



Zizi Afrique
Foundation



HOLIDAY LEARNING CAMPS **Report**

An Innovation of Targeted Interventions to Bridge
Literacy Gaps: Insights from Baseline and Endline
Assessments in Machakos and Kakamega Counties

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**An Innovation of Targeted Interventions to Bridge Literacy Gaps: Insights
from Baseline and Endline Assessments in Machakos and Kakamega
Counties**

Zizi Afrique Foundation (ZAF)

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Executive Summary.

This report presents results from baseline and endline literacy assessments conducted in Kakamega and Machakos counties as part of an initiative aimed at enhancing foundational literacy skills among early-grade learners. The assessments measured learners' reading proficiency at different levels—beginner, letter, word, paragraph, and story—before and after the intervention. The primary intervention included holiday learning camps, literacy assessments, and targeted community engagement activities designed to improve literacy outcomes in the two counties.

Key Results.

The results indicate significant improvements in literacy levels among learners in both counties. The number of learners at the **Beginner Level** dropped substantially from the baseline to the endline assessment, reflecting a positive shift in foundational reading skills. In **Grade 3**, Beginner Level learners decreased from 165 to 80, while in **Grade 4**, the reduction was from 245 to 115. This decline suggests that more learners successfully transitioned from struggling with basic literacy to acquiring more advanced reading skills. Similarly, improvements were noted at the **Paragraph and Story** levels, where learners demonstrated higher reading comprehension skills. The number of Story Level learners increased across all grades, indicating successful skill building throughout the intervention period.

A gender analysis of the data revealed that both male and female learners benefited from the intervention, with female learners exhibiting a slightly higher rate of transition into higher literacy levels. This suggests that the structured support provided during holiday camps effectively addressed some of the literacy challenges disproportionately affecting girls in early grades.

Intervention Effectiveness and Community Engagement.

The structured holiday camps played a crucial role in reinforcing literacy skills outside the traditional classroom environment. The intervention included structured lessons, guided reading sessions, peer-to-peer learning, and individualised support based on learners' literacy levels. The use of the Accelerated Learning Approach (ALA) ensured that learners received instruction tailored to their specific reading abilities, facilitating smoother progression across literacy levels. Additionally, the integration of community involvement through volunteers and local stakeholders strengthened the intervention, creating a more sustainable approach to literacy development.

Implications and Recommendations.

The results underscore the effectiveness of targeted, level-based instruction in improving literacy outcomes, particularly when coupled with community engagement and structured out-of-school support. However, challenges such as reading comprehension gaps at higher literacy levels suggest the need for continued reinforcement beyond holiday learning camps.

To sustain and build on these gains, the report recommends:

1. **Scaling up holiday learning camps** to reach more learners in underserved areas.
2. **Enhancing teacher and volunteer training** to improve the implementation of level-based instruction.
3. **Integrating digital assessment tools** such as Nyansapo AI to track learner progress more efficiently.
4. **Strengthening parental and community engagement** to ensure continued literacy support at home.
5. **Expanding focus on reading comprehension skills**, particularly at the Paragraph and Story levels, to reinforce higher-order literacy skills.

Conclusion.

The assessment results highlight the transformative impact of targeted literacy interventions on early-grade learners in Kakamega and Machakos counties. The steady progression of learners from lower to higher literacy levels demonstrates the potential of structured, community-driven, and data-informed literacy programmes in bridging learning gaps. Moving forward, sustained investment in such initiatives, alongside stronger integration of technology and community participation, will be critical in ensuring long-term literacy gains and improved educational outcomes for all learners.

Acknowledgement.

This report would not have been possible without the collective efforts and contributions of the different institutions, individuals, and organisations dedicated to improving foundational literacy for early-grade learners in **Kakamega and Machakos counties**.

We extend our sincere gratitude to **Machakos Teachers Training College (Machakos) and St. Augustine Eregi Teachers Training College (Kakamega)** for their invaluable support in providing training facilities and allowing us to onboard their teacher trainees as volunteer teachers. Their leadership and commitment to fostering educational excellence played a crucial role in the success of this initiative.

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We deeply appreciate the **65 volunteer teacher trainees** who selflessly devoted their time and skills to facilitate the holiday camps, serving as direct trainers for learners and making a significant impact on improving literacy outcomes. Their enthusiasm and commitment to education were truly commendable.

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To all stakeholders, partners, and contributors, your collective efforts have played a crucial role in advancing literacy development among early-grade learners. Thank you for your unwavering commitment to education and for making a meaningful difference in the lives of children in Kakamega and Machakos counties.

Abbreviations and Acronyms.

ALA - Accelerated Learning Approach

ALP - Accelerated Learning Programme

KICD - Kenya Institute of Curriculum Development

KNLA - Kenya National Learning Assessment

ToT - Training of Trainers

ZAF - Zizi Afrique Foundation

Table of Contents.

- Executive Summary i
- Acknowledgement..... iii
- Abbreviations and Acronyms v
- Table of Contents vi
- List of Tables..... viii
- List of Figures..... viii
- 1. Introduction 1
- 2. Objective 2
- 3. Methodology 3
- 3.1. Training Delivery and Structure 3
- 3.2. Practical Application and Field Support..... 3
- 3.3. Engagement and Reflection Mechanisms 4
- 4. Results – Baseline and Endline..... 5
- 4.1. Key Result 1: Overall Attendance Summary 5
- 4.1.1. Interpretation of Results 6
- 4.1.2. Implications of Results 6
- 4.2. Key Result 2: Combined Results on Literacy Level Comparison (Baseline vs. Endline)..... 7
- 4.2.1. Interpretation 8
- 4.2.2. Implications..... 8
- 4.3. Key Result 3: Literacy Outcomes Baseline vs Endline by County 10
- 4.4. Key Result 4: Gender-Based Comparison of Literacy Levels in Kakamega and Machakos Counties 11
- 4.5. Key Result 4: Literacy Level Comparison by Grade (Baseline vs. Endline) in Kakamega and Machakos Counties 13
- 4.5.1. Implications, Takeaways, and Interpretation 14
- 5. Conclusion 16
- 6. Recommendations..... 17
- 7. References 18
- 8. Appendices 19
- Appendix 1: Literacy Levels (Baseline vs Endline) by % (Proportions) 19
- Appendix 2: Literacy Outcomes (Baseline vs Endline) by County (%)..... 20
- Appendix 3: Literacy Outcomes (Baseline vs Endline) by Gender (%)..... 21
- Appendix 4: Literacy Outcomes (Baseline vs Endline) by Grade (%)..... 22
- Appendix 5: Camp Attendance Summaries..... 23
- Appendix 6: List of Volunteer Teacher Trainees from St. Augustine Eregi Teachers Training College, Kakamega..... 25
- Appendix 7: List of Volunteer Teacher Trainees from Machakos Teachers Training College..... 26

List of Tables.

Table 1: Attendance Summary.....5
Table 2: Combined Literacy Outcomes – Baseline vs Endline7
Table 3: Literacy Outcomes – Baseline vs Endline by County 10
Table 4: Literacy Outcomes – Baseline vs Endline by Gender/ Results from the Baseline and
Endline Data by Gender..... 12
Table 5: Results by Grade Level (Baseline vs Endline)..... 14

List of Figures.

Figure 1: Engagement During a Community Conversation in the Village.....2
Figure 2: Participatory Approach Where Participants Engage in Different Learning Groups3
Figure 3: Ongoing Assessments by the Volunteers at the Households Using the Nyansapo AI
App4
Figure 4: Attendance Summary.....6
Figure 5: Combined Literacy Outcomes - Baseline vs Endline7
Figure 6: Whole Class Activity Engagement.....8
Figure 7: Level-Based Activity Engagement8
Figure 8: Learners Engage in Story Booklet Reading at Whole Class9
Figure 9: Learners at Beginner Level Engaged in Letter Recognition.....9
Figure 10: Literacy Outcomes - Baseline vs Endline by County..... 10
Figure 11: Literacy Outcomes – Baseline vs Endline by Gender/Results from the Baseline and
Endline Data by Gender..... 12
Figure 12: Results by Grade Level (Baseline vs Endline) 14

1. Introduction.

Foundational literacy skills are a critical determinant of future academic success, cognitive development, and socio-economic mobility. Globally, research indicates that an estimated 70 per cent of children in low- and middle-income countries are unable to read and understand a simple text by age 10 (World Bank, 2022). This learning crisis has been exacerbated by factors such as inadequate instructional quality, limited access to learning resources, and interruptions in schooling, particularly in the wake of the COVID-19 pandemic. In Sub-Saharan Africa, where literacy challenges are most pronounced, interventions targeting early-grade learners have shown promise in bridging foundational literacy gaps (UNESCO, 2022).

