Exploring the structure and content of discourse in remote, rural South African classrooms

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The nature of discourse within classrooms strongly predicts students' ability to think about, around, and with text and content (i.e. comprehension and critical-analytic thinking). However, little is known about the nature of classroom discourse in remote, rural South African schools, a context in which students face well-documented language challenges. The central aim of the present study was to explore the structure and content of discourse in South African classrooms using the 4 components of the Quality Talk model as a frame for our exploration (i.e. instructional frame, discourse elements, teacher moves and pedagogical principles). Grade 8 student participants from 3 classes and their teacher were sampled. Data sources included individual student language assessments, digital video recordings of classroom literacy practices and field notes. Findings revealed that discourse was predominantly characterised by an efferent stance toward text, and the discussions were primarily teacher controlled and directed. There was little, if any, evidence of students' critical-analytic thinking. Observations in terms of resilience and narratability as well as implications for research and practice are forwarded.

Keywords: comprehension; critical thinking; discourse; language in education; literacy; rural classrooms

Introduction
South African students, like their contemporaries in other emerging economy contexts such as Ghana, Kenya and other sub-Saharan African countries, continue to perform poorly in English literacy (Piper, Zuilkowski, Kwayumba & Oyanga, 2018). Such performance is amplified by a myriad of contributory factors including text and task complexity, primary and secondary proficiency (i.e. first language [L1] and second language [L2]) poverty and the rural contexts (Abadzi, 2008; Howie, Van Staden, Tshele, Dowse & Zimmerman, 2012). Although there are no immediate ways to address poverty and rurality, there are potential ways to bolster students' classroom experiences so as to foster better comprehension and critical-analytic thinking when faced with complex texts and tasks, while potentially enhancing their English proficiency. For example, promising work on teacher-facilitated, small-group discussions has revealed that classroom discourse can enhance students' critical-analytic thinking, reasoning and fluency both orally and in writing (Blickenstaff, Hallquist & Kopel, 2013; Nystrand, Wu, Gamoran, Zeiser & Long, 2003). Of course, not all discourse approaches are guided by the same goal nor do they give way to similar outcomes.

Purpose of the Study
Within the present research we were particularly interested in a multifaceted, teacher-facilitated, small-group discussion approach called Quality Talk, which has evidenced success in promoting students' critical-analytic thinking, reasoning and fluency in a variety of high-need American contexts, as well as contexts where English is not the mother tongue such as Taiwan and China (Wei & Murphy, 2019; Wei, Murphy & Wu, in press). Importantly, however, the successful implementation of Quality Talk in both the Taiwanese and Chinese classrooms was predicated on a clear understanding of the current literacy and language context of the participating schools and classrooms, with an eye towards cultural embracement and adaptivity. Knowledge of extant literacy and language practices undergirded the adaptation of Quality Talk for these diverse contexts. As such, the purpose of the present study was to conduct an exploratory study of the current literacy and language pedagogy of one teacher and her students from three classes in a remote, rural South African school, focusing on the discursive practices present in the context. In doing so, we used the components of Quality Talk as a way to frame our observations. We see the present study of existing discursive practices as a fundamental first step in the process of adapting interventions aimed at addressing key challenges facing students in low-resourced rural South African schools (Ebersöhn, 2015; Greene, 2015; Murphy, 2015).

Literature Review
Rural education
The Department of Basic Education (DBE), Republic of South Africa (2017:6) refers to rural areas as "farms and traditional areas characterised by low population density, low level economic activity and low levels of infrastructure." These areas are also often characterised by limited access to services and challenges in the delivery

of quality education (DBE, Republic of South Africa, 2014; Hlalele, 2012). Rural schools are reported to have a shortage of textbooks making teaching and learning difficult. Students often have to share textbooks (Moloi, 2014) and the working conditions of teachers require improvement (Hlalele, 2012). Hlalele (2012), however, points out that in some instances, rural schools have surrounding communities that possess positive attributes such as higher levels of participation in extracurricular activities and smaller school sizes which reduces the incidence of behavioural challenges. The challenges highlighted above and other factors such as lack of infrastructure and limited resources often result in poor student performance and are exacerbated by home languages of students that differ from the language of instruction (Monteiro, 2015).

