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Assessing the State of Basic Education in Tetu Constituency

Challenges and Recommendations

Assessing the State of Basic Education in Tetu Constituency: Challenges and Recommendations

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By

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The authors take full responsibility for the views and interpretations expressed in this report.

Executive Summary

The study explores the persistent low learning outcomes in Tetu Constituency, Kenya, despite various educational interventions aimed at advancing learning outcomes. Key factors identified as contributing to this problem include inadequate infrastructure, lack of qualified teachers, socio-economic barriers, and ineffective school leadership. These challenges are consistent with broader national trends where educational infrastructure, teaching quality, and socio-economic status play significant roles in determining learner outcomes. Tetu Constituency has recorded underperformance at both primary and secondary levels, with average scores below national averages.

In response, the Member of Parliament for Tetu Constituency, in collaboration with Zizi Afrique Foundation (ZAF), initiated a literacy and numeracy assessment among learners in Grades 3, 4, and 5 across 45 schools. The objective was to determine the current state of academic performance, identify challenges within the education system, and provide recommendations for improving learning outcomes. The study adopted a quantitative research method that encompassed a comprehensive survey of school heads and assessments of learners, with data collected through structured questionnaires and standardised tests. Data analysis utilised exploratory techniques and logistic regression models to examine relationships between school characteristics and learner outcomes.

The study yielded insightful findings that included:

- **School Leadership and Gender Distribution:** The gender distribution of school heads across the wards varied, with male heads dominating in Dedan Kimathi (67%), and Wamagana having a higher proportion of female heads (73%).
- **School Infrastructure:** Most schools had adequate infrastructure, largely made of brick or stone walls, with a few in Wamagana Ward using iron sheet walls. Playgrounds were available in most schools, though two schools in Wamagana Ward lacked these crucial facilities.
- **School establishments:** The study also established that school establishments in Tetu Constituency dated back to the colonial era, with the most recent school founded in 2014 in Dedan Kimathi Ward.
- **School Enrolment:** The overall median enrolment in the constituency per grade was 13 learners, with Dedan Kimathi Ward showing the lowest median enrolment (9 learners). Boys were generally more enrolled than girls, with notable gender disparities in some grades, as reflected in the Gender Parity Index (GPI) of 0.9, indicating slightly higher enrolment of boys in school.
- **Pupil-Classroom Ratio (PCR):** The average PCR was 24, with Dedan Kimathi recording the lowest (19), while Aguthi-Gaaki and Wamagana wards had slightly higher ratios of 27 and 25, respectively. The highest PCR was observed in Grade 8.
- **Gender Parity:** The overall GPI score of 0.9 suggests that boys had slightly better access to education, although in some grades, girls outnumbered boys. For instance, findings in Aguthi-Gaaki Ward showed more girls enrolled in Pre-primary 2 and Grade 3.
- **Adequacy of School Infrastructure:** Most schools reported inadequate classrooms, particularly in Aguthi-Gaaki and Dedan Kimathi wards. Laboratory access was also limited, with 50 per cent of schools in Wamagana and Aguthi-Gaaki wards lacking labs, and 70 per cent in Dedan Kimathi Ward. Toilet facilities were particularly lacking in Aguthi-Gaaki and Dedan Kimathi, with 50 per cent and 60 per cent of schools reporting inadequacies.
- **Shared Facilities:** In many instances, critical facilities like playgrounds and toilets were shared between primary and junior secondary schools, with high rates of sharing across all three wards. Classrooms were the least shared facility.
- **Teacher Composition:** The constituency had a total of 534 teachers, with a majority employed by the Teachers Service Commission (TSC) and a smaller number hired by school Boards of Management (BoMs). Aguthi-Gaaki had the highest number of teachers, while Dedan Kimathi had the lowest. Notably, female teachers outnumbered male teachers

across all wards.

- **Headteacher and Teacher Preparedness:** About 62 per cent of headteachers indicated they were “very adequately” prepared to support learners. Dedan Kimathi Ward led with 73 per cent, followed by Wamagana (67%) and Aguthi-Gaaki (47%). Similarly, headteachers rated their teachers’ preparedness, with Dedan Kimathi’s rating being 67 per cent, Aguthi-Gaaki’s 53 per cent, and Wamagana’s 40 per cent.
- **Teachers trained on CBC:** The number of teachers trained on the Competency-Based Curriculum (CBC) was noted to be high in Wamagana and Aguthi-Gaaki wards, with 93 per cent and 80 per cent of teachers trained respectively, but lower in Dedan Kimathi at 60 per cent. The study highlights that gaps in CBC implementation, particularly in Dedan Kimathi, affect learning outcomes.
- **Learning Environment:** While 98 per cent of schools displayed learning materials in classrooms, 76 per cent of the schools lacked functional libraries, with many of the existing libraries underutilised. This made it difficult for schools to foster a culture of learning.
- **KCPE Performance Trends:** Over the past 5 years, average KCPE scores have ranged between 225 and 260 marks out of a possible 500 marks. The observable trend is that Wamagana Ward has shown steady improvement, while Dedan Kimathi’s results fluctuated over the five-year period, and Aguthi-Gaaki exhibited a decline in recent years after initial progress.
- **Learner Proficiency:** Only 50 per cent of the learners were proficient at reading at the story level, with variations across wards: Wamagana (55%), Dedan Kimathi (52%), and Aguthi-Gaaki (44%). Higher proficiency was recorded in Grades 4 and 5, with female learners consistently outperforming male learners.
- **School Challenges:** Identified challenges that hindered the enhancement of foundational learning included insufficient parental engagement, lack of learning resources, and gaps in teacher motivation. Inadequate infrastructure, particularly in Wamagana, where some schools still used iron-sheet classrooms, was also cited.

In light of the highlighted findings, the study suggests the following recommendations:

1. **Enhanced Parental Engagement:** There is a need for increased parental awareness and involvement in education to improve learning outcomes.
2. **Address Gender Disparities:** This could entail the implementation of programmes that support male learners for grades where they (boys) lag in reading proficiency.
3. **Infrastructure Improvement:** This may encompass prioritisation of classroom upgrading initiatives, as well as libraries and toilets, to create an improved learning environment.
4. **Teacher Capacity Development:** Prioritised continuous teacher professional development, especially in ICT and foundational literacy instruction.
5. **Targeted Literacy Programmes:** Key education stakeholders in Tetu Constituency could prioritise implementing interventions that are focused on enhancing literacy and numeracy for learners struggling to read at the Story Level.
6. **Strengthen Community and Parental Support:** The schools should adopt initiatives aimed at enhancing collaboration with parents and the community to complement school efforts in improving learning.
7. **Consider Regular Monitoring and Evaluation:** This involves the establishment of systems for monitoring educational interventions, focusing on underperforming schools to provide targeted support.
8. **Promote Stakeholder Collaboration:** This recommendation advocates for a call to foster partnerships among schools, local leaders, and the community to mobilise resources for school improvement.

In summary, the study opines that to enhance learning outcomes in the constituency and beyond, there is a need to address teacher capacity gaps, improve learners’ learning environments, and increase parental involvement in children’s learning, which could entail relevant parental empowerment initiatives. Consequently, the study underscores the need for targeted interventions to address gaps in school infrastructure, teacher staffing, and equitable access to education. These findings will guide future efforts to improve educational outcomes in Tetu Constituency.

1 Introduction

The issue of low learning outcomes in Kenya, especially in rural and marginalised areas, has been a subject of broad research. Several studies have identified key factors contributing to this problem, including inadequate infrastructure, lack of qualified teachers, socio-economic challenges, and ineffective school management practices (Barret et al., 2019; Bold et al., 2013; Kinyajui, 2013; Glewwe et al., 2011). Kinyajui (2013), while studying learning outcomes in rural areas of Kenya, observed that educational infrastructure is a crucial determinant of learning outcomes, the absence of which leads to dismal learning outcomes. However, as noted by Barret et al. (2019), improvement of school infrastructure must be accompanied by other supporting factors, including curriculum development and teacher training, if a corresponding desired improved learning outcome is to be achieved. Teaching quality is another crucial component influencing learner performance and outcomes. Glewwe and colleagues (2011) posited that the quality of teachers, including motivation, training, and experience, has a significant impact on learners' learning outcomes. Additionally, learners' socio-economic and schools' leadership factors also determine the learning outcomes exhibited by learners. Wamalwa and Burns (2018), while studying factors affecting learning outcomes in Kenya, argued that lack of access to educational resources, poverty, and malnutrition are considerable barriers to learning in Kenya, while Leithwood and colleagues (2020) maintain that effective school leadership is paramount for establishing a conducive learning environment for improved learning outcomes.

Tetu Constituency in Kenya, like most regions in the country, faces significant educational challenges, including challenges related to low learning outcomes at both primary and secondary education levels. These challenges are largely attributed to one or more of the above-mentioned factors. Despite various initiatives by local leadership, including efforts led by the area Member of Parliament, educational performance remains consistently below national averages. This issue is more pronounced, a situation that could perhaps be a function of a lack of model and/or traditionally well-performing schools. This situation has led top students to seek alternative educational opportunities outside the constituency, further resulting in dismal learning outcomes. In response to this key challenge, the local leadership has initiated several interventions to improve the constituency's educational standards, including building infrastructure, offering scholarships, and enhancing school leadership. However, despite these interventions, the learning outcomes have persistently remained low, with the interventions yet to translate to notable improvements in learning outcomes in national examinations.

Given the above background, the Member of Parliament (MP) for Tetu Constituency, in collaboration with the Zizi Afrique Foundation (ZAF), having recognised the highlighted educational challenge (i.e., low performance), conducted a numeracy and literacy assessment for Grades 3, 4, and 5 to determine the current level of performance to help determine appropriate immediate and future interventions and address these prevailing educational challenges.

