

When the curriculum outgrows the classroom: How class size renders competency-based pedagogy unenactable in Kenya's refugee-camp schools

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ABSTRACT

Kenya's competency-based curriculum (CBC) is a pedagogy before it is a syllabus: it requires teachers to group learners, differentiate tasks, and give individualised, formative feedback. This study advances a single argument — that this pedagogy has a material precondition, a class small enough for a teacher to see and respond to each learner, and that in refugee-camp schools this precondition is not met for most teachers. Drawing on the TeachWell study of 927 teachers in 74 schools across Garissa and Turkana Counties, we treat class size not as a measure of hardship but as a test of curricular feasibility. Refugee-camp classes averaged 89.8 learners against 55.6 in host-community schools; more than half (51.6%) of refugee-camp teachers taught above 80 learners and a quarter (25.7%) above 100, against 13.8% and 3.2% respectively of host-community teachers. Teachers' own accounts show CBC's core methods — group work, differentiation, marking for feedback — breaking down at these numbers, with instruction reduced to “those who sit in front”. The threshold is specified analytically rather than estimated empirically: the time budget of a standard lesson sets an upper bound on the individual attention a teacher can distribute, and at the class sizes documented here the per-learner allocation falls far below what differentiation and formative feedback require as the curriculum framework defines them. The evidence is descriptive and cross-sectional; it establishes the scale of the disparity and the mechanisms teachers identify, not a causal effect of class size on measured CBC fidelity. The paper reframes class size as a binding constraint on curriculum reform rather than a welfare concern, and argues that measuring implementation without reference to class size risks misattributing a structural constraint to the teacher. Implications for deployment, staffing norms and CBC monitoring policy are discussed.

Keywords: Class size, teacher workload, competency-based curriculum, refugee education, education quality, teacher deployment, Kenya..

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INTRODUCTION

A curriculum reform is only as real as the classroom conditions that allow it to be taught. When Kenya adopted its competency-based curriculum (CBC) in 2017, it did not merely change what learners study; it changed what teachers must physically do in the room. CBC is, at its core, a pedagogy: it requires teachers to arrange learners into groups, set differentiated tasks, circulate to observe and coach, and give individual formative feedback (KICD, 2017). Each of these actions presupposes something the

policy documents never state — a class small enough for a teacher to see, reach and respond to each learner. This paper is about what happens to the reform when that unstated precondition fails.

The argument advanced here is deliberately narrow. It is not that refugee-camp classrooms are difficult places to teach, which is well established, nor that large classes are unpleasant, which is obvious. It is that the specific pedagogy CBC mandates has a material threshold of class

size below which it can be enacted as specified and above which it cannot — and that in Kenya's refugee-camp schools, class sizes sit far above that threshold for most teachers. The claim is analytic rather than causal. It concerns what the prescribed practices demand of a teacher's time and attention within a lesson period, not whether larger classes produce lower measured learning. Where class sizes exceed that threshold, CBC fidelity is not merely low: the prescribed practices cannot be carried out for all learners as written, because the arithmetic of a single period does not permit group facilitation and individual formative feedback for a hundred and twenty learners. Teacher skill, effort and training remain consequential for what does happen in such a room; what they cannot do is restore the conditions the curriculum assumes. The reform does not fail because teachers fall short of it. It fails because the conditions it presupposes are absent.

This reframing matters because it relocates the problem. Debates about education quality in displacement settings, and the monitoring frameworks that accompany curriculum reform, tend to place the explanatory burden on the teacher — their qualifications, their methods, their commitment. If class size is instead a binding constraint on the curriculum itself, then evaluating CBC implementation without reference to the number of learners per teacher does not just miss context; it risks misattributing a structural constraint to individuals who are, on the evidence of the parent study, highly committed. Class size ceases to be a welfare statistic about teachers and becomes a feasibility statistic about the reform.

Using the TeachWell study of teachers in refugee-camp and host-community schools in Garissa and Turkana Counties, this paper (1) specifies what a class-size threshold for competency-based pedagogy means and how it is derived; (2) quantifies how far refugee-camp class sizes exceed those in host-community schools; (3) uses teachers' own accounts to identify the specific CBC methods that break down as class size rises; and (4) argues that class size should be treated as a precondition of curriculum reform in refugee-hosting areas, with corresponding implications for how CBC implementation is planned, resourced and monitored. Section 5 sets out what the study's descriptive, cross-sectional design can and cannot establish.

