


From High-Stakes to Low

HOW KENYA'S TEST REFORMS AFFECT TEACHING PRACTICES

 Amani Karisa, Moses Ngware, Francis Kiroro, Mulusew Jebena, Obiageri Bridget Azubuike, and Jack Rossiter

Abstract

Exams influence how teachers teach, but most of our understanding comes from cross-sectional studies in OECD countries, particularly the USA. These dynamics might not apply elsewhere. We surveyed 321 Kenyan teachers during their transition from high- to low-stakes assessments in primary schools—the first major assessment reform in nearly 40 years. Our findings suggest that while the stakes for students have fallen, teachers still perceive these ‘low-stakes’ assessments as impacting their appraisals, career progression, and school reputation. Despite this, respondents generally view assessments as positive motivators and useful tools, and classroom practices show many similarities regardless of assessment type. However, the transition may be altering the pathways through which assessments influence teaching. Regular classroom assessments are becoming more central and are already shaping instructional strategies. Additionally, local tests, which fall outside the main reform, exert significant influence on how teachers approach their work.

From High-Stakes to Low: How Kenya's Test Reforms Affect Teaching Practices

Amani Karisa

The African Population and Health Research Center

Moses Ngware

The African Population and Health Research Center

Francis Kiroro

The African Population and Health Research Center

Mulusew Jebena

The African Population and Health Research Center

Obiageri Bridget Azubuike

Independent

Jack Rossiter

Center for Global Development

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CENTER FOR GLOBAL DEVELOPMENT

2055 L Street, NW Fifth Floor
Washington, DC 20036

1 Abbey Gardens
Great College Street
London
SW1P 3SE

www.cgdev.org

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1. Introduction

In 2022, Kenya's Teachers Service Commission required some primary school principals to “show cause why disciplinary action should not be taken against you for poor performance in the last three years”.¹ While teachers expect accountability for examination performance, the high-stakes linked to these mechanisms can distort the ways that they work. Kenya's attempt to shift away from the Kenya Certificate of Primary Education (KCPE) provides a rare opportunity to find out how classroom practices are changing as a high-stakes exam is removed.

Exams affect how teachers teach. For some observers they incentivise effort and provide clear signals about what to cover. For others, they divert attention towards selected content and certain students and away from the methods that can deliver subject mastery. But much of the evidence linking assessments to teacher practices comes from richer nations, particularly the USA. These connections may not work in the same ways elsewhere.

If we are going to reach the Sustainable Development Goals (SDGs) of equitable quality education for all, then we need a better understanding of how and why assessments—from exams that may be used for selecting students for the next stage, to weekly school-based evaluations that are used to monitor student and/or teacher performance—influence classroom instructional practices in low- and middle-income countries. This includes improving our awareness of how assessments influence the activities and methods that teachers use, the content they prioritise, and the students they target their instruction to.

This working paper contributes to this agenda by generating evidence that improves our understanding of the influence of exams and other forms of assessment on teachers' classroom instructional practices. We review the empirical literature to develop hypotheses of how instructional practices might change when an assessment regime shifts from higher- to lower-stakes. We then use these hypotheses to survey Kenyan teachers to understand their perceptions of change.

It adds to recent work on where and [when exams are held](#) in Africa and South Asia, and what results are used for; on the [role that exams play in reinforcing income inequalities](#); on the way that school exams may be [slowing progress towards a universal basic education](#); and on the [economic consequences of unreliable exams](#).

The rest of this paper proceeds as follows: Section 2 provides a background of high-stakes assessment in Kenya and presents the current changes that are the basis for our investigation; Section 3 describes the methodology used throughout this work; Section 4 summarises the evidence on the links between high-stakes assessments and classroom instructional practices, particularly as it relates to low- and middle-income countries; section 5 explores how 321 Kenyan primary

1 <https://arena.co.ke/tsc-slams-school-heads-with-show-cause-over-poor-kcpe-kcse-results/>

school teachers perceive assessment-related changes in the classroom, in the year that the high-stakes primary leaving exam is abolished; section 6 concludes this paper with policy and practice implications for Kenya's assessment reform and a few suggestions for future research.

2. Background: Kenya's assessment regime is changing

Kenya's primary school assessment regime is changing for the first time since 1985, along with an overall shift to a so-called Competency Based Curriculum (CBC). The new framework seeks a transition away from once-off high-stakes exams which have been a hallmark of Kenyan children's educational experience for several decades (Wasanga and Somerset, 2013).

Events of this type are rare. Studies of how exams influence teaching and learning are often looking at heterogeneity across policies i.e. what is practice like in Country A with a primary leaving exam, versus Country B with no exam? In Kenya, we have a chance to look at changes in instructional practice as the country changes its policies, allowing us to make more credible claims about how exams influence practice.

During the colonial period, the British introduced an education system in Kenya that was heavily based on examinations for certification and placement. Only those who performed well in exams—for instance, the Kenya African Primary Education (KAPE) and the East African Certificate of Education (EACE)—were allowed to progress to the next levels of education. This system was designed to produce a small elite who would serve as administrators and civil servants in the colonial government. After Kenya gained independence in 1963, the education system remained largely unchanged, with a continued emphasis on examinations (Imana, 2020)—such as the Kenya Certificate of Primary Education (KCPE) and its sister the Kenya Certificate of Secondary Education.

The KCPE was always a high-stakes assessment, with direct consequences for learners based on their performance. It's been argued that such assessments can promote accountability and competition among students and schools, leading to improved academic achievement (Hanushek & Raymond, 2005; Braun, 2004). However, Kenya's Presidential Working Party on Education Reform (PWPER) sees it differently. It argues that the KCPE—including how it is used—encourages “unhealthy competition for limited slots in the subsequent levels of education, with learners who fail to obtain quality grades in the examinations often dropping out of school, leading to a high wastage of a youthful population” (Government of Kenya, 2023). The Working Party also highlights “examination malpractices and integrity issues”, which have been shown to have negative consequences in similar high-stakes exam systems (Rossiter et al., 2023).

In recent years, there have been several efforts to shift towards students' holistic development, including developing students' critical thinking skills and practical knowledge as well as academic skills (Rono & Bwamoni, 2020; Amukune, 2021; Kretzer & Oluoch-Suleh, 2022). Despite these attempts, the legacy of the British education system remains, with a continued emphasis on one-off examinations and academic achievement (Imana, 2020; Kavua, 2020), including the use of regular school, sub-county, county or zonal level tests (which we will refer to as "local tests"), to monitor and compare progress at different levels of administration.

TABLE 1. The three assessments of interest for this study

	Kenya Certificate of Primary Education (KCPE)	Kenya Primary School Education Assessment (KPSEA)	School, Sub-County, County or Zonal Tests (Local Tests)
First year	1985	2022	Can occur in any standard and will usually be paper and pencil based. Will not be standardised beyond the level of administration, and are not used at all levels, or in all schools, so have no common nationwide application. Preparations for national-based assessment
Last year	2023	--	
Standard (grade)	8	6 (3 & 4 & 5)	
Format	100% final exam	40% final exam, 60% classroom assessment from Grades 3–6	
Uses	Select students into secondary schools categories; Certification; System-level accountability	Students remain in the same schools; Certification; System level accountability	

Kenya's Competency Based Curriculum

Efforts to reform the education system reached a turning point in 2017 when Kenya rolled out its 'Competency Based Curriculum' (CBC). This followed evaluations of the existing system (KICD, 2009; KICD, 2016) which argued that the focus on academic achievement and rote learning denied learners opportunities to develop critical skills and values necessary for character formation (Government of Kenya, 2023). With the CBC came curricular changes that emphasised the development of 21st Century skills, values for character formation and psychosocial skills, along with an overhaul of the examination process.

Assessment under CBC

The new Competency Based Assessment Framework (CBAF) has de-emphasised high-stakes examinations. Most clearly, results are not used for placement in the next schooling level (Junior Secondary School). Instead, data from the KPSEA will be used in assessing progress of the CBC, including identifying specific areas where teachers struggle in curriculum implementation.

The new framework seeks to encourage assessment as part of the learning process and combines both summative and formative activities. The approach is designed to "address the challenges of

high stakes in examinations”. The goal is for new assessments to be used for purposes of monitoring learners’ progress and providing feedback to stakeholders (Government of Kenya, 2023). Yet while the new framework does away with the KCPE, its arrival does not necessarily impact other pre-existing assessments, including local tests.

