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Grade 6 English literacy in Kenya's arid and semi-arid lands (ASALs): A scoping review of national assessment evidence, 2021–2025

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Abstract

Grade 6 English literacy in Kenya is monitored through the Kenya Primary School Education Assessment (KPSEA) and the citizen-led Foundational Literacy and Numeracy Assessment (FLANA/Uwezo). However, evidence from these assessments has not been systematically synthesized to establish English literacy proficiency among learners in Arid and Semi-Arid Lands (ASALs). This scoping review maps assessment evidence focusing on three areas: differences between curriculum-level mastery measured by KPSEA and foundational reading proficiency assessed through FLANA/Uwezo; English literacy proficiency among Grade 6 learners in ASAL counties; and achievement inequalities across rural–urban, public–private, and community contexts.Guided by the Arksey and O'Malley framework, refined by Levac et al., and PRISMA-ScR guidelines, a systematic desk review was conducted in January 2026. Searches covered institutional repositories, Google Scholar, ERIC, AJOL, and citation snowballing. Of 20 identified records, 16 were screened after duplicate removal, and four national assessment reports met the inclusion criteria: KPSEA (2023) and Uwezo/FLANA reports (2021, 2023 and 2025).Findings indicate that differences in assessment populations, sampling frames and constructs preclude direct statistical pooling. FLANA 2025 reported that 35% of Grade 6 learners had not attained the Grade 3 English reading benchmark, compared with 34% in 2023. Non-proficiency was higher among rural (39%) than urban learners (29%), and public (37%) than private school learners (24%). No aggregate ASAL-specific estimate was available, although targeted pastoralist and refugee studies reported non-proficiency rates of up to 44%.The review

recommends sub-county data disaggregation, complementary use of assessment metrics, and targeted foundational literacy interventions, including Teaching at the Right Level, to address persistent inequalities.

Key terms: Grade 6 English literacy; KPSEA; FLANA; ASAL education; foundational literacy; Kenya.

1.0 Introduction

Foundational literacy is codified under Sustainable Development Goal 4 (SDG 4.1.1) and monitored through the global construct of "learning poverty"—the inability of a 10-year-old child to read and comprehend a simple text (World Bank, 2021, 2022). In low- and middle-income countries, learning poverty rose sharply in the post-pandemic period, surpassing 70% globally and reaching an estimated 86% across Sub-Saharan Africa (Angrist et al., 2021; UNESCO, 2020; World Bank et al., 2022).

Cross-national assessments (SEACMEQ and PASEC) and citizen-led household assessments (ASER and Uwezo) consistently demonstrate that schooling does not equal learning (Hungi et al., 2020; PASEC, 2020; Uwezo Kenya, 2021). SEACMEQ IV found that over 40% of Grade 6 pupils in Anglophone Africa lacked minimum reading fluency, with dryland border learners lagging two full grade levels behind urban peers (Hungi et al., 2020). PASEC2019 similarly established that 52.3% of primary school completers in Francophone Africa lacked foundational reading competence (PASEC, 2020). Household surveys reveal even sharper structural penalties: Uwezo's regional evaluations across East Africa confirmed that fewer than three in ten Grade 3 learners possessed basic Grade 2 literacy, with arid pastoralist districts recording the lowest performance (Uwezo Kenya, 2021).

In Kenya, dryland education is governed by Sessional Paper No. 8 of 2012 under the State Department for ASALs and Regional Development (Republic of Kenya, 2012). The Arid and Semi-Arid Lands (ASAL) framework designates 29 of Kenya's 47 counties—accounting for 88% of the land area and nearly 30% of the population—subdivided into 9 Arid Counties (e.g., Turkana, Mandera, Garissa, Isiolo, Marsabit) characterized by pastoralism and acute infrastructure deficits, and 20 Semi-Arid Counties (e.g., Kitui, marginal lowlands of Meru) supporting agro-pastoralism (National Drought Management Authority [NDMA], 2023; Republic of Kenya, 2012). This review applies strictly to counties designated under this statutory ASAL framework.

Kenya's transition from the 8-4-4 system to the Competency-Based Curriculum (CBC) restructured primary assessment. The Kenya Primary School Education Assessment (KPSEA), administered by the Kenya National Examinations Council (KNEC), replaced the high-stakes KCPE at Grade 6 to formatively monitor learning progression (KNEC, 2024; Republic of Kenya, 2023). In the 2023 KPSEA cohort of 1.24 million candidates, English Language recorded a national mean of 21.38 and a standard deviation of 9.10, the widest dispersion of any tested subject (KNEC, 2024). Concurrently, Usawa Agenda's citizen-led Foundational Literacy and Numeracy Assessment (FLANA) has tracked Grade 3-level benchmarks across biennial panel rounds in 2021, 2023, and 2025 (Usawa Agenda, 2022, 2024, 2026).

Within this empirical landscape, ASAL counties experience compounding disadvantages in educational access and attainment. In 2023 KPSEA registration, ASAL counties recorded the lowest candidatures nationally, including Isiolo with 4,521 candidates (KNEC, 2024). Nationally, the proportion of Grade 6 learners unable to read a Grade 3-level English story rose from 34% in 2023 to 35% in 2025, with rural non-proficiency reaching 39% versus 29% in urban centers (Usawa Agenda, 2024, 2026). FLANA (2026) confirmed that all ten counties with enrolment rates below the national average belong to the ASAL belt: in Garissa, a child aged 4–17 faces a 31% chance of being out of school; more than six times the national rate of 5%; mirroring earlier Uwezo findings that identified Marsabit and northern pastoralist counties as national epicenters of exclusion (Usawa Agenda, 2022, 2026). The 2021–2025 window therefore provides

a methodologically rich period to evaluate Grade 6 English literacy in the ASALs across both institutional and citizen-led data.

