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Strategic collaboration for technology-supported development and use of multilingual children's storybooks in Kenya: The case of the African Storybook initiative

ABSTRACT

Literacy is critical to achieving the 17 United Nations Sustainable Development Goals but many countries have not achieved globally desirable literacy levels. In this paper I describe a collaborative strategy that the South African Institute for Distance Education (SAIDE) adopted to implement the African Storybook (ASb) in sub-Saharan Africa in response to the shortage of multilingual literacy resources. The paper focuses on Kenya, drawing on my experience as the ASb Partner Development Coordinator and from ASb partner reports. One of the findings is that nationwide literacy programmes may not meet specific literacy needs of children from hard-to-reach communities. Other innovative and unique initiatives need to intervene through a collaborative bottom-up approach. I conclude with some lessons learned, achievements and challenges.

INTRODUCTION

Numerous studies show that many countries still grapple with low literacy rates among children and young adults, with sub-Saharan Africa recording below 50% (UNESCO, 2017b:3). Literacy is critical to achieving the 17 United Nations Sustainable Development Goals (SDGs) because "sustainable development cannot be realized without educated people" (UNESCO, 2015:7). Literacy "is a fundamental human right" and the basis for achieving education for all people (UNESCO, 2006:1). Its centrality to social transformation requires that all children get adequate opportunities to acquire literacy skills to help them excel in education. This, however, seems to be an elusive achievement across many African countries.

The Uwezo assessments administered across Kenya, Uganda and Tanzania, reveal that educational challenges persist in the three countries. The main conclusion is that "despite budgets and other inputs to learning having increased steadily, learning outcomes have remained essentially stagnant" (Uwezo, 2013:1; 2016:3). Could this be partly due to inadequate availability of and access to appropriate reading resources that are familiar to children and to which they can

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relate? Children from communities less exposed to English need access to a wealth of language-appropriate multilingual storybooks on which to practice reading. The benefits associated with this include the fact that it

> … lays a solid foundation for learning; improves access to education, especially for girls; when used at home and/or at school, it promotes literacy in the mother tongue (L1) and later in the second language (L2); it facilitates learning both of academic subjects as well as the second language (L2); and that at school, children can concentrate on the subject matter instead of struggling to understand the language of instruction as well (UNESCO, 2014:2).

The foundation laid early on in the schooling process helps children to attain the confidence required to acquire literacy skills that increase their chances of performing well in lower classes. Success in lower classes is closely linked to successful transition to upper classes and to completion of basic education (UNICEF, 2012:7-8). Yet, providing appropriate multilingual storybooks to ignite African children's early literacy is a persistent challenge.

During the 2017 International Literacy Day, UNESCO urged nations to reflect on:

> How do literacy programmes need to adapt in a digital world, in terms of delivery modes, curriculum, teaching-learning methodologies, materials, teachers and facilitators, language used, as well as monitoring and evaluation? What are the opportunities and challenges to make literacy programmes available, accessible, acceptable and adaptable to all? (UNESCO, 2017a:2).

It is against this backdrop that this paper reflectively discusses SAIDE's ASb collaborative strategy that responds to the multilingual literacy needs of Kenyan children who are likely to miss out on the larger literacy initiatives.

1. BACKGROUND AND CONTEXT

The current education policies in Kenya "mandate the use of vernacular in linguistically homogeneous areas for the first three years of school, though this has not been institutionalized" (Nyarigoti & Ambiyo, 2013-2014:78). This implies that more children from monolingual and hard-to-reach communities continue to be greatly disadvantaged and persist in recording poor literacy outcomes. This is because "one of the points raised in favour of mother tongue use for instruction is that it can promote linguistic skills that facilitate the acquisition of official languages…" (Ibid.:79). While this policy is largely ineffective, there is no policy or discussion on the benefits of multilingual education in Kenya, as is indicated by Mbithi (2014:7), in her earnest appeal to policy makers to consider it.

Literacy is key to improved educational outcomes, successful transition and subsequent completion of basic schooling. Since education is central to sustainable development, it is crucial to ensure that all learners' literacy skills acquisition improves and is sustained as this has a direct effect on educational outcomes.

There are several reasons why teachers in public primary schools in Kenya do not use the language of the catchment area to teach literacy in the first three grades and often skip the mother tongue lesson on the school time table. One is the absence of materials, particularly interesting, contextually-appropriate storybooks available in local languages (Nyakwara, 2014:42), and with little previous incentive to publish in local languages, only Kiswahili and English titles are available. Their absence means that schools and libraries do not know or appreciate the value of multilingual literacy.