CLASS SIZE AS A PEDAGOGICAL THRESHOLD: CONCEPTUAL FRAMING

What competency-based pedagogy requires of teachers

Kenya's Basic Education Curriculum Framework specifies competency-based learning as an approach in which learners work in groups, undertake differentiated and inquiry-oriented tasks, and are assessed continuously

through observation, portfolios and structured formative feedback rather than through terminal examination alone (KICD, 2017). These are not general aspirations but named classroom operations, and each carries a distinct demand on a teacher's time and attention within a lesson. Differentiation requires the teacher to hold more than one task level in a single period and to allocate learners between them (Tomlinson, 2014). Formative assessment requires the teacher to elicit evidence of an individual learner's understanding and to act on it while the learning is still in progress; where feedback is neither individualised nor timely, the practice loses the property that makes it effective (Black and Wiliam, 1998). Group facilitation requires the teacher to circulate, observe and intervene across groups before the period ends.

Kenyan studies of CBC implementation report that these demands have not been matched by the conditions of the classroom. Akala (2021) documents a reform introduced with insufficient attention to teacher preparation and resourcing; Momanyi and Rop (2020) find early-grade teachers reporting low preparedness for competency-based methods; and Amunga, Were and Ashioya (2020) identify large classes and material shortages among the constraints most often named by implementers. The wider literature on learner-centred reform in the global South tells a consistent story: participatory pedagogies are repeatedly adopted in policy and repeatedly not enacted in classrooms, and the explanations most often advanced concern conditions of work rather than teacher disposition (Schweisfurth, 2011).

Class size and the availability of teaching methods

The empirical literature on class size has long debated its effect on measured achievement, generally finding the largest gains from reductions in the early grades and for disadvantaged learners — precisely the population refugee-camp schools serve — while also establishing that reductions alone do not automatically change what teachers do (Hattie, 2005). For the present argument, the more relevant strand concerns not achievement but pedagogy: the evidence that class size determines which teaching methods are practically available. As classes grow, interactive, differentiated and formative approaches become progressively harder to sustain and instruction defaults to whole-class transmission, because the teacher's finite attention must be divided among more learners (Blatchford, Bassett and Brown, 2011; Blatchford, Russell and Brown, 2009). Studies of classroom processes find more individual teacher–pupil contact and higher pupil engagement in smaller classes, with corresponding declines as class size rises (Finn, Pannozzo and Achilles, 2003). This establishes the mechanism on which this paper turns: a curriculum built on differentiation and individual feedback is not merely harder in a large class but, past some point, unenactable as

specified.

Evidence from low-income contexts qualifies this in an important way. O'Sullivan (2006), observing Ugandan primary classes of more than seventy learners, documents lessons that were nonetheless effective, and argues that where class-size reduction is not fiscally available, adapted large-class strategies deserve serious attention. This is a necessary corrective to any claim that nothing can be taught in a large class, and this paper makes no such claim. It is, however, compatible with the argument advanced here. The strategies O'Sullivan identifies — choral response, peer marking, group monitors, sampling of learners' work — achieve learning by substituting for individualised teacher attention rather than by supplying it. They are adaptations to the absence of the condition CBC assumes, not evidence that the condition is unnecessary.

Specifying the threshold

The threshold invoked in this paper is analytic rather than empirically estimated, and task-specific rather than universal. It is derived from the time budget of a lesson. A standard primary lesson period under the Kenyan CBC timetable is 35 minutes. If a teacher's individual attention were divided perfectly evenly, and if no time were spent on transitions, whole-class instruction, register-taking or classroom management, a class of 40 would yield approximately 53 seconds of individual contact per learner, a class of 80 approximately 26 seconds, and a class of 120 approximately 17 seconds. These are upper bounds, and generous ones: observational research consistently shows that a substantial share of lesson time is not available for individual contact at all. Against these bounds, the operations CBC prescribes carry irreducible time costs. Circulating between groups to observe and intervene, checking an individual learner's work against a differentiated task, or giving oral formative feedback that a learner can act on cannot be accomplished in tens of seconds.