Theoretically, these learning outcomes are interpreted through cognitive reading models, cumulative deficit frameworks, and sociological stratification. Under the Simple View of Reading and Constrained Skills Theory, reading comprehension requires both constrained mechanical decoding and unconstrained linguistic comprehension (Hoover & Tunmer, 2020; Paris, 2005). In multilingual ASAL environments where English is often an L3, phonics mastery without oral language proficiency limits comprehension (Crouch & Rolleston, 2022; Trudell, 2021). Stanovich's (1986) Matthew Effect explains how foundational deficits compound: learners who fail to acquire basic decoding by Grade 3 fall progressively behind when curricula shift from "learning to read" to "reading to learn" in Grades 4–6, deepening learning poverty (Crouch & Rolleston, 2022; Kaffenberger, 2021; Spaull & Pretorius, 2019). Furthermore, Lucas's (2001) Effectively Maintained Inequality (EMI) framework explains institutional divides, showing why private schools outpace resource-deprived public schools and why pastoralist households face acute exclusion (Bold et al., 2017; Zuilkowski et al., 2018).

Despite recurrent reports from KNEC and Usawa Agenda, no prior review has synthesized what KPSEA and FLANA (2021–2025) collectively reveal about Grade 6 English literacy in Kenya's ASALs. Existing reports leave the precise cognitive mechanisms of reading failure unexamined, failing to disentangle mechanical decoding deficits from unconstrained English vocabulary and syntactic gaps (Hoover & Tunmer, 2020; KNEC, 2024; Usawa Agenda, 2026). Furthermore, the structural divergence between assessment traditions remains unaddressed: KPSEA is a school-based census measuring Grade 6 curriculum mastery that omits out-of-school populations, whereas FLANA is a household sample assessing a Grade 3 foundational floor (KNEC, 2024; Usawa Agenda, 2026). Aggregate county reporting also obscures within-county variation, conflating settled administrative towns with nomadic communities, and highland zones with arid lowlands (as in Meru).

This scoping review addresses these critical gaps by cross-walking KPSEA's curriculum metrics with FLANA's foundational floor. By mapping documented attainment against empirical data voids, the review establishes where curriculum expectations decouple from foundational competencies and determines whether targeted interventions in ASAL schools must prioritize basic phonemic recovery or accelerated language comprehension.

1.1 Purpose and Review Questions

This scoping review maps and synthesizes national assessment evidence on English literacy among Grade 6 learners in Kenya's ASAL counties, published or fielded between 2021 and 2025 and spanning the KPSEA national reports and the three FLANA/Uwezo rounds. It follows established scoping review conventions for mapping the extent, range, and nature of evidence on a topic rather than establishing causal effect sizes.

Three review questions guide the synthesis:

How do the English literacy constructs measured by the KPSEA differ from those measured by the FLANA/Uwezo assessments (2021–2025) when evaluating Grade 6 competency in Kenya's ASAL counties?

What percentage of Grade 6 learners in Kenya's ASAL counties achieved baseline English literacy proficiency during the 2021–2025 assessment periods?

What is the magnitude of the literacy achievement gap in Grade 6 English between ASAL counties and national, urban, and private-school benchmarks as reported in the 2021–2025 assessments?

3.0 METHODOLOGY

This review follows the five-stage scoping review framework originally proposed by Arksey and O'Malley (2005) and refined by Levac, Colquhoun, and O'Brien (2010)—identifying the research question, identifying relevant studies, selecting sources, charting data, and collating, summarising, and reporting results—reported in accordance with the PRISMA Extension for Scoping Reviews (PRISMA-ScR) guidelines (Tricco et al., 2018). A scoping design, rather than a systematic review with meta-analysis, was selected because the study objective centers on mapping the extent, range, and methodological characteristics of national assessment evidence rather than statistically pooling effect sizes across incommensurable assessment traditions: a census-based, school-administered examination (KPSEA) cannot be mathematically pooled with a household-based sample survey (FLANA/Uwezo).

Sources were identified through systematic searches conducted between January 10 and January 25, 2026, across three distinct retrieval tiers: targeted organizational repositories (KNEC's National Assessment Centre repository at nac.knec.ac.ke, the Ministry of Education portal, Usawa Agenda's open-access archive, UNESCO IIEP Planipolis, and the World Bank Open Knowledge Repository); electronic bibliographic databases (Google Scholar, ERIC, and African Journals Online); and forward and backward citation snowballing from retrieved reports alongside evaluated grey literature (donor-commissioned reports from USAID and FCDO, NGO monitoring briefs, and policy documents). The electronic search strategy deployed Boolean operators, truncation symbols, and field parameters combining population, construct, geographical, and assessment terms: ("Grade 6" OR "Standard 6" OR "Class 6" OR "upper primary") AND ("English literacy" OR "reading comprehension" OR "foundational literacy" OR "reading proficiency" OR "English language") AND (Kenya OR Kenyan) AND (ASAL OR "arid and semi-arid" OR pastoral* OR dryland* OR Garissa OR Turkana OR Wajir OR Mandera OR Marsabit OR Isiolo OR Samburu OR "Tana River") AND (KPSEA OR FLANA OR Uwezo OR NASMLA OR "national assessment"), restricted to fieldwork fielded or published between January 1, 2021, and December 31, 2025.

Eligibility was governed by the Population, Concept, and Context (PCC) framework: sources were included if they (a) reported empirical, quantitative assessment data on English literacy, reading fluency, or comprehension; (b) evaluated Grade 6 learners or presented data disaggregated to extract Grade 6-specific metrics; (c) covered at least one ASAL county as officially classified under Sessional Paper No. 8 of 2012, either as an independent reporting unit or within a disaggregated national dataset; and (d) were published or fielded between 2021 and 2025. Sources were excluded if they assessed literacy exclusively in Kiswahili or indigenous languages without an English measure; focused solely on pre-primary, lower-primary (Grades 1–3), or secondary levels without Grade 6 disaggregation; presented purely qualitative commentary or advocacy lacking an assessment instrument; or evaluated exclusively non-ASAL counties without national or rural comparators.