Another reason is the inadequate training and support to teach reading in mother tongue. There is no discussion to sensitise communities, schools and parents on the importance of using local languages to lay the literacy foundation. These important caretakers need help to understand that it is not about denying children the chance to learn English, but that it is a strategy to help the children acquire literacy in English. Numerous literacy studies have emphasised the importance of using the home language to introduce reading and learning to children before introducing foreign languages. This is because "Fluency and literacy in the mother tongue lay a cognitive and linguistic foundation for learning additional languages" (UNESCO, 2010:2).

According to Nyarigoti and Ambiyo (2013-2014:80), it is possible that parents' "negative attitudes towards mother tongue use for instruction" which seem to be due to the practical function associated with English and its role in education and employability, contribute to the lack of support for this policy. Also, primary school teachers who are the primary implementers of the policy seem to have mixed views about it. According to the above authors, some teachers think "learners often had a challenge translating concepts learnt in local languages into English" and believe that "if pupils are examined in their first language, they will understand the questions and perform well", while others think that "those who use vernacular in class are regarded as 'unskilled'" (Ibid:82). This resonates with the documented experience of Ng'asike[1], one of the African Storybook partner champions of local language literacy. After a visit to a school in northwest Kenya, he related:

> The children were very afraid to speak with me openly in their mother tongue before their teachers. Away from school children would engage with me in their mother tongue in the most creative ways. I learnt that teachers do very little in language development at the lower grades. As a result children's ability to start to develop interest in reading very early is diminished. It explains the fact that by the time a child picks interest or becomes confident to read a book he/she is already approaching the end of the primary school period. Mother tongue lessons are not a priority and time for mother tongue is used to teach other skills (Ng'asike, ASb report, May 2018).

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[1] Dr John Ng'asike is an experienced Senior Lecturer in Early Childhood Education, researcher and advocate of mother tongue literacy in early grades. He holds a Doctoral Degree in Curriculum and Instruction from Arizona State University, USA, a Masters and Bachelor's Degrees in Early Childhood Education from Kenyatta University, Kenya, where he taught for many years. He consulted for ASb in his home county of Turkana.

For children from monolingual communities, like in the example above, the journey to acquire and muster literacy in English is much longer, steeper and more arduous than it is for those who are exposed to it from home.

2. AFRICAN STORYBOOK CONCEPT

Drawing on extensive research that shows reading literacy levels of African children after the first three years of schooling are far from adequate, both in the basic ability to read as well as the literacy necessary to proceed to the next level of schooling, SAIDE began the process of implementing the ASb in 2013. ASb is an early literacy initiative that responds to the question, How can you learn to read without appropriate books? The initiative is backed by a substantial body of research on the cognitive and educational advantages of children learning to read in their most familiar language, preferably in the mother tongue (ACDP Indonesia, 2014:3).

Research further confirms that learning a second language is facilitated if literacy is first firmly established in the mother tongue (Cummins et al., 2005:3; UNICEF, 1999:41). However, in most of the 2,000 languages spoken in sub-Saharan Africa, there are few books for children learning to read in those languages. Because of the costs involved and absence of book-buying publics, there is little prospect of traditional publishing models being able to address the scarcity of reading material in African languages. And yet, "reading books are particularly important in building the foundational skill of literacy and in developing children's background knowledge in key content areas" (Global Book Fund Feasibility Study, 2016:12).

The driving question, How can you learn to read without appropriate books? is likened to trying to learn soccer without a ball. To address it, an innovative publishing solution is needed. Conventional publishing models that rely on economies of scale are unable to provide sufficient numbers or variety in the multitude of languages on the continent. The ASb vision of "open access to picture storybooks in the languages of Africa for children's literacy, enjoyment and imagination" has been built on the firm belief that African educators and language communities can create and publish their own books, using the affordances of digital technology, and use them to shape their own literacy.

2.1 African Storybook theory of change

The ASb aims to facilitate availability, access to, and use of sufficient good stories for early reading practice for African children ages 2 to 9. To achieve that, the initiative has set up an interactive website and App with openly licensed digital and ready-to-print storybooks of various levels and types for early reading.

It trains educators and encourages literacy development organisations working in early literacy of young children in African countries to access them; to translate and/or adapt the stories into a familiar language and context; to create their own stories and upload them in the templates provided; to contribute already published stories and make them available

under an open license; and to use them in a variety of ways for literacy development. This fundamentally localises the solution to the shortage of local language and content-appropriate children's storybooks.

