of factors throughout the course of the LOCAL project that led to limitations in the data collected. While the research methodology aimed to gather data from a big enough variety of stakeholders to account for bias associated with self-reported data, it should be noted that patronage and device-usage numbers were tracked and reported by the librarians themselves. While there was no incentive given for reporting high patronage figures, the Worldreader team was reliant on the data provided by librarians, with support from occasional informal observations through visits by Worldreader project managers.

Further, the LOCAL project was launched in phases, starting in Ghana in January 2018 and then launching in Zambia later that year and Uganda in early 2019. As a result, some of the learnings from Ghana were incorporated into the Zambian and Ugandan project design causing slight variations in the data collected in each country.

One of the results of the project redesign was that a fifth desired outcome, to increase parental involvement and engagement in reading, was removed from the results framework for Zambia and Uganda due to budgetary restrictions that took a toll on parental outreach and data collection around parental engagement.

Some issues arose with endline data collection in Uganda, causing further limitations to the study. The data collected from Uganda did not meet the anticipated sample threshold due to logistical issues such as school holiday and by-election that led to political unrest in Western Uganda at the time of data collection. Seven of the ten participating libraries were still able to provide data, allowing for sufficient insight into LOCAL activities in Uganda.

# Findings

Overall, the LOCAL project made progress towards four of five desired outcomes of the project. All three countries observed increases in patronage as a result of the project, libraries and child patrons in all three countries embraced the digital reading devices, there was some uptake and usage of local language materials, albeit with some notable challenges, and while librarians in Ghana expressed some challenges, a strong majority of librarians across the three countries felt the LOCAL project had improved their capacity to conduct outreach and work with young learners in their libraries.

Along with the budgetary constraints mentioned in the limitations section, there were several challenges with engaging parents and caregivers as part of the LOCAL project. While libraries were able to engage parents and caregivers to an extent throughout the course of the project, particularly in Zambia where parents began to accompany their children to the library, little data was collected to speak to the level of parental engagement that resulted from the LOCAL project. Worldreader did, however, conduct a parent survey in Ghana explored below.

## Library Policy Changes Resulting from LOCAL

LOCAL also led to some key library policy changes, notably in Zambia, that fell outside the intended outcomes of the project. When Worldreader began scoping partners in Zambia for the LOCAL project, it became apparent that there was a clear roadblock to students using the public libraries in the form of fees child patrons were charged for library use. Worldreader staff knew this would be a barrier to the success of the project that aimed to reach young learners with local language early grade reading content to support their learning, so they set out to advocate to the local library councils to remove the fee requirement for young children so that they could use the library resources free of charge.



These stakeholder advocacy efforts succeeded and nine out of the ten Zambian library councils agreed to drop the fees for children under the age of fifteen throughout the course of the project.

**This policy proved so successful throughout the course of the project that the nine libraries have maintained the policy since the close of the LOCAL project in Zambia.**

This section will take a closer look at the progress made towards the first four LOCAL project outcomes, note some observations from the parent survey in Ghana, and highlight observed challenges associated with the digital reading programs in the three target countries.

## Increased interest in regularly visiting the library to read

LOCAL’s primary aim was to leverage libraries to support early grade reading in local languages. The first desired outcome feeding this overarching goal was “increased interest in regularly visiting the library to read.” Worldreader measured progress towards this outcome by asking librarians to collect and report on monthly library patronage, counted as the number of unique individuals within the primary or early childhood age group who entered the library each day.