The threshold is therefore not a single number applying to every classroom, subject and grade. It is the point, specific to a given practice and lesson length, at which the per-learner time available falls below the time that practice requires. What is claimed is that for the core CBC operations at typical Kenyan lesson lengths, that point lies well below the class sizes documented in this study, and that the gap is wide enough that plausible measurement error in either direction would not alter the conclusion. What is not claimed is that a precise cut-point has been estimated from data, that learning ceases above it, or that no teaching of value occurs in large classes.

Two clarifications of terminology follow. First, "unenactable" is used throughout in a specific sense: the practices as defined in the curriculum framework cannot be performed for all learners within the lesson period. It does not mean that teachers do nothing, or that they do

not approximate the practices for some learners — the qualitative evidence below shows precisely that they do, for "those who sit in front". Second, the claim concerns enactment, not outcomes. Whether reduced enactment translates into lower learning is a separate empirical question that the present design cannot answer.

Workload and teaching in displacement settings

Teacher workload compounds the effect, as heavy lesson loads and multi-grade or out-of-subject assignments erode the preparation time that activity-based methods demand. In crisis and displacement settings these pressures are intensified by teacher shortages, uneven deployment and funding volatility, and teachers routinely carry responsibilities far beyond those assumed by curriculum designers (Falk et al., 2019; Mendenhall, 2018; Mendenhall, Gomez and Varni, 2019). Refugee teachers in Kenya face the further constraints of exclusion from national registration, incentive-based remuneration and interrupted certification pathways, which recognition-of-prior-learning provisions have only begun to address (Government of Kenya, 2024; Mendenhall and Falk, 2023; UNHCR, 2021). Where a national reform presupposes conditions that do not obtain, implementation fidelity is undermined at source — not by teachers, but by arithmetic.

METHODOLOGY

Design and setting

This paper draws on the TeachWell study, a cross-sectional convergent mixed-methods study of teacher well-being in refugee-camp and host-community schools in Garissa and Turkana Counties — the counties hosting the Dadaab and Kakuma/Kalobeyei settlements. The design is convergent in that the quantitative and qualitative strands were collected concurrently, analysed independently, and brought together at the interpretation stage. Fieldwork was conducted between September and October 2025. This paper uses the teacher survey together with in-depth interviews (IDIs) and focus group discussions (FGDs) with teachers and key informant interviews (KIIs) with heads of institutions and policy actors.

Defining school type

Throughout this paper, *host-community* schools are schools located in host communities and registered as public schools within the national system, staffed principally by teachers registered with the Teachers Service Commission (TSC). *Refugee-camp* schools are

schools located in the Dadaab and Kakuma/Kalobeyei settlements, registered as refugee schools rather than as public schools, and staffed principally by teachers on partner- or community-funded incentive contracts. The distinction is one of location and registration category; it is not a distinction between public and private ownership, and camp schools are operated by government, UNHCR and NGO partners rather than by private proprietors.

School type is closely, though not perfectly, aligned with the displacement status of teachers: in the parent study 90.5% of teachers in refugee-camp schools reported having been displaced, against 2.7% in host-community schools. It is similarly aligned with employment and qualification conditions: none of the teachers who were themselves refugees held TSC registration, against 95.0% of Kenyan-citizen teachers; over 92% of refugee-camp school teachers were on one-year contracts; and 31.6% of refugee-camp school teachers held a teaching qualification, against 91% of host-community school teachers. Because these attributes are structurally bundled, comparisons by school type in this paper should be read as comparisons between two institutional regimes rather than as estimates of the independent effect of any single attribute.

Quantitative sampling

The survey used a stratified multistage cluster design. The sampling frame, drawn from 2025 programme baseline records, comprised 5,786 teachers in 692 schools across the two counties, divided into four strata: Garissa host community (1,287 teachers in 217 schools), Dadaab refugee camps (509 teachers in 22 schools), Turkana host community (3,225 teachers in 426 schools), and Kakuma/Kalobeyei refugee camps (765 teachers in 27 schools). Within each stratum, schools were selected as primary sampling units with probability proportional to size (PPS), the number of schools per stratum being set by the stratum teacher target divided by average school size; 74 schools were selected in total. Within selected schools, teachers were sampled proportional to school size, with a disproportionate allocation to refugee-serving schools (600 of 1,000 targeted interviews) to secure adequate representation of refugee-camp female teachers.