This is advantageous because it allows educators and parents to have storybooks that suit their context for free. Also the created, adapted or translated storybooks are available for reading and printing immediately. It also enables a re-use of images originally used to publish one storybook to create others in other languages without having to pay again for artwork.

Initially funded by the UK-based, Comic Relief, the ASb initiative began a pilot phase in 2013 in Kenya, Uganda and South Africa, in schools, community libraries/reading clubs, early childhood and family literacy settings. To ensure sustainability of the initiative, SAIDE continuously works to diversify its funding sources.

3. MAPPING OF LITERACY DEVELOPMENT PARTNERS IN KENYA

3.1 Literacy development organisations

In March 2013, SAIDE contracted three consultants from Kenya, Uganda and South Africa to map[2] out literacy initiatives in the three countries. The aim was: (1) to identify and gather relevant data on organisations, initiatives and activities aside from governments and education ministries that related to the full range of early grade reading and (2) to guide SAIDE as it prepared to embark on implementing the ASb.

In Kenya, I identified the Summer Institute of Language (SIL) International as one of the organisations actively involved in the provision of reading materials in local Kenyan languages. It was not possible to get in touch with SIL, but the organisation's official website showed that the materials produced for early grade reading might not have been openly licensed.

At the end of the consultancy, I summarised my findings under government policy and education documents from 2003; Ministry of Education (MoE) and departments; a recommended list of organisations, initiatives and institutions with programs in early literacy; and some suggestions on areas of collaboration; and the challenges I encountered.

Out of the over 45 organisations identified in Kenya, I recommended five for follow up. Only three of them resulted in some form of collaboration. They included the Kenya Institute for Curriculum Development (KICD), which is largely in charge of sourcing and availing quality and appropriate materials used in schools in Kenya. ASb engaged with KICD for purposes of quality assurance of the storybooks and dissemination.

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[2] The mapping exercise was an exploratory intensive desk research carried out to identify organisations working in Kenya, Uganda and South Africa in the area of early literacy with a focus on mother tongue and/ or multilingual literacy, where they were intervening and who else they were partnering with.

The second one was Kenyatta University (KU) which has been in existence since 1985. Individual KU faculties and their departments such as the Early Childhood Development Education section and the Literature and African Languages Department were very interested in participating in ASb.

The third organisation was the National Book Development Council of Kenya (NBDCK), a non-profit organisation that implemented a school-based readership programme called Reading Kenya in the Kisii and Kajiado counties. It aimed at improving teachers' abilities to effectively teach and promote reading and to support the delivery of mother tongue language instruction for learners in monolingual communities.

3.2 Pilot sites

It was crucial for ASb to partner with schools because they work directly with children and experience the brunt of the shortage of multilingual reading resources. They acted as pilot sites for ASb to test access and delivery models. Through previous contacts, I selected three public primary schools as sites to participate in the pilot. Two of them were very rural, located in the northwest and west of Kenya respectively and largely monolingual in teacher and learner composition. The other one was semi-urban, located a few kilometers south of Nairobi with teachers and learners from several language communities. Only one of the schools had solar power.

The pilot site baseline evaluation revealed that teachers were ill-prepared to teach reading. For example, the common trend was that the teacher/instructor read *for* the learners as the learners listened. It was also evident that there was an inadequate supply of local language materials for early reading. Most educators had the impression that English was a "superior" language and should be prioritised over local languages in teaching and learning reading.

None of the sites had a library space where children could sit and read. The nearest to a library was a cupboard stocked with a handful of curriculum books but very few storybooks in Kiswahili or English. As a result, there was very little reading for pleasure or for general knowledge on the part not only of learners, but also teachers. Technology skills were basic among the teachers and in one school in particular, teachers had only feature phones, had never used a computer and did not even have email accounts.

The baseline also revealed that the concept of open education resources, (OERs), and openness to sharing storybooks for the benefit of the broader community without expectation of payment was a new idea for most people. ASb had to work to create awareness of the value of the principles of OERs that would help in achieving sufficient numbers of digitised multilingual storybooks suitable for early reading.

As ASb prepared for implementation, it was vital to empower its partners in schools, libraries, teacher training institutions and literacy development organisations to use and contribute to the ASb website.

4.   IMPLEMENTING THE INITIATIVE

SAIDE signed a Memorandum of Understanding with the KICD, KU, the NBDCK and with each of the three primary schools, outlining roles and responsibilities. Although it was mutually understood that by the schools participating in ASb activities, teachers would be enhancing literacy development as part of their duties, SAIDE was aware that it would involve extra planning, commitment, innovation, monitoring, evaluating and reporting over and above teachers' usual duties.