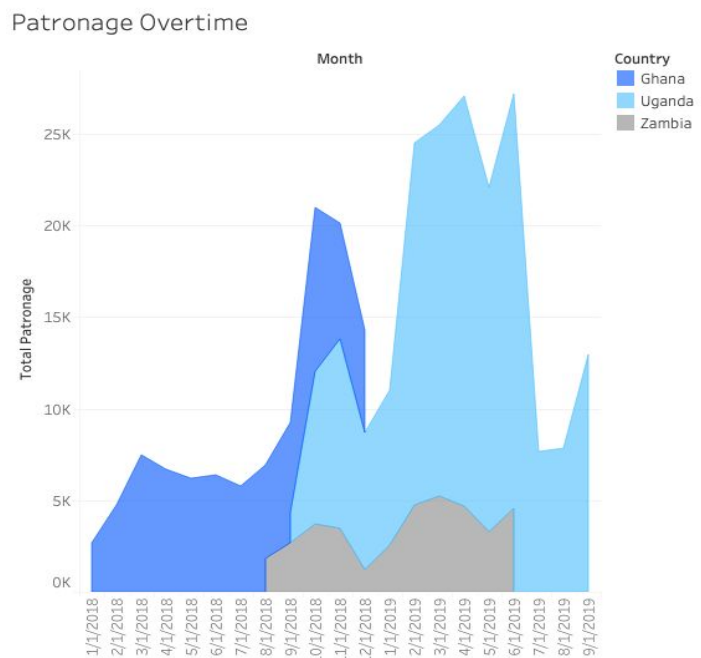


Figure 1

Overall, the digital reading program led to increases in patronage and patrons visiting the library after launch of the project, with fluctuating patronage throughout each year of the intervention.

As seen in **Figure 1**, findings in response to Outcome 1 proved positive. Prior to the launch of LOCAL in Ghana, young patrons averaged 2500 across all nine libraries while it doubled after two months of the project, remaining above 5,000 over the course of the project. Similarly in Zambia, patronage averaged at 1,803 before the launch of LOCAL and climbed to over twice the baseline, reaching 5,000 at its peak in March, 2019.

As noted above, Zambia was in fact a special case in the LOCAL project as the libraries were charging children a fee to attend the library at the project outset. Worldreader worked with the libraries, LIAZ and local government councils responsible for funding the libraries to have the child fees removed so that it was easier for children to gain access to library resources. Patronage increases in Zambia can thus be attributed to the reduction of fees at the library as a result of the digital reading program. This change speaks to the power of advocacy to local council members detailed in the LOCAL toolkit.

Analysis shows fluctuations in patronage month over month throughout the course of the LOCAL Project. However, this fails to factor out common seasonal or cyclical trends in patronage levels, an aspect highlighted in interviews with librarians. These seasonal trends included student holidays during the December and June/July school break, when young patrons often travel to see family and are given respite from their school work

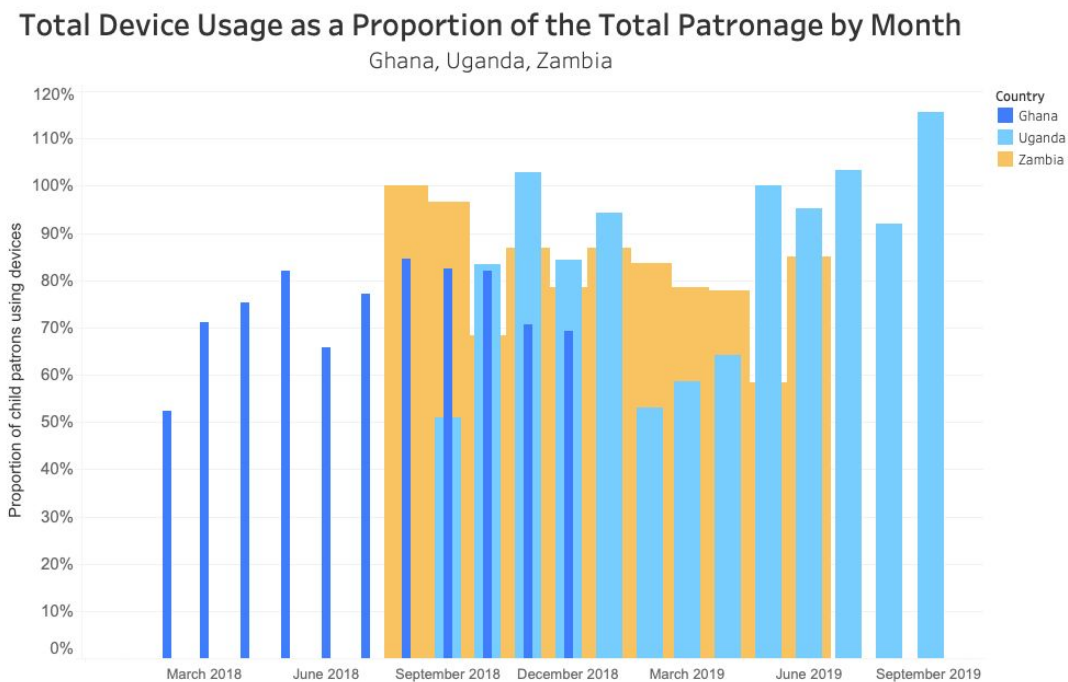
Surveys and interviews conducted with librarians at the endline of each project showed that 87% of librarians attributed increases in library patronage to the digital reading program. Librarians cited the increase in outreach activities, school patronage, uptick in child patrons, and the reading devices themselves as the major influencers for patronage increase.

