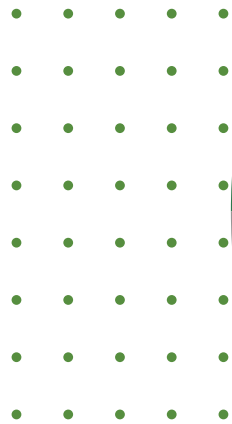


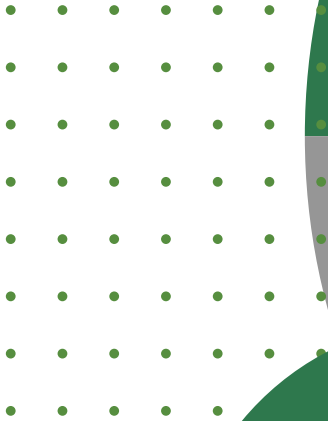
# EVERY LEARNER READS



**Attaining foundational literacy and numeracy skills for all learners by Grade Three**

BASELINE REPORT  
MAY 2023





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## Foundational learning in Kenya

Foundational learning – commonly used to refer to literacy and numeracy – is a pertinent issue that continues to dominate the educational discourse in Kenya and around the world. That literacy levels are not only low but inequitably distributed in Kenya is not in doubt, is a fact made visible by learning assessments conducted by [Uwezo since 2010](#) and confirmed by the National Assessment Systems for Monitoring Learner Achievements (NASMLA). The two national assessments have revealed that millions of children particularly from poor households, those from rural set up, those living with one or multiple forms of disabilities, children from arid and semi-arid lands (ASALs), girls, children whose mothers have limited schooling experiences and those that were exposed to minimal if any pre-school experiences continue to lag behind their peers.

Recognizing that teachers and pedagogical shifts would play a significant role in improving the literacy and numeracy levels in formative years of learning, the Ministry of Education in partnership with development partners has since 2014 rolled out a number of initiatives aimed at improving literacy and numeracy outcomes in Kenya. These efforts in numeracy (PRIEDE) and Literacy (Tusome) were national initiatives that sought to increase teacher capacities to teach literacy and numeracy. Internal as well as independent evaluations of these initiatives revealed that not only were teacher skills to teach foundational literacy and numeracy improved but also the resultant learning outcomes increased. The challenge then becomes ensuring this success is realized for all learners, despite their location, gender, socioeconomic status or if they are differently abled.

### Education in Kirinyaga County

Kirinyaga County, located in the Central region of Kenya, is densely populated with a population of 411 persons per square kilometer. 20% of people in Kirinyaga live below the poverty line. According to the MoE (MoE, 2019)<sup>1</sup>, there are currently 198 public primary schools and 160 private primary schools in Kirinyaga County. The County has a Primary Gross Enrolment Rate of 113.7% (115.4% for girls and 112.1% for boys). According to the MoE Basic Education Statistical Booklet (2019)<sup>2</sup> Primary Pupils Teacher Ratio was 1:30 in public schools and 1:17 in private schools. At secondary level, the Pupil Teacher Ratio was 1:27.

However, learning outcomes in Kirinyaga County do not match the resources input. The literacy and numeracy levels as measured by the NASMLA Grade 4 results show that only 34.9% of learners in Grade 3 can read with comprehension and at the expected level. Scores are relatively higher in Kiswahili where 46.8% of learners are reaching desirable levels but with Mathematics it is significantly lower with only 2.1% able to reason with numbers at the desired level 4.

<sup>1</sup> MoE, 2019. Basic Education Statistical Booklet.

<sup>2</sup> MoE, 2019. Basic Education Statistical Booklet.



## South-South Collaboration and the baseline study

The South-South Fellowship Programme ('Fellowship Programme') is part of the South-South Programme<sup>3</sup> which has the objective of creating and boosting means for education leaders from the Global South in exchange of evidence, practices, and lessons on how they can advance powerful cross-sectoral coalitions to promote educational reform, so as to improve foundational learning and numeracy without leaving any child behind. The South-South Programme draws its inspiration from the municipality of Sobral in the state of Ceará, Brazil. This municipality overcame adverse socioeconomic conditions and extremely poor performance in learning outcomes in education; in a span of 10 years the municipality education outcomes moved from the bottom quartile in the whole of Brazil to the top nationally. Most countries in the Global South are experiencing similar challenges to what Sobral experienced, and so Sobral has been an ideal place to learn and imagine a country where children acquire Foundational Literacy and Numeracy at the right age.