Screening followed a two-stage blinded process: initial title and abstract/executive summary screening removed duplicates, non-Kenyan records, and ineligible materials, followed by independent full-text evaluation by two reviewers against the inclusion criteria, resolving discrepancies through consensus or referral to a third reviewer (kappa > 0.85), and documenting selection exclusions via a PRISMA-ScR flow diagram (Figure 1). Data were abstracted into a standardized, piloted charting instrument capturing publication details, assessment instrument, fielded year, test administration mode (written school examination vs. oral household assessment), sampling frame and sample size, ASAL geographic coverage, literacy constructs and cutoffs, disaggregated Grade 6 English findings, and assessed covariates (gender, public vs. private school type, rural vs. urban location, and socioeconomic status), with multi-wave panel rounds (e.g., FLANA 2021, 2023, 2025) charted separately to preserve chronological trends and psychometric variations.

A total of 20 records were initially identified, comprising 17 records retrieved through database and institutional repository searches (KNEC, Usawa Agenda, MoE, and Google Scholar) and 3 additional records identified through citation snowballing and grey literature tracking. Following the removal of 4 duplicate records, 16 unique records were screened based on title, abstract, or executive summary. Of these, 12 records were excluded for failing to meet predefined eligibility criteria: 5 evaluated grades outside the upper-primary focus without disaggregated Grade 6 metrics (e.g., lower-primary EGRA/early-grade evaluations); 3 assessed numeracy or Kiswahili without an English reading proficiency measure; 2 examined non-ASAL jurisdictions exclusively without national or rural comparative benchmarks; and 2 were qualitative policy commentary pieces lacking empirical assessment instruments. The remaining 4 full-text reports were retrieved and independently assessed for eligibility by two reviewers; none were excluded (n = 0), yielding a final evidence base of 4 comprehensive national assessment reports meeting all inclusion parameters (KNEC 2023 KPSEA; Uwezo 2021; FLANA 2023; and FLANA 2025). The selection procedure and attrition counts are detailed in the PRISMA-ScR flow diagram (Figure 1)

Figure 1. PRISMA-ScR flow of identification, screening, eligibility and inclusion

Note. The four included sources comprised the Kenya National Examinations Council (KNEC) Kenya Primary School Education Assessment (KPSEA) National Report 2023 and three Usawa Agenda/Uwezo learning assessment reports covering 2021, 2023 and 2025.

4.0 FINDINGS AND DISCUSSION.

4.1 Characteristics of the Reviewed Evidence

Four national assessment sources met the substantive eligibility criteria and formed the core evidence base for this review: the Kenya Primary School Education Assessment (KPSEA) National Report 2023, produced by the Kenya National Examinations Council (KNEC, 2024), alongside three successive rounds of Usawa Agenda's citizen-led assessments—the 7th Uwezo Learning Assessment Report (2021), the 1st Foundational Literacy and Numeracy Assessment (FLANA) Report (2023), and the 2nd FLANA Report (2025).

To prevent unintended equivalence across fundamentally disparate assessment regimes, this review explicitly distinguishes between the institutional mandate of KNEC's KPSEA and the civil society-led architecture of Usawa Agenda's surveys. KPSEA is a school-based national census administered at the end of Grade 6. Operating within the Competency-Based Curriculum (CBC), its primary purpose is formative monitoring to determine whether enrolled learners have achieved upper-primary language benchmarks, including complex reading comprehension, grammatical synthesis, and language mechanics. However, because it assesses only pupils attending registered institutions, KPSEA inherently excludes out-of-school children—introducing an institutional survival bias that tends to inflate performance estimates, particularly in marginalized Arid and Semi-Arid Land (ASAL) settings.

In contrast, Uwezo and FLANA utilize household-based probability sampling across children aged 6 to 15, evaluating participants regardless of school enrollment or grade attainment. Their target construct is intentionally calibrated to a foundational floor benchmarked at Grade 2 or Grade 3 competency to measure whether children possess the baseline decoding and reading comprehension necessary for sustained learning.

Ultimately, while KPSEA evaluates curriculum mastery among enrolled upper-primary pupils, FLANA gauges systemic access to foundational literacy across the broader child population. Any apparent divergence between their findings reflects these distinct psychometric constructs, target populations, and testing environments, rather than conflicting empirical realities.

The reviewed evidence comprises two distinct assessment families. KPSEA is a curriculum-linked assessment of learners enrolled in Grade 6 within the formal education system. In contrast, Uwezo and FLANA are household-based assessments that assess children within the broader school-age population and can therefore capture learners who may be outside formal schooling. This difference in sampling frame is important when interpreting literacy estimates and comparing findings across the assessment systems. The four sources provide complementary evidence rather than a single continuous longitudinal dataset. The 2021 Uwezo assessment establishes an earlier baseline of foundational learning evidence, KPSEA provides curriculum-linked Grade 6 evidence, while the 2023 and 2025 FLANA rounds provide repeated household-based evidence of foundational literacy.

4.2 Differences in English Literacy Constructs Measured by KPSEA and FLANA/Uwezo

The first research question examined how the English literacy constructs measured by KPSEA differ from those measured by FLANA/Uwezo. Rather than reflecting differences in mere test difficulty, the evidence indicates fundamentally distinct assessment architectures, psychometric orientations, and policy mandates.

KPSEA evaluates a multifaceted array of curriculum-linked competencies calibrated directly to the Grade 6 syllabus under the Competency-Based Curriculum (CBC). Its assessment battery includes inferential text interpretation, discourse structure, and mechanical language application, enabling diagnostic analysis at both the sub-strand and item-facility levels. In the 2023 administration, KNEC reported notable learner challenges in complex language use, with facility indices falling below 30% for maintaining conversational flow (27.85% and 25.33%), the functional application of prepositions (27.26%), and inferring vocabulary meaning from context (20.72%) (KNEC, 2024).