2. Objectives of the Assessment/Study

The study sought to determine the status of learners' academic performance in Grades 3, 4, and 5 across primary schools in Tetu Constituency. The following were the specific objectives that guided the study/assessment:

- I. **Assess the current state of learning in Tetu Constituency** by conducting foundational literacy and numeracy assessments, along with a comprehensive survey of school heads.
- II. **Establish a detailed understanding** of the existing learning environment and educational outcomes among key education stakeholders (i.e., headteachers).
- III. **Identify key challenges and opportunities within the education system** in Tetu Constituency by analysing collected assessments/survey data, to pinpoint specific areas that require targeted interventions.
- IV. **Provide plausible recommendations** for addressing the identified challenges as well as for tapping into the identified opportunities.

3. Methodology

3.1 Fieldwork and Organisation

The names and number of primary schools, which formed the study areas, were provided by the office of the Member of Parliament (MP) for Tetu Constituency. All public primary schools within the constituency, which is divided into three wards: Aguthi-Gaaki, Dedan Kimathi, and Wamagana, were involved in the study. A total of 45 schools, 15 schools from each ward, were selected to participate in this survey. The survey instruments and data management processes were co-developed by staff from both ZAF and Tetu Constituency's office.

Two survey instruments were employed during this exercise: a school headteacher survey and a learner assessment survey. The school head survey was distributed via WhatsApp to all school heads with the assistance of the Sub-County Director for Education (SCDE). To conduct the learner assessments, ZAF contracted Inspire Children and Youth Organization (ICYO), which was selected due to its prior experience and expertise in similar activities within the constituency. In collaboration with the MP's office, ICYO identified and recruited 30 Research Assistants (RAs) to support with the learner assessments. The assessments targeted learners in Grades 3, 4, and 5. These assessments were conducted in 15 randomly selected schools.

Prior to the assessments, the RAs underwent a two-day training at the Tetu Constituency MP's office. This training covered the learner assessment process and essential research ethics. A pilot assessment was conducted in two schools near the training venue, which were not part of the final assessment group.

3.2 Study Methods

The study utilised quantitative research methodology. The school head survey gathered administrative and contextual data from school heads, while the learner assessment survey measured the proficiency levels of learners in Grades 3, 4, and 5. Data collection involved the use of structured questionnaires and standardised testing procedures to ensure consistency and reliability.

3.3 The Questionnaire

Two types of survey questionnaires were used for data collection: the school head questionnaire and the learner assessment questionnaire. The school head questionnaire targeted headteachers, deputy headteachers, or senior teachers and was self-administered. The learner assessment questionnaire was administered face-to-face by Research Assistants directly to the learners.

3.4 Data Management and Analysis

Data were extracted from the KoboCollect platform, categorised, and cleaned to ensure consistency, while also checking for outliers and missingness of data. Data analysis was conducted using Stata Version 18.0 and R (version 4.3.2). Both descriptive and inferential analyses were applied, beginning with exploratory data analysis and leading up to logistic regression modelling. Exploratory data analysis involved frequency distributions and measures of central tendency. Statistical tests, such as Chi-square tests for categorical variables, were applied based on underlying statistical assumptions. A logistic regression model was used to explore the relationship between the outcome variable (reading story-level text) and the characteristics of both the schools and the learners. The results were presented in tables and graphs. See below the presentation of results in the results section.

4 The Study Results

The following section presents the study’s results as derived from the survey conducted in Tetu Constituency.

4.2 Schools’ Background Characteristics

In each of the three wards, 15 schools were surveyed, with all the schools’ headteachers responding, resulting in a 100 per cent response rate. **Table 1** highlights that all respondents were respective school heads, and all the schools in the wards were of mixed-gender, enrolling both male and female learners. Overall, the gender distribution of school heads showed a near equal composition, with 49 per cent being male and 51 per cent being female. However, significant differences were observed across the wards. For instance, in Aguthi-Gaaki, slightly more than half of the school heads were male (53%), whereas in Dedan Kimathi ward, two-thirds (67%) of the school heads were male. This was, however, different for Wamagana ward, where about three-quarters (i.e., 73%) of the school heads were female. These figures highlight remarkable gender variations in school leadership across the three wards.

Table 1: Distributions of Schools and School Heads

	Aguthi-Gaaki N (%)	Dedan Kimathi N (%)	Wamagana N (%)	Total N (%)
Position in the school				
• School Head	15 (100)	15 (100)	15 (100)	45 (100)
School head gender				
• Male	8 (53)	10 (67)	4 (27)	22 (49)
• Female	7 (47)	5 (33)	11 (73)	23 (51)
School learners’ gender				
• Both Boys and Girls	15 (100)	15 (100)	15 (100)	45 (100)

School infrastructure is crucial in creating an enabling environment for learning. This includes amenities such as classrooms and playgrounds, among others. Appropriate infrastructure that prevents learning disruptions is critical for quality learning. Results reveal that most of the schools prioritised accommodating learners in suitable infrastructure. **Table 2**, for instance, highlights that, except for two schools in Wamagana Ward, which had their classroom walls made of iron sheets, the rest of the schools had classroom walls made of either stones or bricks. Moreover, all the schools in Dedan Kimathi and Aguthi-Gaaki wards had playgrounds, while only two schools in Wamagana Ward lacked playground space.

Table 2: Existence of School Infrastructure (i.e., Walling and Playground)

	Aguthi-Gaaki N (%)	Dedan Kimathi N (%)	Wamagana N (%)	Total N (%)
Materials used for the classroom walls				
• Stone/Bricks	15 (100.0)	15 (100.0)	13 (86.7)	43 (95.6)
• Iron Sheet	0 (0.0)	0 (0.0)	2 (13.3)	2 (4.4)
The school has a playground				
• No	2 (13.3)	1 (6.7)	1 (6.7)	4 (8.9)
• Yes	13 (86.7)	14 (93.3)	14 (93.3)	41 (91.1)

When the study sought to determine the years when the schools were established, it was evident that most schools in Tetu Constituency were established during the colonial era, between 1922 and 1924. Of all the schools in the three wards, Dedan Kimathi had the most recent school, established in 2014. Wamagana and Aguthi-Gaaki had their last schools established in 1983 and 1993, respectively. **Table 3** highlights the institutions' years of establishment.

Table 3: Distribution of the Year the School Was Established

	Aguthi-Gaaki	Dedan Kimathi	Wamagana
Year the school was established	1922 1963 1993	1922 1963 2014	1924 1962 1983
<i>The distribution is (Minimum) (Median) (Maximum)</i>			

4.2 School Enrolment in Tetu Constituency

The study also sought to determine the enrolment statements for schools in Tetu Constituency. From the collected data, the overall median enrolment per grade was 13 learners. Aguthi-Gaaki and Wamagana wards recorded the highest median enrolments, 13.75 (i.e., 14) and 12.75 (i.e., 13) learners per grade, respectively. Dedan Kimathi ward recorded the lowest median enrolment, averaging 8.75 (i.e., 9) learners per grade.

Considering the gender angle, the number of boys enrolled was higher than girls across all three wards, with Aguthi-Gaaki Ward recording the highest median enrolment for boys at 15, while Wamagana Ward had the highest median enrolment for girls at 13. Further analysis on enrolment distribution across the grades reveals a slight variation in median enrolment from Pre-Primary 1 (PP1) to Grade 8, of 8 and 14 learners for boys and girls, respectively. Aguthi-Gaaki had the highest median number of boys enrolled in PP1 at 20 and Grade 2 at 14 for girls, while Wamagana and Dedan Kimathi wards recorded the highest median girls' enrolment for Grades 5, 6, and 8. In general, the median enrolment across the three wards reveals a slight variation across the grades, with Wamagana and Aguthi-Gaaki wards consistently having higher median enrolments than Dedan Kimathi ward. **Table 4** presents figures on median learner enrolment by ward.

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Table 4: Median Learner Enrolments by Ward

Grade	Aguthi-Gaaki			Dedan Kimathi			Wamagana			Overall Median Enrolment
	Boys	Girls	Grade Median Enrolment	Boys	Girls	Grade Median Enrolment	Boys	Girls	Grade Median Enrolment	
PP1	20	13	16.5	7	8	7.5	14	10	12	11.5
PP2	10	10	10	9	6	7.5	11	12	11.5	10
Grade 1	11	12	11.5	7	6	6.5	10	11	10.5	10.5
Grade 2	14	14	14	10	9	9.5	13	13	13	13
Grade 3	13	13	13	10	8	9	15	10	12.5	11.5
Grade 4	13	12	12.5	8	9	8.5	18	13	15.5	12.5
Grade 5	16	14	15	9	9	9	11	13	12	12
Grade 6	17	14	15.5	9	8	8.5	12	14	13	13
Grade 7	17	10	13.5	11	9	10	15	13	14	12
Grade 8	15	14	14.5	10	10	10	15	14	14.5	14
Ward Median Enrolment	14.5	13	13.75	9	8.5	8.75	13.5	13	12.75	13

In further analysis, the pupil-classroom ratio (PCR) was computed for each grade across the wards, as presented in **Table 5**. The overall average PCR for Tetu Constituency was found to be 24, with notable variations across the wards. For instance, Dedan Kimathi Ward recorded the lowest average PCR of 19, while Aguthi-Gaaki and Wamagana wards showed slight variations, with average PCRs of 27 and 25, respectively. The average PCR by grade in Aguthi-Gaaki and Wamagana was relatively consistent but significantly higher than that of Dedan Kimathi. The highest grade-specific PCR was observed in PP1 within Aguthi-Gaaki Ward. Additionally, Grade 8 exhibited the highest overall PCR across all three wards, indicating a relatively larger number of learners in Grade 8 compared to other grades.