After visiting Sobral and hosting several post-trip consultative meetings, Fellows from Kenya agreed to pilot the 'Napenda Kusoma' project that would ensure that all learners in Kirinyaga County would have the required Foundational Literacy and Numeracy (FLN) skills by the end of Grade 3.

## Rationale of the baseline study

Ahead of implementation, the Fellows in Kenya needed to establish the current learning levels and the associated factors of learning at the school. This understanding is fundamental in testing the assumptions underpinning the theory of change in the direction and the strength of the relationships. In addition, the Fellowship focused on specific components that require to be established on how they compare with the Sobral Municipality in Brazil. As such, a focused baseline was necessary to rationalize the targets for the pilot programme. The study questions were:

1. What are the learning levels for learners attending Grades 3 and 4 in Kirinyaga County?
2. What are the school related factors that are associated with the learning levels in Kirinyaga County?
3. How does Kirinyaga County fare on the factors associated with the school improvement model developed by the municipality of Sobral in the state of Ceará, in Brazil?
4. What opportunities exist for applying the Sobral school improvement model in Kirinyaga County?

<sup>3</sup> This initiative is a pilot being jointly developed by:

- a). Foreign, Commonwealth & Development Office of the Government of the United Kingdom;
- b). Education Development Trust, whose head office is in Reading, UK;
- c). Lemann Foundation, whose office is in Zurich, Switzerland;
- d). University of Oxford – Lemann Foundation Programme at the Blavatnik School of Government, whose office is in Oxford, UK;
- e). Lemann Leadership Center for Equity in Education, or Sobral Lemann Center, whose head office is in Sobral, Brazil;
- f). Zizi Afrique, whose office is in Nairobi, Kenya; and
- g). Idara-e-Taleem-o-Aagahi, or ITACEC, whose head office is in Lahore, Pakistan.



## Study approach

The study focused on the case of Kirinyaga County, the locale that was purposely selected for the Napenda Kusoma Project. The study utilized the descriptive survey design to reveal the learning levels and the factors associated with learning at school. The factors are grounded on theories of learning that argue that the allocation of resources (in quantity and mechanism) deliver better or worse learning outcomes. Among the school factors that are associated with learning include the physical infrastructure, learning materials, the ICT infrastructure, teacher capacities, physical and emotional safety of the learners and the school management practices.

The study sample included learners, teachers and head teachers from the selected public and private schools in Kirinyaga County. The target and achieved samples are shown in the table below.

**Table 1: Study sample- planned and achieved**

#	Informant	Planned	Achieved	Achievement
1	Learners (girls/boys, Grade 3 and 4) <sup>4</sup>	660	636	96.4%
2	Grade 3 and 4 teachers	66	66	100%
3	Head-teachers	33	33	100%
	<b>Total</b>	<b>759</b>	<b>735</b>	<b>97%</b>

The baseline utilized the Uwezo learning assessment tool. The Assessment tool is a criterion referenced power test that assesses reading and numeracy competencies of children. The assessments in this baseline study were adapted from the Usawa 2021 assessment that were pegged on Grade 3. The highest level in literacy was reading for fluency and comprehension while the highest numeracy competencies was the division operations.

<sup>4</sup> In each target class, 5 boys and 5 girls were selected making a sample of 20 learners in each school.



# Baseline Assessment Findings



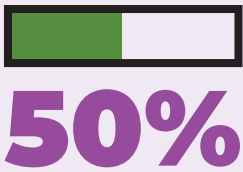
## Learning levels among Grade 3 and 4 learners

The expectation of the Basic Education Curriculum Framework (2017) and the relevant curriculum design is that children should have acquired reading fluency and comprehension in the national and official languages at the completion of Grade 2. Similarly, children are expected to have mastered the basic concepts in numbers and fully mastered the four operations of addition, subtraction, multiplication and division. The analysis of the learning assessment data reveals the following about learning levels among the Grade 3 and 4 learners in Kirinyaga County.



