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Investigating formative assessment in South African high school classrooms

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Abstract

Drawing on an adapted formative assessment framework, this study investigated classroom practices across 99 lessons taught by 50 teachers in eight high schools across the Western Cape and Eastern Cape. Across diverse school resourcing levels and class sizes, we found that instruction was overwhelmingly dominated by a communalised pedagogy—characterized by teacher exposition, whole-class low-level recall questioning, with minimal individualised engagement. Notably, variations in formative assessment were far more pronounced across school subjects than across school types or class size. The findings suggest that in high school classrooms, subject-specific knowledge fields exert a much stronger influence on pedagogy and formative assessment practices than school context or resource availability. The paper argues that the prevalence of communalised practices may be shaped by systemic constraints including second-language instruction, strict curriculum pacing mandates, gaps in teacher knowledge, and the backwash effect of high-stakes summative assessments. Within these constraints the paper argues for subject-specific teacher professional development, strategic textbook integration, and harnessing pathways within communalised pedagogy to drive individual student understanding and success

Introduction

The specific focus and research interest framing this paper is on the nature of formative assessment in classroom pedagogies in high schools. Formative assessment forms a central part of national assessment policy and its focus on ‘Assessment for Learning’. The National Protocol for Assessment Grades R-12 (2012) initially described two types of assessment to be implemented in the national curriculum, namely ‘informal assessment (assessment for learning)’ and ‘formal assessment (assessment of learning)’ (p3). Here informal assessment or assessment for learning was described as daily monitoring and enhancing of learner progress, achieved through teacher observations and teacher-learner interactions in the classroom’ (p3). Subsequent national circulars introduced the language of formative assessment to provide more clarity on the purpose and implementation of informal assessment. National Assessment Circular 03 of 2020¹, states that ‘formative assessment must be integrated into the process of teaching and learning’ (p. 1, para 1.2) and that ‘all schools are expected to effectively implement formative assessment to support learning’ (p. 2, para 1.6). Further, National Assessment Circular 01 of 2023², states that ‘the Assessment for Learning (AfL) approach including formative assessments should be used by teachers during teaching and learning to support and prepare learners for summative assessments’ (p. 3, para 13) and reiterates that ‘the primary purpose of formative assessment is to improve learning’ (p. 3, para 14). From these

¹ Circular on the Implementation of Formative Assessment in the General Education and Training (GET) band

² Circular on the Implementation of the 2023 Assessment Programme in Mainstream and Special Schools across the General Education and Training (GET) band

directives it is clear that formative assessment is the vehicle through which national government conceives of shifting pedagogy to include strategies for monitoring learner progression and improving learning. Our research project thus drew on the notion of formative assessment to construct a research framework to investigate the nature of formative assessment strategies in high school classrooms.

This paper reflects on our empirical findings and analysis of 99 lessons observed across eight high schools participating in the study. The 99 lessons were observed using three key dimensions of formative assessment focusing on teacher activity in the classroom, namely: (1) articulating the purpose of the lesson, (2) checking for learner understanding, and (3) providing feedback to learners. We selected schools in two different provinces (Western Cape and Eastern Cape), included fee and no-fee schools, and observed lessons in Grade 8 and Grade 10 classrooms in Mathematics, Mathematical Literacy (ML), English First Additional Language (EFAL) and English Home Language (EHL) and History. In the analysis we were interested in differences and similarities in teachers' practices as they pertain to the formative assessment dimensions above. We were interested in variations across provincial location of the school, between fee and no-fee schools, different class sizes and school subjects. The analysis provides descriptions of dominant pedagogic practices across the 99 lessons, providing a broad view of high school classroom pedagogies across a range of South African schooling contexts.

Most classroom research in South Africa has focused on primary school (e.g. Kanjee, 2020), and involves predominantly small-scale case studies (see Hoadley, 2012) that investigate Foundation Phase pedagogy (Ramallo & Kanjee, 2023; Govender, 2019; Kanjee & Mthembu, 2015). There is a limited classroom research base in South Africa on high school pedagogies (for example, Ndlovu, 2025; Naidoo, 2021; Naidoo & Mabaso, 2020; Ngwenya, 2019). The few subject-specific studies, for example in Mathematics (Machaba (2017); and Van der Nest, Long & Engelbrecht (2018); Mathematical Literacy (Botha & van Putten (2018); English (Murphy et al., 2020) and History (Geschier, 2010), Hues, 2011) all entail one or two case studies. This study aimed to contribute to a descriptive understanding of pedagogy at high school level in a bigger sample, looking for patterns across different school contexts and school subjects.

In choosing a formative assessment framework for our study, we were also interested in speaking to other classroom-based research that go beyond very small samples of classrooms and that often deploy a formative assessment framework (e.g., Kanjee, 2020). Our interest in this regard was to contribute to more cumulative understandings of what goes on in classrooms and extend understandings of primary school pedagogy into what pedagogic patterns persist or diverge in high schools.

In this paper, our empirical findings and analysis of 99 high school lessons provides a general description of formative assessment practices in high school classrooms across a range of school types. The analysis also surfaces issues related to the application of formative assessment strategies in South African classrooms. In our conclusion we reflect on how we might conceive of pedagogy and formative assessment strategies more broadly and in ways relevant to our context.

The formative assessment framework

Black and Wiliam (2009) argue that formative assessment does not have a precise and widely accepted meaning; however, from a range of descriptions it can be defined as ‘all those activities undertaken by teachers, and/or by their students, which provide information to be used as feedback to modify the teaching and learning activities in which they are engaged’ (p. 1). Black and William (2009) argue that formative assessment is inherent in the whole of classroom practice, not a separate activity.

Black and Wiliam’s (2009) formal definition of formative assessment is as follows:

Practice in a classroom is formative to the extent that evidence about student achievement is elicited, interpreted, and used by teachers, learners, or their peers, to make decisions about next steps in instruction that are likely to be better, or be better founded, than the decisions they would have taken in the absence of evidence that was elicited (Black & Wiliam, 2009, p. 9).

In this way, they place evaluation at the centre of their focus and in later work, they argue that it should be grounded more clearly in a theory of pedagogy (Black & Wiliam, 2018). Wiliam and Thompson (2017) conceptualised this definition into a framework to structure the analysis of formative assessment in classrooms. The overarching idea of their framework is the provision of criteria in the lesson for student success, and the extent to which understanding of criteria is elicited and responded to. They identify five different strategies entailed in formative evaluation:

1. Clarifying, sharing, and understanding learning intentions and the criteria for success
2. Engineering effective classroom discussions, questions, and tasks that elicit evidence of learning
3. Providing feedback that moves learners forward
4. Activating students as instructional resources for one another
5. Activating students as the owners of their own learning

Table 1 below summarises Wiliam and Thompson’s (2007) strategies for assessment.

Table 1. Wiliam and Thompson’s (2007, pp. 15-16) strategies for assessment

	Where the learner is going	Where the learner is right now	How to get there
Teacher	1. Clarifying learning intentions and criteria for success	2. Engineering effective classroom and other learning tasks that elicit evidence of student understanding	3. Providing feedback that moves learners forward

Peer	Understanding and sharing learning intentions and criteria for success	4. Activating students as instructional resources for one another
Learner		5. Activating students as the owners of their own learning

Several studies of formative assessment in South Africa use Wiliam and Thompson's (2007; 2017) framework outlined in Figure 1 above (e.g. Ramallo & Kanjee, 2023; Jacobs, 2021; Kanjee, 2020; Govender, 2019; Kanjee & Mthembu, 2015; Ngwenya, 2019). A central finding from this literature is that teachers' feedback is primarily in oral forms—through immediate responses, classroom corrections, and questioning (Jacobs, 2021; Ngwenya, 2019), but that implementation is constrained by factors such as large class sizes, limited resources in under-resourced schools, socio-economic constraints, and language diversity. Several studies, including Kanjee (2020) and Naidoo (2021), argue that teachers often rely on “traditional”, transmission-based methods that emphasize task completion rather than deeper learning. There is an implicit assumption in these descriptions that so-called transmission-based pedagogies are aligned with superficial learning and that “non-traditional” so-called progressive pedagogies automatically imply deeper learning. Some studies show how efforts to improve teacher confidence and knowledge about formative assessment have failed to lead to sustained changes in classroom practice (Govender, 2019; Kanjee & Mthembu, 2015; Ngwenya, 2012).

In the analysis of our classroom data, we drew on Wiliam & Thompson's (2007) framework (Table 1) but treated the self and peer assessment strategies (no 4 & 5 in Table 1) as subsidiary and the first three as core. This is because we found little evidence of self and peer assessment strategies in the lessons we observed. This narrowed our analysis to focus on the activity of the teacher in terms of the formative assessment framework. Hence, in our study, we did not focus only on how teachers modify their practices in response to evidence of learner achievement, but on how teachers explained content, how they checked for learner understanding and how they provided feedback to learners.