Table 5: Average Pupil-Classroom Ratio by Ward

Pupil-Classroom Ratio (PCR)	Aguthi-Gaaki	Dedan Kimathi	Wamagana	Total
Overall School PCR	27	19	25	24
PP1	36	18	24	26
PP2	21	16	22	20
Grade 1	26	16	21	21
Grade 2	26	20	25	24

Grade 3	25	20	23	22
Grade 4	26	19	27	24
Grade 5	30	19	27	25
Grade 6	28	21	26	25
Grade 7	27	24	29	27
Grade 8	30	25	30	28

Gender Parity Index (GPI) was also computed to understand the level of access to education between girls and boys. GPI refers to the ratio of total female learners enrolled to male learners, with a GPI of 1 implying that there is equality in access to education. A GPI that is less than 1 means that more boys than girls have access to education, while a GPI greater than 1 means that more girls than boys have access to education. The overall GPI score is 0.9, which is the same as the GPI for each of the wards. This means that there are slightly more boys than girls in schools. Overall, only Pre-primary 2 (PP2) and Grade 3 have a GPI greater than 1 (1.1), with most grades attaining parity (i.e., Grades 1, 2, 5, and 6 all have a GPI of 1). The other grades have a GPI of 0.9. However, it is worth noting that PP2 and Grade 3 in Aguthi-Gaaki Ward have a GPI of 1.5, indicating a higher proportion of girls in these grades compared to the other grades and the other wards. **Table 6** presents the school GPI for each grade by ward.

Table 6: Average Gender Parity Index by Ward

Gender Parity Index (GPI)	Aguthi-Gaaki	Dedan Kimathi	Wamagana	Total
Overall School GPI	0.9	0.9	0.9	0.9
PP1 GPI	0.8	1.0	0.8	0.9
PP2	1.5	0.9	1.0	1.1
Grade 1	0.9	0.9	1.1	1.0
Grade 2	1.1	1.1	0.9	1.0
Grade 3	1.5	1.0	0.9	1.1
Grade 4	0.8	1.1	0.8	0.9
Grade 5	1.1	0.9	1.0	1.0
Grade 6	0.8	1.1	1.0	1.0
Grade 7	1.0	0.9	0.8	0.9
Grade 8	1.0	1.0	0.8	0.9

4.3 Adequacy of School Infrastructure

The study also sought to determine the adequacy of crucial infrastructure in the selected schools across the three wards. Within this component, the infrastructure of focus includes school toilets, classrooms, and laboratories (*see Fig. 1*). The headteachers engaged recorded the classrooms

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as either adequate or inadequate. For instance, in both Aguthi-Gaaki and Dedan Kimathi wards, most institutional heads reported that classrooms in their schools were inadequate, whereas in Wamagana Ward, most school heads indicated that the classrooms were adequate. The former findings (i.e., on Aguthi-Gaaki and Dedan Kimathi) appear to contradict the earlier findings on PCR, which indicated that pupil-classroom ratio was at a recommended level. This necessitates further studies to explore the point of divergence, specifically on PCR across the three wards. Figure 1 presents the highlighted statistics for PCR.

Regarding the schools' laboratories, half (50%) of the school heads in Aguthi-Gaaki and Wamagana indicated that they lacked laboratories. This percentage was slightly higher for Dedan Kimathi at 70 per cent. On the adequacy of laboratories, 10 per cent of the headteachers (i.e., respondents) in Aguthi-Gaaki and Dedan Kimathi indicated that they had adequate laboratories. This was only slightly higher in Wamagana at 30 per cent. This situation points to a glaring disparity in access to crucial learning materials, particularly in science-oriented disciplines.

On toilet facilities, data reveal that in Wamagana Ward, 10 per cent of the schools lacked adequate toilet facilities. This was, however, higher in Aguthi-Gaaki and Dedan Kimathi at 50 per cent and 60 per cent, respectively, further presenting a severe water, sanitation, and hygiene (WASH) emergency in the latter wards, specifically in primary schools. It is important to note that even in Wamagana, where only 10 per cent of the schools were reported to lack adequate toilets, only 30 per cent of the schools reported having adequate toilet facilities.

Adequacy of Facilities at School

Please Indicate the Adequacy of the following

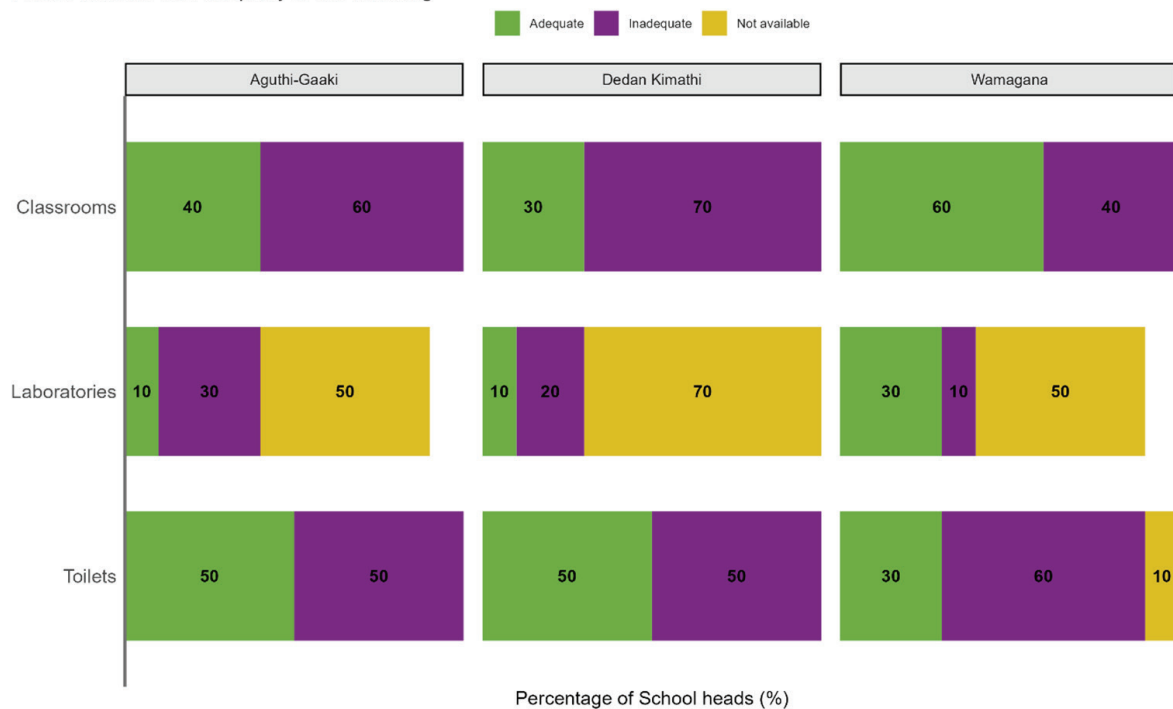


Figure 1: Adequacy of School Facilities

Schools need to have school-specific or independent facilities. However, this is not always the case, as some of the critical infrastructure and/or facilities are at times shared between or among schools in proximity. This largely happens in contexts where primary and secondary schools exist in proximity or the same space.

The survey, therefore, sought to identify the facilities shared between primary and secondary schools. (The latter refers to junior secondary schools). The facilities of focus include playgrounds, toilets, classrooms, and teachers. Across the three wards, playgrounds and toilets were mostly

shared. In Aguthi-Gaaki, all primary schools and junior secondary schools shared a playground (i.e., 100%), while schools in Dedan Kimathi and Wamagana wards had 90 per cent of the schools sharing the playgrounds. Toilets were also almost entirely shared across the three wards. Data revealed that 90 per cent of the schools in Aguthi-Gaaki and Wamagana shared toilets between primary and junior secondary schools, with the figure rising to 100 per cent for Dedan Kimathi. The least shared resource was classrooms, as only 30 per cent of the classrooms in Aguthi-Gaaki were shared by both primary and junior secondary learners. In both Dedan Kimathi and Wamagana, 50 per cent of the classrooms were shared by primary and junior secondary schools. **Figure 2** highlights the above captured statistics.

Adequacy of Facilities at School

For primary and JSS the Following School Facilities are Shared



Figure 2: Shared School Facilities for Both Primary and Junior Secondary Schools

4.4 Composition of School Teachers in Tetu Constituency

The schools' teaching staff is paramount to the success of children's learning. The Teachers Service Commission (TSC) is responsible for employing teachers in both primary and secondary schools. However, where schools experience a teacher gap, their Boards of Management (BoMs) employ more teachers to bridge the prevailing teacher gap. In Tetu Constituency, there were 534 teachers in all three wards, with 492 TSC-employed and 42 BoM-employed. Aguthi-Gaaki had the highest number of teachers with 196 (124 female, 72 male), followed by Wamagana with 177 (123 female, 54 male). Dedan Kimathi had the fewest teachers with 161 teachers (105 females, 56 males). Overall, there were more female teachers (352) than male (182). Given that Aguthi-Gaaki had the highest number of teachers, it also had the highest number of BoM-employed teachers (30). **Table 7** details the findings.

Table 7: Distribution of Teachers Employed at the School by Employer

Employer	Aguthi-Gaaki			Dedan Kimathi			Wamagana			Overall Total
	Male	Female	Total	Male	Female	Total	Male	Female	Total	
TSC	57	109	166	55	104	159	48	119	167	492
BOM	15	15	30	1	1	2	6	4	10	42
Total Teachers	72	124	196	56	105	161	54	123	177	534

4.5 Teachers Classified by Capacity

Teachers' capacities are directly related to learners' learning outcomes. Hence, high teachers' capacities result in high learners' learning outcomes. Consequently, headteachers/teachers' capacity development is critical. In light of the foregoing, the study sought to determine the level of headteachers' preparedness to support learners' learning. For this component, 62 per cent of the headteachers (across the three wards) responded that they were 'very adequately' prepared to support learners' learning. Dedan Kimathi Ward had the highest rate at 73 per cent, followed by Wamagana at 67 per cent, and lastly Aguthi-Gaaki at 47 per cent. Headteachers were also asked to comment on their teachers' level of preparedness to support their learners' learning. Headteachers from Dedan Kimathi Ward had the highest rate of headteachers responding that their teachers were 'very adequately' prepared to support learners' learning at 67 per cent, followed by Aguthi-Gaaki at 53 per cent, and lastly, Wamagana at 40 per cent. Table 8 highlights headteachers' and teachers' levels of preparedness.