**2 out of every 5 children enrolled in Grades 3 and 4 in Kirinyaga County can read and comprehend a Grade 3 text in English.**

Although the proportion of the Grade 4 who can read a text in English is 54%, this proportion reduces to 31% for the learners enrolled in Grade 3. Close to one in every 10 learners in Grade 3 and 4 are non-readers in English.



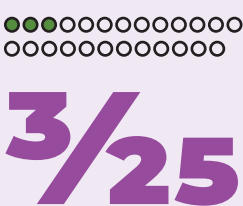
**1 out of every 2 Grade 3 and 4 learners in Kirinyaga County can read and comprehend a Grade 3 text in Kiswahili.**

Although the proportion of the Grade 4 who can read a text in English is 58%, this proportion reduces to 33% for the learners enrolled in Grade 3. Additionally, 7% of the learners in Grade 3 and 4 learners are non-readers in Kiswahili.



**1 in every 5 children (17%) enrolled in Grades 3 and 4 in Kirinyaga County can do Grade 3 division tasks.**

Although the proportion of the Grade 4 who can do Grade three division tasks is 26%, this proportion reduces to 9% for the learners enrolled in Grade 3. Furthermore, 2% of the children enrolled in Grade 3 and 4 are pre-numerate.



**Combined, only 12 in every 100 children attending grades 3 and 4 in Kirinyaga County can read and comprehend in English, Kiswahili and do division tasks appropriate for grade 3.**

The proportion of the children who have a combined reading and numeracy competence is higher in private schools than the public schools. Among the grade 3, this proportion is more than three times more whereas in Grade 4, it is almost 6% more.

**10%**  
Girls > Boys

**There are slightly more girls than boys who can comprehend in both English and Kiswahili.**

Whether in public or private schools, more girls than boys can comprehend texts in both English and Kiswahili. The differences are also more visible in private (almost 10%) than public schools (2%).

**Less than 10%**

**Less than 10% of learners in Grade 3 can comprehend texts in English and Kiswahili regardless of the type of schools.**

Only 6% of the learners in Grade 3 can comprehend a text in English and Kiswahili. Although there is a 7% difference between the public and the private schools, there are more girls than boys who can comprehend texts in English and Kiswahili in Grade 3.

**Almost 20%**

**Almost 20% of the learners in Grade 4 can comprehend texts in English and Kiswahili.**

Although learners in Grade 4 are expected to have achieved comprehension competencies appropriate for Grade 3, only 18% of these learners in Kirinyaga County have achieved this competency. The proportions are higher in private schools than in public schools.



## Findings on school-based factors associated with learning

Learning is a complex process that requires a configuration of different resources to deliver the intention of the defined curriculum. These school-based factors include the physical and ICT infrastructure and availability of adequate teachers who are qualified and motivated to teach. In addition, learning material and sitting places are also important in the teaching and learning process. Furthermore, the learning outcomes are dependent on both the physical and mental wellbeing of the learners and the teachers.

### Physical Infrastructure

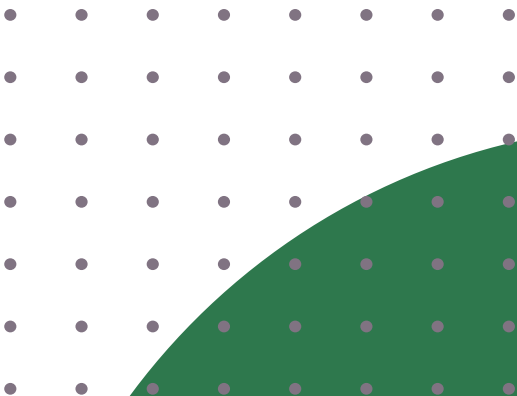
Adequate and quality infrastructure is a necessary condition for a favorable learning environment. The findings reveal that Kirinyaga County has adequate school infrastructure with low pupil to classroom ratio across the public and private schools. Specifically:

- 1). Kirinyaga County has small classroom sizes of less than 40 learners. Classrooms in public schools hold up to 32 learners while classrooms in private schools hold almost a half of that number (18 learners in each class).
- 2). All the surveyed schools have playgrounds and almost all the school compounds (94%) are fenced. Equally, 94% of the schools have an administration block.
- 3). Almost all learners in Kirinyaga are learning under a roof. In fact, over the last 12 months, there have been almost two classrooms that have been constructed in each school. No child attending a private school in Kirinyaga County is learning in the open.
- 4). Almost all the schools in Kirinyaga County are connected to electricity. All the public schools in Kirinyaga County are connected to electricity from the national grid.