Conversely, Usawa Agenda's FLANA and Uwezo assessments adopt a targeted, foundational literacy orientation. Rather than capturing the full curriculum horizon of an upper-primary learner, these assessments establish an early-grade floor, evaluating whether older pupils possess the minimum decoding and comprehension abilities expected by Grade 3. Using a short, age-appropriate narrative passage followed by basic retrieval tasks, FLANA determines whether upper-primary learners—including those enrolled in Grade 6—have crossed the foundational reading threshold (Usawa Agenda, 2024, 2026). Similarly, the 2021 Uwezo round applied early-primary tasks to establish foundational competence, reporting outcomes primarily for Grade 4 rather than Grade 6 (Usawa Agenda, 2022).

This divergence demonstrates that KPSEA and FLANA/Uwezo ask fundamentally different empirical questions:

KPSEA asks: To what degree have enrolled Grade 6 pupils mastered the complex grammatical and reading expectations prescribed by the national curriculum?

FLANA/Uwezo asks: What proportion of children—regardless of whether they are sitting in a classroom or out of school—possess the minimum foundational literacy needed to access learning at all?

Consequently, a learner assessed as struggling with prepositional syntax on KPSEA may simultaneously be classified by FLANA as proficient at the Grade 3 reading benchmark. Conversely, an enrolled Grade 6 pupil classified by FLANA as lacking foundational reading fluency cannot have their deficit diagnosed by KPSEA's curriculum-level assessment items.

Because of these distinct constructs, testing environments, target populations, and sampling frames (census versus household survey), performance metrics from these two assessment traditions cannot be pooled or treated as direct equivalents of Grade 6 English proficiency.

4.3 Grade 6 English Literacy Proficiency in ASAL Counties

The second research question examined the proportion of Grade 6 learners in Arid and Semi-Arid Land (ASAL) counties who achieved baseline English literacy proficiency. A primary empirical constraint across the four national assessment sources is that published national reports do not tabulate a pooled Grade 6 English literacy estimate specifically for ASAL counties as a stand-alone regional category, nor do they report comprehensive county-by-county breakdowns for Grade 6 English. Consequently, the available evidence does not support an aggregate, census-grade ASAL proficiency rate. Instead, it provides robust national and rural–urban benchmarks alongside bounded evidence from targeted sub-studies of vulnerable pastoralist and refugee populations, establishing comparative parameters rather than direct regional estimates.

At the national level, citizen-led assessment data establishes an early-grade foundational threshold rather than an ASAL-specific figure. In the 2nd Foundational Literacy and Numeracy Assessment (FLANA) Report (administered in 2025 and reported in 2026), based on a nationally representative household probability sample of children aged 6 to 15 across all 47 counties, 35 out of 100 Grade 6 learners did not meet the foundational Grade 3 English reading benchmark. This indicates that approximately 65 in 100 achieved basic reading proficiency, reflecting stability when compared with the 1st FLANA Report (2023 assessment; published in 2024), where 66 in 100 Grade 6 learners reached the Grade 3 standard. Locality-level disaggregation demonstrates a persistent rural penalty, with baseline proficiency among Grade 6 learners standing at 61 in 100 in rural areas compared to 71 in 100 in urban areas in 2025, mirroring the 62 rural versus 71 urban per 100 observed in 2023.

This persistent gap reflects broader empirical patterns of learning poverty across Sub-Saharan Africa, where learning trajectories typically flatten after the early grades, leaving substantial proportions of upper-primary children unable to read simple texts independently (Angrist et al., 2021; World Bank, 2021). As Crouch and Rolleston (2022) demonstrate, when foundational fluency is not consolidated in lower primary, children cannot transition from "learning to read" to "reading to learn," triggering cumulative instructional exclusion. In Kenya, this learning stagnation was exacerbated by pandemic-era instructional disruptions, which disproportionately eroded early-grade decoding skills in rural and under-resourced public schools (Kaffenberger, 2021; Uwezo Kenya, 2021).

Because ASAL counties are predominantly rural and face compounded structural deprivations, these rural figures provide a probable upper bound rather than a direct measure of ASAL performance. From an institutional curriculum perspective, KNEC's KPSEA National Report 2023 indicates that among enrolled Grade 6 candidates nationally, 61.36% met or exceeded Competency-Based Curriculum (CBC) expectations in English, with 19.46% exceeding and 41.90% meeting, while 32.12% were approaching expectations and 6.53% fell below expectations. However, because the published national KPSEA report does not disaggregate candidate performance by county or ASAL designation, direct estimates of Grade 6 curriculum mastery in ASAL schools cannot be derived from official examination records.

While aggregate ASAL figures are absent from the broad national tables, localized empirical observations from targeted sub-samples show that reading deficits are significantly more acute in vulnerable schooling environments. In targeted assessments evaluating pastoralist ASAL areas and refugee community schools, 44 out of 100 Grade 6 learners were unable to read and comprehend a basic Grade 3 English story. In these contexts, early foundational acquisition is severely delayed, with only approximately 1 in 5 learners in Grades 3 and 4 demonstrating Grade 3 reading comprehension a pattern mirrored among 10-year-olds in refugee settlements. Logistic regression estimates from these sub-samples indicate that learners attending refugee community schools face 68% lower odds of attaining foundational English proficiency compared to peers in public primary schools nationally ($\text{OR} = 0.32, p < 0.001$).

Furthermore, the 2021 Uwezo assessment cycle provides no direct Grade 6 metric, as its focal upper-primary analysis examined Grade 4 cohorts, finding that roughly two in five learners met expectations on Grade 3 English passages. Measurable temporal shifts in Grade 6 foundational reading are therefore confined to the 2023 and 2025 FLANA surveys, which show national non-proficiency moving from 34 to 35 in 100—a minor variance that warrants cautious interpretation given differences in cluster allocations and domestic testing environments across rounds.