Table 8: Headteachers' and Teachers' Level of Preparedness to Support Learners' Learning in Schools

	Aguthi-Gaaki N (%)	Dedan Kimathi N (%)	Wamagana N (%)	Total N (%)
The school head is adequately prepared to support learning				
• Adequate	8 (53)	4 (27)	5 (33)	17 (38)
• Very adequate	7 (47)	11 (73)	10 (67)	28 (62)
Teachers are adequately prepared to teach effectively				
• Inadequate	0 (0)	0 (0)	1 (7)	1 (2)
• Adequate	7 (47)	5 (33)	8 (53)	20 (44)
• Very adequate	8 (53)	10 (67)	6 (40)	24 (53)

The study also sought to determine the proportion of teachers who had been trained on CBC across the three wards (see Fig. 3). Wamagana and Aguthi-Gaaki wards had the highest number of school heads reporting that their teachers had been trained on the Competency-Based Curriculum (CBC) at 93 per cent and 80 per cent, respectively. In Dedan Kimathi Ward, 60 per cent of all the teachers were reported to have been trained on CBC.

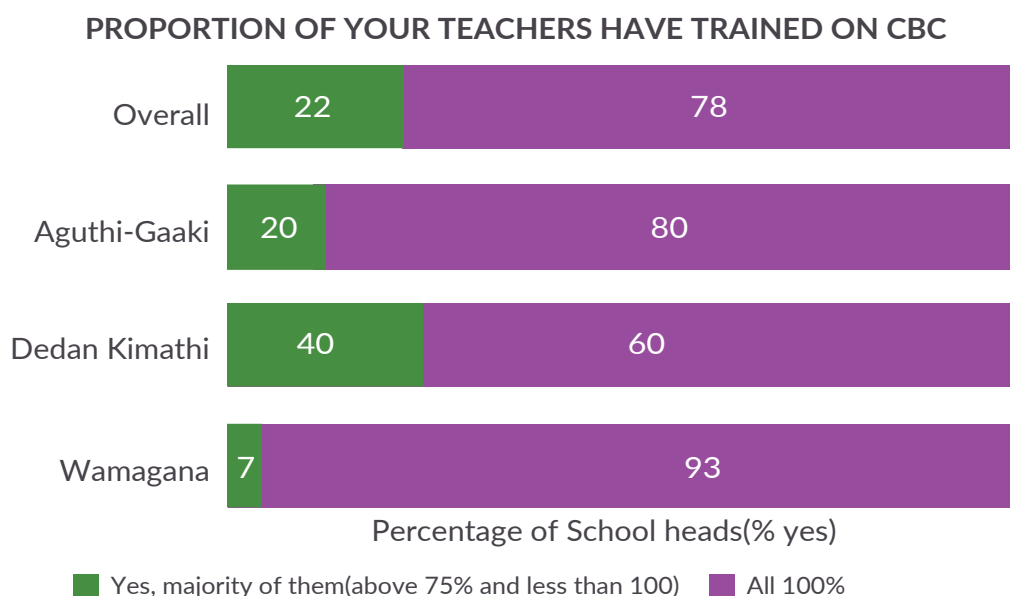


Figure 3: Proportion of Teachers Trained on CBC

While most school heads reported being adequately prepared to support learners' learning, a significant portion expressed the need for additional support to be fully 'adequately' prepared for quality instruction. The school heads noted some capacity gaps that required further teacher capacity development. These gaps included ICT-related competences, financial management training, overall management, and human resource management. To enable the schools address the identified capacity gaps, they considered provision of adequate and quality infrastructure, increased capitation, regular and sustained training for headteachers and teachers through seminars and workshops, appointment of deputy headteachers to institutions that lack this critical human resource, training on ICT and related skills, airtime and/or internet to enable online learning or Google classroom, and provision of other professional development opportunities (different from ICT) to headteachers and teachers especially on stakeholders' engagement.

4.6 Prevailing Schools' Learning Environment

The school learning environment plays a crucial role in embedding a culture of learning. This survey considers schools' learning environments as critical enablers or barriers to learning. Consequently, in this survey, headteachers were asked about the presence of enabling educational resources that facilitated a learning culture in their schools. This included equipped libraries, resources for displaying learning materials in classrooms, and learning content displayed on walls. Results indicate that slightly above three-quarters (76%) of the schools lacked libraries. Of the schools that had libraries, only two (13%) in Aguthi-Gaaki, six (40%) in Dedan Kimathi, and three (20%) in Wamagana reported that they always used the existing libraries. These results imply that even where schools have libraries, they are underutilised. Interestingly, almost all schools (98%) had learning resources displayed on classroom walls, with only one school in Aguthi-Gaaki lacking such displays. **Table 9** shows these figures.

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Table 9: Learning Resources Within the School Environment

	Aguthi-Gaaki N (%)	Dedan Kimathi N (%)	Wamagana N (%)	Total N (%)
The school has a library				
• No	13 (87)	9 (60)	12 (80)	34 (76)
• Yes	2 (13)	6 (40)	3 (20)	11 (24)
Library use in promoting a culture of reading				
• Rarely	1 (50)	1 (17)	1 (33)	3 (27)
• Sometimes	1 (50)	3 (50)	2 (67)	6 (55)
• Always	0 (0)	2 (33)	0 (0)	2 (18)
Classroom walls have displays of learning resources				
• No	1 (7)	0 (0)	0 (0)	1 (2)
• Yes	14 (93)	15 (100)	15 (100)	44 (98)

4.7 School's KCPE Performance Trends in the Past 5 years

This study further sought to determine learners' performance in the Kenya Certificate of Primary Examinations (KCPE) in the three wards over the past 5 years. Results revealed that the average score ranged between 225 and 260 marks out of the possible 500 marks during the period. For Aguthi-Gaaki, data showed that the schools in the ward recorded an exponential improvement in performance from 2019 to 2021, peaking at 255 marks in 2021, after which they recorded declining performance in 2022 and 2023. In Dedan Kimathi Ward, schools recorded intermittent performance, fluctuating each year, with the highest performance recorded in 2022 at about 258 marks. Wamagana Ward recorded steady exponential improvement in performance in the past 5 years, from 2019 (230 marks) to 2023 (255 marks). **Figure 4** presents these findings.

General School Performance

Average KCPE Performance by Ward Over the Past Five Years

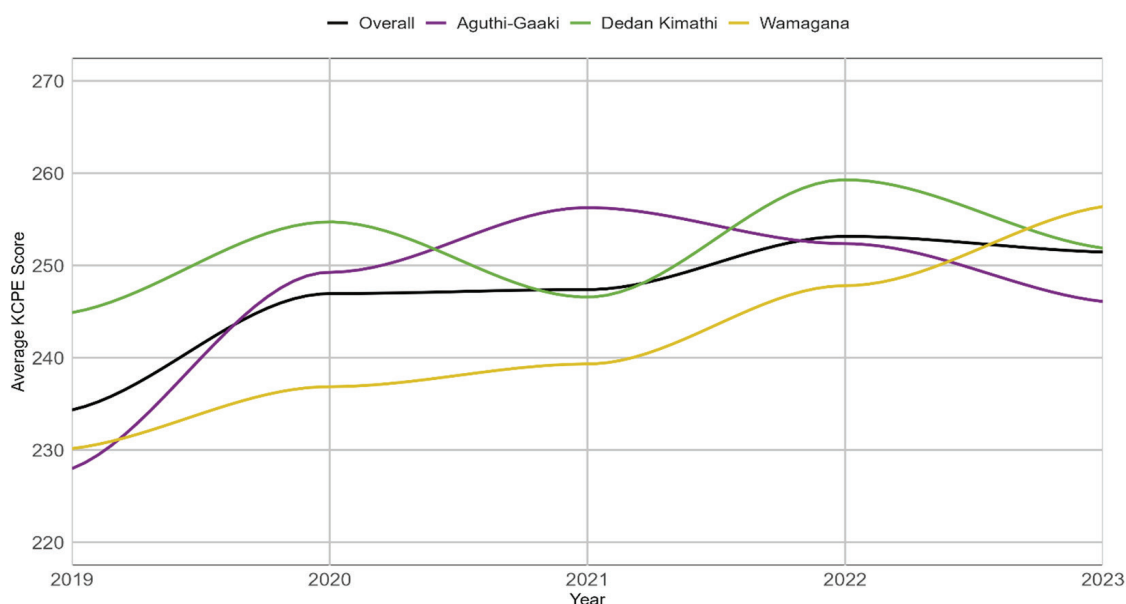


Figure 4: KCPE Trend for the Past 5 Years

The survey was narrowed from a 5-year performance period to 3 years. Opinions on the general performance of the schools were sought from the respective headteachers. Overall, more than half of the school heads (56%) rated school performance as average, further corroborating the performance trends highlighted in Figure 4 above (see Table 10). This was consistent across the

wards, with most school heads in Wamagana Ward (60%) stating that the performance was average. In both Aguthi-Gaaki and Dedan Kimathi wards, headteachers had similar agreement on the schools' performance at 53 per cent.

Table 10: Headteachers' Perception of Schools' General Performance in the Past 3 Years

	Aguthi-Gaaki N (%)	Dedan Kimathi N (%)	Wamagana N (%)	Total N (%)
School General Performance				
• Average	8 (53)	8 (53)	9 (60)	25 (56)
• Good	7 (47)	7 (47)	6 (40)	20 (44)

4.8 Learner Assessment Across the Three Wards

The study further investigated some of the school-related factors and how they influenced the child's ability to read at the Story Level (see Table 11). This was achieved by performing a chi-square test of independence. Table 12 shows the relationship between the school-related factors and the child's reading proficiency. From Table 12, the chi-square test of independence showed that the factors that had a significant association with learners' reading proficiency included: school general performance in the past 3 years, teacher and the learners, availability of a school library, learner grade, learner gender, and ward. School reinforcement of a reading culture, headteacher preparedness, and classroom adequacy were independent of learner reading proficiency.