In Kenya, national assessments have consistently highlighted low literacy outcomes among early-grade learners, particularly in under-resourced and rural communities (Uwezo, 2021). These gaps are linked to factors such as inconsistent exposure to print materials, ineffective pedagogical approaches, and limited parental involvement in supporting literacy development. According to the 2019 Kenya National Learning Assessment (KNLA), only 37 per cent of Grade 3 learners could read age-appropriate texts fluently, highlighting an urgent need for targeted interventions (Kenya Institute of Curriculum Development [KICD], 2019).

To address these literacy gaps, structured and evidence-based interventions have been identified as essential for supporting learners, particularly those in early grades (Grades 3 to 5). Among these strategies, holiday learning camps have emerged as an effective approach to reinforce literacy skills outside the formal school calendar. These camps offer intensive, level-based instruction tailored to learners' individual needs, providing an opportunity to bridge learning gaps and enhance literacy competencies before learners transition to higher grades (Banerjee et al., 2016). Research indicates that structured holiday learning programmes have improved literacy outcomes in several African contexts, with learners showing marked improvement in reading fluency and comprehension (Gove & Cvelich, 2017).

Against the above background, holiday literacy camps were implemented in Kenya (that is, in Kakamega and Machakos counties), adopting the Accelerated Learning Approach (ALA). In the context of Machakos and Kakamega counties, the implementation of holiday literacy camps provided a contextually relevant and scalable solution for addressing early-grade literacy deficits. The Accelerated Learning Approach (ALA) used in these camps integrated targeted assessments, structured reading activities, and community engagement to ensure that learners received tailored support. Ultimately, holiday camp learning sessions proved to be a valuable intervention in enhancing literacy levels among early-grade learners.

This report presents the results from Kakamega and Machakos counties' structured holiday-based literacy programme, which generally aimed not only to increase reading proficiency but also to foster learner confidence and engagement in reading. As Kenya continues to prioritise competency-based learning approaches, integrating holiday learning sessions into literacy development strategies will be pivotal to ensuring sustainable improvements in foundational literacy levels.

2. Objective.

The primary objective of this project was to enhance foundational literacy skills among learners, specifically those in Grades 3, 4, and 5 in the communities of focus, through targeted interventions that promote reading proficiency and comprehension. This initiative, implemented jointly by St. Augustine Eregi Teachers Training College, Machakos Teachers College and Zizi Afrique Foundation, aimed to establish an enabling environment for literacy development by engaging learners, educators, and community members in structured and impactful activities.

Specifically, the project sought to:

1. **Improve Foundational Literacy Skills** – Facilitate meaningful learning experiences that strengthen basic reading and comprehension abilities among children.
2. **Engage the Community in Literacy Development** – Conduct community conversations to raise awareness on the importance of literacy and encourage collective responsibility in supporting learners.
3. **Assess Literacy Levels** – Conduct structured assessments to determine learners' reading capabilities, track progress, and identify areas that require targeted intervention.
4. **Enhance Learning through Literacy Camps** – Organise and facilitate literacy camps within the assigned village to provide immersive and interactive learning opportunities for learners.

The project was implemented between **18th November 2024 and December 2024**, ensuring a focused and time-bound approach to fostering literacy gains in the community. Through these efforts, the initiative aspired to build strong literacy foundations that would contribute to improved educational outcomes and lifelong learning opportunities for targeted learners.



Figure 1: Engagement During a Community Conversation in the Village

3. Methodology.

The training programme employed a structured, participatory, and experiential learning approach to equip 33 volunteers with the necessary skills and knowledge for implementing the Accelerated Learning Approach (ALA). The methodology was designed to balance theoretical instruction with practical application, ensuring volunteers could effectively conduct literacy assessments, deliver level-based learning activities, and engage with the community.



Figure 2: Participatory Approach Where Participants Engage in Different Learning Groups

3.1 Training Delivery and Structure.

The training was conducted over three days, beginning on Monday, 18th November 2024, for the Kakamega team and 25th November 2025 for the Machakos team, with a **Training of Trainers (ToT) session** to validate the training materials and prepare the facilitators. The core training sessions for the two sites, Kakamega and Machakos, covered key aspects such as:

- Ethical considerations and data protection in literacy assessments.
- Utilisation of the **Nyansapo AI** application for literacy assessments.
- Effective delivery of **level-based instruction**.
- Community engagement strategies for promoting literacy.

To reinforce learning, the methodology incorporated interactive lectures, practical exercises, group discussions, micro-teaching, and plenary reflections. Volunteers were divided into small learning groups to foster peer-to-peer learning and maximise engagement.

3.2 Practical Application and Field Support.

Beyond classroom instruction, the training employed a phased implementation approach to ensure volunteers effectively translated learning into practice. The process was structured as follows:

1. **Baseline and Endline Assessments Monitoring:** Trainers and College staff observed volunteers conducting literacy assessments, offering real-time feedback and support to enhance accuracy and efficiency. The baseline and endline assessments provided critical data on learning progress, informing the effectiveness of these interventions and enabling adaptive improvements. By engaging volunteer teachers, leveraging AI-driven assessment tools, and incorporating parental and community participation, holiday camps ensured a holistic approach to foundational literacy development.



Figure 3: Ongoing Assessments by the Volunteers at the Households Using the Nyansapo AI App

2. **Camps Monitoring:** Volunteers facilitated literacy camps in their respective villages, implementing ALA principles in real learning environments. Trainers provided ongoing mentorship, helping volunteers address emerging challenges and refine their instructional strategies.

3.3 Engagement and Mechanisms

Daily debrief sessions were held to encourage reflection on the day's activities, address challenges, and reinforce best practices. Collaborative group discussions enabled volunteers to:

- Plan their literacy intervention activities effectively.
- Set realistic learning goals for the literacy camps.
- Strengthen their understanding of tailored instruction techniques.
- Reinforce ethical standards and best practices in community engagement.

By integrating **theory, hands-on practice, and real-world application**, this methodology ensured that volunteers were well prepared to support literacy development in their communities. The structured nature of the training, combined with continuous monitoring and support, played a crucial role in fostering the effective implementation of ALA, ultimately contributing to improved literacy outcomes.

4. Results – Baseline and Endline.

This section highlights results from the baseline and endline data for both Kakamega and Machakos counties.

4.1 Key Result 1: Overall Attendance Summary.

The average number of days learners attended the holiday literacy camps was 11.6 days out of the 15-day camp duration. However, some learners only attended for a single day, highlighting variability in participation. Kakamega County had a higher average attendance (12.5 days) than Machakos (10.5 days), suggesting stronger engagement or accessibility in Kakamega.

There was no significant difference in attendance by gender or grade level, indicating that participation rates were relatively uniform across these demographics. However, when analysed by literacy level at the endline assessment, learners who reached the Paragraph Level attended slightly more days (12.3 days) on average compared to those at other literacy levels. This suggests that sustained attendance may have contributed to higher literacy achievements.

Table 1: Attendance Summary

Overall Average Attendance	11.6	
Minimum Days Attended	1	
Maximum Days Attended	15	
Average Days Attended by:	Aggregated Level	
County	Kakamega	12.5
	Machakos	10.5
Gender	Girls	11.8
	Boys	11.5
Grade	3	11.5
	4	11.8
	5	11.7
Endline Literacy Level	Beginner	11.2
	Letter	11.4
	Word	11.4
	Paragraph	12.3
	Story and Above	11.9

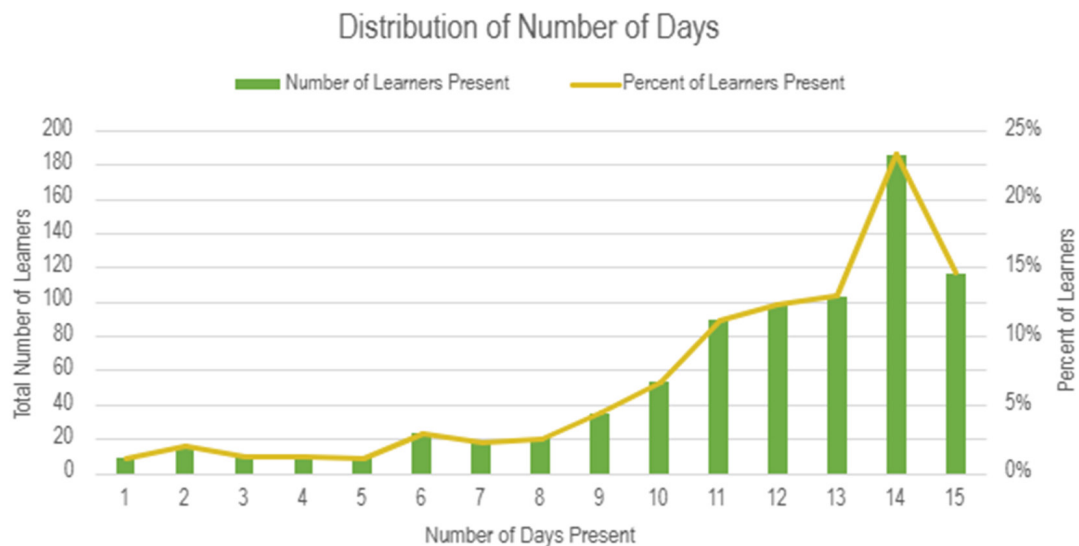


Figure 4: Attendance Summary

4.1.1 Interpretation of Results.

The higher attendance in Kakamega compared to Machakos suggests that learners in Kakamega may have had better access to the learning camps, stronger parental involvement, or greater motivation to participate. On the other hand, the lower attendance in Machakos may indicate potential barriers such as long travel distances, competing household responsibilities, or a lower perceived importance of the programme by parents and caregivers.