Literacy in multilingual contexts
Literacy challenges and the concomitant attempts to mitigate such challenges have been well documented in South African rural schools. For example, Pretorius and Klapwijk (2016) and Spaull (2013) found that reading and comprehension levels among students, particularly in rural schools, were poor. What was particularly prevalent in the outcomes was that students often struggled when answering questions that required critical-analytic thinking or problem-solving skills (DBE, Republic of South Africa, 2014). In response to such outcomes, the South African government has made a relatively substantial investment in education but, unfortunately, the increased inputs have not resulted in increases in students' learning outcomes (Chisholm & Wilderman, 2013). Similarly, the most recent results of the Progress in International Reading Literacy Study (PIRLS) also identified poor performance among the South African students (DBE, Republic of South Africa, 2017).

This situation is compounded by the multilingual nature of the average classroom in most postcolonial sub-Saharan schools, where essentially three or four different home languages could be represented. Research has shown that in such multilingual environments, much of the instruction is geared toward rote learning, which often lacks depth and comprehension (Zimmerman, 2017).

Pedagogy geared toward rote learning represents a critical setback for education in developing countries. In these contexts, it could inhibit students' ability to think independently and contribute to discussion and debate. Without basic comprehension and critical-analytic thinking, higher-order cognitive processes like knowledge application, synthesis and evaluation become virtually impossible. The ultimate consequence of rote learning, especially in multilingual settings, is that students fail to develop to their full potential, simply regurgitating what they have memorised.

Moreover, students may fail to develop skills requisite for meaningful knowledge acquisition or decision-making – skills that are vital for resilience in high poverty settings and fruitful for academic or career readiness (Omidire, 2017).

Promoting productive classroom discourse
As revealed through recent research, multifaceted literacy approaches can help propel students beyond rote learning by promoting their comprehension and critical-analytic thinking skills through particular forms of classroom discussion (Murphy, 2017; Murphy, Firetto, Wei, Li & Croninger, 2016). In particular, select approaches to classroom discussion can provide opportunities for language practice in which students take on more control of their learning and are increasingly responsible for meaning making about text and content (i.e. interpretive authority). These types of teacher-facilitated discussion ultimately lead to student improvements (Lin, 2015). Unfortunately, classroom discourse often does not mirror authentic discourse contexts because of the clear social roles apportioned to the teacher and students and the power relations at play (Behnam & Pouriran, 2009). This results in discourse patterns that lack the quality of productive discussion (Reninger & Wilkinson, 2010). One way to ensure that effective learning takes place in classrooms is to encourage students' involvement and active participation, thereby ensuring that the students have some level of responsibility in their learning process (Cook-Sather, 2010).

Rooted in the meta-analytic and systematic analysis of discourse by Murphy and colleagues (Murphy, Wilkinson, Soter, Hennessey & Alexander, 2009; Soter, Wilkinson, Murphy, Rudge, Reninger & Edwards, 2008) we now understand that certain features of the instructional frame, discourse elements, teacher moves and pedagogical principles are fundamental to classroom discussions that promote students' deep, meaningful thinking about, around and with text and content. These central features of productive classroom discussions form the central pillars of the Quality Talk discourse model (Murphy & Firetto, 2017; Wilkinson, Soter & Murphy, 2010).

Quality Talk Framework
The theory underlying the use of discussions to improve students' comprehension and critical-analytic thinking is derived from cognitive, socio-cognitive, sociocultural and dialogic perspectives on teaching and learning. From a cognitive perspective, discussion promotes active engagement in meaning-making from complex text (McKeown, Beck & Blake, 2009), elaboration and explanation of understanding (Fonseca & Chi, 2011; Inagaki & Hatano, 2013), and evaluation of claims and evidence (Greene, Sandoval & Bråten, 2016). From a socio-cognitive perspective, discussion enables

students to make their perspectives on content-relevant issues public, consider others' alternative perspectives, and reconcile opposing or conflicting points of view (Chinn, Duncan, Dianovsky & Rinehart, 2013). Socioculturally, discussion enables students to co-construct knowledge and understandings about the text, to internalise ways of thinking that foster knowledge building, and to forge habits of mind for self-guided learning (Wells, 2007). Finally, from a dialogic perspective, the tensions between alternative perspectives and competing voices in discussion help enrich the discourse and deepen students' understandings (Murphy & Firetto, 2017; Murphy, Greene, Firetto, Hendrick, Li, Montalbano & Wei, 2018).