The study further examined some of the school-associated factors and how they related to the learner's ability to read at the Story Level. The assessment targeted all learners in Grades 3, 4 and 5 in the 15 study schools (i.e., 5 from each ward). The assessment consisted of five reading sections, which were sequential and included letter/sound, word, sentence, short passage, and a story. Those who were not able to read the letter/sounds were recorded at the Beginner Level, while those who were able to read at the Story Level were recorded at the Story Level. The distribution of the assessed learners across the three wards varied slightly, with the drawn proportion of learners from Aguthi-Gaaki being 35 per cent, Dedan Kimathi (33%), and Wamagana (32%). Additionally, there was a slight difference in the learners assessed by grade, with Grade 4 learners being the highest at 35 per cent. The composition of Grades 3 and 5 accounted for 31 per cent and 34 per cent of the assessed learners, respectively. Overall, more than half of the assessed learners (53%) were male.

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Table 11: Characteristics of Assessed Learners Across the Three Wards

	Aguthi-Gaaki N (%)	Dedan Kimathi N (%)	Wamagana N (%)	Total N (%)
N	494 (35)	458 (33)	457 (32)	1409 (100)
Child's Gender				
• Male	253 (51)	241 (53)	246 (54)	740 (53)
• Female	241 (49)	217 (47)	211 (46)	669 (47)
Child's Class				
• Grade 3	155 (31)	152 (33)	131 (29)	438 (31)
• Grade 4	179 (36)	151 (33)	165 (36)	495 (35)
• Grade 5	160 (32)	155 (34)	161 (35)	476 (34)

4.8.1 Distribution of Learner Proficiency by Ward

Additionally, the study sought to determine the distribution of learner proficiency by ward. Overall, results revealed that only half (50%) of the assessed learners were proficient in reading at Story Level. When distributed by wards, Aguthi-Gaaki had the lowest learner proficiency level at 44 per cent, followed by Dedan Kimathi at 52 per cent. Wamagana Ward had the highest proportion of learners able to read a story text at 55 per cent. The proportion of learners who could not read letters/sounds was relatively the same across the wards at 7 per cent for both Wamagana and Dedan Kimathi wards, increasing marginally in Aguthi-Gaaki Ward at 8 per cent. Figure 5 presents these figures.

Learner Assessment

Overall Reading Proficiency for Grade 3 to Grade 5 Learners
by Ward

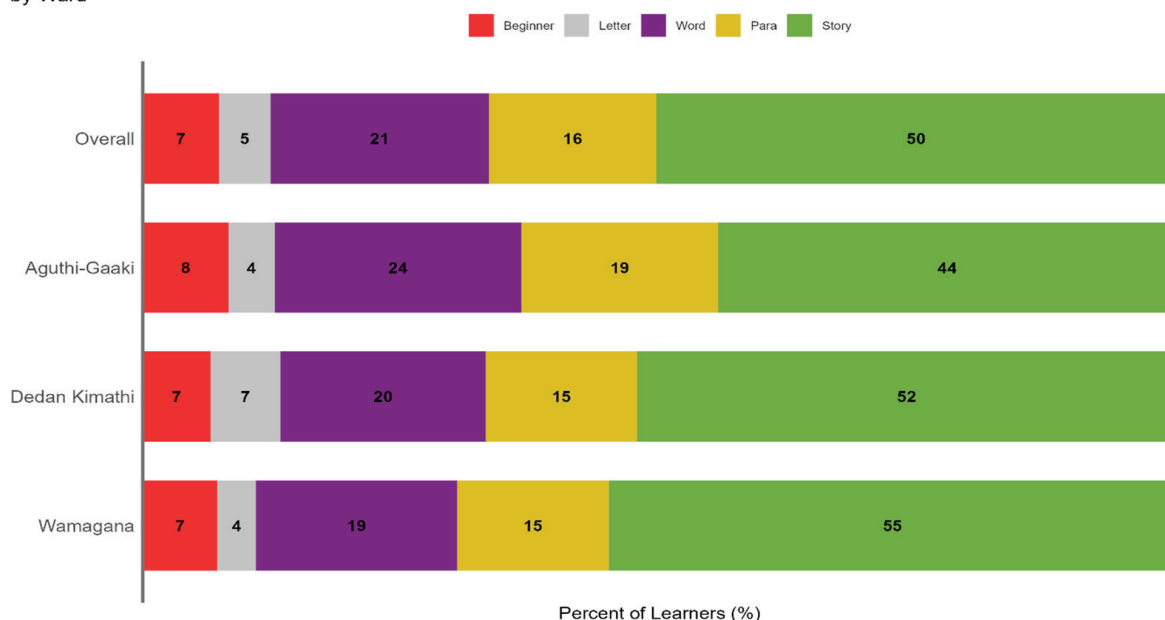


Figure 5: Learner Proficiency by Ward

4.8.2 Learners' Proficiency by Grade and Ward

The study also sought to understand the distribution of learners' reading proficiency by grade (see Fig. 6). Across all three wards, the proportion of learners who could read at Story Level increased progressively from Grade 3 to Grade 5, implying that there was increased mastery of reading skills with advancement to succeeding grades. Results showed that Grade 5 had the highest proportion of learners who could read at Story Level, with the lowest proportion in Grade 3.

However, the proportion of learners clustered at the Beginner Level was relatively similar across the grades in all the wards. The number of learners clustered at the Beginner Level was highest in Grade 4 in Aguthi-Gaaki Ward (10%), followed by Grade 4 in Dedan Kimathi Ward, and lastly by Grade 3 in Wamagana Ward at 9 per cent. The results showed that in Aguthi-Gaaki, learners clustered at Beginner Level in Grade 4 (10%) were higher than those in Grade 3 (8%), a situation that could perhaps be attributed to either the enrolment of more learners who were at Beginner Level in Grade 4, or learners' inability to retain mastered reading skills.

Learner Assessment

Reading Proficiency for Grade 3 to Grade 5 Learners
by Grade

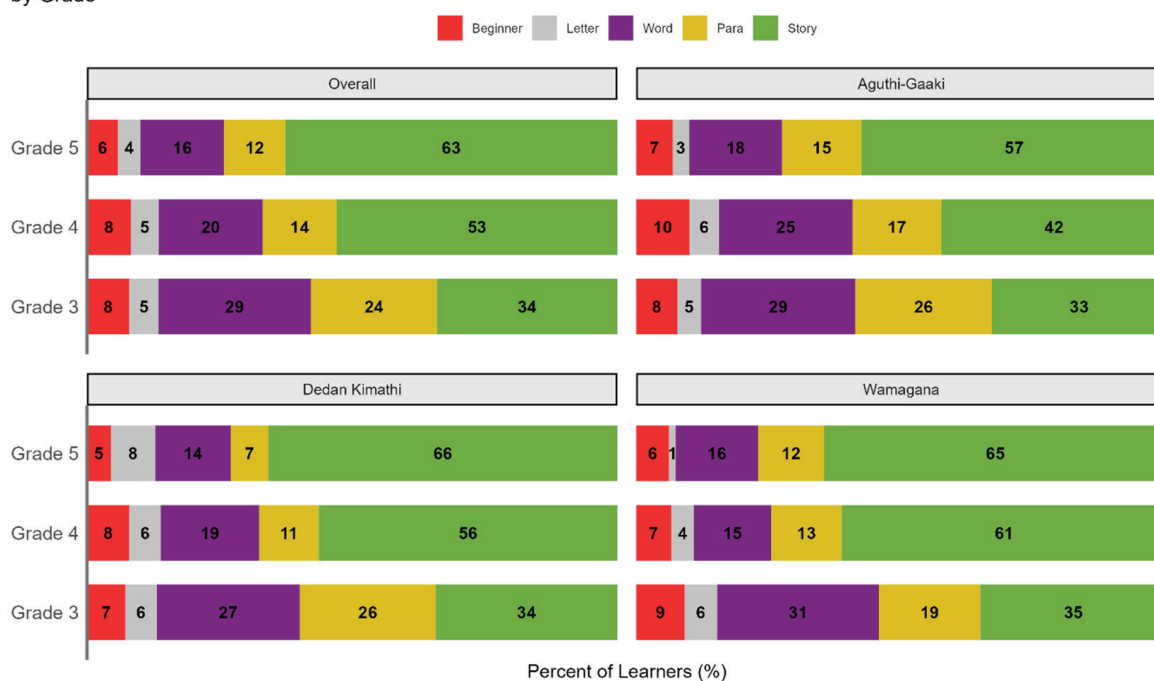


Figure 6: Learner Proficiency by Grade and Ward

4.8.3 Learners' Proficiency by Gender and Ward

Considering the gender aspect, the study further compared learning proficiency between boys and girls across the wards. Overall, and across all wards, there were more male learners (10%) than female (4%) at Story Level. Aguthi-Gaaki and Wamagana had the highest number of male learners at Beginner Level, both at 11 per cent. Dedan Kimathi had slightly fewer male learners at Beginner Level at 8 per cent. Female learners outperformed their male counterparts across the three wards, as fewer of them were at Beginner Level. Figure 7 presents these statistics.