The lack of significant differences in attendance based on gender or grade level implies that factors influencing participation were more contextual than demographic. This suggests that attendance was likely shaped by external conditions such as school culture, household dynamics, or logistical challenges rather than individual learner characteristics.

The positive correlation between attendance and literacy improvement, particularly among Paragraph Level learners, highlights the importance of consistency in participation. Learners who attended for more days were more likely to progress in literacy skills, emphasising the effectiveness of structured literacy interventions when sustained over time.

4.1.2 Implications of Results.

To improve attendance in Machakos, targeted interventions such as parental sensitisation, improved camp accessibility, and incentives for participation could be implemented. Addressing potential barriers such as distance and competing responsibilities would help enhance learner engagement and maximise literacy gains.

Ensuring that learners across all literacy levels remain engaged throughout the camp is essential. Since learners at the Paragraph Level showed higher attendance, additional strategies could be introduced to encourage those at lower literacy levels to sustain their participation. This could include personalised engagement approaches, increased motivation techniques, or peer-supported learning models.

Lastly, implementing a structured attendance monitoring and follow-up system could help identify learners who are at risk of dropping out early. By tracking participation patterns and providing timely interventions, facilitators could ensure more consistent attendance, ultimately leading to better literacy outcomes.

4.2 Key Result 2: Combined Results on Literacy Level Comparison (Baseline vs. Endline).

The comparison between baseline and endline data reveals notable improvements in literacy levels across the assessed learners. The **Beginner Level** saw a substantial decline from 355 learners at baseline to 163 at endline (see Table 2 & Fig. 5), reflecting significant progress in foundational literacy skills. Similarly, the **Letter Level** category experienced a reduction from 146 to 93 learners, indicating a shift of learners to higher literacy levels.

Conversely, there was an increase in learners at the **Word Level**, from 161 to 189, suggesting that more students advanced beyond basic literacy. The **Paragraph Level** also showed an increase, rising from 132 to 141 learners, demonstrating improved reading comprehension skills. Notably, the **Story Level and Above** category recorded 208 learners at the endline assessment, a level not documented at baseline, indicating substantial growth in literacy.

Table 2: Combined Literacy Outcomes - Baseline vs Endline

Literacy Level	Baseline	Endline	Total
Beginner	355	163	518
Letter	146	93	239
Word	161	189	350
Paragraph	132	141	273
Story and Above		208	208
Total	794	794	1588

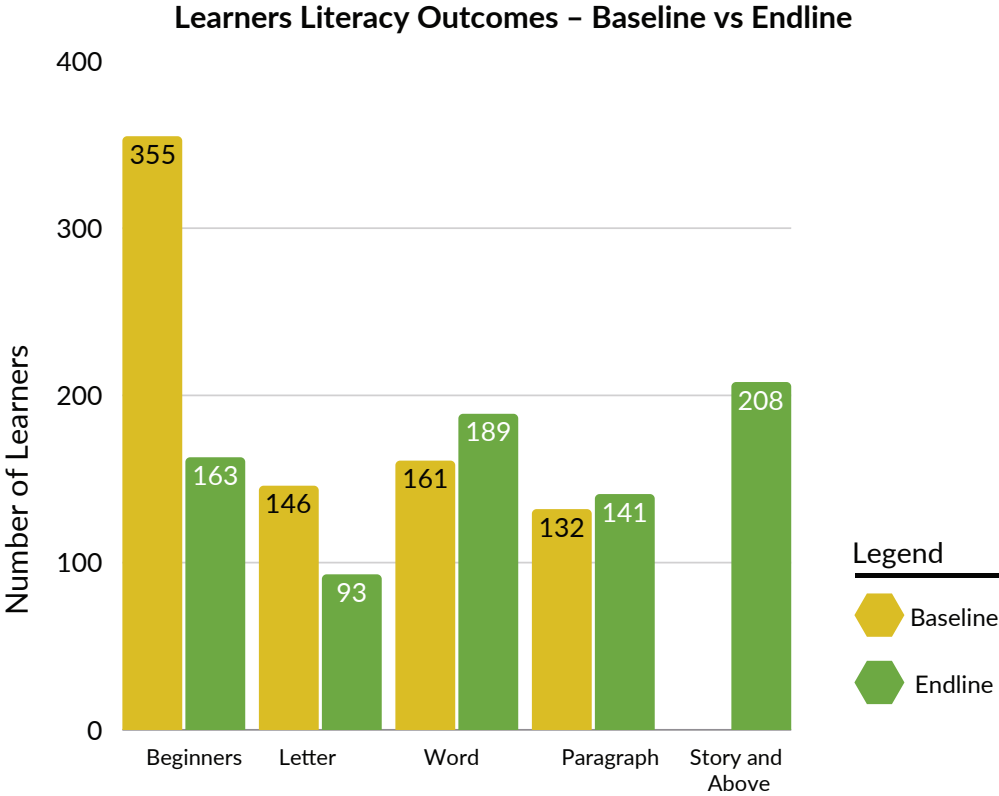


Figure 5: Combined Literacy Outcomes - Baseline vs Endline

4.2.1 Interpretation.

The overall reduction in lower literacy levels (Beginner and Letter) and the corresponding increase in higher literacy categories (Word, Paragraph, and Story) suggest that literacy interventions have been effective in improving reading skills. The increase in learners at the Word, Paragraph, and Story levels signals a positive trend in literacy progression, with more students transitioning towards fluency and comprehension.

4.2.2 Implications.

The results from the literacy assessment highlight significant progress in learners' reading abilities, with a notable shift from lower to higher literacy levels. While this improvement indicates the effectiveness of literacy interventions, it also underscores the need for continued efforts to sustain these gains. The following implications outline key areas for further action, ensuring that learners receive the necessary support to progress towards full literacy proficiency.

1. **Effectiveness of Interventions** – The decline in Beginner and Letter Level learners confirms that foundational literacy interventions have positively impacted students' reading abilities.
2. **Need for Continued Support** – Despite the progress, the presence of a substantial number of learners at lower levels highlights the need for continued reinforcement, particularly for struggling learners.
3. **Focus on Higher-Order Literacy Skills** – The emergence of learners at the Story Level and Above emphasises the importance of enhancing comprehension and critical thinking skills to sustain literacy gains.
4. **Targeted Strategies for Transitioning Learners** – While many learners have progressed, structured support is needed to help those in the Word and Paragraph levels transition to full reading proficiency.

These results underscore the success of literacy programmes while highlighting areas that require ongoing focus to ensure sustainable improvements in literacy outcomes.



Figure 6: Whole Class Activity Engagement



Figure 7: Level-Based Activity Engagement



Figure 8: Learners Engage in Story Booklet Reading at Whole Class
Figure 9: Learners at Beginner Level Engaged in Letter Recognition

4.3 Key Result 3: Literacy Outcomes Baseline vs Endline by County

The results indicate that both Kakamega and Machakos counties have made progress in improving literacy levels, but at different rates. Kakamega experienced a more substantial reduction in learners at the Beginner Level, dropping from 214 to 63, compared to Machakos, where the decrease was from 141 to 100 (see Table 3 & Fig. 10). This suggests that literacy interventions in Kakamega were more effective in helping struggling learners transition to higher literacy levels. Additionally, Kakamega saw a more noticeable increase in learners at the Paragraph Level (from 68 to 79) compared to Machakos, which showed a slight decline from 64 to 62. In terms of word-level proficiency, both counties recorded an increase, with Kakamega improving from 90 to 104 and Machakos from 71 to 85, signalling positive but uneven growth. However, in the highest literacy category (Story Level and Above), both counties showed no change with Kakamega and Machakos counties stagnating at 161 learners and 47 learners, respectively, highlighting a challenge in advancing learners to full reading proficiency in both counties. Overall, while Kakamega demonstrated stronger overall literacy gains, Machakos exhibited slower progress, indicating the need for more targeted interventions in Machakos to accelerate learning outcomes.