Although there are numerous approaches to discussion, we chose to employ Quality Talk as a guiding discourse frame for several reasons. First, it is an evidence-based, teacher-facilitated discourse model that aims to improve teachers' pedagogical content knowledge and develop students' high-level comprehension and critical-analytic thinking skills. In addition, Quality Talk promotes interactive learning through discourse that fosters conceptual understanding and increases occasions of productive and engaging student-led classroom discussion (Firetto, Murphy, Greene, Li, Wei, Montalbano, Hendrick & Croninger, 2019; Wei & Murphy, 2019; Wei et al., in press). Given its proven effectiveness in diverse contexts and its adaptability to varied curricular requirements (Firetto et al., 2019; Wei & Murphy, 2019), we have chosen to use the components of Quality Talk as a frame with which to explore the discourse practices in our exploratory study.

The model includes four components. The first component, an ideal instructional frame, conveys the characteristics of classrooms that promote productive talk. Importantly, the characteristics that make up the ideal instructional frame have been empirically identified as being associated with productive discourse (e.g. teachers control what text is discussed, but students control turn taking). The second component, *discourse elements*, represents the different types of discourse that are indicative of students' high-level comprehension and critical-analytic thinking (e.g. authentic questions or individual or co-constructed responses that include backing). Similarly, the third component, *teacher discourse moves* and scaffolding, is comprised of the specific moves that teachers employ to scaffold students' talk as they facilitate the discussions (e.g. prompting students to elaborate). Finally, the set of pedagogical principles encompasses core ideas about discourse (e.g. the degree to which teachers embrace talk as a mechanism for learning).

This study provides insights into the structure and content of discourse in rural classrooms in South Africa, using the central components of the Quality Talk model as a tool for framing our exploration.

Methodology
School and Participant Context
The families, children, teachers and communities in rural areas in South Africa experience high levels of poverty, illiteracy and unemployment. Infrastructure is underdeveloped and there is limited access to resources (Ebersöhn & Ferreira, 2012). Furthermore, there is a high incidence of child-headed households due to children being orphaned by the human immunodeficiency virus (HIV)/acquired immunodeficiency syndrome (AIDS) pandemic and other associated illnesses. The older children often assume the role of parent figure/caregiver, meaning that, for these students, education is secondary to the demands of this role.

The schooling system in South Africa consists of 12 grades plus preschool, which are divided into primary schools (Grades 1 to 7) and secondary or high schools (Grades 8 to 12). The grades are subdivided into the following bands: Foundation Phase (Grades 0 to 3), Intermediate Phase (Grades 4 to 6), Senior Phase (Grades 7 to 9) and Further Education and Training (Grades 10 to 12). School is compulsory for nine years, and students can exit after Grade 9 at the age of 15. Grades 10 through 12 are non-compulsory but are required for entrance into tertiary educational institutions. Grade 12 is considered a minimum requirement to enter the job market. This research falls within the Senior Phase, and the data were collected from Grade 8 students in one remote, rural South African school located in an area where high risk, high need and adversity are commonplace. School students are provided with lunch every day and, for some students, the school food programme provides their only meal for the day (Head of the Department of Languages, pers. comm.). Two official languages are taught at this school (i.e. SiSwati and English). SiSwati is the Home Language for the majority of students and English is the First Additional Language and the language of learning and teaching (i.e. the medium of instruction). Other languages such Sesotho and isiZulu are also represented in the school. The school has just over 1,000 students and 30 teachers. Most of the teachers are not from the area and are not fluent in SiSwati.