These localized deficits reflect the compounded vulnerabilities documented across crisis-affected and pastoralist educational contexts in the region (Dryden-Peterson, 2020; UNESCO, 2020). In pastoralist drylands, learning acquisition is impeded by structural obstacles including chronic under-deployment of qualified teachers, seasonal migration, and inadequate water, sanitation, and hygiene (WASH) infrastructure (Anlimachie & Avoada, 2020; EFA FTI & UNICEF, 2021). Furthermore, recent evidence confirms that language-of-instruction mismatch severely inhibits foundational literacy acquisition among multilingual learners in pastoralist and refugee camp settings, where instruction transitions rapidly into English before learners have established basic vocabulary or mother-tongue literacy foundations (Alidou, 2020; Trudell, 2021). Recent classroom process studies in Kenya further reveal that pedagogical practices in underserved primary schools remain dominated by passive teacher-centered routines and rote chorusing, offering limited differentiated scaffolding for learners reading substantially below grade level (African Population and Health Research Center [APHRC], 2026).

In synthesis, the reviewed evidence does not report a direct, pooled Grade 6 English literacy rate for ASAL counties as a distinct administrative collective. Nationally, approximately 65 in 100 Grade 6 children achieved foundational Grade 3 English reading proficiency in 2025, dropping to 61 in 100 in rural localities, while 61.36% of enrolled school candidates met or exceeded Grade 6 curriculum expectations on KPSEA in 2023. However, targeted assessments of ASAL pastoralist and refugee populations reveal non-proficiency rates of 44 in 100 at Grade 6, demonstrating that national and rural aggregates mask severe, localized literacy deficits across Kenya’s arid and semi-arid margins.

4.4 Magnitude of the Grade 6 English Literacy Gap

The third research question examined the magnitude of the Grade 6 English literacy gap between Arid and Semi-Arid Land (ASAL) counties and national, urban, and private-school benchmarks. While the reviewed national assessment sources document significant disparities across geographical locations and school types (Table 3), an aggregate ASAL literacy gap cannot be directly computed because none of the four sources provides a pooled or county-disaggregated Grade 6 English estimate for the ASAL region (KNEC, 2024; Usawa Agenda, 2024, 2026). Consequently, the empirical evidence establishes bounded comparative benchmarks namely rural–urban and public–private disparities—rather than a direct measure of ASAL learning deficits.

Nationally, citizen-led evidence highlights substantial divides in foundational English competence across administrative and sector classifications. In 2025, 35 in 100 Grade 6 learners nationally did not meet the FLANA Grade 3 English benchmark, compared with 39 in 100 rural learners and 29 in 100 urban learners; a 10-percentage-point rural–urban divide that widened slightly from 9 points in 2023 (Usawa Agenda, 2024, 2026). School management type reveals an even wider performance disparity: in 2025, 37 in 100 public-school Grade 6 learners failed to attain the benchmark, compared with 24 in 100 in private schools, reflecting a 13-percentage-point advantage for private institutions (down from a 15-point gap in 2023, when non-proficiency stood at 36 and 21 in 100, respectively) (Usawa Agenda, 2024, 2026).

These empirical divides mirror wider evidence on structural stratification in foundational learning across low- and middle-income contexts (Glewwe & Muralidharan, 2016; World Bank, 2018). The observed 10-percentage-point rural–urban penalty reflects what Bashir et al. (2018) identify as systemic geographical

inequality across Sub-Saharan Africa, where rural primary schools face compounded deficits in essential pedagogical inputs, adverse pupil-to-teacher ratios, and limited home print environments (Piper et al., 2018; Zuilkowski et al., 2019). In Kenya, early-grade interventions such as Tusome demonstrated that while structured instructional materials and coaching could lift reading performance across varied contexts, rural and geographically remote schools consistently required longer support cycles to attain fluency benchmarks comparable to their urban counterparts (Freudenberger & Davis, 2017; Piper, Destefano, et al., 2018).

The 13- to 15-point performance advantage documented among private schools corresponds with findings on institutional sorting and resource allocation (Bold et al., 2017; Härmä, 2021). Comparative analyses of primary schooling in Kenya indicate that the private-school advantage in foundational English is driven not only by family socioeconomic sorting, but also by significantly higher time-on-task, lower teacher absenteeism, and regular structured literacy practice in the early grades (Bold et al., 2017; Zuilkowski et al., 2018). In urban centers and informal settlements, low-cost private institutions have expanded largely because parents perceive them as delivering stronger English language instruction (Edwards et al., 2019; Zuilkowski et al., 2018).

However, in ASAL counties, private educational infrastructure is virtually non-existent outside a few administrative urban centers (Dyer, 2016; Ngware et al., 2018). Pastoralist communities remain almost exclusively dependent on government-provided schooling, leaving them disproportionately exposed to the severe structural deficits that characterize underfunded public schools (Crawfurd et al., 2021; Sifuna, 2017). Furthermore, the intersection of rural location and public schooling compounds instructional deficits: when public school provision fails to guarantee foundational mastery by Grade 3, learning profiles characteristically flatten, producing the entrenched late-primary deficits observed at Grade 6 (Crouch & Rolleston, 2022; Kaffenberger, 2021).

Consequently, while national rural–urban and public–private gaps illustrate structural fault lines in Kenya's primary schooling system, they remain conservative proxies for ASAL realities. The combination of pastoralist transhumance, climate-related disruptions, linguistic distance from the medium of instruction, and chronic shortages of qualified educators in the arid margins creates educational barriers that exceed standard rural penalties (Crouch & Rolleston, 2022; Dyer, 2016; UNESCO, 2020).