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Learner Assessment

Reading Proficiency for Grade 3 to Grade 5 Learners
by Gender

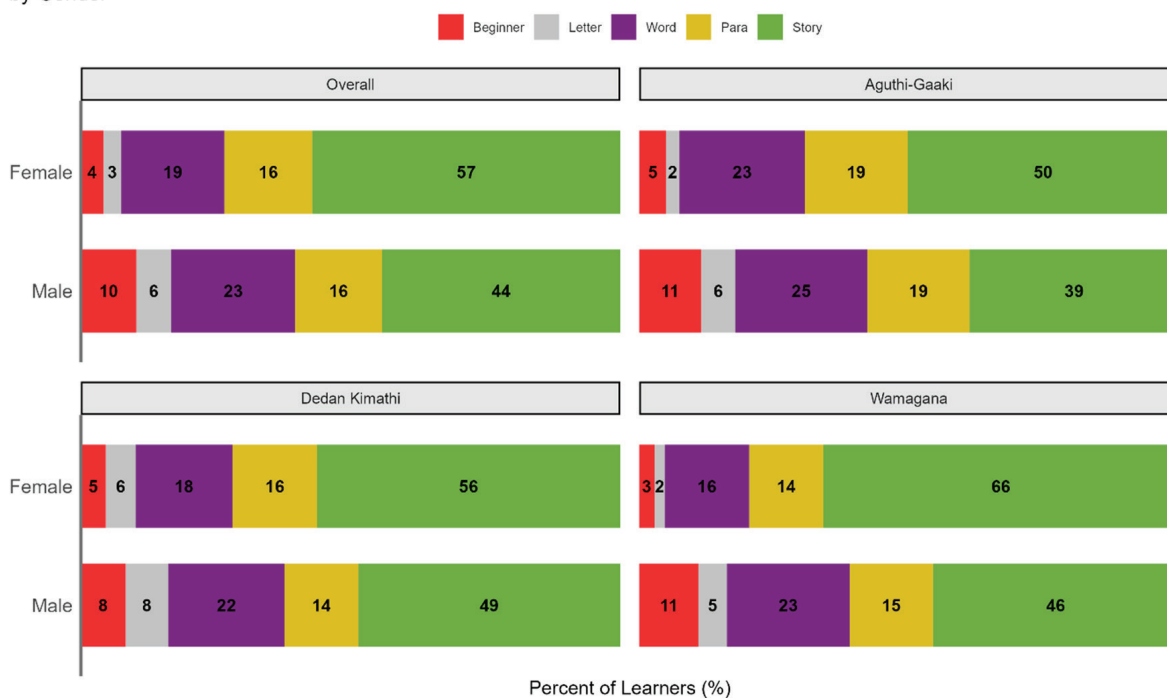


Figure 7: Learner Proficiency by Gender and Ward

4.8.4 School-Related Factors and Their Relationship with Learner Ability to Read at Story Level

The study further sought to determine some of the school and school-related factors that affected learners' ability to read at the Story Level. This was achieved by performing a chi-square test of independence. The chi-square test of independence showed that the factors that had a significant association and/or affected learners' reading proficiency included: school general performance in the past 3 years, teacher proficiency, availability of a school library, learner grade, learner gender, and ward. School reinforcement of a reading culture, headteacher preparedness, and classroom adequacy were not associated with learner reading proficiency.

Table 12: Distribution of Learners, Their Reading Proficiency and Chi-Square Test of Independence

	Cannot read story text N (%)	Can read story text N (%)	Total N (%)	Pearson Chi-Square Test
N	700.0 (49.7%)	709.0 (50.3%)	1409.0 (100.0%)	
General school performance for the past 3 Years				
• Average	324.0 (46.3)	237.0 (33.4)	561.0 (39.8)	<0.0
• Good	376.0 (53.7)	472.0 (66.6)	848.0 (60.2)	
School reinforces reading culture				
• No	168.0 (24.0)	182.0 (25.7)	350.0 (24.8)	0.5
• Yes	478.0 (68.3)	483.0 (68.1)	961.0 (68.2)	
• Not sure	54.0 (7.7)	44.0 (6.2)	98.0 (7.0)	
Teacher is adequately prepared				
• Adequate	462.0 (66.0)	516.0 (72.8)	978.0 (69.4)	0.0
• Very adequate	238.0 (34.0)	193.0 (27.2)	431.0 (30.6)	
Headteacher is adequately prepared				
• Adequate	282.0 (40.3)	275.0 (38.8)	557.0 (39.5)	0.6
• Very adequate	418.0 (59.7)	434.0 (61.2)	852.0 (60.5)	
School has a library				
• No	527.0 (75.3)	434.0 (61.2)	961.0 (68.2)	<0.0
• Yes	173.0 (24.7)	275.0 (38.8)	448.0 (31.8)	
Adequacy of classrooms				
• Inadequate	450.0 (64.3)	436.0 (61.5)	886.0 (62.9)	0.3
• Adequate	250.0 (35.7)	273.0 (38.5)	523.0 (37.1)	
Child Grade				
• Grade 3	289.0 (41.3)	149.0 (21.0)	438.0 (31.1)	<0.0
• Grade 4	233.0 (33.3)	262.0 (37.0)	495.0 (35.1)	
• Grade 5	178.0 (25.4)	298.0 (42.0)	476.0 (33.8)	
Child Gender				
• Male	413.0 (59.0)	327.0 (46.1)	740.0 (52.5)	<0.0
• Female	287.0 (41.0)	382.0 (53.9)	669.0 (47.5)	
Ward				
• Aguthi-Gaaki	275.0 (39.3)	219.0 (30.9)	494.0 (35.1)	0.0
• Dedan Kimathi	219.0 (31.3)	239.0 (33.7)	458.0 (32.5)	
• Wamagana	206.0 (29.4)	251.0 (35.4)	457.0 (32.4)	
<i>Chi-square Test of Independence</i>				

To understand the type of association that exists between the factors that were significantly associated with learners' reading proficiency, a logistic regression model was fitted with those factors as independent variables and learner proficiency (can read or cannot read the Story Level) as the dependent variable. Among all the factors, only the ward was not statistically significant in determining the learner's reading proficiency. Teachers who were 'very adequately prepared' had 1.425 times the odds of learners reading at the Story Level than those who were only adequately

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prepared. This means that learners whose teachers were ‘very adequately prepared’ were 1.425 times more likely to read a Story Level text than those with teachers who were only adequately prepared. Learners from schools that had a library were 1.724 times more likely to read a Story Level text than learners from schools that did not have a library. Learners in Grades 4 and 5 were 2.268 and 3.433 times, respectively, more likely to read a Story Level text than Grade 3 learners. Female learners were 1.774 times more likely to read a Story Level text than the male learners. While ward is not statistically significant in predicting learners’ learning proficiency, learners from Dedan Kimathi Ward were 0.857 times more likely to read a Story Level text than those from Aguthi-Gaaki, while those from Wamagana Ward were 1.226 times more likely to read a Story Level text than those from Aguthi-Gaaki. **Table 13** presents the results of the logistic regression.

Table 13: Logistic Regression Model: Significant Factors in Predicting Reading Proficiency

Reading a Story Level text

Ward		
• Good	1.796	**
	(0.31)	
Teacher Adequately Prepared		
• Very adequate	1.425	*
	(0.24)	
School has a Library		
• Yes	1.724	**
	(0.27)	
Child Grade		
• Grade 4	2.268	**
	(0.32)	
• Grade 5	3.433	**
	(0.49)	
Child Gender		
• Female	1.774	**
	(0.20)	
Ward		
• Dedan Kimathi	0.857	
	(0.14)	
• Wamagana	1.226	
	(0.19)	
Intercept	0.199	**
	(0.04)	
Number of observations	1409	
** $p < .01$, * $p < .05$		

4.9 Barriers to Effective Parental Engagement

The country (Kenya) has adopted the Competency-Based Curriculum (CBC), aimed at providing learners with the skills needed to navigate the contemporary world of learning and work. Among the many guides highlighted in the CBC is the need for enhanced parental engagement in children’s learning, both at home and school. Parental engagement has been considered a critical enabler of enhanced or diminished learning outcomes (Kantova, 2024; Del Boca et al., 2017), depending on the extent of applicability. Consequently, this study sought to determine some of the barriers that hinder effective parental engagement. The results showed that barriers to effective parental engagement cut across the three wards, implying that the constituency was leaning towards experiencing homogeneous issues and/or challenges. The key barriers across the three wards were low literacy rates among parents and a lack of awareness of their responsibilities. Low literacy was highest in Aguthi-Gaaki and Wamagana wards, both at 90 per cent, followed by Dedan Kimathi Ward at 70 per cent. On lack of awareness, this was highest in Dedan Kimathi Ward at 90 per cent followed by Aguthi-Gaaki and Wamagana, both at 80 per cent. Lack of initiative by the school leaders was noted as the least barrier, with only 10 per cent of the teachers in Aguthi-Gaaki citing it as a barrier. **Figure 8** shows that the barriers were cross-cutting in all the wards.