There are three Grade 8 classes at the school and attendance is irregular with older female students. The 152 participating students were fairly evenly distributed across three classes with approximately 51% identifying as female (i.e. Class A: 58% female; Class B: 46%; Class C: 50%). The three Grade 8 classes were taught English by the same teacher (female) who participated in the study. As can be seen in the photos in Figure 1, the classroom walls are bare and many tables and chairs are in disrepair.

Figure 1 Photos of the chalkboard at the front of the classroom and the bulletin board at the back of the classroom. All walls are barren.

Text Materials

All text materials were part of the teacher's regular curriculum. Some of the passages read during the lessons observed were taken from the students' prescribed textbook and reader. The stories included: *The Gift of Stories*, *Twins of the Rain Forest*, *The Sacrifice*, and *AIDS Orphans in Africa*. *The Gift of Stories* is a play with four scenes set in a South African village near the sea. The passage is about a woman who did not know any stories to tell her children so she goes to the bush to meet animals that will teach her stories to tell them. Along the way she exchanges carved pictures she made of her life on land with the sea spirits for a shell that tells different stories about life under the sea that she can tell her children. *Twins of the Rain Forest* is about a woman who gives birth to twins and is horrified to find that her fellow villagers believe that twins are evil and have to be killed. Before the twins are drowned in the river, the woman and her husband defy the rules, which forces the whole community to re-evaluate their beliefs and values. *The Sacrifice* is about the sacrifice of a lamb for the Muslim festival of Eid and the impact of the sacrifice on an 8-year-old boy. The boy tries unsuccessfully to persuade his parents not to kill the lamb, which has become like a pet to him and his friends. After the sacrifice, the boy behaves insubordinately, and his father is angry because he wants his son to learn about the importance of sacrifice. The expository reading, *AIDS Orphans in Africa*, is about the devastation of the HIV/AIDS epidemic in sub-Saharan Africa. The text includes various statistics regarding the orphans, and elucidates the importance of extended family in the care and support of these orphans.

Data Collection and Processing

The data sources and collection process included: (a) semi-structured classroom observations, (b) semi-structured interviews and (c) field notes. Semi-structured observations are a data-gathering technique whereby the researcher observes a predetermined phenomenon visually and auditorily and then systematically records the results of the observations (Punch, 2009; Seabi, 2012). The semi-structured observations were conducted over four timepoints for 50 minutes for each class. The researcher only observed and gathered photos and video recordings of the sessions without being involved in the classroom process or activities and thus served as a non-participant. The photos and video recordings of the observations served as documentary evidence and facilitated the data analysis which involved transcription and coding. The semi-structured interviews were conducted after each classroom observation ($n = 4$) to clarify information from the observation, including strategies used and reasoning behind certain actions and/or processes. One school administrator was also interviewed to understand what was expected of the teachers in terms of policy and school regulations. Throughout the study, field notes were used to record observations and interactions. These notes served as corroborative information during the data collection and analysis process.

The data coding process commenced with the transcription of the audiovisual recordings of the classroom observations. The coders identified aspects from each observation with respect to the alignment with the four aforementioned components of Quality Talk: instructional frame, discourse elements, teacher discourse moves and pedagogical principles. Disagreements between coders were reconciled until agreement was reached. In addition to examining the transcriptions of the full 50-minute semi-structured classroom observations for all three classes at all three timepoints, excerpts of the talk were coded to gather a more detailed understanding of the classroom discourse. Specifically, a discourse coding manual (Murphy, Firetto, Greene & Butler, 2017) was employed to code discourse elements and teacher discourse moves. For each observation, the

middle 10-minute segment was identified and subsequently independently coded by two members of the team, and again disagreements between coders were reconciled until agreement was reached.

Findings and Discussion
Instructional Frame
As discussed previously, the ideal instructional frame refers to a set of characteristics that promotes productive talk in the classroom and can also be seen as the discussion space for the teacher and students. We used the transcriptions of the semi-structured classroom observations, semi-structured interviews and field notes as well as evidence from the coded discourse excerpts to explore the teacher's enacted and espoused instructional frame. Drawing on the ideal instructional frame from Wilkinson et al. (2010), we examined six aspects of the instructional frame including: (a) control of the text, topic and turns, (b) when reading occurred, (c) stance toward text, (d) talk structure and (e) interpretive authority.