To support the three schools, SAIDE gave each school a set of equipment, namely, three laptops and a projector, a small stipend, and ran several training workshops to build their capacities. The school teams were able to purchase data bundles for internet connectivity enabling them to use the ASb website and access the stories. They were also able to advocate for ASb in their counties and conduct other ASb-related activities, to prepare site reports and share them with ASb.

The deliverables included each school translating a certain number of storybooks into the local language spoken at their school allowing their use to teach literacy and to report on their experiences. The teams also organised my visits to their schools and shared their experiences through focus group discussions as well as participating in capacity building training. The training covered the importance of children learning to read in their home languages, basic computer skills, writing appropriate children's stories, translating, adapting the books to reflect local contexts, and effective use of stories to teach reading.

The ASb initiative worked (and still does) to achieve three key outcomes across the pilot countries. The first one was that literacy development organisations (LDOs) and educators working in African countries use the website successfully to find, create, interact with and translate/adapt stories for use in their contexts. Through the website, sufficient stories are available for regular reading practice. This two-pronged outcome emphasised story development and publishing using ASb website tools. Pilot site partners (the three primary schools) used the website successfully to create, translate and adapt stories for early literacy; and partners in colleges of education and non-governmental organisations used the website to find, create, interact with and translate/adapt stories independently for use in their own contexts.

Reports, focus group discussions and observations revealed that new stories were created, translated and adapted by individuals and by groups of teachers and were uploaded on the ASb website. Where they were unsuccessful, I helped them. Teachers with better technology skills assisted others to use the website and their interest in digital literacy grew. After three months of piloting, all participating teachers had ASb-user accounts.

Across the three sites, teachers wanted more devices to practice using the website. They appreciated the website adaptation/translation tool and used it to meet the literacy needs of Early Childhood Centres. Adapted stories enhanced picture reading among children. Reports showed children's excitement in using technology to read.

Through ASb partnership with KU, I introduced literature students to the ASb open licensing concept, the website and its tools. The students created eight new storybooks and translated six. All the participating students were awarded certificates.

The faculty member at KU overseeing the partnership also consulted for the ASb partner, the NBDCK. She trained teachers in Kajiado County on effective use of the Maa stories literacy development. In her training, she used ASb Maa language books, partly, to create awareness of their availability, and also to get feedback on their quality and appropriateness. Feedback was incorporated as more books were developed and translated into the language.

The second outcome was that literacy development organisations and educators working in African countries use the stories in a variety of ways (pedagogic and technical) for early literacy in their contexts. It emphasised effective use of storybooks developed, published and accessed on the website. It was evident that, as teachers themselves learned to cope with technology, they also learned to use it as a tool for literacy development.

Teachers took up the challenge of creating, adapting or translating to meet the needs of other learners. They were no longer limited in resource choice and neither were they restricted in what they could do with it before using it. They realised that folktales were rich resources and recorded them to teach literacy.

Teachers admitted that participating in ASb helped them know the kind of storybooks learners enjoyed reading as opposed to when they had none or no variety. At all three sites, teachers sat in each other's classes and supported their colleague delivering the lesson. They testified that collaborative teaching had never happened before. They were no longer afraid of working together to support each other.

They taught children for enjoyment as opposed to teaching curriculum content only. They found time to let children enjoy reading for its own sake allowing them time to look at the pictures and encouraged it because they understood the importance of picture reading.

They noticed children's reactions such as excitement, interest and they took time to find out from them the reason for those reactions. This, they said, they had not noticed before.

They also encouraged children to attempt to write or tell their own stories in the language they were confident in unlike before when they would only expect them to write in English or Kiswahili even if they were not able to do so. Teachers enhanced children's ability to narrate their own stories confidently, to translate whole or parts of the stories into their home language or Kiswahili to check for comprehension. They encouraged them to ask and answer questions in their language of choice. Most children did so in their home language.

With ASb support, teachers learned to give children the chance to actively participate in the reading rather than them simply listening to their teachers. They also made the effort to let children

see the text and relate words to illustrations on each page. They also began paying attention to individual children to help them with pronunciation while reading.

Teachers talked about how they creatively used the storybooks to teach across the curriculum. In one school, for example, a teacher used one of the ASb books to teach a science lesson and said it was a great experience. Children not only enjoyed reading the story, but also learned science concepts through a familiar language.