The framework does introduce several new assessments spread over four school years. Standardised school-based formative assessments occur in Grades 3, 4, 5, and 6, with content obtained from the Kenya National Examinations Council (KNEC) for administration by teachers. A summative assessment follows at the end of Grade 6—the Kenya Primary School Education Assessment (KPSEA). The first KPSEA was administered in November 2022 and results were released in January 2023.

Despite the framework shift, however, KPSEA results were released in much the same way as they had been for the KCPE, starting with a high-level event presided over by the Minister for Education. Just like the KCPE, candidates and schools were then ranked, with wide [media](#) coverage.

By 2023, the first CBC cohort had reached its seventh grade, having completed the new primary school curriculum and linked assessments. It is expected that the CBC reform, including the new types of assessments and their use, will impact teachers’ classroom instructional practices. Whether and how this is happening is the focus of this study.

3. Methodology

Establishing strong hypotheses around how assessment changes will translate into classroom practices is challenging because there is a scarcity of evidence from Kenya, or more widely, on this topic. The broad objective of this study, therefore, is to generate evidence that improves our understanding of the influence of assessments on teachers’ classroom instructional practices. The following research questions were addressed:

1. How do assessments influence classroom instructional practices in primary schools?
2. Why do assessments influence (if at all they do) classroom instructional practices in primary schools?
3. How are teachers changing their classroom practices as new assessments are introduced and existing assessments phased out in Kenya?

As we began this research there was great uncertainty around whether Kenya would maintain its transition to the CBC approach, with the incoming government having pledged to re-evaluate the approach. Given this uncertainty we took a cautious approach, opting to generate data on teachers’ perceptions of how assessments of different types (pre-existing and new) influence their practices. We anticipated this to be of value whether the CBC remained, or was later reversed.

Our work proceeded in two stages, starting with a review of available evidence to guide our hypotheses about what is likely to change. Next, we surveyed teachers in Kenya's public primary schools to understand their perspectives of the transition.

A review of the evidence

A scoping review was undertaken to identify research demonstrating the influence of high-stakes assessments on classroom instructional practices in Sub-Saharan Africa. The literature search encompassed nine databases, including Academic Search Premier, Africa-Wide Information, EconLit, ERIC, MasterFILE Premier, APA PsycArticles, APA PsycTests, SocINDEX with Full Text, and Teacher Reference Center. The search terms “High-stakes test” and “Africa” were used. Additionally, supplementary searches were conducted on Google. To be included, a publication had to centre on assessments and their impact on teaching behaviour. Moreover, the publication had to be relevant to a sub-Saharan African context, or if it covered other regions, it should incorporate a sub-Saharan African context.

We prioritised causal evidence—i.e. carefully identified studies in which a reform has changed the assessment regime, with potential impacts on instructional practice. However, we are aware that there is little evidence of such changes, so we also include survey evidence gathering teacher perceptions on how assessment influences their choices and practices in the classroom. Exclusion criteria applied to literature that focused on assessments influencing students' behaviour or performance only, as well as those that were not available in English. A limited number of studies (8) met the above criteria. As a result, we broadened our search to include the best evidence from outside the region, where we felt that the findings have relevance to how exams influence classroom practices.

A survey of primary school teachers

Our fieldwork was not designed to be representative of any specific population but to be indicative of primary school teacher perceptions and beliefs about the way tests influence their instructional practice. We surveyed 321 teachers from 61 primary schools in three of Kenya's counties: Embu, Kajiado and Nairobi. These counties were selected to provide some variation in school context and respondent background.

- Embu county is located in the south-eastern slopes of Mount Kenya. It is predominantly rural, its economy based on subsistence and commercial agriculture.
- Kajiado county borders Nairobi and to its south it borders the Tanzanian regions of Arusha and Kilimanjaro. It is mostly arid and semi-arid and includes a mix of rural communities, semi-urban and urban centres. Its economy is driven by livestock keeping, tourism, and commercial activities especially in areas neighbouring Nairobi.

- Nairobi is the capital city of Kenya, located in the South-central part of the country. It is the largest city in Kenya with a diverse population, and its residents are a mix of different ethnic groups and cultures. Over two-thirds of its population reside in low-income urban areas.

In each county, we sampled public schools which offer classes in Grades 5, 6 and 8. The study targeted a sample of at least 50 schools, which comprised 20 schools in Nairobi, and 15 schools each in Embu and Kajiado counties. The school sample allocation was done by taking into consideration their previous national exam's (KCPE, 2022) performance categories. We obtained lists of schools from each county with the 2022 KCPE performance from the MoE county officials which we utilised to categorise the schools, within-county, as low performing (bottom third), medium performing, and high performing (top third) and sought a mixture of schools from each performance band, in each county. In Nairobi half of the sample of public schools served urban informal settlements, and half served the areas outside these settlements.

We surveyed teachers in multiple grades, who were working under different assessment regimes. 2023 was the second—and final—year in which students in the same schools were preparing for the KCPE and the KPSEA at the same time. This gave us the opportunity to survey teachers at the same time, in the same schools, about different assessments. We included teachers in Grade 8 who were instructing the last cohort to sit the KCPE; teachers in Grade 6 who were instructing the second cohort to sit the KPSEA; and teachers in Grade 5 who taught the third cohort of KPSEA candidates, who were to complete classroom-based assessment in Grade 5, which contributes to their KPSEA result in 2024. Surveys were conducted in July and August 2023, in the last week of second term and the first week of third term in the academic year.

At each school we surveyed teachers of mathematics and English, selected because these subjects feature in each assessment type. They are also currently prioritised in the call to focus on foundational skills following COVID-19-related disruptions (Herbert et al., 2021). Sample summary statistics of the respondents are shown in Table 2.

Our survey instrument included modules on respondent background; on how assessment results are used; on how student performance in given assessments influences teachers as professionals and their classroom instructional practices; on which assessments have the greatest influence on what, how and who teachers teach; on the use of assessment-related activities and materials in classrooms; and on teacher views of how attitudes and behaviours have changed on introduction of the KPSEA, and will change after the KCPE ends in 2023. Items for the instrument were adapted from existing tools, including from teacher modules in the Progress in International Reading Literacy Study (PIRLS) and the Teaching and Learning International Survey (TALIS), or were developed specifically for this study.

TABLE 2. Summary statistics of the teacher and school sample

Teachers' Characteristics		Grade 5 (N = 85)	Grade 6 (N = 88)	Grade 8 (N = 148)	Total (N = 321)
Age	Mean (SD)	42.5 (10.0)	44.3 (9.6)	44.1 (9.7)	43.8 (9.7)
Proportion female	Mean (SD)	0.69 (0.46)	0.65 (0.48)	0.55 (0.50)	0.62 (0.49)
Education	Certificate or less	34 (40.0%)	34 (38.6%)	51 (34.5%)	119 (37.1%)
	Diploma	28 (32.9%)	33 (37.5%)	50 (33.8%)	111 (34.6%)
	Degree	23 (27.1%)	21 (23.9%)	47 (31.8%)	91 (28.3%)
Teaching qualification	Certificate or less	42 (49.4%)	38 (43.2%)	59 (39.9%)	139 (43.3%)
	Diploma	23 (27.1%)	31 (35.2%)	45 (30.4%)	99 (30.8%)
	Degree	20 (23.5%)	19 (21.6%)	44 (29.7%)	83 (25.9%)
Teaching experience	1–6 yrs	17 (20.0%)	17 (19.3%)	17 (11.5%)	51 (15.9%)
	7–10 yrs	13 (15.3%)	16 (18.2%)	19 (12.8%)	48 (15.0%)
	11–20 yrs	23 (27.1%)	27 (30.7%)	50 (33.8%)	100 (31.2%)
	More than 20 yrs	32 (37.6%)	28 (31.8%)	62 (41.9%)	122 (38.0%)
Teacher status	Teacher	74 (87.1%)	76 (86.4%)	100 (67.6%)	250 (77.9%)
	Senior teacher*	11 (12.9%)	12 (13.6%)	48 (32.4%)	71 (22.1%)
Subject taught**	Mathematics	46 (54.1%)	41 (46.6%)	82 (55.4%)	169 (52.6%)
	English	39 (45.9%)	47 (53.4%)	66 (44.6%)	152 (47.4%)
County teacher works in	Embu				92 (28.7%)
	Kajiado				89 (27.7%)
	Nairobi				140 (43.6%)
KCPE performance of teacher's school ***	Lower				99 (30.8%)
	Middle				118 (36.8%)
	Higher				104 (32.4%)

Notes: *'Senior teacher' also includes headteachers and deputy headteachers who have classroom teaching responsibilities. **Several respondents teach more than one subject, so for the purposes of this survey each teacher was linked to a single subject and they were asked to respond regarding the students/classroom for that subject (we do not make any strong claims about differences by subject). ***KCPE performance categories are measured within the county, with the bottom third of schools categorised as lower-performing, the middle third, middle-performing and the top third, higher-performing.