Table 3: Literacy Outcomes - Baseline vs Endline by County

Literacy Level	Kakamega		Kakamega Total	Machakos		Machakos Total	Total
	Baseline	Endline		Baseline	Endline		
Beginner	214	63	277	141	100	241	518
Letter	77	42	119	69	51	120	239
Word	90	104	194	71	85	156	350
Paragraph	68	79	147	64	62	126	273
Story and Above		161	161		47	47	208
Total	449	449	898	345	345	690	1588

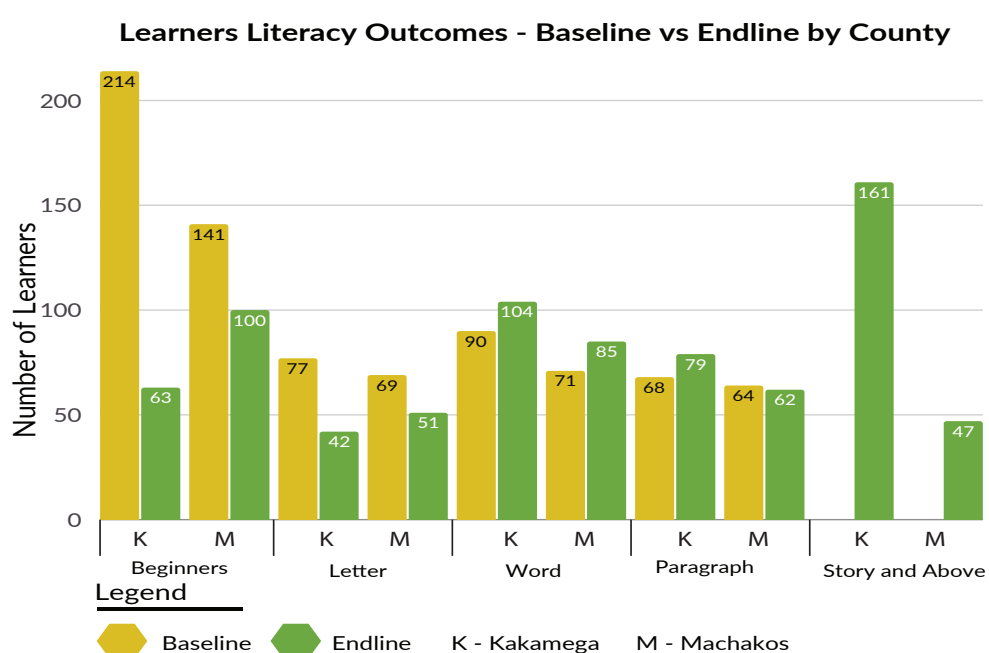


Figure 10: Literacy Outcomes - Baseline vs Endline by County

The combined results from Machakos and Kakamega suggest that while there has been notable progress in literacy development, the rate of improvement varies significantly between counties. The substantial reduction in Beginner Level learners in Kakamega indicates that early interventions and instructional strategies were more effective in supporting struggling readers compared to Machakos, where progress was slower. This implies that targeted instructional support, teacher capacity, and resource availability may have differed between the two regions. Additionally, the stagnation in learners at the highest literacy level (Story Level and Above) suggests a gap in advancing learners beyond foundational reading skills, necessitating more structured support for comprehension and fluency. The slight decline in Paragraph Level readers in Machakos also signals a potential retention issue, where learners may not be consistently progressing through literacy stages. These results suggest the need for county-specific interventions, with Machakos requiring more targeted efforts to accelerate foundational literacy and Kakamega requiring strategies to encourage learners towards higher-level reading proficiency. Moreover, continued teacher training, improved instructional materials, and sustained learner engagement will be critical in ensuring that gains in early literacy translate into long-term reading success in both counties.

4.4 Key Result 4: Gender-Based Comparison of Literacy Levels in Kakamega and Machakos Counties.

The analysis compares literacy levels between the baseline and endline assessments for both male and female learners across Kakamega and Machakos counties. At the **Beginner Level**, the number of female learners reduced significantly from 173 (baseline) to 74 (endline), while male learners declined from 182 to 89 (see **Table 4 & Fig. 11**). This indicates an overall improvement in foundational literacy skills, with a sharper decline among female learners. Similarly, at the **Letter Level**, female learners decreased from 69 to 42, and male learners from 77 to 51, reflecting progress in literacy acquisition and a transition from letter recognition to higher levels. At the **Word Level**, female learners remained relatively stable, moving from 96 to 92, while male learners increased from 65 to 97, suggesting a higher transition among males from basic to intermediate literacy stages.

At the **Paragraph Level**, female learners improved from 54 (baseline) to 68 (endline), while male learners declined slightly from 78 to 73, indicating greater progress among females in advancing beyond basic literacy. At the **Story Level and Above**, female learners increased to 116 and male learners to 92 at the endline, a level not captured in the baseline, indicating significant literacy gains. Overall, the total number of assessed learners remained constant at 392 females and 402 males, with a clear shift from lower to higher literacy levels. These results demonstrate notable improvements in literacy skills across both genders, with variations that may inform targeted interventions for sustained learning progress.

Table 4: Literacy Outcomes – Baseline vs Endline by Gender/ Results from the Baseline and Endline Data by Gender

	Female		Female Total	Male		Male Total	Total
Literacy Level	Baseline	Endline		Baseline	Endline		
Beginner	173	74	247	182	89	271	518
Letter	69	42	111	77	51	128	239
Word	96	92	188	65	97	162	350
Paragraph	54	68	122	78	73	151	273
Story and Above		116	116		92	92	208
Total	392	392	784	402	402	804	1588

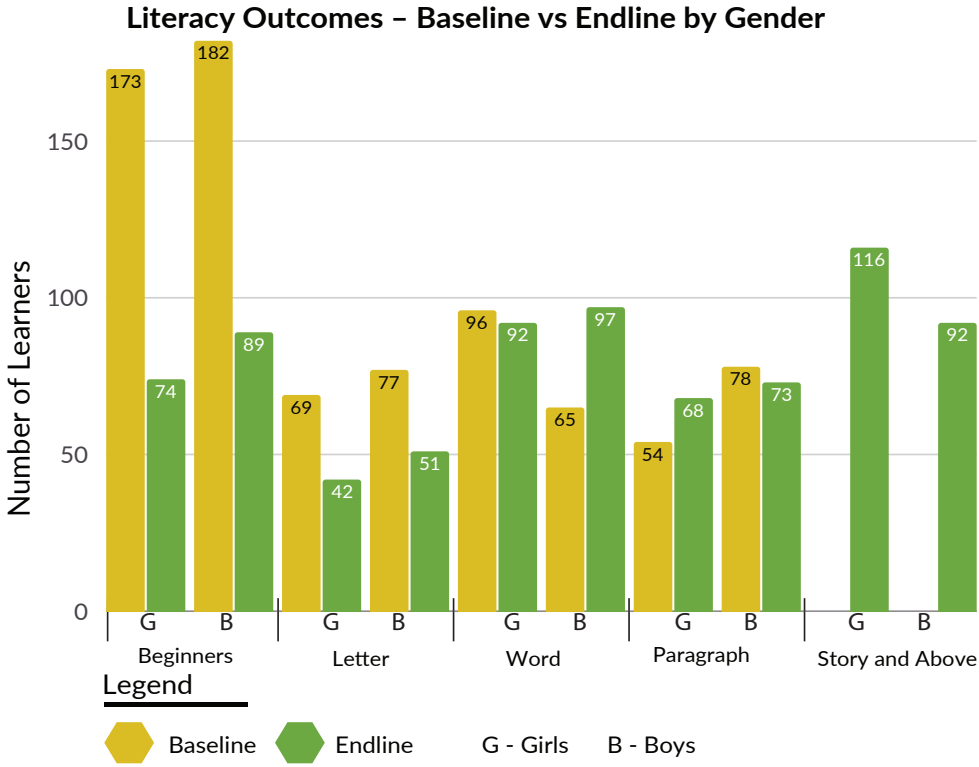


Figure 11: Literacy Outcomes – Baseline vs Endline by Gender/Results from the Baseline and Endline Data by Gender

The results indicate an overall improvement in literacy levels across both male and female learners in Kakamega and Machakos. However, some key trends emerge:

- Female learners demonstrated a more significant decline in the number of students at the Beginner Level compared to males, suggesting a stronger improvement in foundational literacy.
- Male learners showed a notable increase at the Word Level, indicating that while they struggled at the beginning, they caught up at the intermediate stage.