A survey of student patrons at the end of the project also showed that 95% of surveyed student patrons in Zambia, 90% in Uganda and 65% in Ghana enjoyed going to the library. Ghana figures were likely low because a sample of students were interviewed at the surrounding schools, vs. in the libraries themselves, so five of the 20 surveyed students in Ghana had never been to

the library. Of those students who reported enjoying visiting the library all mentioned enjoying the library for reading or learning, and 25% of children in Zambia, 32% in Uganda, and 15% in Ghana attributed their enjoyment in visiting their library more specifically to reading on the ereaders. For example, one child in Zambia responded that they like coming to the library, “because at the library there are books we use for the topics we learn in school.” They went on to state, “I read books. I am also able to use [the] e-readers to know the meaning of the word in the dictionary.” Such responses speak to the added value of reading digital books such as the dictionary look up function to help students with their English vocabulary.

## Increased interest in and ability to use digital reading devices

The projects in all three countries showed that both librarians and patrons embraced the digital reading devices both in and outside of the library.



**Figure 2**

The baseline assessment in Ghana found that children in Ghana were excited about technology in libraries, but had limited exposure with 43% reporting

that they had used ICT devices for reading in their libraries. By endline of the intervention, an average of 4,604 child patrons used the devices each month with 74% of all library patrons engaging with the devices throughout the course of the project (**see Figure 2**). This trend was consistent among all regions in Ghana.

In Zambia, there was also a very high interest among patrons in utilizing digital readers. Out of the 75,664 patrons who are recorded to have visited the ten libraries within the reporting period, 61,112 of them used the devices in the library. This translates to 80% in-library usage, supporting the librarian's presumptions of the direct link between e-readers and increase in patronage.

When divided by age groups within the target range, upper primary children had the highest share of device usage in both Zambia (51% average) and Ghana (50% average), followed closely by lower primary children (average of 36% and 42% respectively). Pre-primary children had the lowest share of device usage, averaging 13% in Zambia and 8% in Ghana. Low pre-primary usage is not surprising, given the need for additional device supervision and support with this age group. In Uganda, the devices were more equally accessed across age groups. Lower primary had the highest share of device usage (35% average), while upper primary's share was an average of 33%, and 23% for pre-primary children. Again, given that older students likely have more exposure to digital technologies through phones and other accessible technologies, these results aren't surprising, especially when considering additional parental or librarian supervision is typically needed for pre-primary children using the devices.

In interviews with LOCAL librarians and teachers at schools that received outreach from the libraries in Ghana, common themes emerged about the interest among children in using the devices that offer insights into the high levels of device usage. Librarians and teachers both offered the diversity of content, particularly early-grade content, all accessible on the same device, as an explanation of the high device usage. In addition, teachers and librarians noted the novelty and technological aspect of the e-readers as appealing to the children, which peaked their desire to use the devices as opposed to paperback books. One teacher interviewed directly attributed an increased interest in reading among his pupils to having regular access to the devices in the library and school.

“Whenever they come to the library they ask for the devices. It makes reading interesting to them...”

*LOCAL Ghana Librarian*

In addition to measuring interest, Worldreader also set out to assess the ability of children to utilise the e-readers as part of the final evaluation. Enumerators asked a sample of children in each country (21 in Zambia, 20 in Uganda, 20 in Ghana) to perform a series of tasks on the e-readers, including turning the device on, selecting their favourite book, turning the pages, accessing the dictionary, and increasing the font size.

	<b>Turn on the e-reader</b>	<b>Find a book</b>	<b>Swipe to the next page</b>	<b>Use the dictionary</b>	<b>Change font size</b>
Ghana	100%	100%	100%	55%	55%
Zambia	100%	91%	100%	61%	78%
Uganda	100%	100%	100%	70%	65%

As seen in Table 3 above, every child assessed in both Ghana and Uganda could perform the first three tasks, indicating a strong ability among the children to utilise the basic functions of the device. Almost half of the children in Ghana (45%) could not access the dictionary, while the same number could not increase the font size. Of those Ghanaian children assessed that could not perform these tasks, 89% could not do both.