This paper is part of the broader Mixed Methods Investigation into Learning Assessment, Progression and Support (MILAPS) project³. Table 2 below shows how we operationalised

³ The broader MILAPS project set out to investigate how learners progress through schooling with a focus especially on high school classroom processes and assessment practices.

William and Thompson's (2017) formative assessment strategies as well as the empirical indicators we generated for assessing the dimensions of formative assessment.

Table 2. Adaptation of William and Thompson's (2017) formative assessment dimensions

William & Thompson (2017): Dimensions of Formative Assessment	MILAPS: Dimensions of Formative Assessment	MILAPS Indicators
Clarifying, sharing, and understanding learning intentions and the criteria for success	1. Articulating purpose and explaining content	1.1. Statement of lesson purpose 1.2 Accuracy of explanations of lesson content
Engineering effective classroom discussions, questions, and tasks that elicit evidence of learning	2. Checking learner understanding through discussion, questions and tasks	2.1 Questioning to check learners' understanding 2.2 Questioning of individuals 2.3 Engineering discussion 2.4 Tasks / activities to elicit evidence of understanding 2.5 Monitoring learners on tasks
Providing feedback that moves learners forward	3. Providing feedback to learners	3.1 Indication of correct or incorrect to responses from learners 3.2 Frequency of feedback to learner responses 3.3 Elaboration of feedback to learners

The indicators that we used were thus derived from this formative assessment framework and informed the design of our closed classroom observation instrument. We included two aspects not common in other formative assessment frameworks. One was considering the accuracy or completeness of the content exchanged in the classroom (indicator 1.2 above). This is because the data indicated that although the purpose of lessons was often clear and explanations of content were provided, the latter were frequently inaccurate, simplistic or partial or irrelevant. As a defining feature of the pedagogy, it was important to capture this. The second element not common in other frameworks was whether questions were directed at individual learners (indicator 2.2 above). This was based on an implicit individualising bias in formative assessment frameworks generally, which we wished to make explicit, but also included in the light of Kanjee's (2020) finding that "the dominant form of engagement with learners was based on teacher-initiated questions that were directed to the whole class" (p.7).

Sample and Methodology

The research employed an in-depth, multiple case study approach to research pedagogy across classrooms. Both closed- and open-ended forms of qualitative data were collected for each lesson. Our sample comprised 99 lesson observations of Grade 8 and Grade 10 classrooms in Mathematics, Mathematical Literacy, English (First Additional Language and Home Language) and History in four schools in the Western Cape and four in the Eastern Cape.

Through a purposeful sampling strategy, we attempted to obtain a broad range of ‘typical’ cases of South African schools. The two provinces of the Western Cape and Eastern Cape represent distinct socio-economic, historical, and educational contexts. The Eastern Cape is one of the poorest provinces in South Africa with high levels of unemployment, rural poverty, and limited infrastructure. The Western Cape, in contrast, is more urbanized, has better infrastructure, higher income levels and generally higher educational outcomes.

The four schools within each of the provinces were all publicly funded schools where National Senior Certificate (NSC) enrolments were above 40 learners and at least half of the school-going population was African. Further, schools with at least 20% Mathematics enrolment in the NSC were sampled to allow for exploration of pedagogy in this key gateway subject. For accessibility, we selected urban or peri-urban schools. Half the schools were fee-paying and the other half were no-fee schools in each province. We also selected high and low performing schools based on an analysis of NSC data across the three years prior to 2024. Performance was determined through the number of NSC passes⁴ as well as the quality of the passes, i.e. the number of Bachelor passes⁵ and the quality of Mathematics passes. Given that we looked at classrooms at the Grade 8 and 10 levels (not at Grade 12), and also setting aside any assumptions that the NSC results are related to the nature of classroom practice in earlier grades, we used high and low performing only for selection and not as part of our analysis. Table 3 below summarises the sample frame for the selection of schools.

Table 3. Sampling frame applied to schools

	<i>High Performing</i>	<i>Low Performing</i>
<i>Fee-paying</i>	Quintile 4 or 5 Must be considered non-elite Average Maths pass of at least 50% At least 75% NSC passes Bachelors passes of at least 60% African student enrolment >50% [WC-School B; EC-School E]	Quintile 4 or 5 Must be considered non-elite Average Maths pass below 50% NSC passes below 75% Bachelors passes below 60% African student enrolment >50% [WC-School A; EC-School G]

⁴ For a pass a student must obtain a 40% minimum in Home Language and at least 40% in two other subjects.

⁵ A bachelors pass allows admission into bachelor programmes at universities. The student must obtain 6 out of 7 subject passes with a minimum of 40% in Home Language, 50% in four other, high credit subjects (excluding Life Orientation) and obtain a 30% pass in at least two other subjects.

<i>Non-fee-paying (Q1-3)</i>	Quintile 1, 2 or 3 Average Maths pass of at least 50% At least 75% NSC passes Bachelors passes of at least 60% African student enrolment >50% [WC-School D; EC-School F]	Quintile 1, 2 or 3 Average Maths pass below 50% NSC passes below 75% Bachelors passes below 60% African student enrolment >50% [WC-School C; EC-School H]
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The four no-fee schools (Schools C, D, F and H) were located in African townships that drew students from the surrounding community. Learners at these schools came from homes that ranged from free standing brick homes to back-yard dwellings and informal housing. Typical for these communities, the environment is bereft of green spaces and recreational facilities and dominated by dusty roads and pavements and informal traders. The schools were fenced in with concrete school yards and classrooms were generally crowded with school desks and bare walls.

Three of the four fee-paying schools were located in the suburbs (Schools A, E & G) and one was an inner-city school (School B). Students at all these schools commuted from different areas. At the inner-city school (School B), some students commuted from African townships more than 20km from the school. One of the schools (School E) had a school hostel where some students lived during term time. These schools generally had well-kept school gardens and playing fields and classrooms were less crowded and decorated with wall posters.

While we endeavoured to select fee-paying schools whose fees were below R20 000 (i.e. what we termed *non-elite Quintile 4 and 5 schools*)⁶, in the end, there was a substantial range in fees in our sample, from R3 300 to R41 800 in the Eastern Cape and from R10 300 to R21 000 in the Western Cape. The schools in our sample were thus very different in terms of their resourcing and the socio-economic status of their learners.

Classroom observations

We observed 99 lessons taught across school types and subjects in Grade 8 and Grade 10. In each school, seven Grade 8 and Grade 10 teachers were sampled who taught English (Home Language or First Additional Language), Mathematics, Mathematical Literacy, and History. Two schools did not offer History at FET level, and the remaining six Grade 10 teachers participated. Mathematical Literacy as a subject is only offered at Grade 10 level.

For the classroom observation data, one researcher accompanied by a trained fieldworker observed classroom pedagogy across two consecutive lessons, collected video and audio-recorded data, and produced a detailed, written description of both lessons. After each lesson, the data collectors completed a closed-ended observation tool that was designed to measure

⁶ 'Elite' Q5 schools charge fees of approx. R80 - 85 000 or higher

scaled levels of formative assessment in the lesson observed. Our classroom observation instrument included descriptive codes of high, medium, low and very low for each indicator described in our framework above. N/A was also an available code where it was either not possible to observe the indicator or the indicator was not relevant to the lesson. See Appendix 1 for the full classroom observation instrument we used.

The observation tool was completed in reference to detailed narrative accounts and subjected to a form of inter-rater reliability at the point of data collection. The video and audio-recorded data also allowed for subsequent in-depth analysis and provided an opportunity for recoding some indicators.

For filming, the video camera was positioned at the back of each classroom to capture a broad view of the classroom, the teacher and the activity of learners at their desks. The recording captured all teacher and some learner talk. The closed-ended observation tool also included some contextual information such as the number of learners present and the presence and use of textbooks or other resources in the lesson.

In sum, 99 lessons taught by 50 teachers⁷ were observed. Each teacher, except for one, was observed teaching two consecutive lessons. Two consecutive lesson observations per teacher is a limitation because they provide a narrow observational window. We cannot therefore be certain that features that were absent in the two observed lessons are not potentially part of the teacher's practice at other times. However, our analysis of the 99 lessons that follows in the next section, shows patterns emerging from the observation data that cut across subjects, grades, and schools, suggesting some entrenched pedagogic practices across the lessons. Table 4 below shows the distribution of the 99 lessons by subject and grade.