### Learning materials

Learning experiences are built around materials and resources that teachers require in and out of classroom to deliver the curriculum demands. The findings reveal that:

- 1). Almost all the public schools (95%) reported that they had received the textbooks from the Government.
- 2). A half of the schools reported that the textbooks received were sufficient, a fact that was corroborated with a text pupil to textbook ratio of almost 1:1.66 revealing that some learners are still sharing textbooks in some schools. The difference in sharing is not significant when comparing the public and the private schools.
- 3). On average, two learners are sharing a desk with public schools having slightly more than 2 pupils sharing a desk. Within the public schools, close to 20% of the schools reported that some learners were sitting on the floor unlike in the private schools where there were no reported cases of learners sitting on the floor.





## ICT infrastructure in schools

The ICT infrastructure in education includes the traditional mass media (television and radio) as well as the uptake of computer based ICT including desktops/laptops, overhead projectors in learning rooms and smartphones. The study findings reveal that all schools have digital learning devices but the quality and utility varies across the public and private schools. Specifically:

- 1). 32 learners are sharing a digital device (computer) in Kirinyaga County. The ratio is lower in public schools (1:28) compared with the ratio in the private schools of 1:68. However, the trained teachers to pupil computer ratio is lower in private schools where one trained teacher handles 33 learners compared to one teacher in a public school who handles twice that number (1:66).
- 2). Apart from computers and laptops, the second most common digital device in schools is the LCD projector. Almost all public schools (95%) reported owning an LCD projector compared to 9% of the private schools that reported the same.
- 3). Whereas most private schools (82%) reported owning a school mobile phone, no public school reported owning a mobile phone. Similarly, public schools in Kirinyaga County did not report owning a television.
- 4). The utilization of KICD digital learning material varies with almost a half of the schools (45%) preferring the audio-visual materials to radio lessons (6%). More private schools than public schools are utilizing both the KICD audio and audio-visual learning materials.

## Physical safety in the schools

Schools are predisposed to many risks that in the event of the risk occurring, learning could partially or completely get paralyzed. On health staff capacities, the study established that 1) No school in Kirinyaga whether public or private has hired a nurse, and 2) more than a half of the schools have at least one staff that is trained on administering first aid. On water sources, reliability and handwashing points, the study established that:

- 1). Almost all schools (94%) of the schools in Kirinyaga County get water from clean sources. 9% of the public schools draw water from the river. No private school draws water from the river.
- 2). Schools have reliable water sources. On average, schools reported lacking water for 1.48 days in a month.
- 3). Schools have adequate hand washing points with water and soap in Kirinyaga County. On average, a hand washing point with water and soap serves less than 6 learners in Kirinyaga County.

## Psychosocial safety of the learners

The mental and emotional wellbeing of learners is an important factor in the learning process. The study established that schools in Kirinyaga are largely safe spaces despite an acute shortage of professional staff. Specifically:

- 1). Although the cases of sexual and gender-based violence are rare, the few cases reported were more boys than girls. There are no reported cases of sexual and gender-based violence in private schools.
- 2). Incidences of teen pregnancy in Kirinyaga County are low with only one reported case in a public school in a year.
- 3). All in all, the number of professional staff (counselors) in Kirinyaga County is low. The average number of professional staff in public schools is 3.73 and 10.7 in private schools.

## Teachers as a learning resource

Learning is made possible through availability of qualified, adequate and motivated teachers. For formative grades, the deployment of the teachers there is also a factor in continuity and even more important in transitional classes such as Grade 4 (where medium of instruction shifts to English and learning areas increase from what learners are exposed to in early years). The choice of instructional pedagogies is an important factor in accelerating acquisition of foundational learning competences such as reading and numeracy.