In Zambia, teachers reported that children were responding very well to using the e-readers, and that it had improved their spelling and vocabulary. A teacher in Zambia also reported that “the children are better communicators” as a result of the initiative. As seen in the Table 3 assessment results, the child assessment of device manipulation confirmed that children were familiar with the devices and able to use them for reading. A higher percentage of children in both Zambia and Uganda were also able to use the more advanced device functions of dictionary lookup and changing font sizes.



The majority of librarians in Zambia and Uganda (80% and 85% respectively), also reported that integrating the devices into their libraries was quite easy, however the majority of librarians in Ghana expressed some difficulty with digital integration. While only one Ugandan librarian stated it was difficult integrating the digital reading program due to scheduling issues with teachers, 81% of Ghanaian librarians expressed some difficulty due to travel costs for outreach, difficulty working with and training children on device usage, both in and outside the library, and some challenges with device charging due to limited electricity.

When librarians were able, outreach activities supported student ability to use the devices. Outreach to schools led to a variety of reading activities utilizing the digital reading devices. While a number of librarians, particularly in Ghana, expressed challenges with traveling to neighboring schools due to distance and lack of funds for transportation, when they were able to conduct outreach, librarians often trained teachers on device usage so they could leverage the books for their teaching. Several teachers struggled with large group settings and introducing the e-readers within the short amount of time allotted by the school. Teachers in each country reported the desire for more time with the e-readers. One teacher from Ghana more clearly suggested that there be better coordination between the librarians and the schools so that class is disrupted less often.

## **Increased interest in reading local language materials**

Since the provision of local language content was one of the primary aims of the LOCAL project, the data collected sought to determine the frequency of use of the local language content. At baseline 79% of the selected libraries across all three countries reported having some access to local language materials, with some variance from site to site. Zambian libraries reported a total of 482 local language titles across libraries, an average of 42 titles per library. Ugandan libraries reported the least with a total of 365 local language titles across all 10 libraries. Lastly, while Ghana reported 462 titles across all nine libraries, six of the nine libraries with local language content available reported less than 5 local language books on hand, making disparities across libraries clear, since one library accounted for 340 of the total Ghanaian

language titles reported.

With 60 local language titles loaded on each device distributed as part of LOCAL, the availability of local language titles increased across all libraries in the project, with exponential growth observed in some cases.

At project endline, librarians provided estimates for the amount of content that patrons consumed over the course of the project in both local language and English using the e-readers, as a means of assessing the level of interest in reading local language materials.

In Ghana, librarians responded that 24% of the content being read by patrons were local language books, on average, significantly higher than the proportion of local language content available on the e-readers. Moreover, when asked to estimate the amount of local language content used during outreach the average reported by librarians was 35%. In Uganda and Zambia, librarians reported that on average 42% and 52% of the content being read by patrons were local language titles, respectively. When it came to outreach activities, librarians in Uganda, reported that 40% of the content used during outreach activities was written in a local language compared to 31% reported during outreach in Zambia. The level of local language consumption compared to English, is further explored in the discussion section below.

As part of the endline survey, students named their two favorite books. This question gave some insight into how they received the local language titles. While the majority of responses listed English titles as their favorites, several students in all three countries expressed that their favorite books were local language books. Among these were a Bemba title in Zambia - *kala ne sumpa ya mupashi*, and four Luganda titles in Uganda. In Ghana, 25% of the interviewed students mentioned local language titles as their favorite, including a book in Fante and five Ewe titles. A student in Zambia also stated that they most enjoyed Bemba activities led by the librarian.

Children further expressed their love of reading, more generally, in many ways. One Uganda student said “Reading is cool!” and another hoped that reading would eventually help them become a journalist or a nurse. The books chosen by the surveyed students in Uganda as their favorites, notably contained information on practical topics, such as healthy eating habits, how to use and maintain a toilet, how to prevent malaria, how to maintain proper

sanitation and how to grow maize. One student listed four favourite story books, explaining that the books had helped him remain positive after his mother passed away.