Control of the text, topic and turns
The observed lessons all took place in a whole-class format. The classroom layout was organised such that the teacher was situated in front of the class facing the students, and the students' desks were arranged in rows with two to three students per desk facing the teacher and the blackboard (see Figure 1). All aspects of text selection were teacher controlled. The literature curriculum, as set out by the DBE, allowed the school to choose its own prescribed texts/stories for Grade 8 students from The *Core Reader*, and this school allowed the teacher to make instructional decisions regarding the class readings. In deciding what to read, the teacher explained in her interview that she selected the texts for her classes according to what she liked and "what is happening today." For this reason, the teacher chose *The Sacrifice* by Ahmed Essop, as she believed the story would resonate with the children because sacrifice was a routine part of their lives and the Eid was a cultural part of some of their lives. During the observations, all discussed topics pertained to the text and were teacher directed and teacher controlled. When students began to tell personal stories or share more than a direct response to a teacher-asked question, the teacher quickly redirected the discussion back to the chosen topic. The teacher also controlled all turn taking by selecting specific students to answer her questions. In each of the three classes, the same two to three students were the only ones who raised their hands or were called upon to answer the teacher's questions during the observations.

When reading occurred
When and how reading occurred was also controlled by the teacher. The first time the students would see the text was during the lesson which was being observed. The students read the story during the class, but with the limited resources, books were shared between two or three students. In considering the nature of the reading, we identified the reading supports or activities that occurred within the discussions before, during or after reading, for example identification of the main idea, delineation of challenging vocabulary or reading comprehension strategy instruction, as these activities are known to support students' reading comprehension (Mason, 2004). *Pre-reading discussions* were observed only during one time-point. Specifically, the teacher asked the students to use a picture on the cover of the book to predict what the story might be about. *During-reading discussions* were observed during all observations. The teacher would usually select the same students to take turns reading excerpts from the text. As the students were reading the text aloud, the teacher would interject text-based questions (e.g. "Who is the main character?"). The discussion would usually be in the form of a question and answer session about what was just read. The example below is from *The Gift of Stories*, excerpts from class A:

Teacher:	*What is happening there in Scene 1? Can anyone tell us? No 5?*
Student 5:	*The children are crying ...*
Teacher:	*The children are just crying because? No 1.*
Student 1:	*Manzandaba was looking for stories to tell to the children.*
Teacher:	*Any other one?*
Student 9:	*Manzandaba's children are crying for stories, and Manzandaba can't tell them.*
Teacher:	*Number? No 24. Yes.*
Student 24:	*They are using stories to calm the crying children.*

There were no *post-reading discussions* in which the class debriefed about the text, topic or their comprehension or understanding of the text. However, all lessons ended with students doing a written comprehension exercise (i.e. post-discussion activity). The question prompts for this exercise were drawn from those included at the end of the reading selection. Most questions drew on their explicit understandings from the text in their written responses. Although some questions included in the list of possible questions required critical-analytic thinking or drawing relations to one's own experiences, the teacher generally selected those that were explicitly based on the text. See Table 1 for the identified supports and activities.

Table 1 Instructional framework indicators for class A, B, and C at timepoints 1, 2, 3, and 4

Class (CI)	Pre-reading discussion	During-reading discussion	Post-reading discussion	Post-discussion activity	Teacher turns	Student turns	Teacher no of words	Student no of words	Teacher-initiated questions	Student-initiated questions
					Timepoint 1					
A	√	√	x	√	22	18	287	246	7	0
B	√	√	x	√	17	13	441	176	5	0
C	√	√	x	√	16	14	716	164	8	0
					Timepoint 2					
B	x	√	x	√	15	15	778	21	4	0
C	x	√	x	√	6	6	317	498	3	0
A	x	√	x	√	23	23	658	194	10	0
					Timepoint 3					
C	x	√	x	√	3	2	405	1	5	0
A	x	√	x	√	14	12	372	202	10	0
B	x	√	x	√	6	5	105	36	5	0
					Timepoint 4					
B	x	√	x	√	10	9	761	33	5	1
A	x	√	x	√	17	16	778	79	6	0
C	x	√	x	√	11	7	634	37	0	0
Total					160	140	6,252	1,687	68	1

Note. "x" denotes instructional features not observed and √ denotes instructional features that were observed.