- The Paragraph Level saw improvements for females but stagnation for males, which suggests that further interventions may be required to support boys in advancing beyond word-level proficiency.
- The emergence of a significant number of learners at the Story Level and Above indicates progress towards reading fluency.
- The results imply that targeted interventions, such as gender-sensitive teaching strategies, could be beneficial in further improving literacy outcomes. The slower progress among boys at certain stages suggests the need for tailored support to sustain literacy gains for both genders.

In conclusion, while both male and female learners made literacy gains, females showed more consistent progress across levels, whereas males had higher variations in their literacy improvement trajectories. Future programming should address these nuances to ensure all learners achieve optimal literacy outcomes.

4.5 Key Result 5: Literacy Level Comparison by Grade (Baseline vs. Endline) in Kakamega and Machakos Counties.

This analysis compares literacy levels across Grade 3, Grade 4, and Grade 5 between baseline and endline assessments in Kakamega and Machakos counties. The aim is to assess progress in literacy achievement over time and highlight trends across different grade levels.

In Grade 3, there was a significant reduction in the number of learners at the Beginner Level, dropping from 165 at baseline to 80 at endline (*see Table 5 & Fig. 12*), demonstrating notable improvements in foundational literacy. The slight decline in learners at the Letter Level (from 59 to 48) suggests that more students progressed beyond basic letter recognition. Additionally, an increase in the Word Level group from 79 to 91 indicates a steady shift towards intermediate literacy skills. Paragraph Level readers also increased from 54 to 60, reflecting improved reading comprehension. Most notably, the number of learners in the Story and Above category reached 78 at endline, a level that was previously unrecorded at baseline, underscoring overall progress in higher literacy levels.

Grade 4 exhibited a similarly strong improvement, with the Beginner Level declining significantly from 245 to 115, indicating strengthened foundational literacy. The reduction in Letter Level learners from 49 to 37 further supports this transition to higher reading levels. The increase in Word Level learners from 45 to 54 and in Paragraph Level learners from 40 to 46 highlights steady progress in literacy acquisition. The most notable advancement was seen in the Story and Above category, where 66 learners reached this level at endline, emphasising a growing competency in advanced reading skills. These shifts suggest that learners in Grade 4 have benefited from targeted literacy interventions, supporting their movement towards more proficient reading abilities.

Grade 5 demonstrated the most significant reduction in the Beginner Level, decreasing from 112 at baseline to just 37 at endline, reflecting strong literacy growth and retention of reading skills. The sharp decrease in Letter Level learners from 38 to 8 suggests that most students successfully transitioned to more advanced literacy categories. The increase in Word Level learners from 37 to 44 further reinforces continued literacy development. However, a slight decline in Paragraph Level learners from 38 to 35 suggests possible challenges in reading comprehension that may require additional support. The Story and Above category reached 64 learners at endline, reinforcing higher proficiency in reading. These results indicate that while literacy interventions have been effective, additional focus on comprehension skills at higher reading levels would further strengthen learners' abilities.

Table 5: Results by Grade Level (Baseline vs Endline)

Literacy Level	Grade 3		Grade 3 Total	Grade 4		Grade 4 Total	Grade 5		Grade 5 Total	Total
	Base line	End line		Base line	End line		Base line	End line		
Beginner	165	80	245	115	46	161	75	37	112	518
Letter	59	48	107	49	37	86	38	8	46	239
Word	79	91	170	45	54	99	37	44	81	350
Paragraph	54	60	114	40	46	86	38	35	73	273
Story and Above		78	78		66	66		64	64	208
Total	357	357	714	249	249	498	188	188	376	1588

Literacy – Results by Grade Level (Baseline vs Endline)

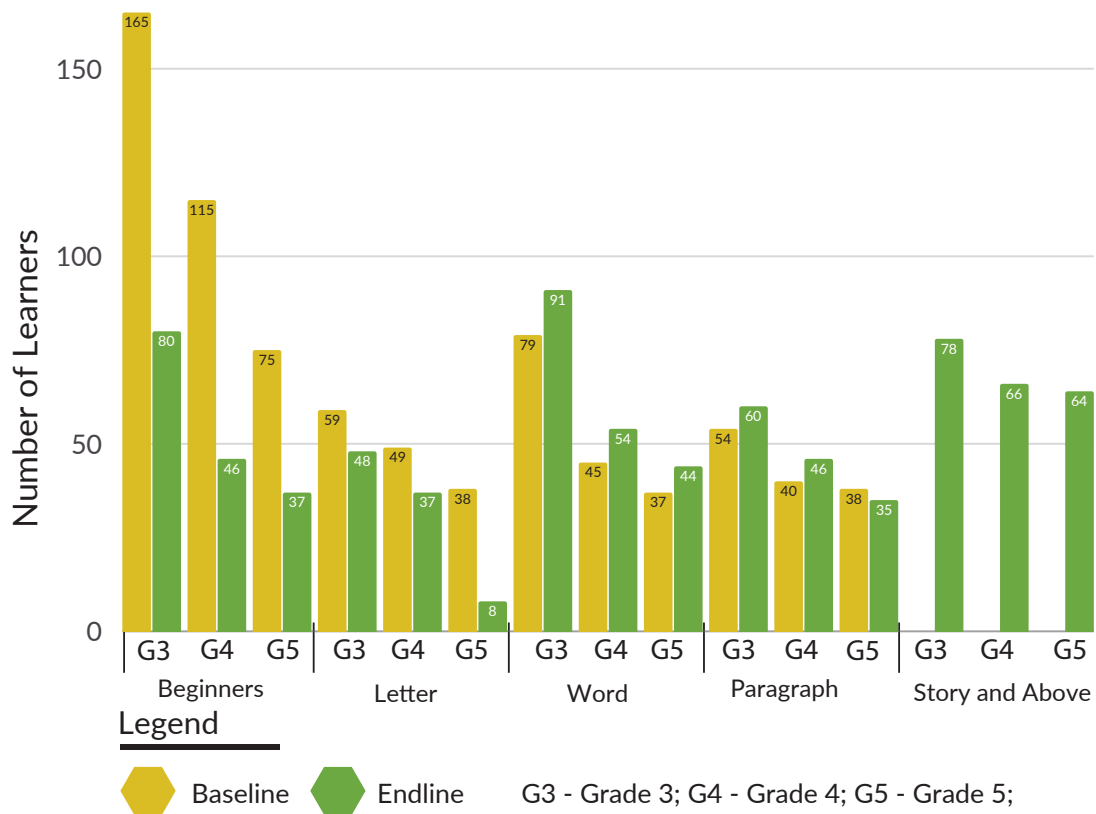


Figure 12: Results by Grade Level (Baseline vs Endline)

4.5.1 Implications, Takeaways, and Interpretation

The results indicate a significant improvement in literacy levels across all three grades, with the most pronounced shifts occurring at the Beginner Level. The sharp decline in the number of learners at the Beginner and Letter levels suggests that foundational literacy interventions have been effective in helping students progress to higher reading categories. The steady increase in Word, Paragraph, and Story Level learners highlights the positive impact of literacy programmes, fostering stronger reading abilities and comprehension. However, the slight decline in Paragraph Level learners in Grade 5 suggests potential challenges in reading comprehension

that may require targeted instructional support to reinforce advanced literacy skills.

A key takeaway is that as learners advance through the grades, they retain literacy skills at a higher rate, as reflected in the substantial decline in Beginner Level learners in Grade 5. The presence of more learners at the Story and Above Level in endline data, compared to baseline, suggests that literacy programmes are successfully promoting higher reading proficiency. This progression points to the need for continued emphasis on comprehension strategies and structured reading support to sustain learning gains and ensure students fully transition to fluent reading.

Overall, the results emphasise the importance of sustained literacy interventions, particularly for foundational and intermediate readers, to ensure smooth progression across levels. While significant gains were recorded, there is a need for targeted support in reading comprehension at higher literacy levels, particularly in Grade 5, to prevent potential stagnation. Strengthening instructional approaches and integrating comprehension-focused teaching strategies will be crucial in sustaining literacy improvements over time.

These results suggest that literacy programmes and interventions have had a **positive impact** in enhancing reading skills across all grades, with a need for continued emphasis on comprehension skills at higher levels.