Table 4. Distribution of lessons observed

SUBJECT	Lessons Observed		
	Grade 8	Grade 10	Grand Total
Mathematics	16	16	32
History	13	10	23
English HL	6	6	12
English FAL	10	8	18
Mathematics Literacy		14	14
Grand Total	45	54	99

Class Sizes

Class size was determined by recording the number of learners present during observations then verifying class size in teacher interviews. We categorized class sizes as small, medium or large. Class sizes with less than 30 learners are considered small, medium classes are those

⁷ Of the 50 teachers, 34% had less than five years of teaching experience, and 30% had 10–19 years of teaching experience. 20% had 5–10 years teaching experience and 16% had more than 20 years teaching experience.

between 31-40 learners and large classes are those with more than 40 learners. Out of the 99 lessons we observed, 27% were small classes, 44% were medium classes and 28% were large classes.

Figure 1 below shows the distribution of class size in fee and no-fee schools in our sample.

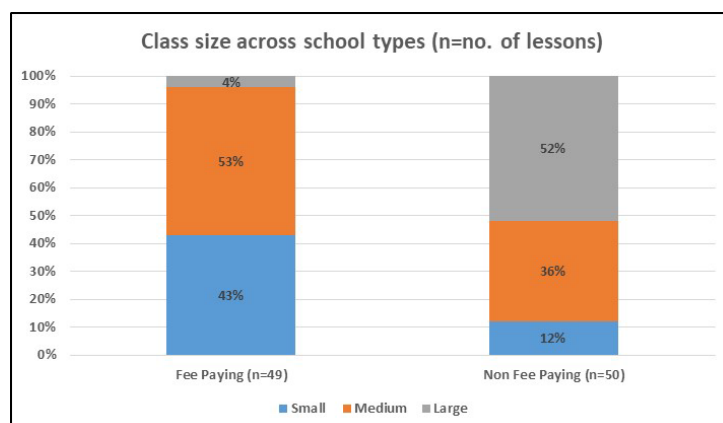


Figure 1: Proportion of class size across school types

The distribution of class size in Figure 1 shows that 52% of lessons in no-fee schools were large classes (more than 40 learners) compared to only 4% of lessons in fee paying schools. Lessons in fee-paying schools were mainly distributed between small (43%) and medium (53%) classes. The majority of the large classes were in Eastern Cape no-fee schools. Despite these differences in class sizes, our analysis of the 99 lessons show many dominant pedagogic patterns that cut across class size.

Analysis of formative assessment

In our analysis of how formative assessment was working across different lesson contexts, and in producing descriptions of typical high school classrooms, we discuss our findings below in relation to the range of indicators for each dimension described in Table 2 above⁸.

Dimension 1: Articulating purpose and explaining content

On the first dimension we looked at the extent to which the lesson purpose was made clear and the depth and clarity of explanations given. Use of textbooks and other classroom resources may be considered as contributing factors to making the purpose of lesson clear and enhancing depth and clarity of explanations. However, in 63% of lessons nobody used a textbook. Textbooks were only used by the entire class in 17% of lessons observed, and most of these were history lessons. The two indicators for this dimension were coded as shown in table 5 below:

Table 5. Descriptive indicators for articulating purpose and explaining content (Dimension 1)

⁸ Only a small proportion of lessons were coded N/A on various indicators. These lessons were not included in the analysis of the respective indicators.

Indicator	Very low	Low	Medium	High	N/A
1.1 The teacher makes the purpose of the lesson clear	The teacher does not state or write the lesson purpose(s), nor can one be inferred from the lesson activities.	The teacher does not explicitly state the lesson purpose(s), or states it in very general terms, but it can be inferred somewhat from the lesson activities.	The teacher explicitly states the lesson purpose(s) in <i>general</i> terms, and / or it can mostly be inferred from the lesson activities.	The teacher explicitly states a <i>specific</i> lesson purpose and/or purpose is very evident in all activities	-
1.2 Explanations of content (information; concepts; ideas) are accurate	Teachers' explanations are mostly irrelevant	Teachers' explanations are mostly inaccurate or partial	Teachers' explanations are mostly accurate but <i>simplistic</i>	All teachers' explanations are accurate and complete	There are no explanations given or observed in the lesson

In most lessons, the purpose of the lesson (indicator 1.1) was made clear or could be inferred from the tasks given in the lesson (95% of lessons coded high or medium). The difference on this indicator was only slight between lessons in fee paying schools (20% coded high) and no-fee schools (18% coded high).

There was a greater range on indicator 1.2 which rated the accuracy, complexity and completeness of teacher explanations across lessons. Overall, in only 18% of lessons, teachers' explanations were accurate and complete (coded high). In the majority of lessons (59%), teachers' explanations were simplistic (coded medium). Simplistic explanations were equally dominant in lessons in fee and no-fee schools and in lessons across provinces.

Subject differences

Lessons with simplistic explanations were also dominant across subjects, although there was greater variation in lessons between subjects on the high, low and very low codes for accuracy of teacher explanations as shown in Figure 2 below.

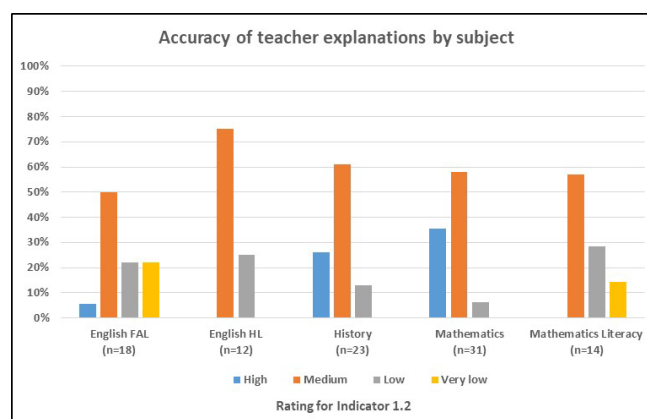


Figure 2: Accuracy of teacher explanations across subjects (Indicator 1.2)

Mathematics had the highest proportion of lessons coded high for accuracy of teacher explanations followed by History. English FAL and Mathematics Literacy had the highest proportions of lessons where teacher explanations mostly inaccurate/partial or mostly irrelevant explanations (coded low or very low) compared to Mathematics and History lessons.

Most mathematics lessons took the form of outlining a procedure for solving a particular class of mathematics problems and then restating the steps of the procedure repeatedly. Lessons coded high and medium are ones where the procedure is always or mostly mathematically

correct and involves operations aligned with the field of mathematics enabling learners to produce the correct solution to the specific or class of problems discussed.

In the majority of the Mathematical Literacy lessons observed, the teachers' explanations of content were either very simplistic (medium) or mostly inaccurate or partial (low). Clarity and accuracy was often compromised when teachers attempted to elaborate definitions with 'simple' examples. The use of imprecise mathematical language and inaccurate definitions of mathematical terms or concepts were observed in several lessons particularly when teachers attempted to interpret contextual problems mathematically.

In History lessons content explanations were mostly accurate and presented at a simple level, with little evidence of the multi-perspectivity or critical engagement that is envisaged by the CAPS. Nonetheless, there were some lessons in which teachers provided detailed and nuanced explanations in response to learners. For example, one Grade 8 teacher at School E gave a nuanced explanation on slavery in response to a student questioning whether "black" people would enslave other "black" people.

In general, content presented across English lessons was not entirely inaccurate, but more often irrelevant, partial, truncated or imprecise. The use of analogy and linking lesson content to learners' experiential knowledge or personal response often led to undue emphasis given to issues that deflected from the purpose of the lesson. In many English lessons, the text (especially textbooks) rather than the teacher, often provided the learners with precise language with which to grasp content. Another common feature of English lessons, was explanations of content that were correct but at a very rudimentary and simplistic level (coded medium).