Stance towards text

The teacher's goals for reading or writing were never explicitly or implicitly stated during the classroom observations. However, as noted earlier, the teacher's questions were geared toward literal or basic text comprehension, requiring students to locate and recall information from the text. This focus on gleaning text-based information suggests a high efferent stance toward text. There were two instances, however, where the teacher prompted students to express their feelings regarding the character or topic of the text. Thus, given the teacher's sporadic prompting for the expression of students' feelings, we would also describe her as having a modest, but low, expressive stance toward text. An example below is from *Twins of the Rain Forest*, excerpts from class B:

Teacher	*What is actually happening in the in the story? After you have read it. What are your feelings about the story? How do you feel? If I tell the story as if is real? 24?*
Student 24	*I feel so ashamed because a kingdom deserves to be – a royal palace deserves to be run by a person, but the way to solve the problem is not to push some other person into the river.*
Teacher	*Any other one? 40. Tell us.*
Student 40	*I think that the – I think that the older twin brother shouldn't have pushed the little brother into the river.*

At no point did the teacher prompt students to invoke a critical or analytic perspective toward the chosen texts.

Talk structure

In exploring the talk structure, our deeper coding of the discourse included an examination of the frequencies of teacher and student turns, words per turn and questions. Prior research suggests that in more productive discussions, which are linked to strong student comprehension and critical-analytic thinking, students take more turns than teachers, ask more questions, and hold the speaking floor for longer periods of time compared to the teacher. However, the discussions we observed did not align with what might be characterised as productive discussions (see Table 1). Rather, we observed a discourse structure that aligned with a more traditional Initiate-Respond-Evaluate ([IRE], Mehan, 1979) approach to discussion. Specifically, the teacher would ask a question, a selected student would respond, and the teacher would either offer an evaluation or provide a more extended, alternative response. Thus, while there was a fairly equal *number of turns* taken between the teacher and students, the teachers' turns were much longer in terms of sheer *number of words* (see Table 1). Further, in Table 1 the students in Class C generally had the least number of turns. The teacher averaged approximately the same number of words ($n = 520$) across all three classes, while the students in Classes A ($n = 180$) and C ($n = 175$) spoke far more than the students in Class B ($n = 67$). The data also reveal a stark decline in the number of words spoken by students, which is particularly evident in the fourth observation. In the semi-structured interview following the last observation, the teacher suggested that this decline was due to the need for exam preparation.

Interpretive authority

Although the teacher advocated for the use of classroom discussion throughout the observed lessons with comments such as "let's talk", her routine instructional practices were both teacher centred and teacher directed. The teacher's questions were predominately test questions (i.e. questions with a specific, predetermined, correct answer). In essence, there was little to no shared interpretive authority of what counted as a viable or correct response – the teacher controlled all evaluations of correctness. Often, the teacher would repeat the same question or continue asking students for responses until she was satisfied with the response.

Discourse Elements

To examine the nature and content of the classroom discourse, we coded both the questions and responses in the 10-minute discourse excerpts using a pre-established discourse coding manual (Murphy et al., 2017). The frequencies of the various discourse elements are displayed in Table 2 by class, as there was little variation in the nature of the questions or responses across the four timepoints. Of the total 69 questions, only 30 represented unique, content-oriented questions that were responded to by students. The remaining 39 questions represented repeated questions (e.g. "What else again?"), aborted questions for which there was no response (e.g. "Who will tell me the answer?"), or procedural/discourse management questions (e.g. "Whose turn is it?"). Of these 30 questions, eight were coded as authentic questions (i.e. there were multiple possible responses) and 22 were coded as test questions (i.e. questions that presupposed one correct response). Importantly, we coded only one student-initiated question.