On teacher qualifications and experiences:

- 1). 85% of the teachers currently teaching grades 3 and 4 did not teach the same grade in the previous year.
- 2). More than four in every 5 teachers (82%) have undergone CBC training in the last two years.
- 3). At least one in every 5 teachers teaching in Grades 3 and 4 has a personal computer. The proportion of teachers with personal computers is twice as high in private schools (32%) than in the public schools (16%).
- 4). Slightly more than 2 in every 5 teachers teaching in Grades 3 and 4 have at least a degree qualification. The proportion is higher in public schools (55%) compared to the private schools (18%)
- 5). Almost 4 in every five teachers (83%) of the teachers handling grades 3 and 4 in Kirinyaga are of the female gender.

On teachers' professional compliance, the study findings reveal that teachers plan and keep professional documents. The compliance rates for developing schemes of work, lesson plans and keeping a record of their work covered is at over 85%. All teachers keep the schemes of work while keeping the record of work reported the lowest area of professional compliance.

Teachers apply different approaches to design and deliver experiences that enable children to learn the expected competencies. There is now recognition that a blend of these methods accelerates the learning curve. These approaches could include the conventional listening and speaking, use of reading, writing, rote counting, playing and use of home assignments. The study that all the surveyed teachers were giving home assignments. Almost all the surveyed teachers also rated all the remaining instructional methods as very important.

## Teacher engagement with parents

The teachers recognize the importance of engaging with parents at the classroom level. At over 80%, teachers reported planning and organizing meetings with parents on a monthly and termly basis. Furthermore, they reported organizing training sessions for the parents. Additionally, 80% of the teachers reported organizing activities in the communities such as cleaning of markets.



## Instructional leadership

Schools require focused leadership to allocate and oversee the teaching and learning resources to realize the intended outcomes. This is made possible by recruiting and deploying managers as school head-teachers. Although head teachers undergo a level of training on management during their pre-service training, in-service training has been established to have a positive relationship with increased learning outcomes. The study established that almost a half of the teachers have attended management training in the last two years and own a personal computer. Specifically,

- 1). There are more male head teachers in public schools (45%) than in private schools (36%) who have undergone a management training in the last two years
- 2). Almost a half of the head teachers own a computer
- 3). More than 70% of the head teachers in Kirinyaga have at least a diploma qualification. More than three quarters of the heads in public schools have at least a diploma.
- 4). More than a third of the head-teachers have been in the current work station for at least 4 years.
- 5). Close to 90% of the head-teachers have been heading schools for more than 4 years.
- 6). More than 80% of the head teachers have been serving as teachers for more than 7 years.

## Schools with special units

Inclusion is an important element in realizing the learning for all goals and aspirations of SDG 4. The study also sought to establish the proportion of schools visited that have established only a third (32%) of the public schools had established a special unit while no private schools visited had established a special education unit.

## Learner and teacher absenteeism

Learning is made possible with consistent assistance of learners and teachers. This makes it possible for the learning content to be covered within the timeframe defined by the Kenya Institute Curriculum Development (KICD). However, it is every day that the expectation that learners and teachers will be in school is not met. The study sought to establish the school attendance by conducting a spot check on the day of the visit. The study established that

- 1). School attendance by teachers was high on the day of the school visit. Almost all teachers were present.
- 2). Learner attendance is high in Kirinyaga County. Almost all the learners were in school on the day of the visit.



## Implications of these findings on the project

This study has revealed that despite the numerous policy efforts such as the implementation of the competency-based curriculum, all learners have not acquired the expected competencies. By delaying acquisition of foundational learning, (almost 40% of the Grade 4 learners are yet to master basic competencies more than a year later), children may struggle to learn other complex skills. The study reveals that inputs for accelerating learning outcomes exist. It is important to note that largely, the study relied on reported inputs and availability of these conditions/factors without estimating the levels and quality of these factors and conditions. There could be a need to establish the level and quality of the reported inputs and take a reflection on how these inputs would explain the established learning levels. This is important in validating the assumptions supported by the massive evidence on the factors associated with learning. These could be realized by conducting a qualitative study on a few schools where learning levels are desirable. Even on the pedagogical front, a deeper insight generated by observing the teachers in the classroom could help identify where gaps and challenges exist.





## **EVERY LEARNER READS** BASELINE REPORT

Conducted by a partnership of  
**Usawa Agenda, Zizi Afrique and Ministry of Education**