Sample size calculations targeted a 95% confidence level and a $\pm 5\%$ margin of error; after finite population correction, the minimum was 360 teachers, and the target was raised to 1,000 to permit subgroup analysis across four groups (refugee-camp men, refugee-camp women, host-community men, host-community women), giving subgroup margins of approximately $\pm 6\text{--}7$ percentage points. Of the 1,000 teachers targeted, 927 completed the survey (339 in host-community schools; 588 in refugee-camp schools). Non-response was principally due to teacher absence, with repeat visits attempted where feasible; where schools were inaccessible for security or

logistical reasons, replacements were drawn from the same stratum by PPS. Data were weighted for unequal selection probabilities, the multistage design and non-response, with cluster-robust standard errors applied at school level.

Instruments

The survey instrument was a structured questionnaire covering teacher demographics, employment conditions, workload and class size, school climate, sources of stress and well-being. Items were drawn from established instruments used in research on teacher stress and well-being in crisis-affected settings, and content validity was established by aligning items with those constructs. The instrument was piloted before fieldwork for clarity, comprehension and cultural appropriateness and refined accordingly. It was programmed in REDCap and administered on password-protected tablets with built-in validation checks. Enumerators were trained in standardised administration protocols to reduce interviewer variance, and inter-rater reliability was assessed on a random subsample of responses requiring enumerator judgement. Internal consistency of composite scales was assessed using Cronbach's alpha.

The measures reported in this paper are directly reported single-item quantities: the number of lessons taught per week, the number of learners in the class the teacher teaches, and the number of grades taught. Class size was reported by the teacher and was not verified against enrolment registers. Qualitative data were collected using semi-structured guides developed separately for teachers, heads of institution and policy actors, covering working conditions, workload and class size, instructional practice, school climate and support.

Qualitative sampling

The qualitative strand used purposive sampling across twelve schools — three each in Dadaab, Garissa host community, Kakuma/Kalobeyei and Turkana host community. The Lutheran World Federation served as the entry point to county directors of education, who validated school selection and facilitated access; county directors introduced policy actors and heads of institutions, who in turn engaged teachers. Participants were recruited through school meetings at which the study was explained and voluntary participation secured through informed consent.

Sample size was guided by data saturation. The achieved sample comprised 105 participants: 18 teachers in in-depth interviews (3 in Dadaab, 2 in Kakuma, 6 in Garissa host community, 7 in Turkana host community); 66 teachers across 11 focus group discussions of six participants each, conducted separately for women and

men (4 FGDs in Dadaab, 2 in Kakuma, 2 in Garissa host community, 3 in Turkana host community); 12 heads of institution in key informant interviews (3 in each of the four locations); and 9 policy actors drawn from government education departments, UN agencies and NGOs (2 in Dadaab, 3 in Kakuma, 2 in Garissa host community, 2 in Turkana host community).

Analysis and integration

Quantitative measures were summarised by school type using means, standard deviations and category distributions. The analysis reported in this paper is descriptive: no model is fitted and no causal estimate is offered.

Qualitative audio data were transcribed and read for familiarisation before coding. A codebook was developed containing code labels, definitions, rules for use and an illustrative excerpt for each code, and was applied by multiple coders to maximise consistency. Codes were developed both for patterns anticipated from the literature and for unanticipated or discrepant material, and were then aggregated into themes. Trustworthiness was supported through prolonged engagement in the field, triangulation across participant categories and methods, member checking of emerging interpretations with selected participants, and thick description.

Integration followed a convergent logic: the quantitative strand establishes the distribution of class sizes across the two school types, and the qualitative strand identifies the mechanisms by which teachers report that distribution affecting instruction. The strands were analysed independently and compared at the interpretation stage; where they diverge, the divergence is reported rather than reconciled.

Quotations were selected on three criteria: the excerpt speaks directly to class size, workload or instructional practice; the account it expresses recurred across more than one participant or participant category, unless identified in the text as a single-source account; and it states the point more economically than a paraphrase would. Excerpts are attributed by data collection method, participant type and location. They are offered as illustrations of themes present across the coded corpus, not as a representative sample of participants, and the qualitative design does not support prevalence estimation.