Table 2 Discourse element frequency counts for class A, B, and C

Code	Class A	Class B	Class C	Total
Question types				
Authentic	3	2	3	8
Test	10	7	5	22
Total	13	9	8	30
Response type				
Elaborated explanation	1	0	1	2
Exploratory talk	0	0	0	0
Cumulative talk	2	2	2	6
Total	3	2	3	8

We also looked more closely at the responses students made to the authentic questions. With regard to students' responses, in two instances students responded with elaborated explanations (i.e. a turn from a single student that included a claim with evidence and reasoning as backing for the claim). Likewise, there were only two instances of co-constructed talk, both of which were coded as cumulative talk (i.e. talk involving the cumulative building of student understanding between at least two students) and no instances of exploratory talk. Together, the patterns from the coded elements of discourse further support the notion of a classroom primarily characterised by teacher-centred and teacher-directed talk.

Teacher Discourse Moves

To examine the teacher's facilitation of the discussion, we coded the teacher's use of discourse moves (Wei, Murphy & Firetto, 2018) in the 10-minute discourse excerpts using a pre-established discourse coding manual (Murphy et al., 2017). Specifically, we examined teachers' use of modelling, prompting, summarising, challenging and marking. As displayed in Figure 2, *prompting* (e.g. "Tell me more …") was the most frequently occurring teacher discourse move, followed by modelling of thinking and summarising students' responses. The teacher issued no challenges of students' responses, which further reinforces our supposition that there was almost no indication of a critical-analytic stance toward the texts.
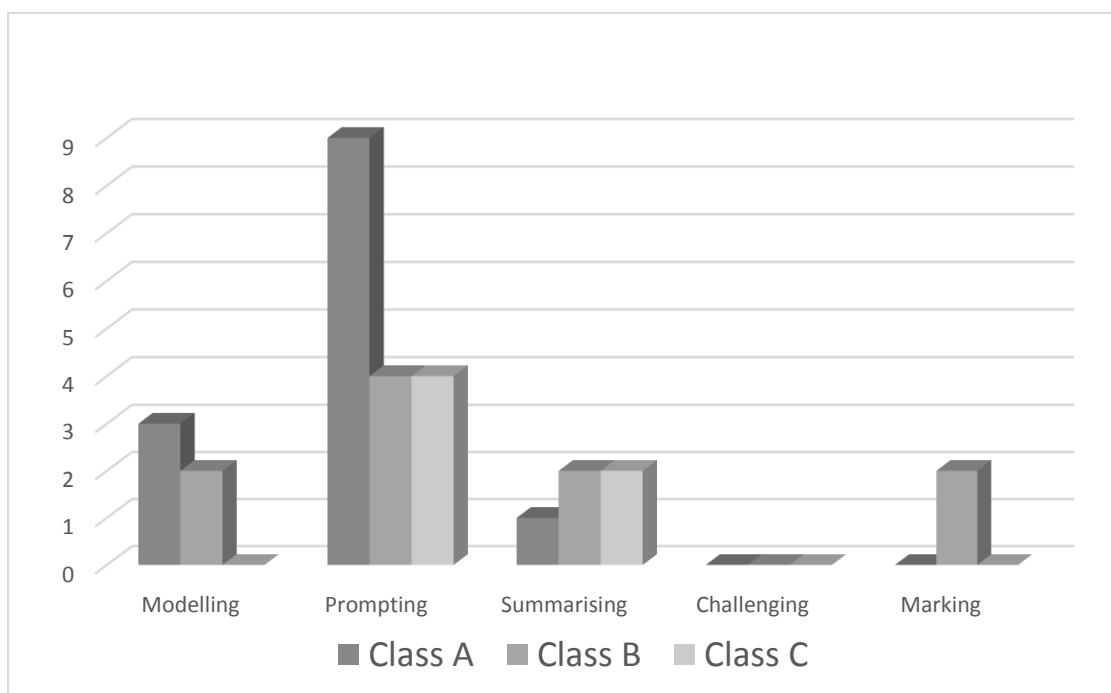
Figure 2 Teacher discourse moves per class