Dimension 2: Checking learners' understanding

The second dimension of formative assessment considered how teachers check learners' understanding through questions and tasks in the lesson. Five indicators for this dimension were described and coded as shown in table 6 below:

Table 6. Descriptive indicators for checking learners' understanding (Dimension 2)

Indicator	Very low	Low	Medium	High	N/A
2.1 The teacher asks questions that determine what students can know and do.	The teacher either does not ask questions at all or asks only affirmatory questions (e.g. do you understand?)	The teacher mostly asks questions that require simple recall responses or yes, no answers	The teacher mostly asks a combination of questions that require simple recall (low) responses and deduction/inferential type (high) responses	The teacher mostly asks questions that require learners to produce responses based on deeper understanding, logical deduction or inferences not directly stated by a text or the teacher.	Teacher questioning is not suited to the purposes of this lesson or not observable
2.2 Teacher targets individuals for responses to questions	The teacher always asks questions directed at the whole class for expected synchronised response	The teacher mostly asks questions directed at anyone in the class	The teacher sometimes directs questions at specific individuals	Teachers questions are mostly or always targeted to a wide range of specific individuals	Teacher questioning is not suited to the purposes of this lesson or not observable
2.3 The teacher engineers student discussion that elicits evidence of student understanding	There is no discussion initiated by the teacher	Students seldom engage in discussion initiated by the teacher OR student discussion is off topic or very simplistic	Students engage in some discussion initiated by the teacher that requires them to think and show understanding	Students engage in <i>challenging</i> discussion initiated by the teacher in the lesson that shows evidence of their understanding	Student discussion is not suited to the purposes of this lesson or not observable
2.4 A task or activity is set that elicits evidence of student understanding	No task or activity is set by the teacher	The task/s set by the teacher doesn't require thought on the part of the student (e.g. copying from board)	The task/s set by the teacher requires learners to demonstrate low level of understanding	The task/s set by the teacher requires learners to demonstrate understanding	A task is not suited to the purposes of this lesson or not observable
2.5 The teacher monitors students during tasks	The teacher does not monitor students when they are working on tasks	The teacher on occasion monitors by circulating the classroom but does not check individual's understanding nor provide clarification.	The teacher sometimes monitors by circulating the classroom and may check one or two individual's understanding or provide some clarification.	The teacher systematically monitors by circulating the classroom and intensively approaching individual students to check understanding and provide clarification.	No task is introduced / Teacher monitoring would not be appropriate in this lesson or not observable

Below we discuss findings for each of the indicators in this dimension of formative assessment.

Types of questions (indicator 2.1)

For this indicator, we coded whether questions mostly required affirmatory responses (e.g. Do you understand?) (coded 'very low'), whether they required simple recall responses (coded 'low') or required responses based on understanding, deduction or inference (coded 'high'). Lessons coded 'medium' had a combination of 'high' and 'low' questions.

In the highest proportion of lessons (41% of lessons) teachers mostly asked questions that required simple recall responses or yes, no answers (coded 'low'). In only 18% of lessons teachers posed questions that required responses based on understanding, deduction or inference (coded 'high'). In 13% of lessons teachers asked no questions or only questions requiring affirmatory responses (coded 'very low').

The highest proportion of lessons in fee and no-fee schools were coded 'low' for teacher questions (36% and 50% respectively). More lessons in fee paying schools (28%) were coded 'high' for teacher questions, compared to lessons in no-fee schools (10%). The provincial location made little difference on this indicator. This means that across lessons in fee and no-fee schools and across provinces, teachers predominantly asked questions that required simple recall responses or yes/no answers from learners. Questions that required responses based on understanding, deduction or inference were most frequently observed in lessons in fee paying schools.

Subject differences

Some interesting differences were observed between subjects as shown in Figure 3 below. Across subjects, the few lessons coded 'high' for teacher questions, were mostly lessons in Mathematics. For Mathematics, these were often questions that required learners to provide explanations based on understanding, deduction or inference. For example, several

Mathematics lessons focused on geometry, and supplying reasons is an integral component of the topic, stipulated in CAPS and marking guidelines.

History lessons were predominantly coded ‘medium’ (48%), while lessons coded ‘low’ or ‘very low’ for teacher questions predominated in Mathematics (52%), Mathematical Literacy (93%) and English (75% in EHL and 59% in EFAL).

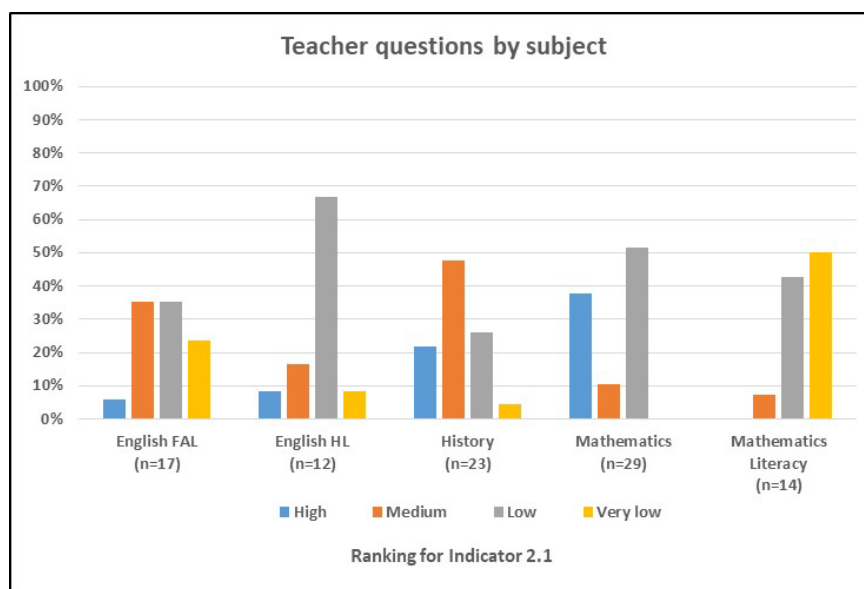


Figure 3: Teacher questions across subjects (Indicator 2.1)

In summary, on this dimension of checking learners’ understanding, low level questioning dominated lessons in all subjects, except History, which had more lessons coded ‘medium’ or ‘high’ for teacher questions. In most of the lessons, teacher questions were most frequently used to move the lesson along rather than as a formative assessment strategy to understand learners’ thinking or check on their progress.

Teacher questions in History and English also frequently had an explicit focus on summative assessment requirements in several classrooms, modelling how to respond to examination and test questions, rather than checking on student understanding in the context of the classroom and lesson. For example, in the Grade 10 history classes, all teachers spent some or most of the lesson time on training learners how to answer the different levels of source-based questions, which have a specific format in the FET phase. Likewise, more open interpretive questions in English HL classrooms were foreclosed by teachers’ questions focused on how to respond to certain types of question in an examination rather than on learners’ interpretation of the text at hand.

In Mathematics lessons, questions posed typically involved eliciting from learners the next step in a procedure e.g. “what do we do first?” or “what do we do next?”, or asking learners to do basic computations either mentally or by calculator e.g. “what is three times four?” or asking

learners to explain what mathematical terms mean e.g. “What is a polynomial?”. Many of these were low level questions that did not probe learners’ understanding.

Mathematical Literacy lessons were dominated by low-level questions mostly posed to the entire class that required simple recall or yes/no answers. For example, in a lesson on ‘shapes’ the teacher asked a series of questions to learners about properties of squares and circles, e.g. ‘what shape is this?’, ‘can anyone tell me the properties of a rectangle?’, ‘what other shapes do we know?’, ‘what do we call the side of circle?’. They were all questions that require simple recall responses from students, which they often did in chorus.

Teacher questions targeting individual learners (indicator 2.2)

A key dimension in our formative assessment framework is the extent to which teachers target individual learners to respond to questions, as this is a mechanism to elicit evidence of student learning. The codes for this indicator privileges individualising or differentiating students as a pedagogic strategy to assess individual students’ levels of understanding and engagement with the content. Hence, on this indicator, teacher questions are coded ‘high’ when directed at individual students and ‘low’ when directed at anyone in the class and ‘very low’ when questions were posed to the whole class for expected chorused responses.

Similar to Kanjee’s (2020) findings, in only 15% of lessons in our sample did teachers ask questions directed at individual learners. The dominant mode of teacher questions in most of the lessons was directed at anyone in the class (48% coded ‘low’), with a further 16% of lessons coded ‘very low’ for questions directed at the whole class for expected chorused, or synchronised response from learners. The targeting of individuals for teacher questions was seen more frequently in lessons in fee paying and Western Cape schools than no-fee and Eastern Cape schools, although proportions of lessons where this was observed were low across all groups.

Subject differences

Across subjects, Mathematics lessons had the highest proportion of lessons where teacher questions were mostly directed at the whole class for expected synchronised responses (23% coded ‘very low’). The targeting of individuals for teacher questions was seen more frequently in English (HL) lessons (41% coded ‘high’) than any other subject.

Class size

Figure 4 below shows questioning strategies in lessons across different class sizes. Even in small classes (less than 30 learners), teacher questions were mostly addressed to anyone in the class rather than specific individuals (49% coded ‘low’). Large classes with more than 40 learners had the highest proportion of lessons where teacher questions were directed at the whole class for expected synchronised responses (33% coded ‘very low’). Most of these large classes were in Eastern Cape schools.