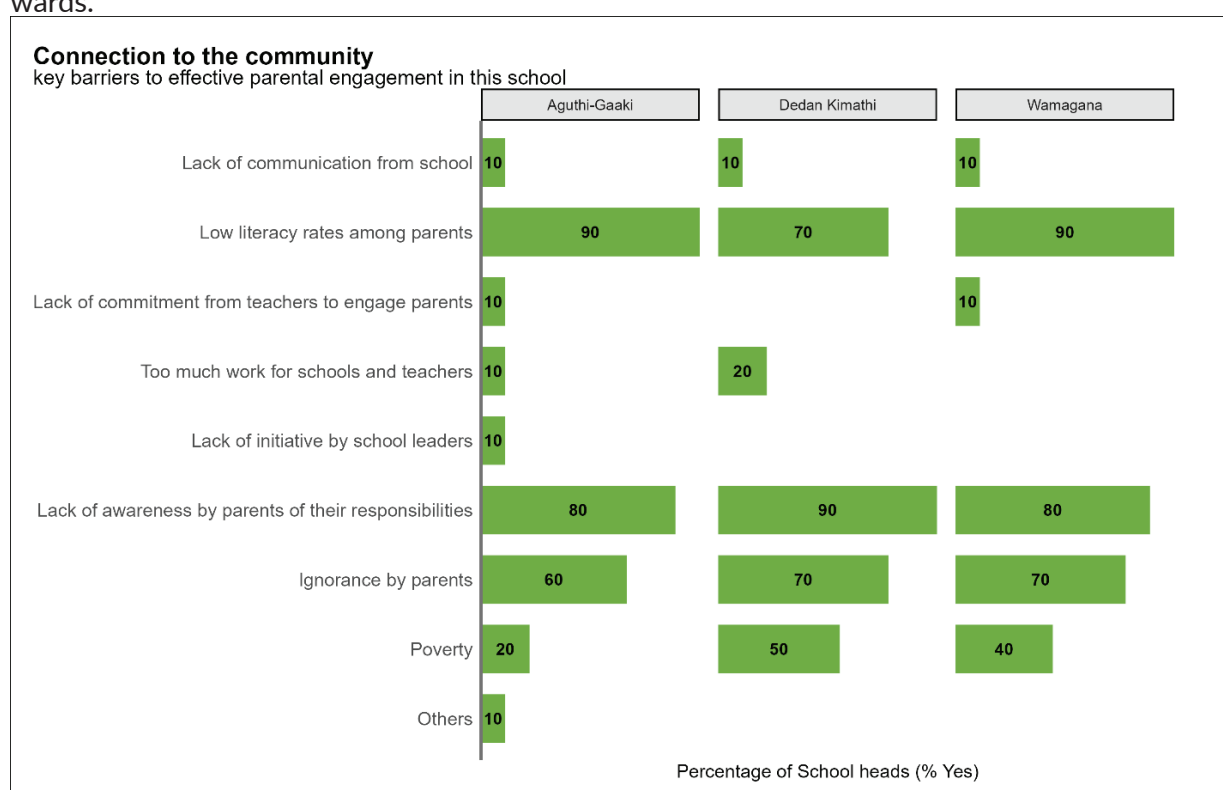


Figure 8: Key Barriers that Hinder Effective Engagement

When the school heads were asked how the identified ‘parental engagement’ barriers could be addressed, their views oscillated around measures like parental sensitisation/creating awareness, conducting more parent-teacher meetings, having motivational talks with the parents, educating parents and having academic clinics, which are consistent with the highlighted barriers.

4.10 Management of the Schools

The study further sought to understand how the schools of focus were managed. For this component, it emerged that most of the schools had a business development/strategic plan (82%). These were largely mentioned by school heads domiciled in Aguthi-Gaaki and Dedan Kimathi wards at 87 per cent. A slightly lower rate was recorded by school heads in Wamagana ward at 73 per cent. **Table 14** presents this information.

Table 14: Existence of Schools' Management Structures and Guidelines

	Aguthi-Gaaki N (%)	Dedan Kimathi N (%)	Wamagana N (%)	Total N (%)
Business development/strategic plan				
• No	2 (13)	2 (13)	2 (13)	6 (13)
• Yes	13 (87)	13 (87)	11 (73)	37 (82)
• Not sure	0 (0)	0 (0)	2 (13)	2 (4)
Duly constituted board of management				
• Yes	15 (100)	15 (100)	15 (100)	45 (100)

4.11 Responsibilities for Improving Learning and Performance

When it comes to promoting learning outcomes, different education stakeholders play different but linked roles towards this goal. Thus, this study also sought to determine whose responsibility it is to promote schools' learning outcomes, at least from the headteachers' perspective. Almost all the school heads believed that parents/community have the highest responsibility in promoting schools' performance at 100 per cent in Aguthi-Gaaki and Wamagana wards, and 90 per cent in Dedan Kimathi Ward. This was lowest for 'religious leaders' and others. **Figure 9** shows who had the highest responsibility in increasing schools' performance.

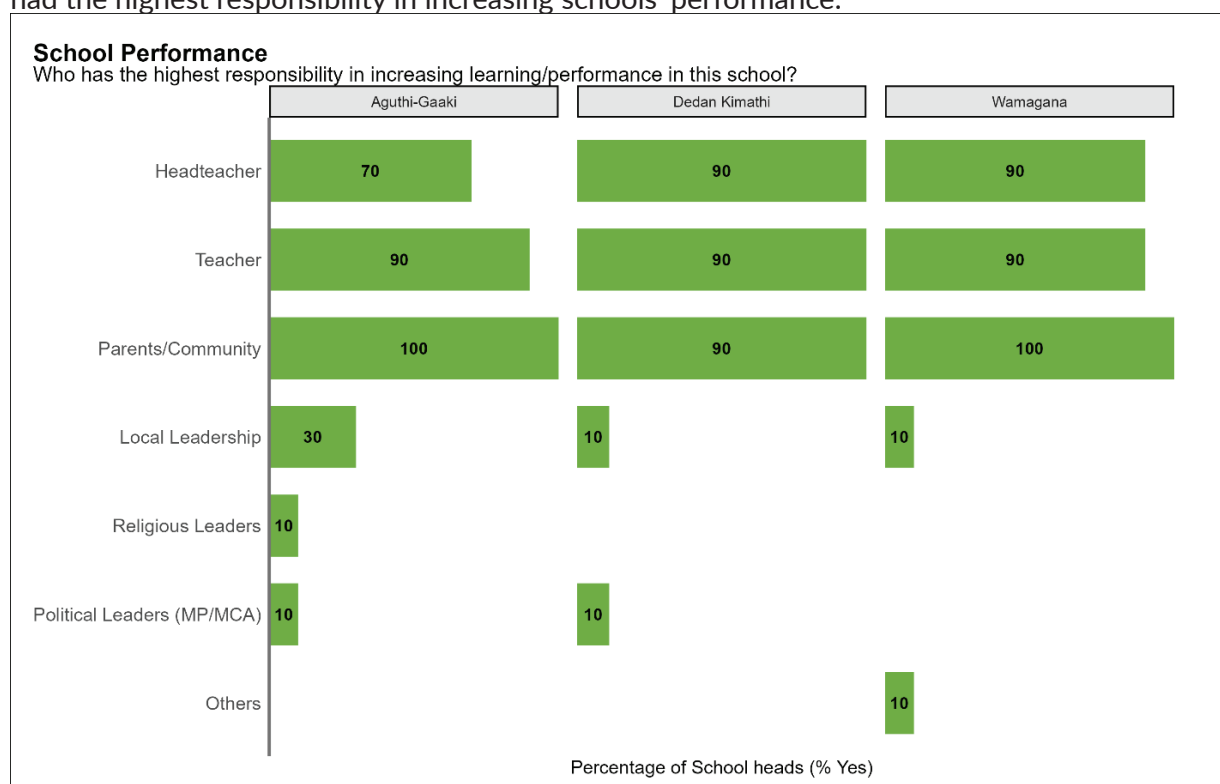


Figure 9: Responsibility for Improving Schools' Learning/Performance Outcomes

Moreover, the study explored the activities and practices adopted by the schools to enhance foundational learning outcomes. Gathered data revealed that the schools across all three wards fared significantly well as they scored between 70 per cent and 100 per cent for all the suggested interventions (see **Figure 10**). It was only "reinforcement of a reading culture through varied fora" that was less practised within the schools across the three wards at 70 per cent (Aguthi-Gaaki), and 80 per cent for both Dedan Kimathi and Wamagana wards. **Figure 10** presents some of the highlighted activities that took place within the school aimed at improving foundational learning outcomes.

Additionally, other cited efforts made by most school heads to improve learning outcomes included: remedial classes/lessons, motivation of learners and teachers, provision of teachers with teaching/learning resources, individualised programmes for learners, and engaging parents. While acknowledging their efforts towards improving learning outcomes, the schools' heads also noted that the following needed to be done if learning outcomes were to be improved: retooling for teachers, motivation of teachers and learners, having libraries and library books, and provision of learning resources, all of which are consistent with earlier presented results on resources.

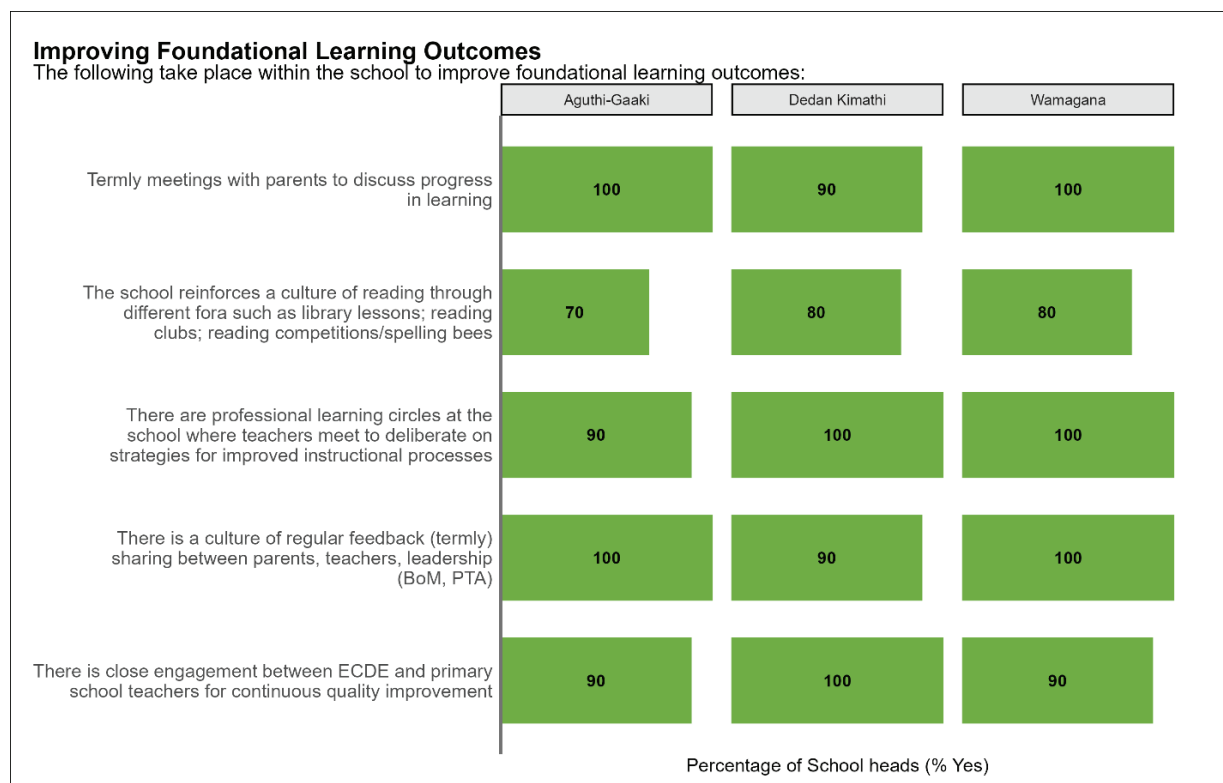


Figure 10: Activities Implemented Within the School to Improve Foundational Learning Outcomes

4.12 School Programmes That Infuse Life Skills and Values

The survey further sought to understand whether there were school programmes that inculcated values and developed life skills among learners (see Table 15). Overall, almost all schools (91%) had life skills programmes. By ward, schools in Aguthi-Gaaki and Dedan Kimathi had the highest positive responses at 93 per cent, followed by Wamagana at 87 per cent. Regarding the effectiveness of these programmes, the school heads indicated that the programmes were either effective or highly effective. Overall, most school heads indicated that the programmes were effective (85%), with only 15 per cent of the school heads indicating that the school programmes were highly effective. None of the school heads in Dedan Kimathi indicated that the programmes were highly effective.