Dramatisation was also used to enhance reading and comprehension and enjoyment of storybooks. As a result of these diverse approaches to teaching and learning to read, children began asking their teachers for more reading of stories through projection.

When ASb decided to combine projection and print, children's wish to take books home was realised. At one site, I observed a teacher translate language during a reading lesson. His class had previously read the print version of the story *Curious baby elephant* in Ng'aturkana (mother tongue spoken by Turkana people) and in Kiswahili. On the day, he projected the same story in English. The learners read the title in English and were able to remember the titles in the other two languages.

When he showed them the Ng'aturkana print text, they read fluently without stammering. They pointed out pictures in the English text and were able to name them in Ng'aturkana. Learners were relaxed as they asked and answered questions in all three languages. The class was small so the teacher used the print book alongside projection, enabling pupils to read the story in two languages at the same time. This was a very good example of combining projection and print for effect.

Experiences like the one above, were included in the ASb guides that share the good and varied practice that the ASb team members have observed in the practice of the partners. The guides are on *Developing, translating and adapting African Storybooks; Preparing to use African Storybooks with Children;* and *Using African Storybooks with Children.* These are all accessible on the website.

The third outcome was that there is a growing recognition that openly licensed stories available for versioning for particular contexts and languages have a significant role to play in supporting early literacy development. As explained in outcome one, sites participated in story development, translation and adaptation with the full understanding that they were participating in generating reading resources that others could use for free.

Although the concept was new, they gradually understood and recognised its role in addressing the shortage of local language reading materials that they had always faced. Many of the teachers were proud of their participation and contribution and appreciated that they had developed professionally. Some did not know that they could write stories, translate or turn a folktale into a story until they were exposed to ASb. They ventured out of the school compound and visited the community around the school to meet with community elders. They listened to them narrate

folktales which they later transcribed and published on the website. They also encouraged children to collect their own folktales from home and to share them with others in class in the language they were most familiar with.

4.1 Participatory approach to quality assurance of ASb books with KICD

KICD requires that materials used in Kenyan schools have its approval or quality assurance mark. There is a standard process for how educational resources are vetted, approved and listed in the so-called Orange Book[3]. There are criteria for commercially-produced print materials, and vendors/publishers pay for assessment. OERs, such as the ASb, also undergo quality assurance, although some of the criteria do not quite fit.

KICD did not have standards for evaluating digital or online materials. Working with ASb has helped them recognise the importance of digital openly licensed local language supplementary readers. They have committed to finding mechanisms to access and review them for the Digital Literacy Programme (DLP) and the Kenya Education Cloud (KEC). I also participate in KICD-organised workshops to help explain the concept of OERs and to support them in developing their own standards for online quality assurance and approval of materials submitted on the KEC.

Through the eLearning Department, I have held several workshops with relevant staff. I introduced to them the ASb website and its books and story development guidelines, and led the quality assurance process. Once their feedback is incorporating, the storybooks are ready for inclusion in the DLP. In total, there are 175 titles in Ng'aturkana, Kiswahili and English that can be accessed on the KEC and through the DLP. Through ASb engagement, KICD often consults with SAIDE seeking advice about how they can generally use OER as a model to address reading materials provision in Kenyan schools.

4.2 Advocacy and expansion

Through conferences and KICD-organised workshops with its other partners, I discovered Kytabu and Virtual Learning Solutions (VLS). Kytabu is an education content leasing platform for digital books, audio books, educational videos, animations and interactive content. VLS Ltd is an educational social enterprise that is passionate about creating a movement to empower young people with 21st century skills using technology. The two used ASb content and reached more learners providing valuable feedback and data on use.

iMlango, a pioneering eLearning programme, was referred to ASb through an international conference. It worked to improve education for 150,000 primary school children in 205 schools across Mombasa, Meru, Laikipia and Kwale Counties. Led by sQuid Kenya, the programme

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[3] The Orange Book is the book that contains the official list of approved course, supplementary and other teaching and reading resources for use in schools in Kenya. Available from: https://kicd.ac.ke/wp-content/uploads/2017/10/BIDDOCUMENTS.pdf

was supported by the MoE, Science and Technology, and sponsored by the UK Department for International Development. In 2017 alone, it availed ASb books to over 17,000 learners and 640 educators. Although ASb and iMlango worked together without any formal MoU, they shared valuable monthly data on use.