A NOTE on surveying teacher perceptions

We were primarily interested in gauging teacher perceptions, and it is worth briefly discussing what this means for the study design.

When designing the survey we were aware of the challenges in gathering teacher perceptions on issues that can have socially desirable answers (Stantcheva, 2023). We designed the survey to avoid sensitive items and minimise social desirability bias, to the extent that this is possible. Our fieldworkers had no affiliation with the Ministry of Education or its regional departments and participants were made aware that the data were not being collected for the government, but for a research study. The surveys were conducted one-to-one rather than in group format; and it was explained that the survey responses would be used to understand teacher perceptions with respondents assured of complete anonymity in the consent process.

We do not claim that our findings represent any objective ‘truth’, nor was that our intention. Instead, we wanted to understand teacher perceptions and how these are changing, which we keep in mind when analysing and reporting survey findings. Our analysis seeks to identify group-level distributions in the answers to questions and we avoid respondent-level inferences.

We are also interested in practices that may be changing over time, but we avoid questions that require recall, preferring to survey, concurrently, teachers in different exam grades. Note that this is only possible thanks to the overlapping cohorts, some teaching under the old KCPE model, others on the new KPSEA, in the same schools. Finally, while no teacher can know the future, we are still interested in how teachers think things are going to change in the near future and retain a few items that allow us to look at that.

More specifically, there are three sets of questions in our survey, all fielded to teachers, which we expect to behave a little bit differently given the various contexts teachers operate in. These are concerned with:

1. How assessment results are used and impact teachers and schools.

Where teachers are responding about how student assessments impact them—i.e. the implications for career progress, classroom assignments etc.—their perception is what matters, more than a ‘truth’. If teachers *think* that student performance has consequences for their salary then this will influence their practice whether or not it actually has any bearing on their salary. We would struggle just as much to interpret how observed classroom behaviours related to teacher beliefs about the consequences of an assessment.

2. How teachers use resources, methods and how they allocate their time.

Where teachers are reporting on their own practices, we should expect self-image concerns to bias responses to sensitive items in favour of socially desirable responses. This might mean, for example, that they under-report the frequency with which they use test-prep activities. These biases can differ between assessments given teachers’ understanding of what is the preferred answer for that assessment. For what we expect to be the most problematic items, for example asking about teacher malpractice, we prefer to ask these indirectly to minimise self-image bias.

3. ‘Facts’ about the school or teacher reports of how others behave.

Where teachers are providing ‘facts’ about the school, or reporting on how others behave—these include information on how results are communicated to parents, or how teachers perceive student motivation—we don’t necessarily expect socially desirable responses, but we must also bear in mind that responses are individual perceptions perhaps influenced by their context.

4. How do assessments influence classroom practices: a review of the evidence

High-stakes assessments influence student and teacher attitudes and behaviours

Every country has assessment programs to gather data about students' achievement, but countries do not use results in the same way. Results may be used by governments for evaluating teachers' performance (Jones & Egley, 2004; Jonsson & Leden, 2019) or holding individual schools to account (Marchant, 2004), by students and firms in obtaining and allocating jobs (Abebe et al., 2021), by selective schools in screening students (Lu et al., 2018) and by policymakers in monitoring system performance (Singh, 2021) and allocating resources (World Bank, 2014).

Where an assessment carries serious consequences for students or for educators—or is at least perceived to do so (Chapman & Snyder, 2000)—it is likely to be thought of as “high-stakes”. And it is likely to have some “washback” influence on educators (Alderson & Wall, 1993).

Four major ideas underpin the use of high-stakes assessments and indicate how these might influence the attitudes and behaviours of teachers and students.

1. **Motivation:** high-stakes assessments can influence effort, such as through student's and teachers' attendance, time on task and so on, which can influence teaching styles.
2. **Alignment:** they can also help educators to find alignment and prioritise between sometimes disparate standards, curriculum and assessment content.
3. **Information:** assessment results provide feedback on students' performance that can be used to tailor resources, and to target instruction to students of different abilities.
4. **Signalling:** national assessment systems also signal important values to stakeholders, in particular the public, that the money being spent on education is being used well.

Many of these ideas have been studied, providing fuel for debate. Advocates emphasise studies that point to high-stakes assessments as a strategy for improving public education, while critics point to the perverse incentives that they create in the classroom. In the next section we review the empirical literature, with a preference for evidence that's most relevant to countries in Sub-Saharan Africa.

A framework for structuring the evidence

In this section we review the literature on how high-stakes assessments have been shown to influence classroom instructional practices. We review 18 high-quality studies, 8 from Sub-Saharan Africa, which provide empirical evidence on how high-stakes assessments influence what teachers teach, who they teach and how they teach (Table A1). From these studies we draw out seven ways in which exams influence classroom instructional practice, which we use to structure our review and inform our later analysis: (1) Narrowing of Curriculum, (2) Use of Materials, (3) Fragmenting Subject

Knowledge, (4) Educational Triage, (5) Teacher-Centred Pedagogies, (6) Coaching, (7) Competition for Instructional Time.

A global perspective

While high-stakes assessments set clear expectations and targets for teachers (Jones & Egley, 2004), they can also inadvertently limit the scope of what is taught, and the materials that teachers use to teach. Teachers often restrict their instruction to exam topics, sacrificing a comprehensive grasp of the broader curriculum (Au, 2007; Berliner, 2011; Slomp et al., 2020; Taylor, 2023).

Examinations encourage student effort but when preparation strategies are strictly exam-oriented, students may show gains in exam scores but not in actual subject mastery (Jürges et al., 2012).

This exam focus can lead to the fragmentation of subject knowledge too. Teachers may break down the curriculum into smaller, more “test-friendly” units, which in turn diminishes opportunities for in-depth subject mastery (Au, 2007; Berliner, 2011; Slomp et al., 2020). This fragmentation is often accompanied by a form of targeted coaching, where class time is disproportionately allocated to improving assessment performance, not subject comprehension (Neal, 2013). In some contexts, such as Kenya, this practice is popularly known as ‘extra tuition’ and is meant to coach learners on how to pass an exam.

The drive for high performance in high-stakes assessments generates competition for instructional time (Boguslawski et al., 2021; Polesel et al., 2014), with schools and teachers neglecting untested subjects such as physical and health education. This competition can also present itself in the unequal distribution of attention among students, with educational triage leading teachers to focus their instruction on children whose learning improvements will likely improve the teachers’ evaluation as educators (Jennings & Sohn, 2014; Krieg, 2011).

The influence of high-stakes assessment also extends to teachers’ finding themselves teaching in ways that contradict their understanding of good pedagogy. By aligning their instructional content closely with exam requirements, their teaching methods and the materials they use become increasingly teacher-centred, rather than student-centred, conflicting with their own views on effective instruction (Abrams et al., 2003; Au, 2007; Taylor, 2023). Other consequences of high-stakes assessment can include corruption and malpractice by teachers, students and other stakeholders (Dee et al., 2019; Amini-Philips & Ogbuagwu, 2017), and increased levels of stress and weakened morale among teachers (Collins, 2014; Wronowski & Urick, 2021). Each of these can influence how teachers teach.

While much of the existing research on high-stakes assessment is sourced from high-income countries, particularly the United States, these findings offer important perspectives. However, lessons from high-income settings, characterised by near-universal enrolment and secondary

school completion, present limitations when addressing educational issues pertinent to low and middle-income countries.