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Table 15: Values and Life Skills Among Learners

	Aguthi-Gaaki N (%)	Dedan Kimathi N (%)	Wamagana N (%)	Total N (%)
There are programmes for inculcating values and developing life skills				
• No	1 (7)	1 (7)	2 (13)	4 (9)
• Yes	14 (93)	14 (93)	13 (87)	41 (91)
The effectiveness of these (values, life skills) programmes				
• Effective	9 (64)	14 (100)	12 (92)	35 (85)
• Highly Effective	5 (36)	0 (0)	1 (8)	6 (15)

4.13 Challenges Faced in Efforts to Improve Foundational Learning

Every school head has a performance level and standards they aspire to attain. However, this goal is often not realised. Consequently, the study sought to understand issues or challenges that might prevent schools from meeting their performance aspirations. For instance, in an earlier presentation of results on learner assessment (*refer to Fig. 5*), only 50 per cent of the learners could read a Story Level text across the three wards, despite the texts being Grade 2 level. Although foundational learning entails more than literacy, this evidence showed that there were challenges that hindered literacy proficiency. The school heads outlined the challenges they faced in their efforts to improve literacy and numeracy in early-grade learners. The major challenge they noted was the lack of parental support, which was consistent in the three wards. The sentiment was shared by all school heads from Dedan Kimathi Ward, ranging between 80 per cent and 100 per cent. At least half of the school heads in all wards opined that lack of learning materials was also a major challenge (i.e., 50%–70%). Surprisingly, poor leadership was not considered a challenge across the three wards, with a mere 10 per cent of school heads in Wamagana noting it as a challenge to improving foundational learning. **Figure 11** presents in-depth statistics.

Foundational Learning

Challenges in improving literacy and numeracy for early grades learners in your school

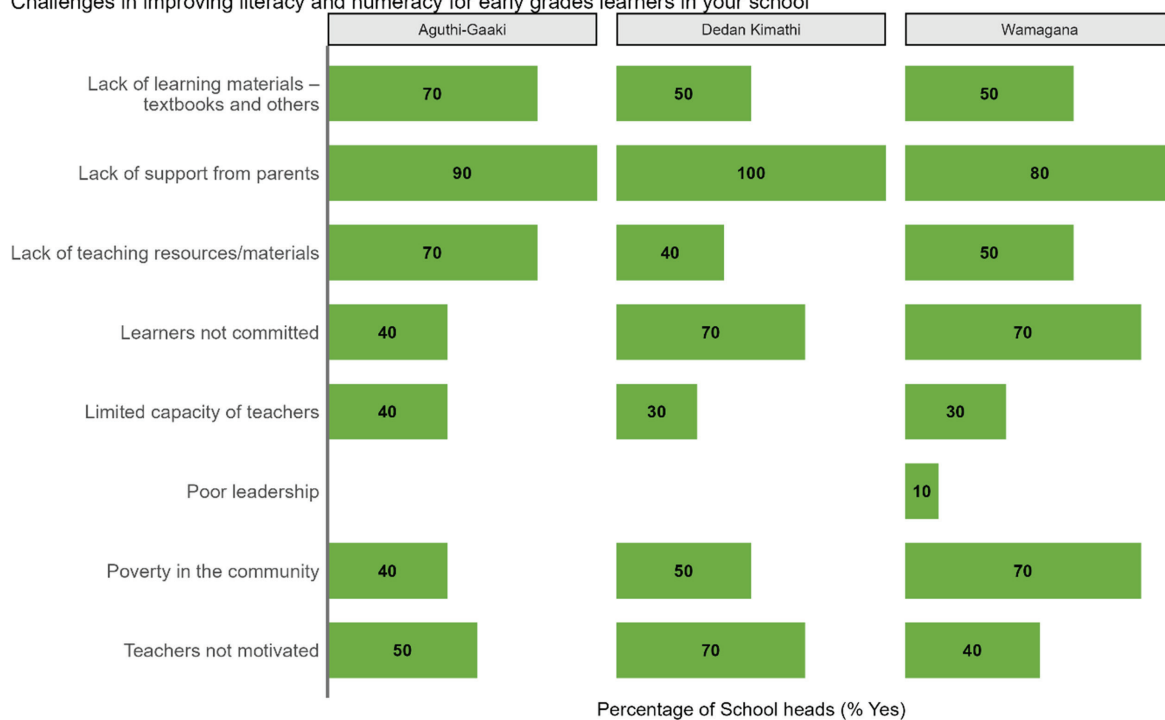


Figure 11: Challenges Cited by School Heads in Improving Literacy and Numeracy for Early-Grade Learners

Conclusion

The study offers a comprehensive overview of the state of primary education across the three wards in Tetu Constituency. Key findings highlight notable gender differences in school leadership across the wards. Overall, school infrastructure is generally adequate, with most schools constructed using stone or brick, although some schools in Wamagana Ward still rely on iron sheet walling. Enrolment rates are stable across the wards, with Aguthi-Gaaki and Wamagana recording higher enrolment than Dedan Kimathi. The pupil-classroom ratio (PCR) is within acceptable limits, though Dedan Kimathi Ward reports a slightly lower PCR compared to other wards. The Gender Parity Index (GPI) indicates a slight bias towards male learners in most grades, though in some grades, such as Pre-primary 2 and Grade 3 in Aguthi-Gaaki, there was a higher enrolment of female learners. Concerns about the adequacy of school facilities persist, particularly in the availability of laboratories and toilets, with many schools reporting deficiencies. Facility sharing between primary and junior secondary schools is common, with classrooms being the least shared.

Teacher distribution is relatively even across the three wards, with the majority of teachers being female and employed by the Teachers Service Commission (TSC). However, gaps remain in school heads' adequacy as some wards report deputy headteacher shortages as well as teacher capacity gaps, with calls for more professional development, ICT integration, and retooling to improve learning outcomes. The learning environment also requires improvement. Most schools lack libraries, and those that have them underutilise them. On a positive note, almost all schools display learning resources on classroom walls, enhancing the learning atmosphere. Foundational learning skills is an area of concern, with Kenya Certificate of Primary Education (KCPE) performance remaining average across the wards. Wamagana Ward, for instance, has shown consistent improvement, but Aguthi-Gaaki has a lower proportion of learners reading at Story Level compared to Dedan Kimathi and Wamagana. Results further reveal that more female learners reach the story-reading level, with a noted increase in proficiency from Grade 3 to Grade 5. The findings further maintain that teacher preparedness and availability of libraries are significantly associated with improved reading proficiency. A lack of, and inadequate, effective parental involvement, due to low literacy levels and limited awareness of parental roles in education, presents notable challenges that hinder improved learning outcomes among learners. Other highly-emphasised challenges at the school include inadequate teaching resources and low teacher motivation, which negatively impact foundational literacy and numeracy development.

Recommendations

The following are some of the recommendations highlighted for improving learning outcomes for Tetu Constituency and beyond:

- I. That school heads should consider creating increased space and opportunities for parents to engage with the school on matters pertaining to their children's education to enhance learning outcomes.
- II. **Address gender disparities:** Implement targeted programmes to address gender imbalances in reading proficiency, particularly targeting male learners.
- III. **Infrastructure improvement:** Prioritise upgrading infrastructure, especially in areas reporting deprivation of this critical resource, such as Wamagana Ward, where iron sheet classrooms are still used in some schools. Additionally, focus could also be on constructing adequate toilets and laboratories, especially in schools where these facilities are shared between primary and junior secondary levels. This would contribute to an enhanced learning environment.
- IV. **Increased provision of requisite learning resources to schools:** Provide resources to schools without libraries and encourage teachers to engage students in library use actively.
- V. **Strengthening teacher and school head capacity:** There is a need to offer professional development focused on reading instruction, ICT integration, and teacher preparedness. This will bridge capacity gaps and improve the overall quality of education.
- VI. **There is a need to institute measures aimed at improving foundational learning:** These could take the form of implementing targeted interventions to enhance literacy and numeracy for learners struggling to read at the Story Level. This means there is a need to introduce specialised reading programmes and provide tailored learning materials suited to Grades 3 to 5.
- VII. **Enhancing parental and community engagement to complement teacher effort for improving learning outcomes:** This calls for addressing barriers to parental involvement through awareness programmes and other educational programmes. This could also encompass fostering stronger communication and collaboration between schools and the community to support student learning.
- VIII. **Monitor, provide feedback, and evaluate school performance periodically:** The constituency, through the MP's Office, could support schools to establish a robust system to monitor and evaluate educational interventions. The key focus should be on underperforming schools and providing targeted support to address identified challenges.
- IX. **Promote stakeholder engagement:** This calls for schools to jointly work together among themselves and with local leaders, parents, and the community to create a supportive learning environment. Joint efforts could help mobilise resources to address salient infrastructure needs.

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Challenges and Recommendations

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