5. Conclusion.

The comparative analysis of baseline and endline data for Kakamega and Machakos counties reveals significant improvements in literacy levels across different demographic groups, including gender and grade level. The results indicate a substantial reduction in the number of learners at the Beginner and Letter levels, demonstrating progress in foundational literacy skills. Additionally, an increase in the number of learners transitioning to Word, Paragraph, and Story Level reading reflects the positive impact of literacy interventions implemented over the assessment period.

While overall literacy outcomes have improved, variations exist across gender and grade levels. Female learners exhibited a sharper decline in the Beginner Level compared to their male counterparts, suggesting better engagement or responsiveness to interventions. Similarly, Grade 5 learners showed the most substantial reduction in the Beginner Level, indicating stronger retention and application of literacy skills over time. However, the slight decline in Paragraph Level learners in Grade 5 suggests the need for more targeted support in reading comprehension.

These results emphasise the effectiveness of ongoing literacy initiatives in strengthening foundational reading skills. However, they also highlight areas that require sustained intervention, including reinforcing comprehension strategies at advanced levels and ensuring that all learners, regardless of gender or grade, continue to experience meaningful literacy growth.

6. Recommendations.

The results from this assessment indicate promising improvements in literacy levels but also reveal critical areas for further enhancement. To build upon these gains and address existing gaps, the following recommendations are proposed:

- 1. Strengthen Targeted Support for Comprehension Skills.**
 - i. Develop instructional strategies that focus on improving reading comprehension, particularly for learners transitioning from the Word to the Paragraph Level.
 - ii. Provide additional training for teachers to enhance their ability to support learners in understanding and interpreting texts.
- 2. Enhance Gender-Sensitive Literacy Interventions.**
 - i. Continue monitoring gender-based differences in literacy progression and tailor interventions to ensure equal opportunities for both male and female learners.
 - ii. Encourage community engagement initiatives to support female learners in maintaining their progress in literacy development.
- 3. Sustain and Expand Foundational Literacy Programmes.**
 - i. Strengthen early-grade reading interventions to reinforce literacy skills from the lower levels, ensuring that learners establish strong reading habits early on.
 - ii. Expand literacy programmes to cover more schools and provide consistent instructional support across counties.
- 4. Improve Monitoring and Evaluation Mechanisms.**
 - i. Establish a structured system for tracking literacy progress at regular intervals, allowing for real-time adjustments to instructional strategies.
 - ii. Conduct further assessments to understand challenges in transitioning from Paragraph Level to higher literacy levels and develop interventions accordingly.
- 5. Leverage Parental and Community Engagement.**
 - i. Encourage greater parental involvement in supporting literacy at home through reading activities, storytelling, and community-based learning programmes.
 - ii. Work with local stakeholders to foster a culture of reading beyond the classroom, ensuring sustained literacy growth.

By implementing these recommendations, education stakeholders can build on the progress observed in the endline assessment, ensuring that literacy improvements are sustained and expanded across Kakamega and Machakos counties.

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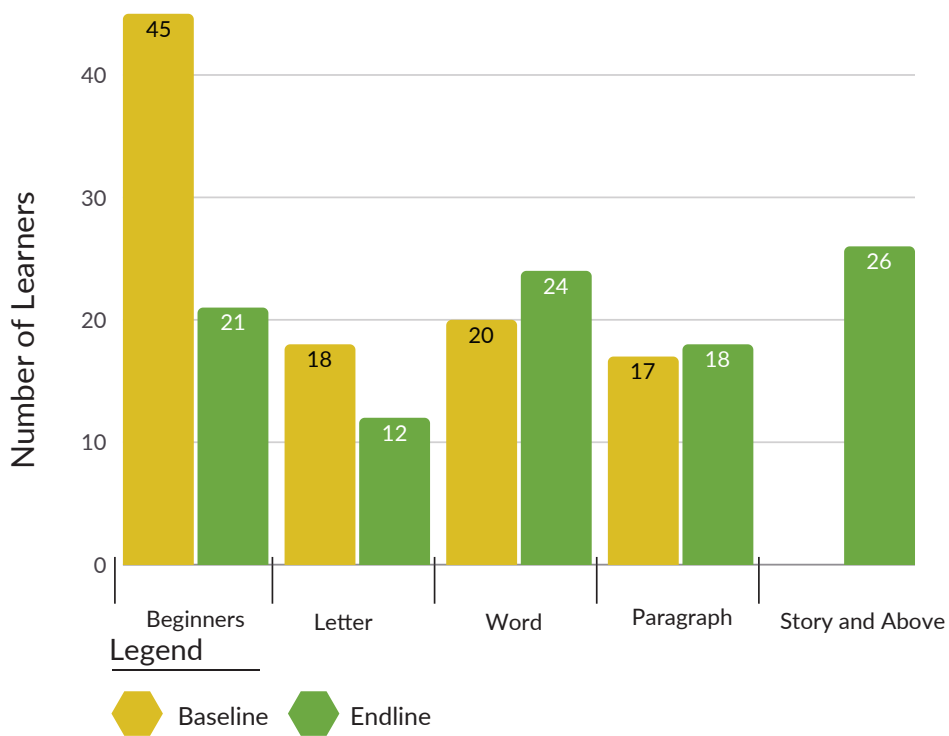
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8. Appendices.

Appendix 1: Literacy Levels (Baseline vs Endline) by % (Proportions).

Literacy Level	Baseline	Endline	Total
Beginner	45%	21%	33%
Letter	18%	12%	15%
Word	20%	24%	22%
Paragraph	17%	18%	17%
Story and Above	0%	26%	13%
Total	100%	100%	100%

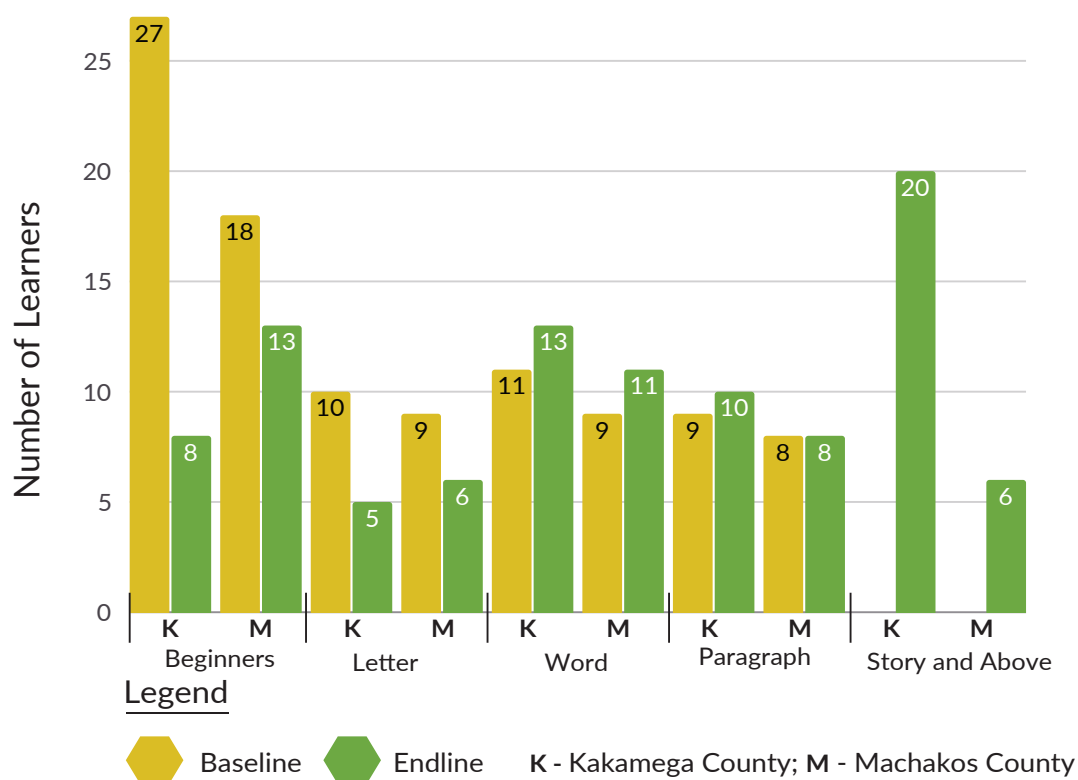
Learners Literacy Assessment (Baseline vs Endline)



Appendix 2: Literacy Outcomes (Baseline vs Endline) by County (%)