Evidence from sub-Saharan Africa

Literature from sub-Saharan Africa points to several implications of exams on instruction, including educational triage, coaching, narrowed curricula and materials use, the use of teacher-centred methods, and weak alignment between the curriculum, exams and what teachers prioritise.

Many of the influences of exams on instructional practices observed in high-income countries have also been observed in low- and middle-income countries. In Uganda, a Randomised Controlled Trial (RCT) by Gilligan et al. (2022) revealed that educational triage—targeting instruction to specific student groups—results in weaker students being encouraged to drop out so that teachers maintain better exam outcomes. This mirrors findings in Tanzania, where schools engage in educational triage, leading to the exclusion of students from assessments that occur at the end of primary school (Cilliers et al., 2021).

While in high-income countries triage often involves reallocating resources to specific student groups (Booher-Jennings, 2005; Jennings & Sohn, 2014; Krieg, 2011), in low-income contexts it is more likely to result in students' exclusion. We should also emphasise that the Tanzanian findings come from an apparently low-stakes assessment, indicating that it's not only terminal exams that influence teacher behaviours.

Another study from Tanzania (Roberts, 2015) indicates that national exams negatively influence instructional practices. Issues related to 'washback'—the effect of assessment on teaching and learning—include coaching by teachers, narrowed curricula and materials use, and teacher-centred methods. These are further exacerbated by teacher behaviour management practices. In Kenya, an RCT by Glewwe et al. (2010) found that performance improved in schools where teachers received prizes based on students' performance, albeit due to an increased emphasis on test-preparation activities (teaching to the test), rather than on strategies to support long-term learning gains.

In South Africa, Graven and Venkat's (2014) study on Annual National Assessments (ANA) found that teachers adjust their instructional methods to fit exam exemplars, impacting both content (narrowing) and delivery (more teacher-centred). In Nigeria, Bosan (2018) observes a similar shift in teaching practices in preparation for the West African Senior School Certificate Examination (WASSCE), specifically in mathematics. In some ways these approaches can be supportive of students' attainment and learning, particularly where assessments are high quality and align well with curriculum content. But the approach can be detrimental if the emphasis moves too far in favour of test preparation and where exams are of low quality, as has been indicated for the WASSCE (Rossiter et al., 2023).

More recently, Surveys of Enacted Curriculum that measure alignment between curriculum, exams and classroom instruction, indicate weak alignment between exams and what teachers prioritise in the classroom. Atuhurra and Kaffenberger (2022) first study in Uganda and Tanzania finds low alignment between the three components and they speculate that a lack of coherence might be attributed to inadequate teacher training or resistance against poorly structured content. Whatever the reason, teachers tend to cover broad swathes of content and levels of cognitive demand, without any strong influence from exam content. Follow-on work in Nepal finds similarly weak links between assessment content (in this case an early grade reading assessment) and what teachers choose to teach, both in terms of content and the cognitive demand of tasks (Atuhurra et al., 2023). Nigeria reinforces this finding, with teachers delivering content that is well-aligned with curriculum standards, but only weakly aligned with content in English and Maths end-of-cycle exams (Adeniran et al., 2023).

This review has attempted to synthesise the literature on the influence of high-stake exams on classroom practices of teachers in both high-income and low-income country contexts. We find many similar patterns and influences across countries, and also document instances of divergence. While high-stakes assessments seem to yield certain positive outcomes, such as improving student and teacher effort, their influence on specific classroom practices of teachers seems to be more negative. A main consideration seems to be the risk that (selected) students are well-coached for specific assessments, but as a consequence miss opportunities to develop competencies in other knowledge areas.

5. Teachers' perspectives: how exams influence classroom practices in Kenya

Teachers hold a wide range of opinions of the new assessment approach

As the transition to a new assessment regime begins, teachers in our survey provide a wide range of views on how different assessments shape or are shaping instructional practices and the classroom experiences of children.

For some teachers there are big differences in how assessments do this: “the KPSEA has no pressure, the pressure is in KCPE”, leading them to mourn the loss of the high-stakes exam, “I am against the removal of the KCPE; if there is no ranking, then there is no meaning of the test.”

As assessment pressures change, some teachers perceive changes in teacher behaviour: “the removal of KCPE has dwindled motivation among teachers to work hard”, and the incentives for students to study, “the removal of the KCPE

will lead to lack of motivation from students who only prefer to get the KCPE certificate”.

Others are more optimistic about the influence of new assessment methods, “I prefer the system of KPSEA to the KCPE and teachers are adapting well to the changes”, but there are also sceptics, “the introduction of KPSEA has not been helpful; it was easier and more appropriate to work with the KCPE than we are finding it with the KPSEA.”

Somewhere in the middle, teachers perceive the changes to be irrelevant, “the different tests have not affected me in any way”, or lacking influence so far, “the KPSEA is still not clear on what is expected of teachers, it still focuses on tests and [so] we still use the KCPE strategy to prepare for KPSEA”.

But despite these anecdotes and often strong opinions, there is very little descriptive evidence on how classroom instructional practices may be changing as assessments do. So building from the review in Section 4, we asked teachers how they perceive the influence of different assessments, how that is changing, and why.

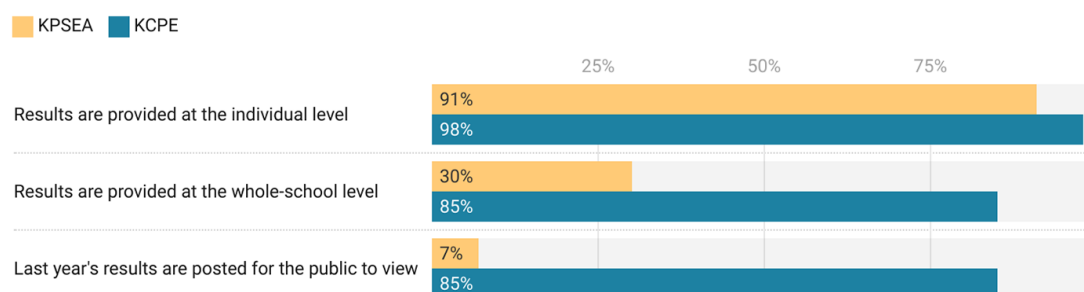
The assessment change has lowered the stakes for students

KPSEA results are not used for school placement in the way that KCPE were, and there are already signs that the change of use is passing through into how results are being communicated by schools.

In more than 90 percent of schools, teachers report that both KCPE and KPSEA results are available at the individual level, but that’s where the similarities in how results are put together and communicated end. While KCPE scores are almost always aggregated into school average performance metrics (85 percent of schools), teachers tell us that this is true in only a third of schools for the KPSEA (30 percent of schools). And there is a large difference in how results are shared with the public too—one channel of local monitoring and influence.

KPSEA are rarely posted for parents, or other members of the public, to view (only 7 percent of schools do this), while teachers in 85 percent of schools report that the KCPE is posted for the public to view, supporting parental engagement. It’s so far unclear what will replace the KCPE as a performance indicator after it ended in 2023. Without clear guidance, KPSEA results may begin to fill the gap, servicing the need for available learning evidence, and beginning to look more like the KCPE in terms of how results are used for local accountability. At a national level, KNEC has also indicated that the KPSEA may be used to monitor the performance of the system overall.

FIGURE 1. Percentage of schools for which teachers report results are available



Notes: There isn't agreement among teachers on how results are put together and communicated in every school. Each school is categorised based on which understanding the majority (>50%) of teachers hold in that school.