Ethical considerations

The parent study obtained ethical approval from the institutional review boards of the African Population and Health Research Center, the International Rescue Committee and Save the Children International, followed by clearance from Daystar University. Research authorisation was granted by the National Commission for

Science, Technology and Innovation (NACOSTI, with additional permission from the Ministry of Education and the County Directors of Education for Garissa and Turkana. Written informed consent was obtained from all participants, who were briefed on the study's purpose, its voluntary nature, their right to withdraw, and confidentiality measures including the use of pseudonyms. Participation was voluntary, participants received modest reimbursement for participation costs, and all data were anonymised and stored on password-protected systems accessible only to authorised members of the research team.

RESULTS

How far refugee-camp classes exceed the threshold

Teaching conditions differed sharply by school type (Table 1). Refugee-camp classes averaged 89.8 learners, against 55.6 in host-community schools. The distribution is more telling than the means: almost a third (32.7%) of host-community teachers taught classes of 40 or fewer, compared with 7.3% of refugee-camp teachers. At the other extreme, more than half (51.6%) of refugee-camp teachers taught classes above 80 learners and a quarter (25.7%) taught classes exceeding 100, compared with 13.8 and 3.2% respectively of host-community teachers. One teacher described a school of 1,700 pupils served by “almost 21 teachers”, observing that “the workload is very, very high” (IDI, male teacher, Dadaab).

The two distributions overlap rather than separating categorically: 48.5% of refugee-camp teachers taught 80 learners or fewer, and 13.8% of host-community teachers taught more than 80. What distinguishes the two settings is the share of teachers placed beyond the feasibility range set out in earlier, and the size of the tail above 100 learners, which is eight times larger in camp schools.

Load, multi-grade teaching and subject misallocation

Although host-community teachers reported marginally more lessons per week (28.1 vs 24.8), refugee-camp teachers faced heavier composite demands once class size and assignment are considered. Over half (51.0%) taught three or more grades, and teachers frequently served as the sole subject specialist across grades: “I’m the only maths teacher... Grade 7, 8, and 9... a lot of workload” (FGD, female teachers, Kakuma). Assignment outside one’s training was common under CBC — “you find yourself teaching something you don’t even know” (FGD, female teachers, Dadaab) — raising workload while undermining confidence and instructional quality. Workload was also distributed unevenly within schools, with one teacher noting a colleague with “30 lessons” while a senior held “none” (FGD, female teachers, Garissa).

The composite demand is therefore not captured by lesson count alone. A host-community teacher with 28 lessons and 56 learners and a refugee-camp teacher with 25

lessons and 90 learners carry comparable timetables but markedly different marking, grouping and feedback loads.

Table 1. Teaching conditions by school type.

Characteristic	Host-community	Refugee-camp	Total
Sample (N)	339	588	927
Mean lessons/week (SD)	28.1 (7.3)	24.8 (6.0)	26.0 (6.7)
Mean learners/class (SD)	55.6 (26.5)	89.8 (40.8)	77.3 (39.8)
≤ 40 pupils	32.7%	7.3%	16.6%
41–80 pupils	53.4%	41.2%	45.6%
81–100 pupils	10.6%	25.9%	20.3%
> 100 pupils	3.2%	25.7%	17.5%
Teaching 3+ grades	64.6%	51.0%	56.0%

Note: Percentages are within school type and are computed on the achieved sample (N = 927; 339 host-community, 588 refugee-camp). Class-size bands and grades-taught figures are drawn from the teacher survey. “Host-community” denotes public schools in host communities; “refugee-camp” denotes schools registered as refugee schools in the Dadaab and Kakuma/Kalobeyi settlements. Source: TeachWell study; authors’ analysis.

The effect on competency-based pedagogy

The clearest consequence reported by teachers was on the enactment of CBC itself, and their accounts map onto the specific operations set out earlier. Grouping and facilitation were described as impractical at scale: “you find a teacher with a class of 120... this requires learners to be in groups... it is very hard... you will only be able to deliver [to] those who sit in front” (IDI, male teacher, Kakuma). The final clause is the substantive finding: instruction does not stop, it narrows to the reachable subset, which is the opposite of the differentiation the framework prescribes.