Literacy Level	Baseline	Endline	Total
Beginner	45%	21%	33%
Kakamega	27%	8%	17%
Machakos	18%	13%	15%
Letter	18%	12%	15%
Kakamega	10%	5%	7%
Machakos	9%	6%	8%
Word	20%	24%	22%
Kakamega	11%	13%	12%
Machakos	9%	11%	10%
Paragraph	17%	18%	17%
Kakamega	9%	10%	9%
Machakos	8%	8%	8%
Story and Above	0%	26%	13%
Kakamega	0%	20%	10%
Machakos	0%	6%	3%
Total	100%	100%	100%

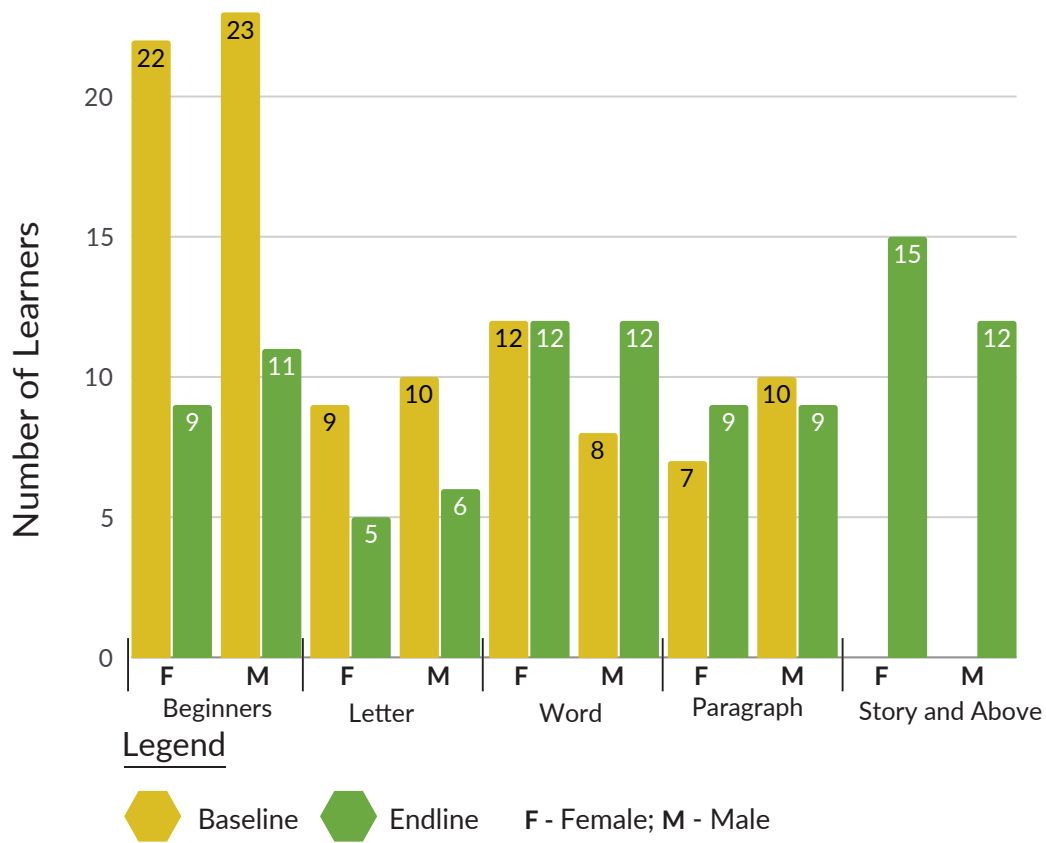
Learners Literacy Assessment (Baseline vs Endline) By County



Appendix 3: Literacy Outcomes (Baseline vs Endline) by Gender (%)

Literacy Level	Baseline	Endline	Total
Beginner	45%	21%	33%
Female	22%	9%	16%
Male	23%	11%	17%
Letter	18%	12%	15%
Female	9%	5%	7%
Male	10%	6%	8%
Word	20%	24%	22%
Female	12%	12%	12%
Male	8%	12%	10%
Paragraph	17%	18%	17%
Female	7%	9%	8%
Male	10%	9%	10%
Story And Above	0%	26%	13%
Female	0%	15%	7%
Male	0%	12%	6%
Total	100%	100%	100%

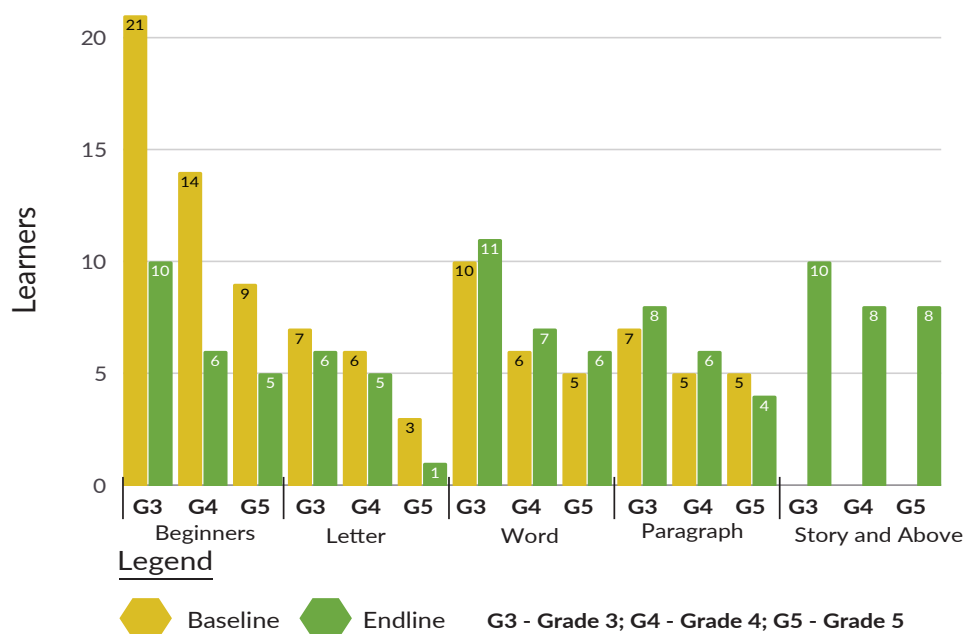
Learners Literacy Assessment (Baseline vs Endline) By Gender