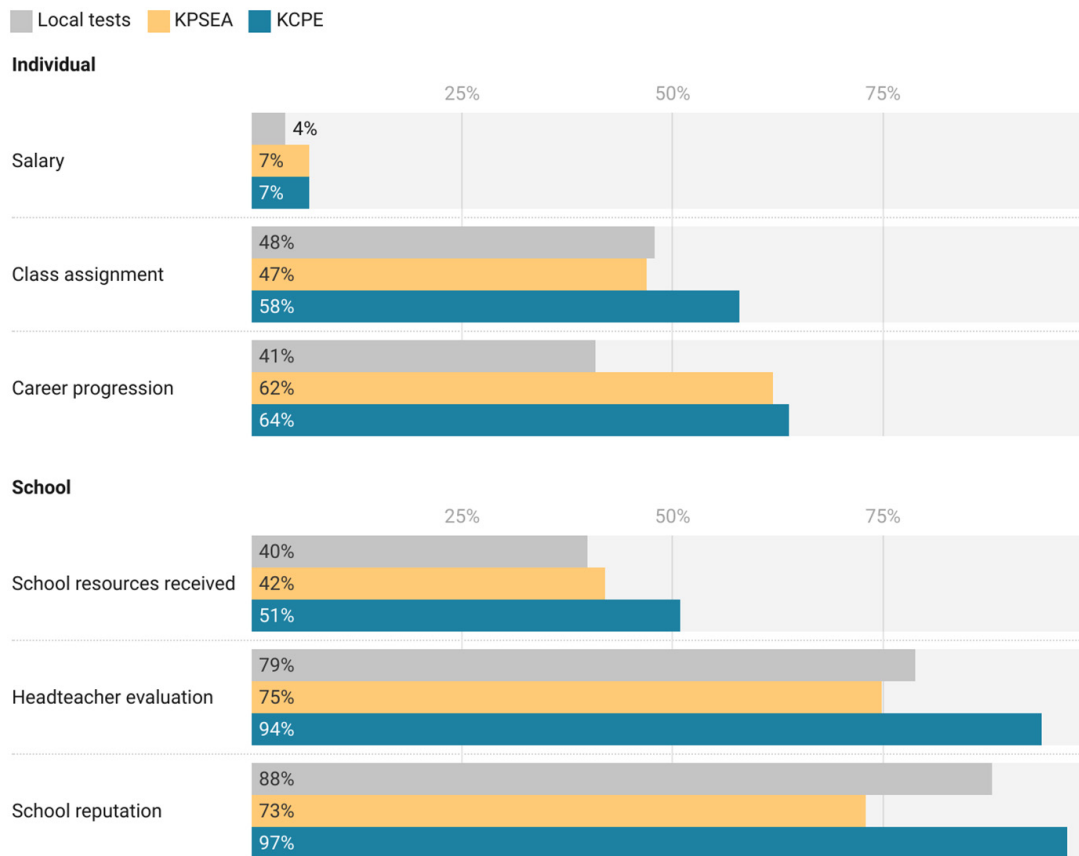
Yet teachers perceive few differences between the KCPE and the KPSEA in the stakes that they face as teachers

Stakes for students needn't be the same as stakes for teachers or schools. We look at six ways in which teachers perceive stakes attached to their student's performance, and how this varies by assessment. Three of these are direct: influences on their salary, their career progression or the class that they are assigned to. Three operate at the school level: influences on the evaluation of the headteacher, the school's reputation or the resources the school will receive.

We look at how teachers perceive influence across three types of assessments: the KCPE, the KPSEA and "local tests", which include county, sub-county and zonal level tests used to monitor performance.

In every dimension the KCPE is perceived as having the highest stakes. Teachers understood this as more important for school-level factors but about 2 in 3 reported that their students' performance in the KCPE would have a strong influence on their career progression and where they were deployed to teach. There was overall agreement that KCPE performance is not directly tied to financial outcomes for individuals.

FIGURE 2. Will your students' performance on the [ASSESSMENT] impact your...



Note: Proportions responding agree or strongly agree.

What is somewhat surprising is that teachers also perceive strong stakes associated with the KPSEA, at least in the early stages of the transition. It is clear that there's a difference in the ways that teachers see the KCPE and KPSEA influencing their class assignment, school reputation and so on, but the overall degree of difference is small in several cases. Teachers perceive strong individual effects from the KPSEA, including the influence on their own career progression and where they will be assigned to teach. So while it might be true that stakes have switched from high- to low- for students, our findings suggest that students' performance in examinations remains a strong determinant of a school's reputation, and of resource allocation to schools. Anecdotally, one way in which this works is that when schools perform well they achieve greater visibility and enhance their social climate, followed by more opportunities to engage authorities at provincial or county offices (Makewa et al., 2011).

More generally, exams have more noticeable implications at school than individual level. We might understand this in terms of how important exam results are as inputs to individual

or school-level decisions. While exam results might be one (of many) inputs to teacher evaluation and career progression, they are often the main data source for evaluating school reputation and performance. For example, after national exam results are released, parents' demand for school spaces for their children is often influenced by school performance. When schools perform poorly, parents push schools for change, including changes to senior staff (Echaune, Ndiku & Sang, 2015), and this can be a powerful effect. Although such pressures might also be directed to individual teachers (Echaune, Ndiku & Sang, 2015), the push seems to be more pronounced at the school level.

The transition to the KPSEA seems to be changing the channels through which assessment influences teacher practices

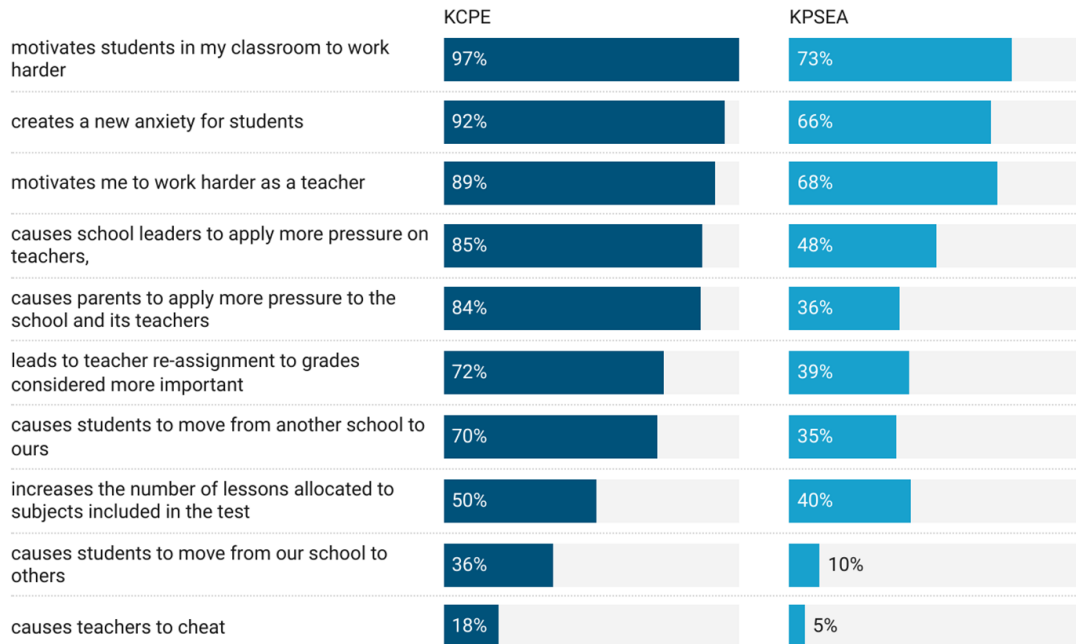
We also asked teachers about different ways in which perceived *pressure* from the old (KCPE) and new (KPSEA) assessment regimes is influencing teaching practice. The picture is pretty consistent across dimensions with the KCPE more influential than the KPSEA by a reasonable margin, with some specific differences worth drawing out.

Nine in ten respondents see KCPE exam pressure motivating teachers and students in the classroom, but they caution that this also crosses into increased anxiety among students too. The KPSEA is clearly perceived as a lower pressure assessment but still seven in ten teachers see it as motivating their practice and the practice of students, with consequences for anxiety—perhaps surprising given the lower-stakes for students.

There are large differences in teacher perceptions of the channels through which pressure travels. For the KCPE, 4 in 5 teachers report pressure from parents and school leadership—leading to teacher reassignments for instance. This is muted for the KPSEA, with a minority of teachers perceiving pressure from school leaders or parents (lining up with our earlier findings on how results are used and communicated to the public, in Figure 3).

Some of the largest (relative) differences are in the ways that assessment pressures impact student movements into and out of schools. Teachers perceive KCPE pressures as contributing to student inflows, in particular, and outflows, to a lesser extent. They detect much less of this movement for the KPSEA. This may be an area for closer inspection and scrutiny with administrative data, including looking at movements into and out of private schools now that there is no competition for scarce secondary school places at the end of the KPSEA. The substantial difference in “causes teachers to cheat” indicates that KCPE may be more associated with negative coping strategies due to its perceived higher stakes.

FIGURE 3. The pressure of the [EXAM]...