Concordia University, through the Centre for the Study of Learning and Performance (CSLP), disseminated 150 ASb books to schools in Mombasa, Meru and Laikipia Counties through its repository called READS. The Concordia team encouraged teachers to help children to read books to help build fluency and comprehension skills.

The Kenya National Library Services, Kibera Branch and the Mathare Youths Sports Association (MYSA), reached over 20,000 neediest learners between 2016 and 2017. Located on the edge of the sprawling Kibera informal settlement, the Kibera Library actively served 25 under-resourced informal primary schools. MYSA's four branch libraries located in similar environments within and around Nairobi, did the same. The children loved reading "the stories on the wall" as they came to call the ASb-projected stories. Three new storybooks were developed at the Kibera Library, two of which were also illustrated by two library users. Children loved reading those storybooks because they were developed by children like themselves.

Through a Pan African Literacy for All Conference, a public primary school with an enrollment of over 700 children came on board ASb. The teacher librarian encouraged the whole school to make use of the free resources and ensured that the library lessons were properly and productively used in the library by all the classes.

4.3 Why strategic collaboration was important

Very often, large-scale initiatives implemented nationwide take long to be fully rolled out and to reach everyone, particularly, those most in need of them. Often, they may not be tailored to the needs of certain communities such as the nomadic pastoralists whose lifestyles are unique. The ASb strategy helped the neediest children to actively participate in literacy development as the storybooks spoke to their contexts and situations.

The question of language in literacy and therefore in education is central to most of these communities because often they are on the fringes of modern development and are less exposed to languages of wider communication. Centrally managed literacy curricula easily exclude such groups from acquiring meaningful literacy and from valuing education. ASb and its partners reached these communities.

Partnering with KICD gives ASb legitimacy to operate in Kenya. It helps us to know where there is the most need and to create sustainability strategies.

Collaboration has ensured there are alternative avenues to reach children, deliver content, capacitate educators, follow up and collect data and be able to measure site-specific impact

that can easily get lost in the larger programmes. It is easier to involve beneficiaries and easily incorporate feedback in the implementation because it does not have to be uniform. What matters is what works at whatever site with whichever group.

Through SAIDE's collaborative strategy, it is easy to draw on local knowledge. Teachers, librarians and learners write storybooks that reflect their own experiences and contexts, thus stimulating the positive aspects of their cultures. In the safety of writing, some authors courageously modify negative cultural aspects like gender discrimination, violence, and ethnic stereotyping. Story development processes also bring together members of different ethnic communities who would not naturally be drawn together.

4.4 Enabling factors

Having champions among partners is important as they are reliable drivers of the partnership. Most of the time success with a partner depends on specific individual's investment in the partnership. Where teachers and librarians see the partnership as supporting their professional development and their work, there is success. For this reason, certificates are issued to individual teachers and their schools.

It is noticeable that multilingual resources are most appreciated and effectively used among communities that are predominantly monolingual and therefore need resources in local languages. So the two rural schools reported the greatest number of stories developed.

Capacity building through regular training empowers teachers and librarians to access the website and select storybooks independently, taking pride in being able to use technology for literacy development. Regular visits to the partners in the initial stages of implementation provide opportunities for feedback.

Establishing a cordial relationship between the school and the surrounding community also serves to create an atmosphere of openness, respect and ownership of the school. Community elders appreciate the fact that they are recognised as custodians of cultural knowledge and that they are valued enough to be approached to mediate that knowledge. Many who contribute are happy to do so and are eager to do more to support the school and the teaching and learning process. They are even happier when they are invited to the school to narrate stories directly to the children.

5. KEY ACHIEVEMENTS

5.1 Improvement of pedagogic practices for literacy development

At baseline, most teachers admitted that during college, they had been inadequately prepared to teach reading, leave alone teaching reading in African languages. If teachers are unskilled, teaching children to read may be ineffective. Important to pedagogy is the effective use of

materials. Most colleges prepare teachers to teach curriculum materials prescriptively placing emphasis on the teacher who reads for the child rather than the child reading for himself. With ASb, teachers realise the importance of letting children read storybooks themselves rather than passively listening as they used to do before.

They take time to help children engage emotionally with storybooks, relate text to illustrations and engage with characters rather than just answering simple, factual comprehension questions.

With ASb support, teachers progressively use storybooks in diverse ways to stimulate and sustain reading. They pay more attention to the storybooks their learners like most and develop new pedagogies as they discover how to use the storybooks across the curriculum. They encourage learners to develop their own versions of storybooks. They teach children to recognise and learn sounds and letters, pronunciation, and to discuss the meanings of new words using the language that children are most confident in.