Several Zambian students stated that the books they read taught them “good morals” or “kindness.” In Ghana, the most common responses were *Bobo the Rat*, an East African children’s book by Frank Odoi that tells the funny tale of a hungry rat who embarks on adventures to find food, and *Fatima Can Count*, a Nigerian children’s book by Karon Harden about a girl going to the market that supports learning to count.

## **Librarians have greater skills, knowledge, and confidence to support and facilitate early literacy**

A major component of the LOCAL project was capacity building of the librarians to better support child-patrons with reading activities using the new content and reading devices provided. Worldreader conducted a series of trainings for librarians in each country that included training on:

- Technical device usage
- Project management and responsible device maintenance
- Digital reading integration and how to conduct in-library reading activities for children
- Community engagement and outreach

At project endline, a majority of librarians reported being confident in their ability to conduct activities with digital reading devices, attributing this to the skills and knowledge gained through the Worldreader training.

Librarians in all three countries had positive responses to the training conducted by Worldreader with 67% reporting that the training was useful for preparing them to implement the project. This included 71% of librarians in Uganda, 70% in Zambia and 62% in Ghana. The responses reflected on the training support for librarian skill building to use the devices, train others, and

work more effectively with children in the library. For example, one librarian in Uganda stated: “Training offered skills building and this is being extended to teachers to improve services.” In Zambia a librarian noted, “I have become a better librarian who is able to engage stakeholders and management and get [sic] fruitful results.” Similarly in Ghana, one of the librarians reflected that the training, “taught me a lot on how to teach students in the region. It enlightened me on how to teach.”

As a key part of the LOCAL project, Worldreader trained librarians on how to conduct twelve early-grade reading activities using the digital books. Librarian reporting showed that the training was effective and that librarians held e-reader-specific activities both in and outside the library in each country. In Ghana, librarians held 315 e-reader specific activities, 235 during outreach, and 80 held in libraries. In Uganda, librarians held 717 reading activities in the library, with group role reading and librarian read alouds as the most popular activities. Librarians in Zambia reported conducting the same activities most frequently, and reported completing 646 reading activities throughout the course of the project.

Teachers also reported on the reading activities they conducted with the digital books. In Uganda and Zambia, the most common digital reading activities conducted by teachers during outreach included read-alouds, spelling bees, and silent reading, while in Ghana the digital books were more broadly mentioned as teaching aids. Some teachers also reported collaboration between them and their librarian when conducting these activities in the libraries.

Finally, librarians in all three countries reported long travel times as barriers to accessing many potential readers. Several teachers reported issues with fitting new library activities into existing schedules. For example, a teacher from Chibolya Primary in Lusaka city mentioned not being able to access library activities because the school needed to seek authority from the Ministry to have their children walk to the library. The school is situated in the town center surrounded by busy roads and this serves as a danger for the children. Likewise, a number of librarians mentioned issues with funding travel for themselves to do outreach and community activities, and funding students who must travel long distances to be able to attend library activities.

## ***Spotlight on Parental Involvement in Reading in Ghana***

While parental engagement in reading to and with their children wasn't properly tracked throughout the course of the LOCAL project, at the start of the project in Ghana, Worldreader worked with GhLA and AfLIA to conduct a baseline parent survey among Ghanaian parents affiliated with the LOCAL libraries. The intention was to assess whether an additional component could be added to the library project that would encourage parents and caregivers to read to their children on mobile phones through the Worldreader application. The survey sought to gather information around parental behaviors and attitudes around reading, and their access to a data-connected mobile phone to support reading in the home. Worldreader staff and volunteer enumerators interviewed 63 parents in an effort to outline the best way for parents to support their children with reading outside of the library.

In order to get a sense of how much community parents valued reading to and the different ways they engaged with their children, enumerators asked them a series of questions. 71.4% of parents said they read to their children. 43% of those parents who reported reading to their children said they do so in local languages and over 73% reported reading in English to their children, with some using both Ghanaian languages and English. The majority of parents (65%) reported reading storybooks to their children with 75% of them reporting reading to their children in English and 43% reporting reading to their children in a local Ghanaian language.