Note: Proportion of teachers responding agree or strongly agree.

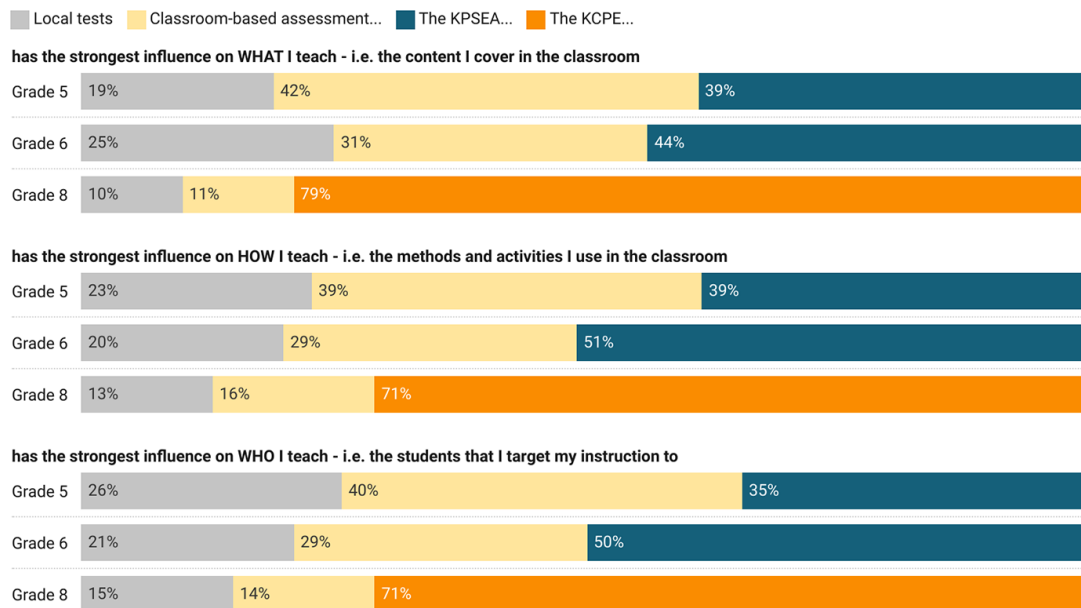
Source: Created with Datawrapper.

Other 'local tests' influence teacher practices too

It's not just national exams or assessments that matter to teacher practices, local tests are influential too. Most teachers (78 percent) use local tests—i.e. those conducted at the school level or by a group of schools at the county, sub-county or zonal levels. Teachers perceive these assessments as influencing their practice in many of the same ways as the KPSEA, but there are some notable differences which indicate slightly different uses (Figure 2). Local tests are more important for school reputation than the KPSEA, and are almost as important as the KCPE. But teachers see them as substantially less relevant to their career progression. This could be because such assessments are not recognised by authorities responsible for facilitating career progression.

To get an idea of the relative importance of assessments, we asked teachers to rank each assessment that they use in terms of its influence on what they teach, how they teach and who they target their instruction towards. For this group of questions, we also broke the KPSEA down into classroom-based continuous assessment (CBA) and the KPSEA summative assessment, to open the possibility that these parts influence practice in different ways.

FIGURE 4. Relative importance of different assessments



Source: Created with Datawrapper.

We are interested in two comparisons. First, are there differences within grade, across dimensions of influence—for example, assessment A is more important for *what* I teach but assessment B is more important for *how* I teach. Second, are there differences between grades, on the same dimension of influence—for example, assessment A is highly influential for what I teach in Grade 5, but largely irrelevant in later grades.

For the first comparison, there are few differences across the three dimensions of teaching practice in any grade. If an assessment has the strongest influence on the content a teacher prioritises, then it's likely to have the strongest influence on how she teaches and who she targets her instruction to. This might reflect a difficulty among teachers in distinguishing the ways in which an assessment influences their practice, beyond an awareness that a certain assessment is the most influential.

For the second comparison it's noticeable how classroom based assessments have become important in Grades 5 and 6. The big contrast between Grades 5 & 6 and Grade 8 is the relative importance of the final assessment—the KPSEA or the KCPE. In Grade 8, the KCPE dominates, with a minor role for classroom assessment, which is informal in that grade. But in earlier grades, regular classroom-based assessment has a dominant influence on classroom instructional practices. Given this perceived level of importance among teachers, the design of these assessments is likely to be an effective channel to influence teacher practice.

It is also noticeable how important local tests are for many teachers. Recall that teachers are not just reporting which assessments have some influence, but about 10–25 percent of teachers identify

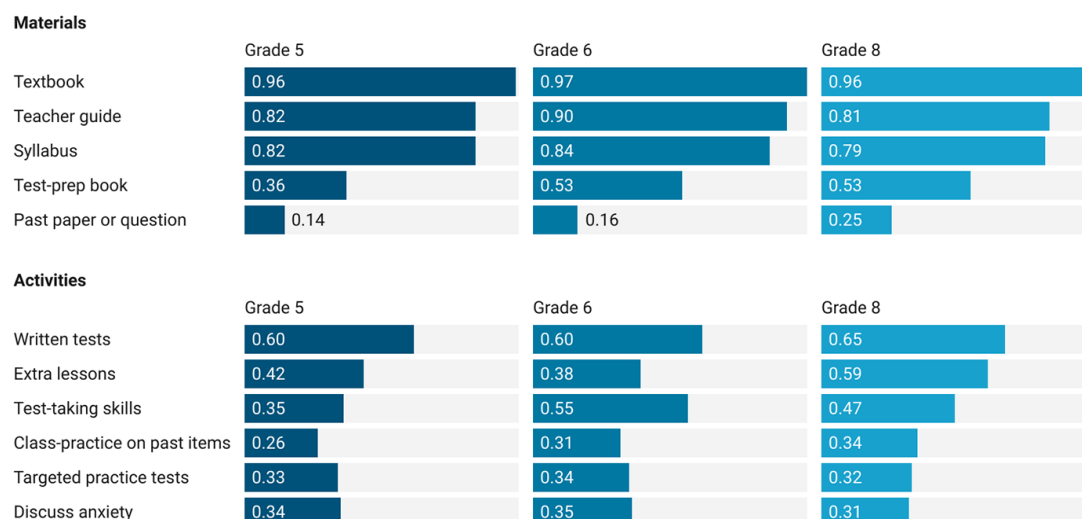
local tests as the most important forms of assessment for what, how and who they teach. While the Competence-Based Assessment Framework does away with high-stakes exams like the KCPE exam, its implementation does not necessarily disrupt the established assessment practices in schools, including the administration of joint local tests. This is despite the fact that joint local tests, including mocks, were abolished by the government in 2015. The legacy of the structure and assessment practices of KCPE remains deeply entrenched in schools, and practices seem to persist under the CBC. The spillover of KCPE-driven assessment practices to CBC grades may hinder the effective implementation of the new curriculum, leading to a persistent misalignment between teaching approaches and the desired learning outcomes. Any efforts to guide classroom practices should take into account the content and influence of these local tests.

There are many similarities in the ways that teachers use exam-related materials and activities across grades and assessments

Teachers were asked about the frequency of their use of typical resources and test-oriented resources and activities in the classroom. We see no differences in patterns of use by teacher sex, teacher status, experience or age. A few differences are apparent by school performance level, with lower-performing schools reporting a slightly more frequent use of test-preparation books and teacher guides than in other schools, which may be seen as an efficient way to boost assessment performance and close the gap to other schools.

We also see many similarities across grades, with more than 80 percent of teachers reporting frequent use of standard materials like the textbook, syllabus and teacher guide across all grades. Test-prep books are used at lower rates but about half of teachers in Grade 6 use them in half their lessons, which is no less common than in Grade 8. Teachers also use written tests at high rates in all grades—it is possible that the inclusion of classroom-based assessment in Grades 5 and 6 has influenced this. And about a third of teachers report using whole-class practice on past assessment items in about half their lessons, or giving practice tests to specific students, with little variation across grades or assessments.

FIGURE 5. Teachers' reported use of materials and activities in their classrooms



Note: Proportions responding that they use these materials/activities in at least half their lessons with that grade.