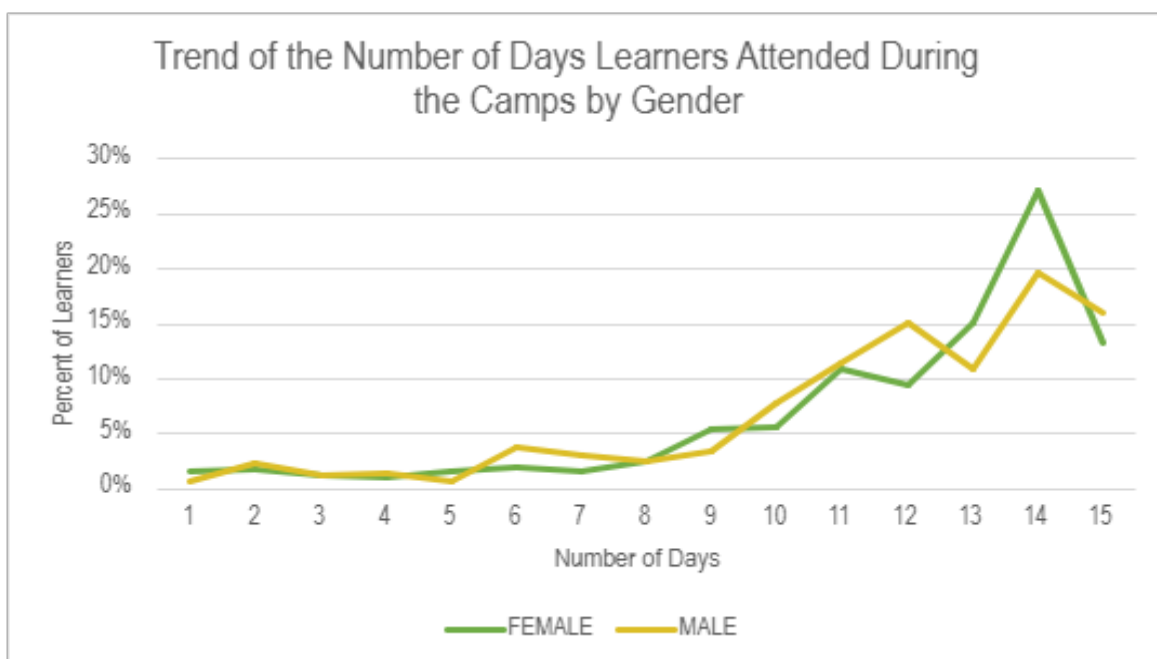
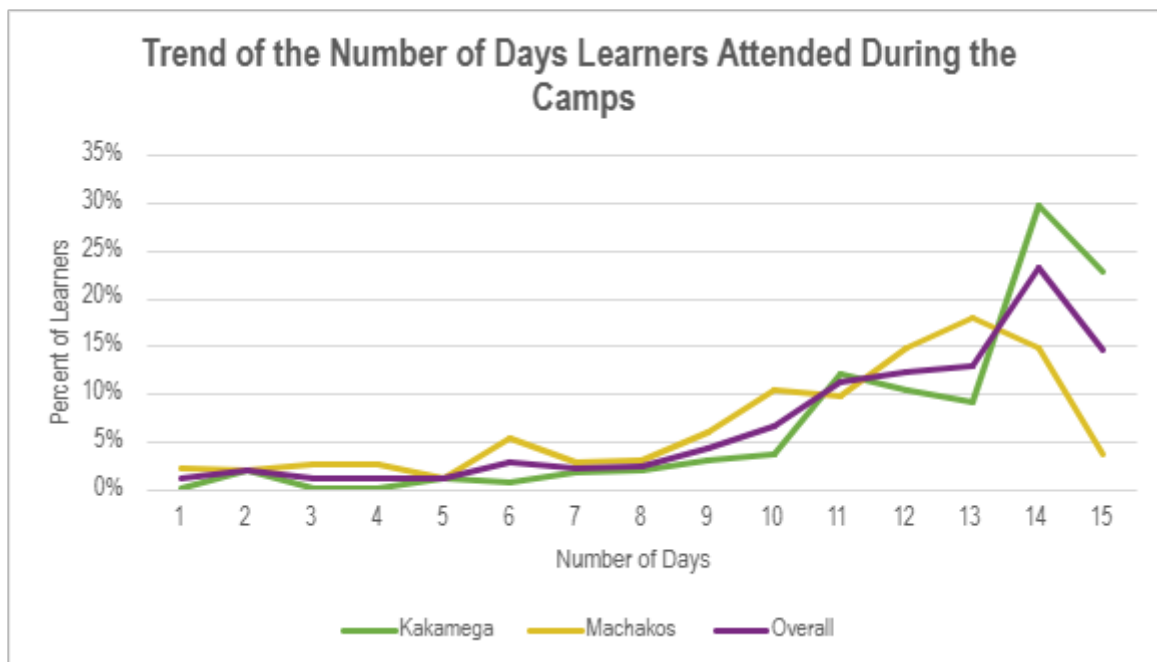
Appendix 4: Literacy Outcomes (Baseline vs Endline) by Grade (%).

Literacy Level	Baseline	Endline	Total
Beginner	45%	21%	33%
3	21%	10%	15%
4	14%	6%	10%
5	9%	5%	7%
Letter	18%	12%	15%
3	7%	6%	7%
4	6%	5%	5%
5	5%	1%	3%
Word	20%	24%	22%
3	10%	11%	11%
4	6%	7%	6%
5	5%	6%	5%
Paragraph	17%	18%	17%
3	7%	8%	7%
4	5%	6%	5%
5	5%	4%	5%
Story and Above	0%	26%	13%
3	0%	10%	5%
4	0%	8%	4%
5	0%	8%	4%
Total	100%	100%	100%

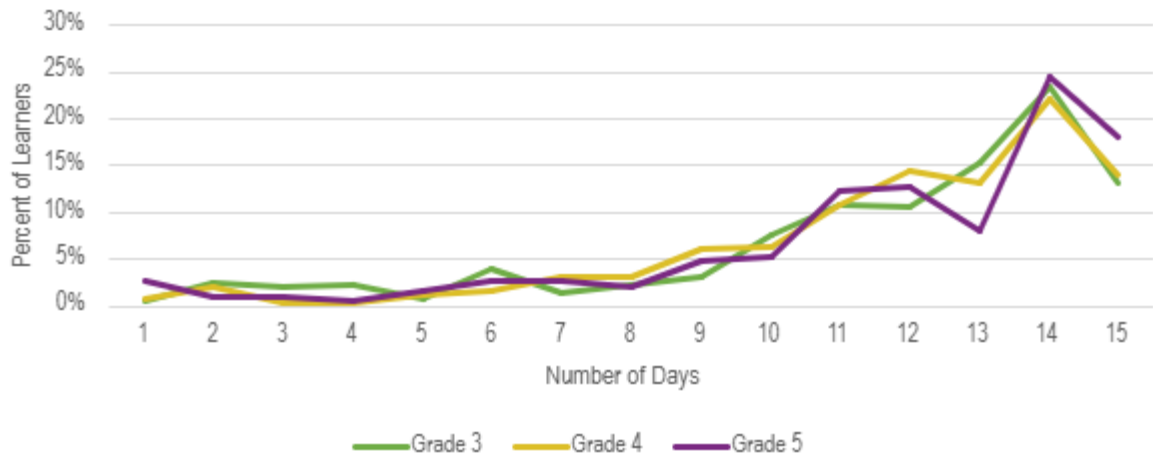
Learners Literacy Assessment (Baseline vs Endline) By Grade



Appendix 5: Camp Attendance Summaries.



Trend of the Number of Days Learners Attended During the Camps by Grade



Appendix 6: List of Volunteer Teacher Trainees from St. Augustine Eregi Teachers Training College, Kakamega.

NO.	Name of the Volunteer	Gender
1	Adeline Naliaka	Female
2	Alvin Matwang'a	Male
3	Branice Ngoya	Female
4	Clinton Fedha	Male
5	Cynthia Nato	Female
6	Cynthia Vitinyu	Female
7	Doreen Chasia	Female
8	Euphresia Imbuhila	Female
9	Faith Wanyonyi	Female
10	Fhadhili Olwanzira	Female
11	Flavian Mwoka	Female
12	Godwill Lidonde	Male
13	Imali Axtell	Female
14	Innocent Mukunza	Male
15	Irma Khamati	Female
16	Juliet Nanzala	Female
17	Laveen Musimbi	Female
18	Leah Nangila	Female
19	Lucky Ian	Male
20	Majanga Vitalis	Male
21	Maryjane Ahono	Female
22	Maurine Ambani	Female
23	Mitchelle Wanjala	Female
24	Modester Masitsa	Female
25	Mugalla Remmington	Male
26	Natalia Ludisi	Female
27	Patmos Eunice	Female
28	Purity Namisi	Female
29	Rehema Faverine	Female
30	Shalom Karama	Female
31	Silvia Vugutsa	Female
32	Vivian Khatenje	Female

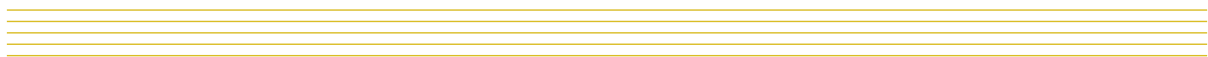
Appendix 7: List of Volunteer Teacher Trainees from Machakos Teachers Training College.

S/N	Name of Trainee	Gender
1	Tina Katanu	Female
2	Terry Wambua	Female
3	Faith Mbithe	Female
4	Grace N Ndolo	Female
5	Joy Mutanu	Female
6	Dorcus Mueni Mwanthi	Female
7	Harriet Mutua	Female
8	Linet lutu	Female
9	Emily Kamene Nzomo	Female
10	Morris Mwendwa Mutie	Male
11	Kelvin Kimeu	Male
12	Jacinta Mutheu	Female
13	Mercy Muthoni	Female
14	Josephine Wambua	Female
15	Andrew Muthenya	Male
16	Nthiwa Elizabeth Ndanu	Female
17	Rael Mbinya Syombua	Female
18	Faith Mwendu	Female
19	Musyoka Jane Mwiyaithi	Female
20	Mercy Mbula	Female
21	Queen Lulu	Female
22	Kyalo W. Nduku	Female
23	Joseph Mulinge	Male
24	Sheila Mueni	Female
25	Faith Mutheu	Female
26	Lucy Nthoki	Female
27	Nyaga N. Rosemary	Female
28	Catherine Mumbua	Female
29	Patrick Musyoki	Male
30	Annah Mutheu K	Female
31	Abigael Mutheu Mbondo	Female
32	Alfred Wambua	Male
33	Britneyz Mukui Maingi	Female



HOLIDAY LEARNING CAMPS **Report**

An Innovation of Targeted Interventions to Bridge Literacy Gaps: Insights from Baseline and Endline Assessments in Machakos and Kakamega Counties



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