*"Readers are always leaders."*

*Parent from the Ashanti Region, Ghana*

When asked why they felt reading was important, of the 61 parents who responded, 74% emphasized reading for intelligence, better understanding, and broadening children's minds, and 41% focused on improving vocabulary, language development and creativity among children. As one parent eloquently put it, "Reading is important because it develops the mind. Understanding the written word is one way the mind grows in its ability. Teaching young children to read helps them develop their language skills. It



also helps them learn to listen.”

The results further showed that 100% of interviewed parents had access to a mobile phone in the household and 74.6% use data on their phones. When asked how much they each spend on phone data per month the mean was 41 cedis (approximately \$8 US dollars in 2018) with a mode of 10 (\$2 USD) and median of 25 cedis (\$5 USD).

While these baseline results indicated there was potential to reach parents and caregivers with mobile reading efforts at the home level, the reality for librarians in Ghana’s ten partner libraries ended up being more complex. Digital reading program launch events never took place in Ghana to start LOCAL so there was a missed opportunity to engage parents and caregivers around the digital reading program at project outset. Launch events have always been an important piece of digital reading programming in Ghana to get community buy-in, but a disagreement in funding allocation for these events, left librarians without the additional support to seek early community engagement.

Further, librarians found they had limited access to parents during the course of the LOCAL project in Ghana. Unlike schools that have PTAs and PTA meetings where parents are readily accessible for outreach, libraries didn't have any means of reaching parents aside from contact through the children coming to the library. Most parents didn't have vested interest in the libraries and children mostly came to the library through the school or by their own volition. This lack of direct contact between the library and parents limited the librarians' ability to promote the mobile reading at home component to the parents. Some librarians did see some success reaching out to churches to introduce the mobile component of the project, but little app engagement was seen as a result of the project.

Since parental involvement in Ghana was so low, allowing for limited data collection, this aspect of the project was not incorporated into the later programming in Zambia and Uganda, instead focusing on in-library activities for children and school outreach.

# Discussion and Recommendations



The LOCAL project demonstrated that digital reading programs are feasible mechanisms for enhancing local language programming for the early grades in a variety of contexts. Throughout the course of the project, a number of key factors stood out for programmatic success, including the importance of funding for librarian outreach to schools, the importance of organized outreach activities, built into school and library schedules, and the need to motivate local community members and networks to support local language reading activities.

**Libraries can act as local language resources for their early grade reading communities.** While librarians are not inherently trained to support early-grade reading, nor mother-tongue reading activities, librarians in the

LOCAL project really rose to the challenge and showed the great willingness of the majority of librarians to provide effective programming for their patrons. While some struggled with supporting local language reading activities, because they didn't speak or read the languages in question, others found innovative ways to engage teachers in neighboring schools and other stakeholders in the community to support local language reading activities both in and outside the library.

The interest displayed by child patrons in reading in their mother tongue in all three country programs further supports the idea of libraries as providers of local language early grade reading content. Since the collections on each device only contained 30% of the books in local languages and 5-15% in each language, it is telling that children were choosing to read the local language books 24–52% of the time, since that is far greater than the proportion of the collection that the local language titles represented.

In Uganda, the LOCAL project was well timed to align with an MOE policy push for local language use in the early grades, making the project important for schools and the MOE at both the local and national levels. However, the number of local language books provided were insufficient, as many students went through all 30 storybooks in the first few months of the project and the more active libraries were ready for more soon after.

### **Challenges with language politics and language selection.**

Language politics and policies are complex in every country, and with so many spoken languages in each of the three LOCAL countries, supporting all the languages through this type of reading program wasn't feasible.

In Uganda, for example, where there are over 40 spoken languages,<sup>4</sup> our program managers were faced with some road-blocks due to language politics. Given that 60% of libraries were in urban towns, there was a lot of push back around language choices since, with urban classrooms, come a mix of children from various different language backgrounds and regional affiliations. A number of both patrons and schools complained about the language selections for the LOCAL books, since they were only relevant to a portion of the school and library populations. It was clear that patrons, librarians, and teachers would have preferred a greater language selection

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<sup>4</sup> Ethnologue, 2020 retrieved from <https://www.ethnologue.com/country/UG/languages>

and more books in local languages added to the digital reading devices. Libraries faced similar challenges in Zambia where 90% of libraries were in linguistically diverse urban areas.