But there are distinct variations in some practices, which point to differences in the classroom experiences of children

Despite commonalities across grades, there are differences worth discussing. The use of past papers is a lot more common in Grade 8, with 1 in 4 teachers telling us that they use them in half their lessons, than in Grades 5 and 6 where only 1 in 7 teachers uses them regularly. This might be a different choice in practice, and could also relate to availability of past scripts which is lower for the newer KPSEA. The use of extra lessons to prepare children for assessments was also more common in Grade 8 than in grades 5 and 6, perhaps giving more scope for targeted support, and responding to the pressure to pass inherent in the KCPE.

Teachers tell us that they are more likely to teach test-taking skills and strategies in Grade 6 than in Grade 8. Although this might seem counterintuitive, it is consistent with the greater frequency of assessment that the KPSEA framework has introduced. A new series of classroom based assessments throughout the year and a summative assessment in Grade 6 are all new, unfamiliar, and require a wider range of skills than has been typical of the KCPE. Teachers might be preparing their students accordingly, and that could also help to explain the smaller (but non-negligible) proportion of teachers coaching students on test-taking skills already in Grade 5.

Further differences between grades and assessments emerge when teachers report on how they use assessments and assessment results. We've broken this down into three parts: **perspectives** on different assessments and assessment uses; the links between different assessments and the **content** that teachers prioritise; and the steps teachers take in **preparation** for different assessments. We see three main findings coming from this.

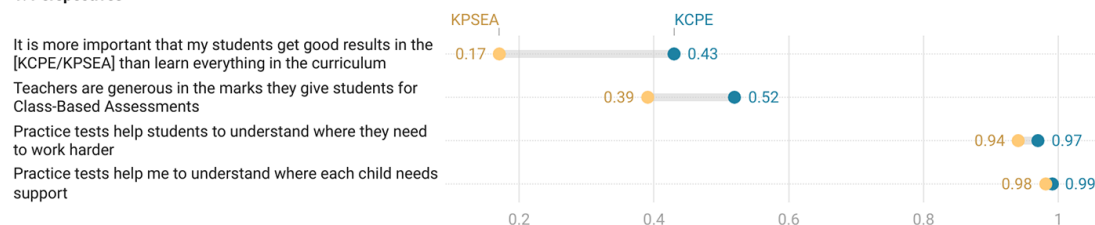
First, the majority of teachers see the KCPE as a support to their teaching, and a useful guide to what content to teach, finding it easy to prepare students for the exam. Senior teachers, in particular, were more likely to prioritise expected exam content. This is much less true for the KPSEA, where closer to half of teachers report this sentiment.

Second, half as many KPSEA teachers, compared to KCPE teachers, see exam results as the most important thing. This seems to give them more flexibility in what they choose to teach. The difference across assessments aligns with few teachers telling us they'd change what they taught if the assessment was not there and only half reporting that they would use different activities.

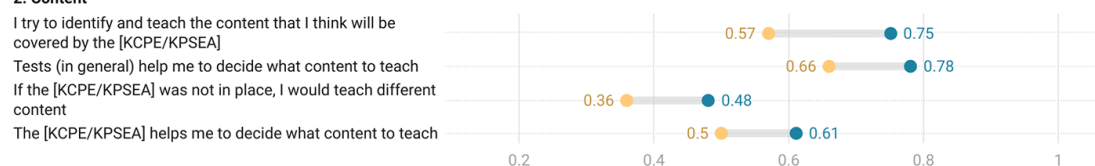
Third, teachers tell us that being well-prepared is important whatever the assessment, with teachers showing great support for practice tests in monitoring progress, routinely teaching test-taking strategies and, for a large majority, seeing these test-prep exercises as ways of building lasting skills.

FIGURE 6. How teachers and students use assessments and assessment results

1. Perspectives



2. Content



3. Preparation



Note: Proportions responding agree or strongly agree.

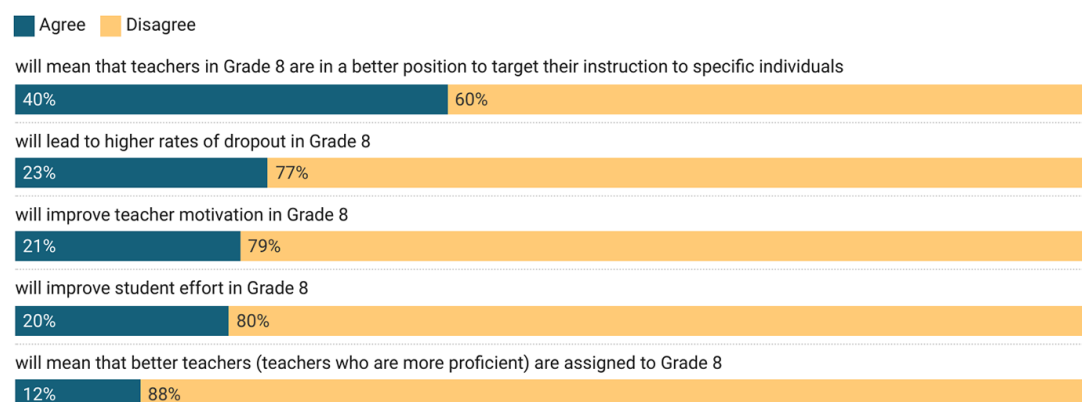
The teachers we surveyed generally perceive assessments as external motivators and helpful guides for practice

Finally we ask respondents to be a bit more speculative and tell us how they think the phase-out of the KCPE will influence attitudes and behaviours. Then we did the same for the introduction of the KPSEA.

Our main takeaway from this is that, on the whole, teachers saw the KCPE as more of a support and external motivator, than a burden or negative influence in the classroom. Few respondents expect the lifting of the KCPE to improve motivation or effort among students and teachers (we might cautiously interpret the level of disagreement as a sign of the expectation of the opposite). More optimistically, 40 percent of teachers do expect the removal of the KCPE to give teachers more freedom to target their instruction to student needs.

FIGURE 7. Perceptions about the removal of KCPE

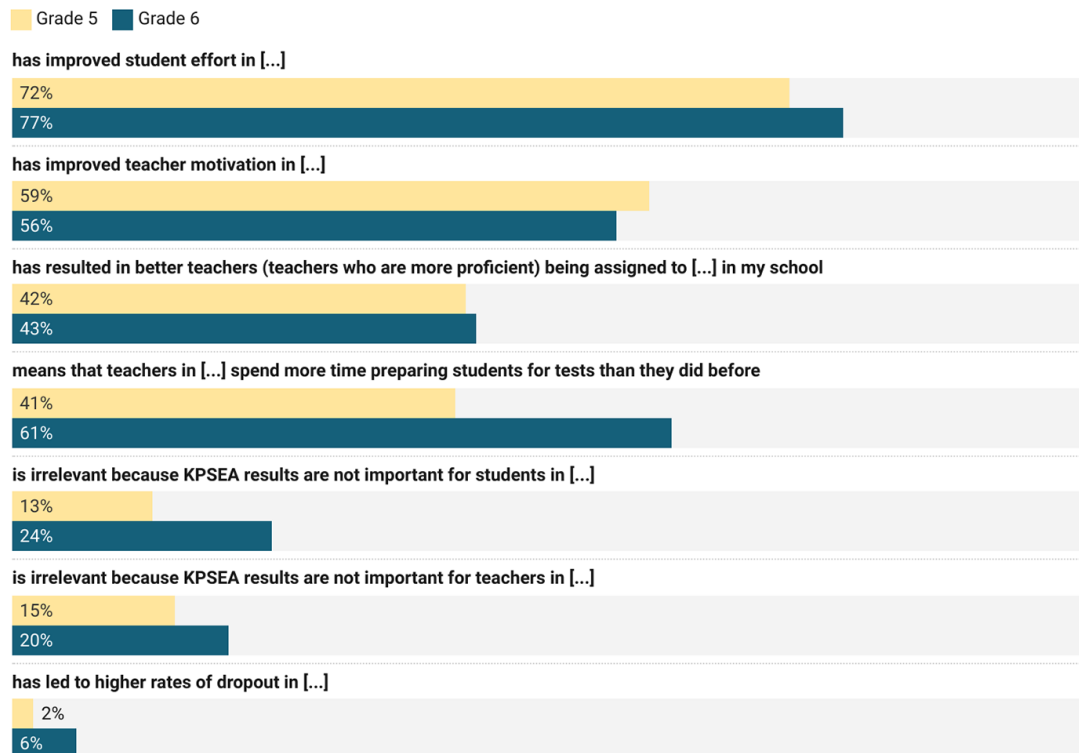
The removal of the KCPE...