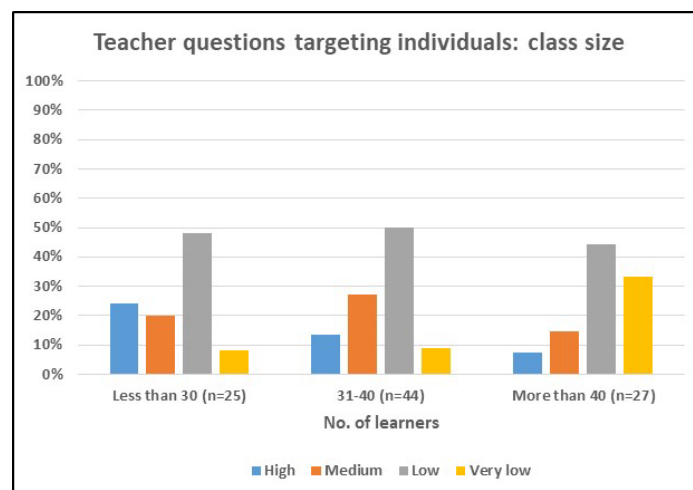


Figure 4: Teacher questions targeting individuals across class size (Indicator 2.2)

Engineering student discussion (indicator 2.3)

For indicator 2.3, only 10% of lessons saw teachers initiating student discussion in the lesson (coded 'high' or 'medium'). 90% of the lessons observed were characterised by 'teacher talk' with little initiation of student discussion. This dominance of 'teacher talk' in lessons was apparent across all school types and school subjects in our sample.

Nature of Tasks set (indicator 2.4)

Indicator 2.4 looked at the extent to which tasks set in class elicited evidence of student understanding. In just over half of all the lessons (53%) the tasks given by the teacher required learners to demonstrate understanding (coded 'high'). However, in 22% of lessons tasks given required a low level of understanding (coded 'medium'), and a further 14% of lessons simply entailed copying notes or solutions from the board (coded 'low'). In 11% of lessons no task was set by the teacher (coded 'very low').

Higher proportions (62% compared to 43%) of lessons in fee-paying than no-fee schools set tasks that required learners to demonstrate understanding. In contrast, higher proportions (20% compared to 9%) of lessons in no-fee than fee paying schools were coded 'low' for tasks that required little thought.

Subject differences

In English HL, Mathematics and Mathematical literacy, most of the lessons were coded 'high' for tasks set, while in English FAL and History most of the lessons were coded 'medium' for tasks set i.e. requiring low levels of understanding.

In Grade 8 History lessons, most tasks given were from the textbook. The questions seldom required inferential thinking, and were generally coded 'medium'. In eight of the 13 Grade 8 lessons the teacher did corrections on the completed activity, by asking learners for answers.

The teacher or a learner would write the answers on the board, which all the learners then copied. In Grade 10 history classrooms, the tasks were mostly ‘source-based’ which comprise a text or an image with questions to be answered.

For English FAL, copying off the board was a common task, especially in lessons focused on doing corrections to previous work. In lessons where a textbook was used to generate tasks, these tasks tended to be coded ‘high’ for eliciting evidence of understanding.

In Mathematics and Mathematical literacy lessons most of the tasks set entailed exercises in which learners had to solve mathematical problems related to the topic of the lesson. These exercises were either written on the board or given on worksheets. In order for learners to complete the tasks successfully, they had to demonstrate understanding and competency in mathematical procedures to solve the problems, hence most of the lessons in these two subjects were coded ‘high’ for tasks set.

Monitoring learners (indicator 2.5)

The fifth indicator we used for how teachers checked learners’ understanding was the extent to which teachers monitored learners while they were doing tasks (indicator 2.5). Overall, in only 21% of lessons was there systematic monitoring and checking of learners’ understanding in the lesson (coded ‘high’). By contrast, in 18% of lessons there was no monitoring of learners while working on tasks (coded ‘very low’). For most of the lessons, there was some or occasional monitoring of learners on task although this did not always include checking of learners’ understanding (coded ‘medium’ or ‘low’).

Very low levels of monitoring were slightly more prevalent in lessons in no-fee (27% coded very low) than fee paying schools (21% coded very low), and much more prevalent in lessons in Eastern Cape schools (29% coded very low) than Western Cape schools (18% coded very low).

Subject differences

Monitoring of learners varied more widely across subjects as shown in Figure 5 below. Mathematics had the lowest proportion of lessons (8%) where there was no monitoring of learners (coded ‘very low’), compared to 33% of lessons in Mathematical Literacy, 47% of lessons in English FAL and 24% of lessons in History. Taken together with lessons coded ‘low’ for monitoring, it means that in a high proportion of lessons where there was no monitoring of learners on task, teachers did not have a sense of how successfully learners were engaging with the contents. In six of the 30 English lessons observed, the teacher did communal corrections i.e., corrections with the whole class and only in five English lessons, the teacher walked around marking / correcting individual learners’ books.

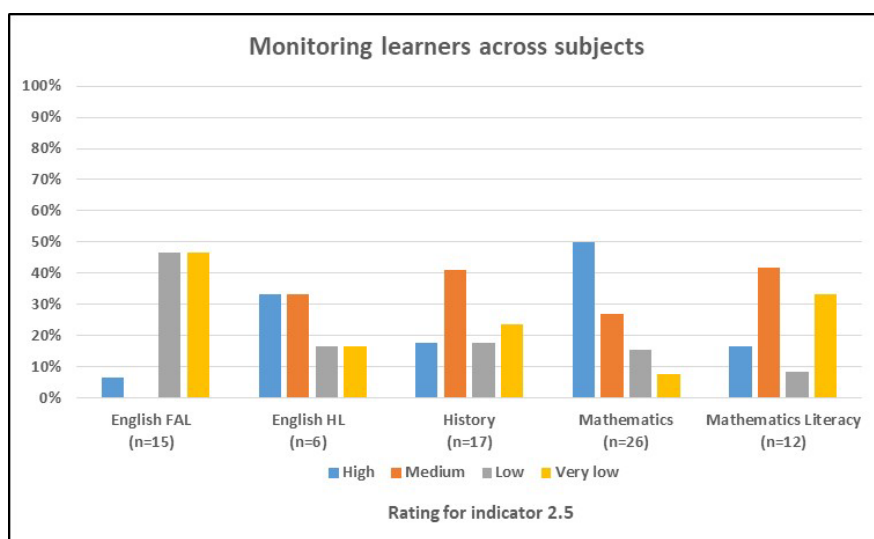


Figure 5: Monitoring learners across subjects (Indicator 2.5)

Class size

Although lessons in small classes had a higher proportion of lessons coded ‘high’ for monitoring than large classes (33% compared to 15%), the proportion of lessons coded ‘very low’ for monitoring were similar in small and large classes (33% compared to 30% respectively). In other words, smaller classes did not necessarily mean there was always systematic monitoring of learners in lessons, nor did it necessarily mean that there was always no monitoring of learners in large classes, albeit only in a small proportion of lessons.

Dimension 3: Teacher Feedback

The third dimension of formative assessment that we examined was the frequency and nature of teacher feedback to learners. For this dimension we described and coded three indicators as shown in table 7 below:

Table 7. Descriptive indicators for teacher feedback (Dimension 3)

Indicator	Very low	Low	Medium	High	N/A
3.1 The teacher indicates whether a learner response is correct or incorrect or asks learners to identify whether learner response is correct or incorrect.	The teacher does not indicate whether a response is correct or not but moves on to the next learner or repeats the answer without	The teacher mostly doesn't indicate whether a response is correct or not or is unclear about what she thinks	The teacher mostly clearly indicates whether a response is correct or not	The teacher always clearly indicates whether a response is correct or not	Learners are not required to or do not respond in the lesson.
3.2 The teacher elaborates on why a response is correct or incorrect or elicits this information from learners	The teacher never elaborates on why a response is correct or incorrect	The teacher sometimes elaborates on why a response is correct	The teacher mostly elaborates on why a response is correct or incorrect	The teacher always elaborates on why student responses are correct or incorrect.	Learners are not required to or do not respond in the lesson.
3.3 Teacher elaboration is detailed and accurate	The teacher's elaboration is irrelevant	Elaboration is very superficial and or slight and or inaccurate Elaboration is mostly inaccurate or partial	Elaboration is mostly accurate but slight and superficial	Elaboration is detailed, accurate and deepens response	Learners are not required to or do not respond in the lesson.

Indicating correct or incorrect responses (indicator 3.1)

Overall, in 78% of lessons teachers always or mostly indicated clearly when learner responses were correct or not (coded ‘high’ or ‘medium’), with only slight variation across lessons in fee and no-fee schools and across provinces.

Subject differences

There was much wider variation on this indicator across subjects as shown in Figure 6 below.

Mathematics had by far the highest proportion of lessons (78%), followed by History (48%), in which teachers always clearly indicated whether learner responses were correct or not (coded ‘high’). This contrasts with English lessons where only 11% of English FAL and 17% of English HL lessons were coded ‘high’ on this indicator.