Marking and feedback, central to CBC’s formative logic, were reported as unmanageable, with teachers marking for “up to 120 learners” daily and finishing “very tired” (FGD, female teachers, Turkana). Where assessment materials were unavailable, formative assessment lapsed altogether for extended periods: “we would stay for the whole term without assessing learners” (IDI, male teacher, Turkana). Differentiated task-setting was constrained by materials as well as numbers, at ratios that make individual task allocation impossible: “you have 150 or 200 learners... but... only one textbook” (FGD, male teachers, Kakuma), with one teacher summarising that “resources are scarce... [the curriculum] needs a lot of resources” (FGD, male teachers, Dadaab).

Physical circulation — the precondition for observing and intervening during group work — was itself obstructed. A head of institution described classrooms where “you don’t even have a space to stand on” (KII, HOI, Kakuma), and teachers described movement between desks as “you just squeeze yourself... you will find yourself stepping on some of them” (FGD, male teachers, Kakuma). These accounts recurred across both counties and across teacher, head-of-institution and policy-actor interviews; the

theme of class size constraining instructional method was among the most consistently expressed in the coded corpus, and no participant described participatory methods as fully workable at the class sizes they reported.

The survey data converge with these accounts only partially, and the divergence is worth stating. Large classes were named as a source of occupational stress by roughly a third of teachers in both school types, alongside workload and unclear syllabus guidance — that is, at similar rates in settings whose mean class sizes differ by 34 learners. Two readings are available. Reported stress may be calibrated against local norms and expectations rather than against absolute numbers, so that a class of 55 is experienced as burdensome in a setting where 40 is the reference point and a class of 90 is experienced as normal where it is ubiquitous. Alternatively, self-reported stress may simply be a poor proxy for objective instructional load. Either reading supports the same methodological point: the feasibility of a pedagogy is not well measured by asking teachers how stressed they feel, which is a further reason to treat class size as a structural rather than an experiential variable.

Funding volatility as an amplifier

Class sizes were further inflated by funding-driven mergers and staff losses. School leaders described merging classes to “more than 100 plus learners” (KII, HOI, Kakuma), and teachers absorbing departed colleagues’ lessons: “if four teachers resign... you are taking their lessons adding to yours” (FGD, male teachers, Kakuma). Layoffs — “we laid off almost 200 teachers” (KII, policy actor, Dadaab) — simultaneously raised loads and job insecurity, leaving remaining staff “not mentally stable

because of job security" (KII, HOI, Kakuma).

Distinguishing class size from co-occurring constraints

Class size does not operate alone in these schools. The material above identifies at least four co-occurring constraints on CBC enactment: multi-grade and out-of-field assignment, scarcity of textbooks and learning materials, funding-driven class mergers and staff losses, and learners' limited proficiency in the languages of instruction. Each independently reduces the feasibility of the practices the framework prescribes, and this study's design does not permit their contributions to be separated. Two observations nonetheless bear on the particular role of class size. First, the constraint it imposes is arithmetic rather than contingent: unlike a textbook shortage or an out-of-field assignment, it cannot be relieved by better resourcing or better training of the same teacher, only by changing the ratio. Second, several of the co-occurring constraints are partly downstream of class size itself — the textbook-to-learner ratio worsens mechanically as classes grow, and merged classes are the mechanism through which staff loss is converted into class size.

DISCUSSION

The results describe a teaching environment in refugee-camp schools that sits far outside the conditions the curriculum teachers are required to deliver presupposes. The disparity is not marginal: a quarter of refugee-camp teachers face classes above 100 learners, a scale at which, on the time-budget argument set out earlier, the individualised, activity-based methods CBC prescribes cannot be carried out for all learners within a period. This reframes a familiar problem. Where education-quality debates often locate the deficit in teachers — their qualifications, their methods, their effort — these findings direct attention to the conditions of teaching. A well-trained teacher and a poorly trained one face the same time budget before a class of 120, even though what each does with it will differ.

Alternative interpretations and the limits of inference

Three alternative readings of these results deserve statement. The first is that the association between school type and reported instructional breakdown reflects not class size but the bundle of attributes that accompanies it. Refugee-camp teachers are far less likely to hold a teaching qualification (31.6% against 91%), are employed on short-term incentive contracts, and work in schools with acute material shortages. Any of these could produce the reported collapse of participatory methods independently

of the number of learners. The design does not allow them to be separated, and no claim is made that class size is the largest of them. The claim is narrower: that class size imposes a constraint of a different kind, which the others do not remove and which additional training or resourcing of the same teacher cannot relieve.