It is therefore a major achievement for ASb for successfully creating interest in children to want to experience literacy in their language. For example, children in Turkana, who only know and speak Ng'aturkana, love to read in their language and when their reading skills in Kiswahili and English begin to improve, their teachers attribute it to the use of ASb.

5.2 Reading for enjoyment

As mentioned earlier, little reading for pleasure or general information was done prior to the initiative mainly because of lack of local language storybooks. For example, the mother tongue lesson on the school timetable was often relinquished to other subjects considered more relevant to the academic achievement of the learners as well as of the school. This denied children the opportunity to read and enjoy interacting with storybooks.

However, this has changed with the use of ASb books as they arouse children's desire and curiosity. One teacher said that "children want to read all the time" and in another school teachers reported that children "want to be given storybooks to read – any time they are given a book (regardless of the subject), they quickly open it to look for storybooks like the ones they have read with the teachers" (Site reports, 2014). The teachers in these examples attributed the children's evident desire for reading to the availability of the ASb books used in and outside class. They find these storybooks culturally exciting.

As it has been reported by one school, teachers too have begun to read the storybooks and enjoy doing so. This was an unexpected achievement which points to the fact that educators too need some support and opportunities to ignite their reading and to read for pleasure.

5.3 Developing local agency

It is important to establish if the ASb publishing model enhances the agency of educators. Teachers discover that they can digitally publish children's storybooks, translate and adapt them for use as they need. Instead of only registering their complaints about the lack of local language materials, they access the ASb, which offers them the prospects of changing that situation. The website has managed to collect over 400 high quality storybooks in five local languages and over 300 in Kiswahili suitable for learners from grades one to five.

Site reports show that with the onset of the ASb initiative, teachers have not only developed professionally but they have also grown in their agency as literacy promoters. They get the opportunity to explore the relationship between teacher agency and resource utilisation.

Teachers have also begun doing collaborative teaching, something most of them never did before. They are challenged to develop their technology skills and learn to integrate technology in education, something they said might have taken long to occur without exposure to ASb. Integrating technology in education awakens the educators' pedagogic creativity and ignites learners' interest in the use of the resource being mediated by the technology. The initial curiosity experienced at the beginning of the teaching and learning process, whether in text or image, gradually moves the learner to the point where they want to read more and in this way, they grow to appreciate the process.

For the teacher and librarian, rural or urban, using technology becomes a starting point for a deeper realisation of the endless possibilities they can explore to improve themselves and their pedagogy to effectively play their roles of supporting others in their literacy and learning processes. And so, when children don't want to miss that school lesson they believe they "read from the TV" or library session of reading "stories on the wall" (Partner report, 2017), the educator strives even harder to make each literacy lesson attractive enough to sustain the learners' interest.

Their participation helps educators to demonstrate that, as individuals entrusted with improving the literacy skills of the learners from local villages, their efforts of impacting the local scene are as important as those that impact the global scene. They realise how important it is to improve the literacy skills of each child.

6. CHALLENGES

6.1 Challenges related to the mapping exercise

During mapping, I found un-updated websites of organisations with out-of-use contacts so there was no way of obtaining information about the organisations. Others that I wrote to seeking audience, did not respond or failed to honour meeting appointments.

6.2 Challenges related to language and education policy in the country

Efforts to partner with large nationwide programmes that could have benefited from ASb resources were fruitless and discussions led to no commitment.

Despite the presence of the local language policy in early grades, some community members saw the use of mother tongue as a step back. There was a general lack of knowledge about the relationship between mother tongue and its role in helping children learn to read in English.

Initially, teachers thought it was extra, unexaminable work, as the emphasis is on passing exams. It is difficult for some of them to see the importance of reading for pleasure.

Transfer of trained teachers of the initiative forced us to change our instruction model to include the entire staff in the training, even those who were not handling the lower classes.

6.3 Challenges with local communities

In some cases, the community around the school misunderstood the initiative and wanted it to be about computer training for the community. The head of the school had to be firm to keep the initiative on course.

6.4 Challenges related to use of the website and its stories

The biggest barrier to use the website is intermittent or non-existent connectivity and absence of a reliable power source. Although the sites purchased data on a monthly basis in order to access the website, one of the sites could still hardly get a signal at the school so the site coordinator regularly visited internet cafes to download storybooks. It was difficult for the site to perform all the website functions. The school did not have any source of power so teachers took turns charging the devices in their houses until later when the school was connected to electricity.