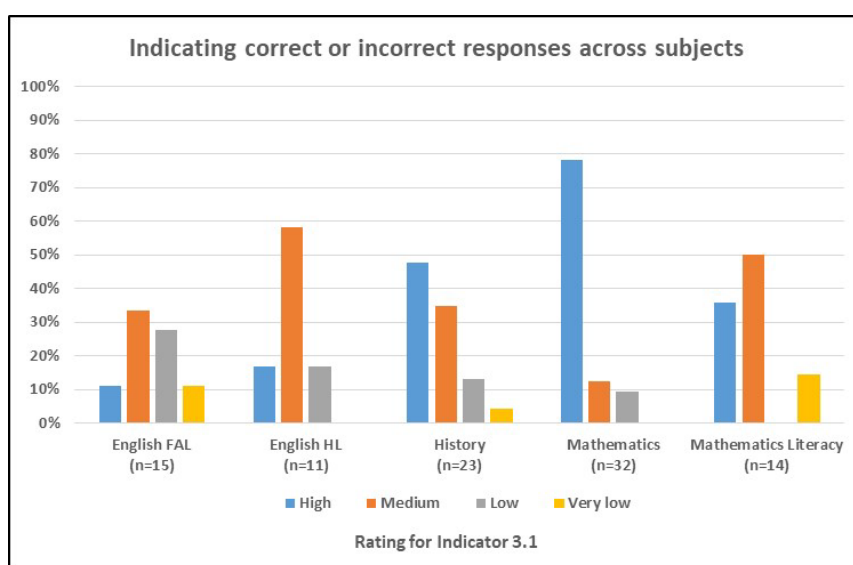


Figure 6: Indicating correct or incorrect responses across subjects (Indicator 3.1)

Elaborates feedback to learners (indicator 3.2)

Overall, in more than half the lessons teachers never or only sometimes elaborated on why learner responses were correct or incorrect (56% of lessons coded ‘low’ and ‘very low’).

Although fee paying schools had higher proportions of lessons coded ‘high’ than lessons in no-fee schools (25% compared to 13%), a significant proportion of lessons in fee paying schools were coded ‘low’ (46%) for teacher feedback elaboration. In these lessons it was common for teachers to simply repeat a student response or give a simple affirmation rather than elaborate, probe, deepen or dispute the response from learners.

Subject differences

There were also interesting variations on this indicator across subjects as shown in Figure 7 below. Nearly three-quarters (72%) of Mathematics lessons, were coded ‘high’ or ‘medium’ for elaborating feedback to learners. This is in stark contrast to teacher feedback in other subjects, where teachers never or only sometimes elaborated on feedback to learners (coded ‘low’ and ‘very low’). Teacher feedback was the most variable across History lessons.

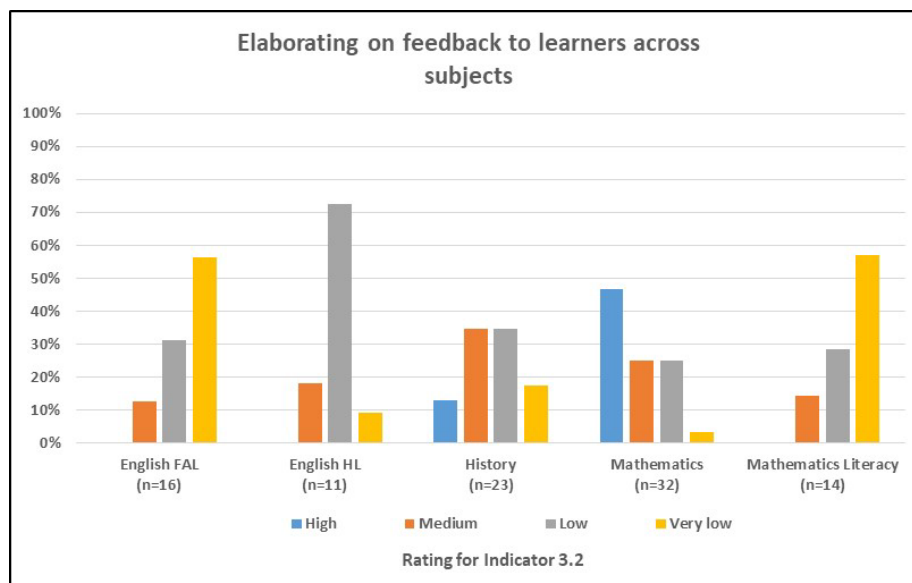


Figure 7: Elaborating of feedback to learners across school types (Indicator 3.2)

Nature of elaboration on feedback to learners (indicator 3.3)

The final indicator for this dimension considered the nature and depth of feedback to learners. Overall, in only 19% of lessons teachers' feedback was detailed, accurate and deepened response from learners (coded 'high'). Thirty-six percent of lessons were coded 'medium', meaning teacher elaboration was mostly accurate but slight and superficial. In 19% of lessons teacher elaboration was inaccurate or partial (coded 'low'), and in 20% of lessons teacher's elaboration was irrelevant (coded 'very low'). Detailed feedback to learner responses were more frequently observed in lessons in fee paying than no-fee schools (27% compared to 19%) and in lessons in Western Cape schools than Eastern Cape schools (24% compared to 14%).

Subject differences

Across subjects, detailed feedback to learner responses were more frequently observed in Mathematics lessons (34%) than in other subjects.

Across all English FAL and English HL lessons, it was very rare to see a follow up question to a learner's response. Teachers also did not respond to errors by asking further questions or trying to identify the source of error. In every instance, teachers moved onto another learner to produce the correct response. It was also apparent in English lessons that teachers were often unable to manage learner responses to more open-ended questions. In other words, teachers' own grasp of their subject did not enable them to identify the appropriateness of a learner response and how to elaborate or reframe that response.

While teachers in most History lessons observed did not elaborate on learner responses, there were a few examples where the teacher did not simply repeat a learner's response, but provided

more elaboration on learners' responses and elicited additional information, like asking learners to give more than one reason to explain a historical event.

As discussed earlier, teacher questions in Mathematics were typically low-level questions. Mostly, teachers accepted answers and moved on without saying anything and learners appeared to understand that this meant the answer given was correct. When learner responses were incorrect, mostly teachers asked for other responses until they got a correct response, often not elaborating why the response was correct.

Teacher feedback was also frequently observed when marking corrections. In Mathematics, 81% of lessons involved communal marking (corrections) to tasks set either as classwork or as homework. These lessons are equally spread across Grade 8 and 10. In a Grade 8 lesson at School D, the teacher insisted on seeing the learner's solution to the first problem before learners were allowed to move on. She only managed to mark 3 learners' books before the end of the period. In another lesson, the teacher moved from learner to learner marking or attending to difficulties learners experienced with the homework task set the day before.

In most of the Mathematical Literacy lessons, the teachers always or mostly indicated whether learner responses to questions were correct or not but seldom elaborated on why a response is correct or not, nor did they ask learners to explain their responses. For example, in several lessons observed on measurement, the teachers wrote formulas for finding area and perimeter of different shapes on the board and accepted learner responses that simply entailed substituting values into given formulas without elaboration of the formulas by teachers or learners.

Summary and discussion

Our analysis of 99 high school lessons provides a description of the nature of classroom pedagogies across a range of high schools using a formative assessment framework. The analysis focused on three dimensions of formative assessment co-present in classroom activity, namely, articulating the purpose and explaining content of the lesson; checking for learner understanding through questions and tasks; and giving feedback on learner responses. We selected a sample that allowed us to investigate potential variation in pedagogy across different subjects and types of schools (no-fee and fee-paying and provincial locations). We also considered variation across class sizes on selected indicators.

While our analysis shows some variation on the dimensions of formative assessment between fee and no-fee schools and between Eastern Cape and Western Cape schools, the differences in formative assessment practices and teacher-learner interactions viewed through our framework are less than one might have expected, given different resource levels and differential outcomes of NSC performance between fee and no-fee schools. Textbook use for example was relatively low across lessons in all school types, and only slightly more frequent in Western Cape schools. Simplistic or partial explanations of content predominated lessons in fee and no-fee schools. In relation to Alexander's (2008) continuum of pedagogical practices: *rote, recitation, instruction by exposition, discussion and dialogue*, instruction by exposition by far dominated lessons. Lessons across fee and no-fee schools were characterised by the

dominance of ‘teacher talk’ and the absence of opportunities for learner discussions. Learner discussions were no more prevalent in small classes than large classes. The analysis also shows the predominance across school types, of low-level teacher questions that require simple recall responses, most frequently directed at anyone in the class. In most lessons across the sample, teacher questions did not probe learners’ thinking and understanding but served more to move the lesson along. Teacher questions directed at individual learners to assess understanding were observed in low proportions of lessons for both fee and non-fee schools. Questions directed at individual learners were only slightly more prevalent in small classes than large classes. Similarly, there were low levels of monitoring learners to assess progress in lessons in both fee and no-fee schools which persisted irrespective of class size. Small classes did not necessarily show consistently higher levels of monitoring learners. Regarding feedback to learners, most teachers never or only sometimes elaborated on learner responses to questions. Where teachers did provide some elaboration, this was mostly slight, superficial or partial explanations and most often addressed to the whole class rather than individual learners.