Responses about the introduction of the KPSEA tend to swing in the other direction, with teachers, on the whole, seeing it as a positive influence that matters for them and for their students. Most tell us that they detect improved student effort and higher teacher motivation, and many that they think better teachers are being assigned to Grades 5 and 6. Teachers certainly acknowledge that the introduction of the KPSEA means that more time is spent preparing students for assessments, particularly in Grade 6. But—to the extent that we can detect it with this survey—teachers did not report higher rates of dropout in Grades 5 or 6 in most schools (this is something that deserves more attention using administrative data).

FIGURE 8. Perceptions about the introduction of KPSEA

The introduction of the KPSEA...



6. Feeding back into Kenya's ongoing assessment reforms and ideas for further research

Our consultations with teachers during the KPSEA transition period have provided valuable insights into Kenya's evolving assessment landscape. Teacher perspectives have helped us to understand how different assessment approaches influence their classroom practices, and how and why that might be changing. We hope that these findings prove helpful to officials as they prepare new assessments for the first CBC cohort which will reach Grade 9 later in 2024.

Our fieldwork aimed to reflect primary school teachers' views, not to statistically represent them or establish causality between assessment types and classroom activities. Our goal was to capture teachers' perceptions of the impact of assessments on teaching methods.

As the KPSEA embeds itself within Kenya's educational system, the dynamics we've noted may evolve, and so our findings offer a snapshot, not necessarily a final picture. Yet, the insights gained are pertinent to current policy considerations and suggest further research, complementing the findings of the Presidential Working Party on Education Reform (Government of Kenya, 2023).

Teachers report generally small differences in classroom practices post-KCPE, despite a nominal shift from a high- to a low-stakes assessment regime. Changes may be limited by a longstanding and pervasive culture surrounding the KCPE, which moves slowly in the early stages of reform. It may also be because when talking about test stakes, the literature doesn't always clearly separate the stakes facing students from those facing teachers, nor which channels influence which practises.

Discourse on assessment stakes should consider and seek to understand the different pressures on students and teachers. While the reform has already alleviated some student pressure, by disconnecting assessment results from secondary school placement, it hasn't so far reduced teachers' perceptions of pressures on their career progression and so on. These teacher perceptions influence their instructional choices, suggesting that even so-called low-stakes tests can significantly shape classroom practices.

Additionally, teachers largely viewed the KCPE as supportive rather than burdensome, with many adopting similar classroom practices for the KPSEA, albeit less intensely. In many respects the influence of assessment has increased with the introduction of the KPSEA and regular classroom assessment in earlier grades, with teachers already adapting and preparing students to face those assessments. Despite intentions to reduce student stress, there is a potential for anxiety among younger students with KPSEA, which warrants attention.

While tests continue to strongly influence teachers instructional choices, pairing high-quality assessment designs with support to teachers on the use of formative methods can be an effective way to influence classroom practices. Since classroom based assessments already significantly influence teaching in Grades 5 and 6, focusing on their content and how they are delivered could be a strategic way to improve educational practices. And it may be more effective than ideas that centre on removing assessment components altogether.

With the discontinuation of the KCPE, there is uncertainty around using school performance data for local accountability. Providing clear guidance on the use of assessment data is essential. The impact of local tests at county and sub-county levels, despite being officially discontinued, also merits examination due to their ongoing influence and the risks that they fill the void left by the KCPE.

Future research avenues include exploring the dependency of teacher assignments on student performance using administrative data, particularly in lower KPSEA grades. Additionally, teachers report small but non-zero influences of assessment on student dropout, and tell us that one of the largest (relative) differences between KCPE and KPSEA grades is the ways that assessment pressures impact student movements into and out of schools. Investigating how assessments affect student enrollment and dropout patterns could provide insights into the broader implications of new assessments on student trajectories through grades and across school types.

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Appendix 1. Evidence reviewed

TABLE A1. Summary of the evidence reviewed

Source	Year	Study Type	Country Context	Exam Influence
Slomp et al.	2020	Mixed Methods	Canada	NC
Berliner	2011	Review	US & UK	NC
Taylor	2023	Qualitative	US	NC, TCP
Au, 2007	2007	Qualitative Review/ Synthesis	US	NC, FSK, TCP
Jennings & Sohn	2014	Quantitative	US	ETG
Neal	2013	Review	US	CO
Boguslawski et al.	2021	Qualitative	US	CIT
Krieg	2011	Quantitative	US	ETG
Abrams et al.	2003	Quantitative	US	TCP, CIT
Polesel et al.	2014	Quantitative	Australia	CIT
Gilligan et al.	2022	RCT/Experiment	Uganda	ETG
Cilliers et al.	2021	Quantitative	Tanzania	ETG
Roberts	2015	Qualitative	Tanzania	NC, TCP, CO
Graven & Venkat	2014	Qualitative	South Africa	NC, FSK, TCP, CO
Atuhurra & Kaffenberger	2022	Quantitative	Tanzania & Uganda	-
Atuhurra et al.	2023	Quantitative	Nepal	-
Adeniran et al.	2023	Quantitative	Nigeria	-
Bosan	2018	Qualitative & Obs.	Nigeria	NC, TCP
Glewwe et al.	2010	RCT/Experiment	Kenya	CO

Notes: NC = Narrowing of Curriculum, FSK = Fragmenting Subject Knowledge, ETG = Educational Triage, TCP = Teacher-Centred Pedagogies, CO = Coaching, CIT = Competition for Instructional Time.

Appendix 2. Making direct connections between our findings and existing empirical evidence

In Section 4, we analysed empirical literature detailing how exams shape teacher instructional methods through curriculum narrowing, subject knowledge fragmentation, educational triage, teacher-centred pedagogies, and competition for instructional time. These concepts underpinned our survey development, and we now align our findings with this literature.

Our data indicates significant alignment with empirical insights, particularly in curriculum narrowing—70 percent of teachers concur that assessments guide their teaching content. Furthermore, 65 percent acknowledge tailoring their instruction to anticipated assessment content, suggesting possible subject knowledge fragmentation.

Regarding educational triage, our findings reveal more about who is doing the teaching than the students that they are targeting. While 55 percent of teachers report reassignment to

“more important” classes due to assessment pressures, this is more pronounced with the KCPE (72 percent) compared to the KPSEA (39 percent)—as detailed in Figure 3.

Exams influence teacher-centred pedagogies, with 58 percent of teachers indicating they would employ different teaching methods if exams were absent. Coaching is also prevalent; nearly half of the teachers incorporate test-taking skills frequently in their lessons, and a significant majority (91 percent) support their students with exam strategies.

In contrast, competition for instructional time due to exam pressures was less evident—with teachers split on whether exams affect lesson allocation across subjects. Teachers tell us that they generally adhere to teaching the curriculum and this aligns with what is assessed, “We teach what’s in the curriculum, and those are the subjects tested by KCPE/KPSEA”.

From the reports of teachers in the survey, we find evidence of narrowing of the curriculum, fragmented subject knowledge and a type of educational triage happening across classrooms. There is also some indication that exams lead to teacher centred pedagogies and coaching of students by teachers, albeit approaches that teachers perceive as developing lasting skills among students. The evidence of how assessment influences competition for instructional time is not strong in the current study.

TABLE A2. Linking our findings back to the main influences identified from the literature, a few examples

Exam Influence	Teachers Tell Us
Narrowing of the Curriculum	70% agree or strongly agree that assessments help them decide the content they teach
Fragmenting Subject Knowledge	65% agree or strongly agree that they try to identify and teach the content that they think will be covered by the assessment
Educational Triage	55% agree or strongly agree that the pressure of the exam leads to the re-assignment of teachers to classes and grades considered more important, in their school
Teacher-Centred Pedagogies	58% agree or strongly agree that If the exam was not in place, they would use different activities or methods in the classroom
Coaching	91% agree or strongly agree that they support their students by teaching them test-taking strategies for the exam
Competition for Instructional Time	45% agree or strongly agree that the pressure of the exam increased the number of lessons allocated to subjects included in the exams