When selecting languages in each country, project managers chose to focus on languages that publishers were interested in pursuing and publishing. Given that the initial LOCAL interventions were only set to last for a year in each country, project managers made a strategic decision to avoid investing in a language that had no infrastructure and no interest from publishers due to low market demand. The desire was to ensure that the languages chosen would have some continuity and chance of new content acquisition at project end.

### **Leverage teachers and community volunteers for local language learning.**

While librarians should not be expected to act as local language teaching experts, Worldreader's research identified a number of cases where community volunteers from religious groups and schools can be leveraged to support local language learning at the libraries. Worldreader recommends, as part of community launch events, or local advocacy, that library authority and library support organizations provide financial support for librarians to conduct further community outreach in order to recruit volunteers to support local language reading programs and leverage expertise of community members.

**Supporting future outreach activities for librarians.** Worldreader saw the advantageous effects of librarian outreach with e-reading devices through its past work in libraries in Kenya. Outreach activities were a means for increasing library patronage, membership and local resource mobilization.<sup>5</sup> In all three countries, limited outreach conducted by librarians was a direct result of limited to no funding to support outreach activities and a lack of additional staff to manage the library in their absence. Those LOCAL librarians who were able to conduct outreach activities reported increased usage of local language content during outreach activities and positive experiences teaching the children on device usage and organising reading activities.

Five of the libraries in Uganda were more advanced in the success of their outreach programs because they had existing digital reading programs

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<sup>5</sup> See LEAP 2.0 Final Report  
[https://comms.worldreader.org/wp-content/uploads/2018/07/LEAP-report\\_digital.pdf](https://comms.worldreader.org/wp-content/uploads/2018/07/LEAP-report_digital.pdf)

before the launch of the LOCAL project, through a partnership between Worldreader and Bookaid International. Two of these libraries, in Nakasake and Zigoti as well as the NLU library in the Central Region had very well established outreach programs and had already established school networks for outreach. The libraries in Hoima and Fort Portal had well established systems in place as well. These libraries leveraged digital outreach as a source of income by charging schools a fee each time the librarians visited the schools with the digital books during a set time, or each time a group of students came to the library to use the digital books during a designated visitation period set by the school. These libraries set up the fees on a sliding scale of 5,000 - 10,000 Ugandan shillings per visit, depending on the school.

The libraries new to digital reading in both Uganda and Zambia also developed symbiotic relationships with schools. They were tasked with working with a minimum of five schools and throughout the course of the project, the school-library relationships became well entrenched, often loaning devices to the schools through a system where the schools would come to pick up the devices from the library.

These outreach activities were a much bigger challenge in Ghana where 81% of Ghanaian librarians expressed some difficulty due to the travel costs associated with outreach activities. Worldreader recommends that library support organizations and local community councils like GhLA, LIAZ, and NLU support librarians to conduct outreach activities to neighboring schools and provide further training on how to mobilize resources for the library locally that might support these outreach activities.

Librarians should also explore working with schools to provide funding for their transportation, similar to the model employed by the five Ugandan libraries, as this was a major limitation to conducting outreach activities. Libraries that reported a high number of outreach activities, reported working with schools who were willing to fund their transportation to visit the schools weekly.

**Consult with Schools to organize librarian outreach activities.** In order to make outreach activities more effective, Worldreader recommends librarians reach out to school leaders to schedule set times for librarians to come with the devices and support digital reading activities. Based on a number of teacher recommendations, better organization of outreach activities will



enable teachers to more effectively integrate digital reading into their weekly lesson plans. Lastly, conducting community launch events for the digital reading program is highly recommended in order to better engage local educators and parents around the digital programming and resources available at the library. Community launches are essential for fostering community buy-in and ownership of the digital reading program and creating a space for creative problem solving through community engagement with the libraries.

**There is value in facilitating networking across libraries for more decentralized library systems.** A major unforeseen benefit of the LOCAL project was bringing libraries and librarians together from a variety of different communities and providing them with the opportunity to network and share experiences. Throughout the course of the LOCAL project, there were four active meetings that brought librarians together first at the beginning of the project for training and policy meetings with librarians and library supervisors, then at the end of the project for closeout and sustainability planning.