Table 3. Percentage of Grade 6 Learners Not Meeting the Grade 3 English Reading and Comprehension Benchmark, FLANA 2023 and 2025

Comparison	2023(%)	2025 (%)
National benchmark	34	35
Rural	38	39
Urban	29	29
Public schools	36	37
Private schools	21	24
Rural–urban gap (percentage points)	9	10
Public–private gap (percentage points)	15	13
ASAL versus national, urban, or private schools	Not reported	Not reported

Source: Usawa Agenda (2024, 2026). Note: Gaps are calculated from reported percentages; no pooled

ASAL or county-level Grade 6 English estimate is reported in the reviewed sources.

4.5 Synthesis of Findings

The synthesized evidence yields three central empirical conclusions regarding upper-primary English literacy in Kenya:

First, KPSEA and FLANA/Uwezo assess distinct psychometric constructs and serve different policy purposes. KPSEA evaluates curriculum attainment across complex upper-primary strands including inferential comprehension, prepositional syntax, and functional discourse among enrolled Grade 6 pupils in formal schools. In contrast, Usawa Agenda's FLANA and Uwezo surveys establish a foundational floor, measuring basic decoding and reading comprehension against a Grade 3 benchmark across both enrolled and out-of-school children. Because KPSEA measures curriculum ceilings while FLANA evaluates minimum competency thresholds, their performance metrics are non-equivalent and cannot be pooled.

Second, foundational English literacy deficits remain widespread among Grade 6 learners nationally. The 2025 FLANA assessment demonstrates that over one-third of upper-primary children (35 in 100) have not acquired Grade 3-level reading proficiency, indicating that learning delays incurred during the lower-primary cycle persist into the final year of primary education. Thus, foundational reading deficits are a systemic national challenge rather than a crisis exclusive to pastoralist or ASAL counties.

Third, inequities are sharply delineated by geographic locality, schooling sector, and institutional vulnerability. In FLANA 2025, foundational non-proficiency scaled from 24 in 100 in private schools and 29 in 100 in urban areas to 37 in 100 in public schools, 39 in 100 in rural areas, and 44 in 100 in refugee community schools (Usawa Agenda, 2026). When controlling for child, household, and school-level characteristics, learners in refugee schools had 68% lower odds of attaining foundational English proficiency than their peers in public primary schools (OR = 0.32, $p < 0.001$) (Usawa Agenda, 2026).This warrants an observation that the national that educational marginalization is strongly patterned by geography and resource allocation.

Ultimately, while the reviewed evidence conclusively demonstrates persistent national deficits and pronounced structural divides, it underscores a major reporting blind spot: published national assessment reports do not report disaggregated, county-level Grade 6 English literacy outcomes for ASAL counties. As a result, the full magnitude of learning loss in Kenya's arid and pastoralist margins remains obscured behind national aggregates, even as indirect indicators confirm disproportionate out-of-school rates and severe age-grade distortion across the region.

4.6 Evidence Gaps

Several critical empirical and methodological gaps remain in the current evidence base, limiting both longitudinal synthesis and policy action.

First, direct and disaggregated Grade 6 English literacy estimates for Arid and Semi-Arid Land (ASAL) counties are not systematically reported across all assessment cycles (KNEC, 2024; Usawa Agenda, 2022, 2024, 2026). Because national reports frequently collapse regional figures into broad rural–urban aggregates or omit sub-national tables for specific grade-subject pairings, constructing an uninterrupted empirical trend line from 2021 to 2025 is not possible.

Second, the assessment instruments measure fundamentally non-equivalent psychometric constructs calibrated to disparate learning standards (KNEC, 2024; Usawa Agenda, 2024, 2026). As demonstrated by the contrast between KPSEA's upper-primary curriculum ceiling and FLANA's Grade 3 foundational reading floor, the two tradition evaluate distinct learning dimensions (KNEC, 2024; Usawa Agenda, 2026).

This dichotomy reflects the structural tension between overambitious curricular pacing and actual learner mastery in low-resource educational contexts (Pritchett & Beatty, 2015). Treating these divergent assessments as a single, continuous longitudinal dataset would introduce severe measurement error and generate misleading inferences regarding learning progression.

Third, reliance on broad national and county-level aggregates conceals profound within-county heterogeneity across ASAL regions (KNEC, 2024; Usawa Agenda, 2026). ASAL counties are expansive geographic territories characterized by fragmented settlement patterns and uneven institutional infrastructure (Ruto et al., 2009). Aggregating performance to a single county mean inherently masks deep inequalities across sub-counties, between urbanized county headquarters and remote pastoralist rangelands, and across varied schooling types (Ngware et al., 2014; Ruto et al., 2009). For example, aggregate county figures obscure the acute disadvantages experienced by refugee camp schools, informal community learning centers, and mobile pastoralist communities relative to established, resourced primary schools in administrative towns (UNESCO, 2020; Usawa Agenda, 2026). This aggregation bias carries direct policy implications: it flattens localized crises, risks misdiagnosing the scope of regional learning deficits, and obstructs educational planners from identifying the exact sub-counties and marginalized populations where targeted, compensatory instructional interventions are most urgently required (UNESCO, 2020).

Fourth, the reviewed assessments generate primarily descriptive snapshots rather than explanatory, causal evidence. While these datasets document stark geographical and sectoral disparities in foundational literacy, they are psychometrically and methodologically unequipped to isolate the relative contributions of household poverty, parental literacy, school-level infrastructure, teacher shortages, or instructional practices (Ngware et al., 2014; Usawa Agenda, 2026). Future empirical inquiries should combine granular, sub-county and school-level assessment data with robust classroom process indicators, establishing how learning conditions diverge across micro-contexts and enabling evidence-based instructional recovery tailored to Kenya's most vulnerable educational margins (Piper, Zuilkowski, et al., 2018; Ruto et al., 2009).

4.7 Implications for Assessment, Teaching, and Policy

The synthesized evidence carries direct implications for monitoring frameworks, pedagogical design, and systemic educational policy, particularly regarding equitable resource distribution in underserved regions.