The most prominent and consistent differences in dimensions of formative assessment that we observed, was between school subjects. The analysis suggests that the nature of the knowledge field for different subjects in high school explains pedagogic practice more than schooling context. Mathematics and History for example, have strong subject identities in which knowledge is clearly defined, specialised and governed by relatively strong boundaries around what counts as legitimate knowledge and who has the authority to produce and evaluate it (Bernstein, 1999). By contrast, English and Mathematical Literacy have less distinct subject identities with less specialised language and less rigid boundaries about what counts as legitimate knowledge. These differences may account for example for why we observed higher proportions of teachers in Mathematics and History lessons providing and elaborating on feedback to learners, compared to teachers in English and Mathematical Literacy lessons. For the latter subjects, feedback to learners frequently relied more on teachers’ own interpretations rather than what strong disciplinary knowledge itself defines as ‘right’ or ‘wrong’ answers.

In accord with their reference to more clearly defined and specialised curriculum content, Mathematics and History also had the highest proportion of lessons coded ‘high’ for accuracy of teacher explanations compared to the other two subjects. Our analysis suggests that in English and Mathematical Literacy lessons especially, the degree of accuracy of content explanations in lessons increased with the use of textbooks or prepared worksheets rather than dependency on teacher explanations alone. The subject focus in our analysis further surfaced interesting differences in the way different dimensions and indicators of formative assessment manifested and were coded across the subjects. For example, teacher questions that elicited student understanding (coded ‘high’) or simple recall questions (coded ‘low’), or detailed elaborated feedback to learners (coded ‘high’), took on quite different forms within each subject.

Notwithstanding the interesting subject differences, the analysis makes apparent that in relation to two key indicators of formative assessment, namely, checking for learner understanding and feedback to learner responses, *individualised* engagements with learners were very limited across lessons in all school types, class sizes and subjects. Lessons across our sample were

characterised by a communalising pedagogy in which teacher questions were generally posed to anyone in the class and feedback to learner responses were mostly made to the whole class, with consistently low levels of monitoring individual learner's understanding in the lesson. In addition, where lessons focused on doing corrections on homework or in class tasks for example, corrections were most often done communally, with correct answers written on the board and copied down by all learners. This supports the finding of Ngwenya's (2019) study in Grade 11 Accounting classrooms in a rural school in KwaZulu-Natal. In these lessons there was minimal monitoring or interrogating why an individual learner's answer may be wrong, with the lesson focused on ensuring all learners at least record the correct answer. Alongside the limited individualised engagements with learners, lessons across our sample were characterised by the dominance of 'teacher talk' and limited learner discussions or dialogic interactions between teachers and learners.

In recent work, Black & Wiliam (2018) argue that formative assessment must be embedded in a theory of pedagogy and that assessment and pedagogy can only be understood "within the cultural, social and political situation within which they are embedded" (p.570). However, formative assessment as it is deployed in much of the literature is asocial, presenting a technicist view of teaching without attention to the complex social processes of learning (Pryor & Crossouard, 2008).

In our prior work on pedagogies (Bertram, 2009, Hoadley, 2007; Hoadley, 2012; Jaffer, 2020), we have mostly drawn on Bernstein's theorising of pedagogic discourse. There are close synergies between formative assessment and Bernstein's (2000) notion of pedagogy as constant evaluation. Davis (2005) draws attention to the fact that Bernstein uses the term *evaluation* rather than *assessment*. In other words, pedagogic evaluation (much like formative assessment) is broader than tasks like tests that assess learners' knowledge. It also encompasses all forms of pedagogic communication such as teacher and learner talk, teacher feedback on learners' verbal or written productions, textbooks and other curriculum resources, including tests and examinations.

The Bernsteinian frame also surfaces a distinction between instructional and regulative discourse. For Bernstein (2000), pedagogic communication entails two discourses, separable only analytically – instructional and regulative discourse. Instructional discourse concerns the knowledge, skills, concepts and content that are transmitted in the pedagogy. This discourse is embedded in a regulative discourse, the set of social norms and behavioural expectations, which include particular understandings around the relationship between teachers and students. While formative assessment frameworks (such as Wiliam & Thompson, 2017) privilege an individualising social relationship and one where authority relations in the classroom are more relaxed (through individual feedback and engagement in discussion)⁹, the regulative discourse

⁹ Arguably, individualising is also explicitly promoted by Bernstein and more generally Bernsteinian scholars who draw on Durkheim's notions of mechanical and organic solidarity, so this bias is not only located within formative assessment frameworks. The theory itself, however, allows for the description of 'positional' and 'personal' forms of social relation, suggesting different authority relations and roles and responsibilities for teachers and students.

that we observed in our dataset entailed largely teacher-dominated whole class instruction with very little student talk and very little student discussion. What was particularly interesting was that this communalised pedagogic form predominated across lessons in fee and no-fee schools, and in lessons of different class size and different subjects.

Reflecting on why communalised, teacher directed pedagogic forms are so prevalent in South African classrooms, Muller and Hoadley (2019) suggest that a communalised pedagogy may have in the past and now provided teachers with an efficient means of working under extreme duress, with large classes of vulnerable learners, broken schools and systems and little instructional support from parents. The pedagogy enables them to fulfil minimum curriculum coverage requirements and maintain social cohesion even if it means learners are not keeping up academically. However, our findings suggest that communalised pedagogies are not restricted to under-resourced schools or large class sizes. We observed the dominance of communalised pedagogies in lessons across our sample of fee and no-fee schools and across different class sizes.

In this regard, there are some immediate material and symbolic aspects to the pedagogic context of our sample that we could argue potentially contributes to more collective pedagogic forms and teacher-dominated talk. The first and perhaps most significant factor is language and the fact that in most classrooms in our sample, the language of teaching and learning is English, which is a second language for teachers and students. English language proficiency amongst students in the no-fee schools in the Eastern Cape was particularly low. This language barrier potentially curtails discussion amongst students and inhibits students from responding to teacher questions, which is evident in many studies (Probyn, 2019). The framework evaluates the engagement of first language isiXhosa speakers in a context where the language of teaching and learning is English. In the few cases where students indicated an eagerness to participate in discussions in the lesson, they either requested to or did respond in their first language, isiXhosa.

Secondly, the teachers' knowledge resources may also be a mitigating factor. At a symbolic level, the high frequency of inaccurate/ partial and irrelevant explanations in lessons across school types, together with the limited feedback that teachers provide to learners, suggests that at least some of the reasons discussions are not easily initiated in class is rooted in teachers' lack of subject content knowledge, evident especially in English and Mathematical Literacy lessons. At a material level, shortage or absence of textbooks also meant that much of the classroom discourse knowledge had to be driven / controlled by the teacher.

Thirdly, teachers in all the schools are subject to an administrative regime of Annual Teaching Plans and curriculum guidelines, that regulate the pace of curriculum coverage week by week. Any slowing down of pace for teachers to be more attentive to individual needs of students in class, mounts pressure on teachers to meet the weekly curriculum coverage requirements (Bertram et al., 2021). To alleviate this pressure, it is entirely rational for teachers to maintain focus on teaching the whole class, ensuring that all curriculum contents are covered timeously for the whole class.

Fourthly, high-stakes examinations and a focus on formal assessment potentially mitigated more wide-ranging discussion or discussion that connected more to students' lived experiences, particularly in English and History. The focus on completing assessments or on rehearsing answers for examinations meant that teachers controlled the discourse, as seen especially in Grade 10 English and History lessons. In mathematics, the focus was on rehearsing procedures for solving classes of problems. There was no discussion or opportunity for learners to think through solutions to problems. Procedures are presented by the teacher and rehearsed.

Thus, the summative assessment system distorts the formative system. Dann (2019) notes that when the schooling system is dominated by high-stakes testing, the teacher-learner relationship is shaped by the teachers' need to ensure that learners yield the required marks to show that they and their school are performing well. "Formative assessment thus becomes a mechanism to deliver the prioritised outcomes which are predetermined and imposed beyond the classroom" (Dann, 2019, p. 357).