In Uganda, the Worldreader project coordinator and NLU were also responsible for maintaining a shared librarian WhatsApp group of 25 or so librarians, to help supervise and support the digital reading programs in each library. This group allowed the librarians to be in regular communication with each other and share successes and challenges with their digital reading programs. During training more established county libraries supported the smaller, less-established libraries to formulate their new library policies to incorporate the LOCAL project. The smaller libraries didn't have any background training so larger libraries provided some on-site training for them. This led to observed growth in organizational capacity of the smaller libraries. For example, the librarian for the Kaboya library had never received training as a librarian. She had been serving as the secretary for the local council chairman and was given the additional responsibility to manage the library. After working with the librarian at the Hoima library she was using the devices at the library and enrolled in a course in library studies. By the end of the LOCAL project, she was managing the library budget processes with the local council and buying extra books for the devices. Over a period of one year, she was able to do advocacy for the library, increase her personal capacity and mobilize her library patrons for increases in patronage.

# Sustainability and Replicability of the Project



As part of the LOCAL project, Worldreader developed a toolkit to support libraries to sustain and replicate digital reading programming in other communities. The toolkit contains five modules:

**Module 1:** Why Digital Reading?

**Module 2:** Getting Stakeholder Buy in on Digital Reading Programming

**Module 3:** Acquiring Digital Content

**Module 4:** Incorporating Digital Reading Into Your Community

**Module 5:** Sustaining Your Digital Reading Program

Key takeaways from the project showed that the LOCAL project programming can best be sustained in the GhLA, NLU and LIAZ library systems through ongoing monthly monitoring reporting, technical support training, and budgeting for future device provision and replacements.

Librarians responded well to the accountability of monthly monitoring reports in both Ghana and Zambia, and felt the reports motivated them to do more with the devices. Further, technical support for librarians needs to be maintained and was built into the sustainability plans for each project. Supporting training of regional technical leads would alleviate some of the concerns around how to address technical device issues without on-going Worldreader support. Lastly, budgeting for the future of any digital reading program is essential. There are continued costs of device replacements and new content acquisition that should be considered.

In regards to ownership, some librarians felt that working with local councils or government bodies will be more effective, rather than decentralized groups like NLU or advocacy bodies such as LIAZ. For many libraries in Zambia and Uganda, there was little accountability felt towards NLU and LIAZ since they did not make the financial decisions for the libraries. Worldreader suggests having a technical team that will have representatives from both relevant library advocacy and local government bodies tasked with certain responsibilities to ensure sustainability of the project and proper accountability of libraries and their librarians.

# Conclusion

While libraries are indeed capable of acting as development hubs within their communities, the success of each library comes down to the passion and dedication of its librarians. As an innovative project that asked librarians to go above and beyond to learn new skills and expand outside their comfort zones by supporting early grade reading efforts, LOCAL was more than anything a testament to librarians willing to learn new skills and expand their service offerings in support of their community. Strong project management is essential to the success of any digital reading program.

One librarian was so dedicated to her community that she volunteered her own garage, so that on Saturdays students within the village could come and read after the library closed at mid-day. Up to 40 children were regularly coming to her garage for reading sessions on Saturday afternoons by the end of the LOCAL project.

Where there is a will, there is always a way and with a measure of success seen across all three countries, there is potential for digital reading as a solution to library programming for the early grades across East and West Africa.

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# Annex

## Annex 1: Library site selection criteria

Library applicants were selected based on the following vetting criteria:

### **Demonstration of Need and Interest:**

- Applicant must demonstrate a strong vision and interest in leveraging technology to expand library activities beyond the four walls of the library.

### **Capacity**

- Library should have at least two (2) active staff serving as Librarians.
- At least one librarian familiar with the local language spoken by the majority of the children/people in the community. This means that they should be able to have a basic knowledge of reading and understanding text in the particular language.

### **Demographics:**

- Libraries accessed more by targeted age-group will be prioritised over other libraries least accessed by targeted age-group.

### **Infrastructure :** In the least, the library must

- be accessible by road
- have access to electricity
- Secured for safe keeping of devices

### **Programming**

- Libraries with active outreach programs focused on targeted age-group will be prioritised.

### **M&E**

- Rigour (established tools and systems) in data collection (tracking) and measuring for improvement of library programming and content will be a plus.

Worldreader will vet all submitted applications. Promising libraries will be selected for further assessment. The team may visit libraries to ascertain the information provided in the application and share list with GhLA for any final feedback/ suggestions.