6.5 Challenges related to integrating ASb in teacher education

Integration of ASb into teacher education proved challenging. Staff need additional support in order to work effectively with the website and storybooks. Work with KU was limited only to story development. Tight schedules as well as lecturers' strikes that became more frequent and more prolonged made it difficult for the KU in-service teachers who teach in primary schools to use the books in their schools.

7. LESSONS FROM THE ASB EXPERIENCE

From the three pilot sites, ASb has shown that teachers embrace the digital format if provided with a minimum set of equipment. Digital open licensing ignites teacher agency and encourages

their innovation and, with a little support, they can re-shape and re-use storybooks with learners in different contexts.

The use of technology acts as a catalyst for the acquisition of greater technological skill. As a result of the work, ASb has had a costed proof of concept for use of the website and storybooks among the target audience that quantifies equipment, subsidy, and support. In this case, it has proved that openly licensed, digital content combined with print does matter.

The main way that children in marginalised contexts can improve their literacy outcomes is through strategic partnerships between targeted literacy initiatives whose model of implementation is bottom-up. SAIDE's collaborative model provides opportunities for some partners to mobilise teachers, others to provide more devices and technical support while ASb brings in appropriate content storybooks. Collaboration improves data collection.

It is very important to take time to identify partners that are enthusiastic about the partnership and in which to invest time and finances. MoUs alone do not guarantee success, but assist both parties in achieving their goals and realising their vision. For this reason, champions play a crucial role in ensuring the success of a partnership.

Community libraries are essential in under-privileged communities as effective spaces and places that foster literacy across all ages. It is worth investing in community libraries and creating awareness of their importance.

Children need a variety of interesting, well-written, context-appropriate multilingual books in sufficient quantities to ignite a desire to read more.

Capacitating educators is crucial in order to develop local agency and encourage active participation in book making, quality assurance and effective use.

8. CONCLUSION

This paper describes my experience of implementing in Kenya SAIDE's African Storybook initiative, a digital publishing model that adopts and adapts the strategy of collaboration with other literacy development organisations to advocate for, provide and encourage effective use of openly licensed multilingual resources for early literacy development.

Although Kenya implements nationwide literacy programmes, there are still many communities that continue to miss out on what they most need. One of the literacy needs is about finding a cost-effective, community-driven strategy for provision of and access to a wealth of multilingual storybooks for early reading.

The other is finding ways of supporting educators to use the storybooks effectively to actualise the policy on use of the language of the catchment area in the early years of teaching and learning.

Kenya's policy on use of the language of the catchment area in the lower classes is to enable children who start formal school to acquire literacy skills and have a strong foundation to build on as they transit to upper primary. This calls for access to and effective use of the right resources. This is particularly important, where children's exposure to major languages of wider communication is unlikely or limited.

One strategy to achieve this sustainably is through in-country collaboration among literacy development organisations that play complementary roles. SAIDE's ASb publishing model is successfully demonstrating this through its website tools that users themselves can use to create, translate and adapt storybooks.

9. RECOMMENDATIONS

I strongly recommend that policy makers seriously consider building local languages and their instrumentality in learning second languages into the primary teacher education curriculum. It would help to equip teachers with the right attitude and skills to teach reading in local languages. It would also help communities to understand the role of a home language in the child's literacy development.

I also recommend that teachers actively participate in local language materials development to encourage their creativity, develop their agency and strengthen the relationship between them and learners. In this case, teachers could draw on the richness of African oral tales and learn to convert them into multilingual children's storybooks.

Finally, I recommend that investment in community libraries and sensitising communities about their importance be part of the national development agenda.

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ACRONYMS

ASb	–	African Storybook
CODE	–	Canadian Organization for Development through Education
CSLP	–	Centre for the Study of Learning and Performance
DLP	–	Digital Literacy Programme
ICT	–	Information & Communication Technology
KEC	–	Kenya Education Cloud
KICD	–	Kenya Institute for Curriculum Development
KU	–	Kenyatta University
L1	–	First language, in this paper, mother tongue (home language)
L2	–	Second language, in this paper, English
LDOs	–	Literacy Development Organisations
LTK	–	Learning ToolKit
MoE	–	Ministry of Education
MYSA	–	Mathare Youths' Sports Association
NBDCK	–	National Book Development Council of Kenya
OERs	–	Open Educational Resources
SAIDE	–	South African Institute for Distance Education
SDGs	–	Sustainable Development Goals
SIL	–	Summer Institute of Language
VLS	–	Virtual Learning Solution