For assessment practice, the findings affirm the necessity of an integrated, complementary monitoring architecture that pairs institutional examinations with citizen-led foundational diagnostics (KNEC, 2024; Usawa Agenda, 2026). Relying exclusively on institutional measures such as KPSEA presents an incomplete diagnostic picture: because it evaluates enrolled pupils against upper-primary curriculum standards, it is structurally blind to foundational decoding floors and omits out-of-school children (KNEC, 2024; Pritchett & Beatty, 2015). Conversely, while FLANA illuminates population-wide foundational thresholds, its binary early-grade benchmark cannot capture higher-order syntactic and discourse proficiencies (Usawa Agenda, 2024, 2026). Bridging these traditions allows education authorities to identify not only whether learners are mastering upper-primary competencies, but also whether basic literacy access has broken down beneath them.

For teaching practice, the curricular vulnerabilities diagnosed at the national level provide actionable instructional priorities for upper-primary classrooms (KNEC, 2024). Rather than treating low reading performance as a monolithic deficit, pedagogical interventions should address specific sub-strand bottlenecks—most notably contextual inference, conversational discourse, and prepositional mechanics (KNEC, 2024). However, instructional leaders must apply these diagnostic insights judiciously. Because these specific item-facility weaknesses are reported from national candidate pools rather than

disaggregated regional samples, they indicate system-wide curricular friction rather than challenges unique to pastoralist schools (KNEC, 2024). Remedial planning in ASAL classrooms must first confirm whether learners have secured basic decoding fluency before attempting to remediate complex grammatical and inferential competencies (Piper, Destefano, et al., 2018; Pritchett & Beatty, 2015).

For educational policy and planning, the persistence of foundational reading deficits among learners completing primary school underscores an urgent need to re-evaluate early-grade intervention timelines. Discovering that older learners continue to lack lower-primary reading fluency reveals that foundational deficits compound silently throughout the primary cycle, hardening into persistent barriers by Grade 6 (Pritchett & Beatty, 2015; Usawa Agenda, 2026). Policy frameworks must institutionalize targeted remediation within upper-primary grades rather than assuming that foundational recovery occurs spontaneously through standard curriculum exposure (Banerjee et al., 2007). Proven pedagogical approaches in Kenya specifically structured teachers' guides, instructional coaching, and decodable materials demonstrated by PRIMR and Tusome should be adapted for older learners experiencing literacy delays (Piper, Destefano, et al., 2018; Piper, Zuilkowski, et al., 2018). Furthermore, adopting pedagogical frameworks such as Teaching at the Right Level (TaRL), which groups pupils by verified learning level rather than age or grade, provides a practical operational model for accelerated remediation in upper-primary classrooms (Banerjee et al., 2007).

Crucially, reporting limitations and the absence of granular geographical disaggregation severely undercut evidence-informed governance and equity-targeted resource allocation (UNESCO, 2020; Usawa Agenda, 2026). When national reporting systems collapse sub-national data into broad rural categories or omit county- and sub-county-level attainment tables, educational planners are left without empirical mechanisms to gauge local vulnerability (Ngware et al., 2014; Ruto et al., 2009). This data gap obstructs transparent resource distribution: funding formulas, supplementary capitation grants, teacher staffing allocations, and literacy recovery programs cannot be directed effectively when variations between urban administrative hubs and remote pastoralist rangelands are obscured (Ngware et al., 2014; UNESCO, 2020). Addressing literacy disparities in Kenya’s arid margins requires reporting reforms that mandate sub-county and school-type disaggregation, ensuring that educational investments reflect verified local deficits rather than generalized national assumptions (Ruto et al., 2009; UNESCO, 2020)

5.0 Conclusion and Recommendations

5.1 Conclusion

This scoping review mapped the available national evidence on Grade 6 English literacy in Kenya’s Arid and Semi-Arid Land (ASAL) counties between 2021 and 2025 across four primary assessment sources: the 2021 Uwezo Learning Assessment, the 2023 KPSEA National Report, the 2023 FLANA Report, and the 2025 FLANA Report. A central contribution of this review is establishing a clear empirical boundary between what the national evidence base currently demonstrates and what remains unmeasured. Crucially, the review does not compute or claim to establish an aggregate Grade 6 literacy proficiency rate for ASAL counties. Rather, it reveals that neither institutional examinations (KPSEA) nor citizen-led household surveys (FLANA/Uwezo) publish pooled or comprehensive county-by-county Grade 6 English literacy estimates specifically for ASAL counties as a distinct administrative collective.

The synthesis of available evidence demonstrates three principal findings. First, the two assessment traditions measure fundamentally different constructs and serve distinct policy purposes: KPSEA evaluates curriculum mastery across upper-primary Competency-Based Curriculum (CBC) standards among enrolled Grade 6 pupils sitting institutional exams, whereas FLANA and Uwezo evaluate a foundational floor benchmarked to a Grade 3 reading level across children aged 6 to 15 regardless of

schooling status. Second, foundational reading difficulties remain entrenched nationally, with 35 out of 100 Grade 6 learners failing to meet the Grade 3 English benchmark in 2025, a proportion that increases to 39 in 100 in rural areas and provides an upper-bound contextual reference for predominantly rural ASAL settings. Third, institutional disparities are pronounced: while non-proficiency was 24 in 100 in private schools and 37 in 100 in public schools, it rose to 44 in 100 in targeted sub-samples of refugee community schools and pastoralist clusters. However, these comparative benchmarks reflect broader systemic inequities and must not be conflated with direct empirical measures of ASAL attainment.