CONCLUSION

In this paper we have analysed a relatively large sample of high school classrooms spread across both more and less affluent social settings as well as a range of big and small classes and different subjects. Adapting a widely used formative assessment framework as our lens to describe what is going on in classrooms, this paper has provided an overview of the predominant pedagogic practices across the whole set of 99 lessons in our sample, while also providing illustrative examples of what these practices look and feel like in different high school classrooms. This study hopes to contribute to descriptive understandings of pedagogy at high school level across a broad range of lessons in four subjects.

Our findings suggest that in high school classrooms, school subjects matter when it comes to shaping pedagogy and formative assessment practices, perhaps more so than in primary school classrooms. While we saw variations on several indicators across lessons in different school contexts, these variations were much less prominent than one would have expected between well resourced (fee paying) and less resourced (no-fee) schools or between small and large class sizes. In contrast, formative assessment practices across lessons in different school subjects showed up much more interesting variations that persisted across school contexts. The variations between subjects that we observed suggest that the nature of the knowledge field for different subjects in high school influences the pedagogic practice more than individual teachers and school context. teacher agency.

Further, our findings also suggest that there are similar predominant modes of pedagogy and formative assessment practices in lessons across school types. A communalising pedagogy was observed in the majority of lessons, where teacher questions and feedback were directed at the whole class rather than specific individuals, including doing classroom tasks or corrections collectively rather than individually. In other words, despite years of national curriculum and policy driven changes to encourage teachers to support individual pathways to success for learners, including the current national emphasis on assessment for learning, in our sample of

lessons we saw very little *individualising* of learners across lessons in different school contexts, including different class sizes.

The challenge this study raises is what levers of change can we harness to identify and share pedagogic strategies or formative assessment practices that will work within the collective discourse of the South African classroom which mostly remain teacher controlled. Some initial clues that emerge from our data include the development of teacher knowledge through subject-specific training, and revisiting the role of the textbook in ensuring accurate content and tasks that elicit student understanding. Although our analytic framework did not surface translanguaging as a pedagogic strategy for formative assessment, it is an aspect that warrants further investigation given the instances we found in it contributing to more dialogic discourse. Additionally, subject-specific teacher development could focus on posing appropriate questions and working with learner responses collectively in ways that enable accessing learners' knowledge and building on learners' understanding of the subject. The challenge is to balance teacher control in the classroom with engendering more engaged learning on the part of learners and provide teachers with knowledge of diagnosing student understanding and progress. In other words, the challenge is to find a set of practices within a communalised pedagogy that still leads to individual student understanding and success.

References

- Alexander, R. (2008). *Towards dialogic teaching: Rethinking classroom talk* (4th ed.). Dialogos.
- Bernstein, B. (1999). Vertical and Horizontal Discourse: An Essay. *British Journal of Sociology*, 20(2), 157–173.
- Bernstein, B. (2000). *Pedagogy, symbolic control, and identity: Theory, research, critique* (Rev. ed.). Rowman & Littlefield.
- Bertram, C. (2009). Learning and teaching in Grade 10 history classrooms at a time of curriculum reform. *Journal of Educational Studies*, 8 (3), 111 - 134.
- Bertram, C.A., Mthiyane, C.C.N. & Naidoo, J. (2021). The tension between curriculum coverage and quality learning: The experiences of South African teachers, *International Journal of Educational Development*, 81, <https://doi.org/10.1016/j.ijedudev.2021.102353>.
- Black, P., & Wiliam, D. (2009). Developing the theory of formative assessment. *Educational Assessment, Evaluation and Accountability*, 21(1), 5–31. <https://doi.org/10.1007/s11092-008-9068-5>
- Black, P., & Wiliam, D. (2018). Classroom assessment and pedagogy. *Assessment in Education: Principles, Policy & Practice*, 25(6), 551–575. <https://doi.org/10.1080/0969594X.2018.1441807>

- Botha, H., & van Putten, S. (2018). How mathematical literacy teachers facilitate mathematisation in modelling situations. *African Journal of Research in Mathematics, Science and Technology Education*, 22(1), 93–102.
<https://doi.org/10.1080/18117295.2018.1437337>
- Dann, R. (2019). Feedback as a relational concept in the classroom. *The Curriculum Journal*, 30(4), 352–374. <https://doi.org/10.1080/09585176.2019.1636839>
- Davis, Z. (2005). *Pleasure, pain and the constitution of subject: On the subject of mathematics in the schooling of the Working Class* (Doctoral dissertation, University of Cape Town).
- Department of Basic Education [DBE]. (2012). *National Protocol for Assessment Grades R-12*. Republic of South Africa.
- Department of Basic Education [DBE]. (2020). *National Assessment Circular 03 of 2020: Implementation of Formative Assessment*. Republic of South Africa.
- Department of Basic Education [DBE]. (2023). *National Assessment Circular 01 of 2023: Assessment for Learning (AfL) Approach*. Republic of South Africa.
- Geschier, S. M. (2010). ‘South Africans did, Miss, we, we fought for our freedom’: Pedagogy and the potential of primary narratives in a history classroom. *Education as Change*, 14(1), 47–60.
- Govender, P. (2019). Formative assessment as ‘formative pedagogy’ in Grade 3 mathematics. *South African Journal of Childhood Education*, 9(1), 1–12.
<https://doi.org/10.4102/sajce.v9i1.688>
- Hoadley, U. (2007). The reproduction of social class inequalities through mathematics pedagogies in South African primary schools. *Journal of Curriculum Studies*, 39(6), 679–706.
- Hoadley, U. (2012). What do we know about teaching and learning in South African primary schools? *Education as Change*, 16(2), 187–202.
- Hues, H. (2011). “Mandela, the terrorist”: Intended and hidden history curriculum in South Africa. *Journal of Educational Media, Memory, and Society*, 3(2), 74–95.
- Jacobs, N. L. (2021). *The use of formative assessment to teach writing skills to English First Additional Language learners* (Doctoral dissertation, University of Pretoria).
- Jaffer, S. (2020). Evaluation and orientations to Grade 10 mathematics in schools differentiated by social class. *Pythagoras*, 41(1), 578.
- Kanjee, A. (2020). Exploring primary school teachers’ use of formative assessment across fee and no-fee schools. *South African Journal of Childhood Education*, 10(1), a824.
<https://doi.org/10.4102/sajce.v10i1.824>

- Kanjee, A., & Mthembu, T. J. (2015). Assessment literacy among Foundation Phase teachers: An exploratory study. *The South African Journal of Childhood Education*, 5(1), 142–168. <https://doi.org/10.4102/sajce.v5i1.354>
- Machaba, F. M. (2017). Pedagogical demands in mathematics and mathematical literacy: A case of mathematics and mathematical literacy teachers and facilitators. *Eurasia Journal of Mathematics, Science and Technology Education*, 14(1), 95–108.
- Muller, J., & Hoadley, U. (2019). Pedagogic codes and social justice in South African schooling. In N. Spaull & J. Jansen (Eds.), *South African Schooling: The Enigma of Inequality* (pp. 211–227). Springer.
- Murphy, L., et al. (2020). Formative assessment practices in English language classrooms: A South African case study. *Journal of Language Teaching*, 54(2), 45–67.
- Naidoo, D. (2021). Deep learning opportunities in the geography classroom. *South African Journal of Education*, 41(2), 1–10.
- Naidoo, D., & Mabaso, M. (2020). Deep conceptual learning opportunities in business studies classrooms. *Journal of Education (University of KwaZulu-Natal)*, (81), 136–158.
- Ndlovu, S. (2025). High school classroom pedagogies and assessment practices in South Africa. *South African Journal of High School Education*, 12(1), 15–32.
- Ngwenya, J. C. (2012). *Formative Assessment in Accounting: Exploring Teachers' Understanding and Practices* (Doctoral dissertation, University of KwaZulu-Natal).
- Ngwenya, J. (2019). Accounting teachers' experiences of communal feedback in rural South Africa. *South African Journal of Education*, 39(Suppl 2), Art. #1502, 1–10. <https://doi.org/10.15700/saje.v39ns2a1502>
- Probyn, M. (2019). Pedagogical translanguaging and the construction of science knowledge in a multilingual South African classroom: Challenging monoglossic/post-colonial orthodoxies. *Classroom Discourse*, 10(3-4), 216–236.
- Pryor, J., & Crossouard, B. (2008). A socio-cultural theorisation of formative assessment. *Oxford Review of Education*, 34(1), 1–20.
- Ramallo, M., & Kanjee, A. (2023). Formative assessment practices in Foundation Phase classrooms. *South African Journal of Childhood Education*, 13(1), 1–11.
- Van der Nest, A., Long, C., & Engelbrecht, J. (2018). The impact of formative assessment activities on the development of teacher agency in mathematics teachers. *South African Journal of Education*, 38(1), 1–10.
- William, D., & Thompson, M. (2017). *Integrating assessment with instruction: Formative assessment in practice*. Routledge.