Pedagogical Principles

Finally, to better understand the pedagogical principles undergirding instruction across these classes, we drew on data from the classroom observations, interviews and field notes. As has been the case throughout, we used prior research on productive discussions as a frame for our exploration of pedagogical principles. Specifically, we explored: (a) the extent to which the teacher viewed language as a tool for thinking and inter-thinking, (b) the teacher's normative expectations

and dialogic responsiveness, and (c) clarity of the content.

Language as a tool for thinking and inter-thinking
Emerging from Vygotsky's (1978, 2012) perspective on language and thought, the basic premise within the literature on productive discussions is that talk is an external representation of thought. As such, talk can be used as a tool for thinking both individually and as a group (i.e. inter-thinking). From discussions with an administrator and teacher, the value of discourse was accepted. However, as noted above, this did not seem to be internalised by the teacher nor the students in the observations. The administrator explained that some students find it difficult to talk in the classroom because they were shy. The administrator further mentioned that the students were expected to keep quiet during lessons. As a result, very few students contributed to classroom discussions during the lessons. In fact, with few exceptions, the same students were asked to read from the text and to answer the teacher's questions. Thus, although it seems that both the administrator and the teacher are open to the use of talk as tool for thinking, there is some disconnect with respect to their espoused frame and that which was enacted.

Normative discourse expectations and dialogic responsiveness
Our classroom observations and field notes revealed clearly established normative expectations for student participation and interaction. Specifically, students were very disciplined in the classroom and the teacher negotiated all the forms of interactions in the classroom – open participation was not encouraged. For example, when more than one student responded, the teacher requested that they raise their hand first. During the question sessions, the teacher tried to encourage more elaborated answers by sequentially calling on different students until she was satisfied with the answer. However, the answer the teacher was often looking for was a summary of what was in the text rather than students' own understandings or elaborations beyond the text. The teacher did not provide explicit feedback to the students' answers. She often contributed to discussions with her own experiences rather than encourage the students to share their personal stories or experiences. As mentioned previously, critical-analytic exchanges were noticeably absent from the discourse as though the normative expectation was that challenge was not permitted in the classroom, which was also evidenced in the lack of challenge discourse moves by the teacher. Finally, all aspects of the discussion took place in a whole-class setting.

Clarity of the content
Another key pedagogical principle of productive discussions is that both the teacher and the students are prepared to discuss. Such preparation may include the teacher preparing questions of central importance in advance. During the semi-structured interview, the teacher explained that she decided on important questions as the students read the text out loud during the lesson with the goal of being responsive to students' specific challenges. Through observations and field notes, we documented strong effects of low resources playing out relative to this principle, particularly for the students. The limited availability of resources meant that not all the students had access to the text before the lesson and during the lesson up to four students might be required to share a book or photocopy of the text. As a result, for many students the post-discussion writing activities were done in the absence of a text to which to refer. Without textbooks, the incidence of homework being given to students was limited and the students had to finish outstanding work at school.

Conclusion
Using the four components of the Quality Talk model as a tool for framing our exploration, this study sheds light on the structure and content of discourse in three rural classes in a remote, rural South African school. Across the examination of the instructional frame, discourse elements, teacher moves and pedagogical principles employed by one teacher, one primary theme that emerged across these components is the high efferent stance toward text, with only a modest expressive stance, and no evidence of any critical-analytic stance. Importantly, these findings reveal key areas that could be bolstered to improve the use of productive talk in these classrooms. Classrooms in similar emerging economy contexts could also benefit from the findings of this study to improve students' language skills. Based on these findings, professional development programmes could be developed to focus on using various instructional approaches that would foster high-level comprehension and critical-analytic thinking skills in students with a better understanding of the extant context.

Authors' Contributions
All the authors participated in the writing of the manuscript. FO, PKM and LE conducted field

research and analysis. All authors reviewed the final manuscript.

Notes

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