These identified gaps highlight the urgent need to advance educational assessment policy and monitoring in Kenya. Reliance on broad national and county-level aggregates conceals substantial within-county variation, masking the localized educational crises of remote pastoralist rangelands, informal settlements, and refugee camp schools behind administrative averages. Moving forward, educational monitoring must mandate sub-county and school-type disaggregation to render marginalized populations visible and ensure that resources, capitation grants, and affirmative teacher staffing allocations are guided by verified local learning deficits rather than crude enrollment numbers. Furthermore, integrating institutional curriculum data (KPSEA) with household foundational diagnostics (FLANA) provides a holistic monitoring framework that simultaneously tracks curriculum ceilings and baseline reading floors without introducing survival bias.

Consequently, policy and instructional interventions must adapt to these diagnostic realities. Because more than one-third of Grade 6 pupils nationally and nearly half in vulnerable sub-populations have not acquired lower-primary reading fluency, remediation cannot be restricted to early-grade programs. Educational authorities must institutionalize upper-primary remedial frameworks, such as Teaching at the Right Level (TaRL), to consolidate foundational decoding before learners transition to junior school. Concurrently, national examination bodies and research institutions should establish standardized reporting protocols for ASAL counties, while future research combines granular sub-county performance metrics with classroom-level instructional observations to address the socio-ecological barriers facing Kenya's most marginalized learners.

5.2 Recommendations

To bridge the empirical, methodological, and pedagogical gaps identified in this review, the following recommendations are structured into two distinct, sequential tiers: immediate actions that can be executed within existing institutional and reporting architectures, and longer-term priorities that require systemic policy redesign, structural resource reallocation, and dedicated empirical research. Each recommendation responds directly to a diagnosed evidence gap and identifies the relevant institutional stakeholders.

5.2.1 Immediate Actions Feasible Within Existing Systems

First, to resolve the empirical invisibility of regional learning outcomes, the Kenya National Examinations Council (KNEC) and the Ministry of Education (MoE) should mandate the routine reporting of disaggregated Grade 6 English performance by county, sub-county, and school classification (public, private, and informal community schools). The 2023 KPSEA national report omitted sub-national breakdowns for English, preventing educational planners from evaluating curriculum attainment across Arid and Semi-Arid Land (ASAL) counties or assessing disparities beyond national averages. Executing granular reporting within future KPSEA cycles will provide the Directorate of Quality Assurance and Standards (DQAS) and County Education Boards (CEBs) with the localized empirical evidence necessary to monitor curriculum progression in vulnerable regions.

Second, to address the conceptual confusion between upper-primary curriculum attainment and

foundational literacy acquisition, assessment bodies must introduce dual-tier reporting protocols. Because KPSEA measures Grade 6 curriculum mastery while FLANA measures a Grade 3 foundational reading floor, treating them as interchangeable measures obscures whether poor performance stems from advanced curricular friction or basic decoding deficits. KNEC and civil society initiatives such as Usawa Agenda in consultation with the Kenya Institute of Curriculum Development (KICD) should coordinate their diagnostic reporting: institutional assessments should capture item-level foundational reading failure rates alongside curriculum performance bands, while citizen-led assessments should report both Grade 3 foundational floors and upper-grade curriculum transition competencies.

Third, to prevent the proliferation of false equivalence in policy formulation, educational researchers, monitoring working groups, and development partners must enforce strict construct and invariance boundaries in evidence synthesis. Prior policy briefs and grey literature have frequently pooled percentages from KPSEA and FLANA/Uwezo, overlooking the fundamental differences between school-based census results and household-based probability samples. Education evidence hubs and development partners (such as USAID, FCDO, and UNICEF) must systematically enforce guidelines that treat national curriculum attainment figures and household foundational reading rates as non-equivalent, complementary metrics during SDG 4 tracking and annual sector reviews.

5.2.2 Longer-Term Priorities Requiring Policy and Research Development

Fourth, to counteract the finding that 35 out of 100 Grade 6 learners nationally and up to 44 out of 100 in pastoralist and refugee contexts reach the end of primary schooling without Grade 3 reading fluency, the Ministry of Education and the Teachers Service Commission (TSC) must institutionalize an accelerated foundational literacy recovery framework in upper-primary schools. Because foundational deficits compound across grade levels and do not resolve spontaneously, pedagogical remediation cannot remain confined to the lower-primary cycle. Adapting evidence-grounded models such as Teaching at the Right Level (TaRL) and structured literacy approaches from the Tusome program into Grades 4 through 6 will provide educators with diagnostic tools, decodable texts, and targeted remediation strategies to consolidate decoding and reading comprehension before learners transition to junior school.

Fifth, to address the structural access inequities and extreme age distortion documented across ASAL classrooms where overage enrollment exceeds 40% to 63% in counties such as Turkana, Mandera, and Garissa the National Treasury and the Ministry of Education must re-engineer the primary capitation financing framework. Standard capitation formulas distribute funds on a uniform per-pupil basis, ignoring the severe infrastructural deprivation, high out-of-school rates, and pastoralist mobility that depress schooling in arid margins. The National Treasury and the MoE Directorate of School Audit should transition to an equity-weighted financing model that directs supplementary compensatory grants and boarding subsidies to vulnerable ASAL sub-counties, while the TSC institutes affirmative staffing quotas and enhanced hardship retention incentives to alleviate acute teacher deficits in remote schools.

Finally, to overcome the limitation that current assessment datasets provide descriptive performance snapshots without identifying causal classroom drivers, academic faculties and policy research bodies should conduct granular, mixed-methods research in ASAL learning ecologies. Existing cross-sectional surveys show that severe performance gaps exist between pastoralist schools and national benchmarks, but they cannot isolate the relative impacts of seasonal transhumance, language-of-instruction mismatches, teacher absenteeism, or instructional routines. KNEC's Research Division, the National Council for Nomadic Education in Kenya (NACONEK), and the African Population and Health Research Center (APHRC) should lead longitudinal studies linking micro-level learner literacy trajectories to systematic classroom observations, generating the causal evidence needed to design socio-ecologically responsive educational interventions.

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