The second is that large classes are teachable and that the appropriate response is adapted practice rather than reduced ratios. O'Sullivan's (2006) Ugandan observations support the first half of this proposition directly. The response offered here is the one set out earlier: large-class strategies substitute for individual attention rather than restoring it, and therefore alter what CBC is in practice rather than delivering it as specified. That may be a defensible policy choice under fiscal constraint, but it should be made explicitly, and monitored as what it is, rather than arrived at by default while fidelity is still assessed against the original framework.

The third is that teachers' accounts overstate the constraint. Reports of workload come from people with a legitimate interest in having workload recognised, and were collected within a study framed around well-being, which may have primed attention to strain. Two features of the data limit this concern without dissolving it: the accounts are specific about mechanism rather than general about hardship, and the same teachers reported exceptionally high intrinsic motivation and professional commitment in the parent study, which is not the profile of a sample uniformly disposed to complaint. Class size nonetheless remains self-reported and unverified against enrolment registers.

Taken together, the evidence presented here supports three conclusions: that class sizes in refugee-camp schools in these two counties are far above host-community levels and above the range in which the prescribed practices are feasible as the framework defines them; that teachers identify specific CBC operations — grouping, differentiation, circulation and formative marking — as the point of breakdown; and that funding volatility operates to inflate class size further. It does not support claims that class size causes measured differences in learning under CBC, that a particular numerical cut-point has been empirically identified in these data, or that reducing class size alone would produce CBC fidelity.

Implications

Two implications follow, subject to the qualifications above. First, CBC implementation in refugee-hosting areas cannot be evaluated, or fairly demanded, without reference to class size; fidelity measures that ignore the denominator of learners per teacher will attribute to teacher performance a constraint that is structural in origin. This is an argument about the design of monitoring instruments, and it follows directly from the evidence presented. Second, class-size reduction in these settings

is not a general aspiration but a precondition for a reform the state has already committed to, and to which the Shirika Plan's integration commitments give added weight (Government of Kenya, 2025). Targeted teacher deployment, enforceable staffing norms for refugee-hosting sub-counties, and protection of teaching posts from funding volatility address the constraint this study documents. Their effectiveness, however, is not established by these data: this study identifies the condition such measures would target, not their impact, and each would require evaluation on its own terms.

Limitations

The analysis is descriptive and cross-sectional; it documents disparity and its reported consequences rather than estimating causal effects on learning outcomes. No direct measure of CBC enactment was collected, so the breakdown of prescribed practices is evidenced through teachers' accounts rather than through classroom observation or a fidelity instrument; systematic observation is the appropriate next step and would test the argument directly. Class size and load are self-reported and were not verified against enrolment registers, and self-reports of class size in crowded schools may be imprecise in either direction. School type bundles location, registration status, teacher displacement status, qualification and contract conditions, and their contributions cannot be separated in these data. The threshold argument is analytic and rests on assumptions about lesson length and about the time costs of specific practices that were not measured in these classrooms. The qualitative strand, though drawn from 105 participants across four locations, is purposive and was not designed to support prevalence estimation. The two-county focus, appropriate to the parent study's refugee-education aims, may limit generalisation to other contexts. Future work linking observed class-size distributions to measured CBC enactment, and in turn to learning gains, would strengthen the causal claim that this paper deliberately stops short of making.

CONCLUSION

In refugee-camp schools in northern Kenya, class size and workload are not background conditions but binding constraints on the curriculum teachers are mandated to deliver. With classes averaging ninety learners and a quarter exceeding one hundred, the participatory pedagogy at the heart of Kenya's competency-based reform cannot be enacted as the framework specifies, and the quality gap between refugee and host-community schooling is reproduced structurally rather than through any deficit of teacher effort. The evidence here is descriptive, and the threshold argument is analytic rather than estimated; what both point to is the same practical conclusion. Making CBC real for refugee learners requires

acting on the conditions of teaching — deployment, staffing norms and the protection of posts — before, or at least alongside, the expectations placed on teachers themselves.

CONFLICT OF INTEREST

The authors declare that they have no conflict of interest.

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