

## **Interpretive Case Research: The problematic of developing analytical constructs**

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### **Abstract**

*The paper draws on the methodology used in conducting a PhD study that focused on teachers' instructional strategies. The central claim of the paper is that the development of analytical constructs is a matter of integrating suggestions from the relevant literature and evidence from research data. The process of working with both the literature and data leads to credible conclusions about the phenomena studied. Drawing on classroom lesson data, the paper illustrates how analytical constructs were developed and used in the main study. The key finding of the main study is that analytical constructs derived from the literature in most cases does not fit with the data.*

**Key words:** Interpretive case study, analytical constructs, and sufficient evidence

### **1. Introduction**

This paper reports on interpretive case study methodology, which was used in conducting a PhD. It notes two important strengths of interpretive case: (a) an emphasis on understanding the phenomena studied rather than refuting claims or theories and (b) respecting the voices of the research participants. The latter involve working with categories, which adequately captures what the participants pointed out. It is contrasted with the process whereby research participants' views are evaluated against a set of criteria – criteria often developed out of the context of the research participants. By outlining how analytical constructs were developed and used within the interpretive case study, the paper will argue that the conclusions made in the main study are credible and plausible. The discussion in the coming sections will assert the importance of working towards a rich understanding of the phenomena under study rather than finding *the* truth. In essence it does recognize objective truth within the social sciences but neither does it propose that every claim about knowledge is valid. The process of conducting the research (defining the research question and selecting appropriate research instruments), developing analytical constructs and subjecting the data to the constructs constitute criteria of adequacy - what is also referred to as analytic realism.

HSRC RESEARCH OUTPUTS

3302

The discussion in the following sections is structured into four parts. The first section provides background data of the main study and the framework adopted in this paper. This will be followed by an examination of how issues of validity and reliability were taken into account in this study to bring out credible conclusions. Discussion of how the analytical constructs were developed will constitute the third section of the paper while the concluding section will engage with empirical data to illustrate the application of the analytical categories.

## **2. Background and Framework**

The main study focused on rural schooling and observed that the literature on rural schooling pays attention predominantly to the material inadequacies of rural schools, such as lack of classrooms, overcrowded classrooms, dilapidated buildings, lack of teaching aids, and lack of ablution facilities. The general poverty of rural communities is also well documented. However, the detailed descriptions and analyses of material conditions of rural schooling are not accompanied by in-depth examination of what transpires in the classroom. It raises the following questions with regard to the dominant perspective in current research on rural education: In what ways does the lack of resources constrain the presentation of the lesson to learners? Does lack of resources automatically result in instructional approaches that fail to provide access to disciplinary knowledge?

The study used interpretive (non-evaluative) case study methodology to understand the classroom practices of teachers. A distinction needs to be made between an evaluative and non-evaluative case study. Some authors point out that non-evaluative case study methodology is chosen precisely because researchers are interested in insight, discovery and interpretation, rather than in testing hypothesis (Stake, 1991; Erickson, 1986; Eisner, 1990). The primary aim of conducting a non-evaluative case study is to gain insight into the phenomena studied instead of refuting certain claims and conclusions. The emphasis is on interpretation and discovery rather than on establishing whether a theory is valid or not. This does not mean that testing theories or hypotheses is unimportant, only that it does not constitute the central focus of a case study.

Wolcott (1994) argues that understanding believes that the primary tactical aim of the case study research is to advance understanding. His focus in conducting research is not on coming up with the truth but rather identifying significant points and writing plausible interpretations. As he puts it

What I seek is something else, a quality that points more to identifying critical elements and writing plausible interpretations from them, something one can pursue

without becoming obsessed with finding the right or ultimate answer, the correct version, the Truth (p.366)

Drawing specifically on the study of education, Lampert (1990) makes the same point when she contends that the purpose of interpretive case study research "is not to determine whether general propositions about learning or teaching are true or false but to further our understanding of the character of these particular kinds of human activity" (p.6). Similarly, Stenhouse (1988) observes that "many researchers using case study methods are concerned neither with social theory nor with evaluative judgment, but rather with understanding of educational action" (p.50). On a similar point, building on the work of Glaser and Strauss (1967), Yin (1994) notes that exploratory (interpretive) case studies involve a hypothesis-generating process and "its goal is not to conclude a study but to develop ideas for further study" (p.110).

It is also the case that researchers conduct case study research because of the need for specific understanding through documentation of concrete details of practice (Stakes, 1991 and 2000; Lampert, 1990). Qualitative researchers are committed to taking a case-based position, which directs their attention to the specifics of particular cases. The overwhelming concern with case study research is not to produce generalizations that cut across many settings and contexts, because a large part of it is conducted in natural settings by using observation techniques and participation within the discourse of the community being studied. In controlled research, rarely conducted in natural settings, generalization across research sites is feasible. In this research the classrooms observed were not arranged and prepared for research purposes. The issue is that qualitative case studies will:

get as close to the subject of interest as they possibly can, partly by means of direct observation in natural settings, partly by their access to subjective factors (thoughts, feelings, and desires), whereas experiments and surveys often use convenient derivative data, e.g. test results, official records. (Stake, 2000:p.32)

Direct observation was the most dominant technique of data-gathering in this study, and involved extensive video recording of classroom proceedings – everything the teachers said and did. The extensive data gathered in this study will enable the researcher to conduct what is called 'thick description' in the data analysis. As Yin (1992) notes, "*thick description* is the end product of a case study, a construct borrowed from anthropology

that means the *complete, literal* description of the entity under investigation. Case studies include as many variables as possible and portray their interaction, often over a period of time" (p.29-30).

The exploratory nature of the study means that there is an emphasis on understanding the various features of teacher's instructional approaches. Essentially, the aim is more in making sense of the instructional approach rather than in evaluating it as effective or ineffective.

This having been said, as Erickson (1986) points out, even though researchers working within the interpretive case study method are not 'manifestly evaluative' and their questions are not "Which teaching practices are most effective?", issues of effectiveness are crucial in case study methodology (p.122). Differently put, in case study research the issue of evaluation cannot be totally excluded. In conducting this study the primary aim is to comprehend teachers' instructional approaches and how they enhance learners' access to disciplinary knowledge. Ultimately, however, conclusions will be made about the aspects within teachers' instructional strategies which are less effective.

### **3. Validity and Reliability**

This paper is premised on those fundamental principles of qualitative research that recognize that the phenomena of the social sciences are entirely of human construction and as a result cannot be known with absolute certainty (Wolcott, 1994; Woods, 1996). To seek *the* ultimate answer, the 'correct version', 'the Truth', is not one of the aims of qualitative research, nor are the findings about teachers' instructional strategies in this study aimed at determining the objective truth about teaching in rural areas. Some analysts point out that while the grand narrative (canon) is exclusionary, as it does not include the experiences of marginal people, not all claims to knowledge are necessarily valid. It is merely the case that some claims to knowledge are more credible than others (Muller and Moore, 1999). Given the exploratory nature of the study - to comprehend the instructional approaches of teachers in rural schools - issues of validity are examined by taking into account several pertinent factors.

#### **3.1 Accurate and Extensive Recording of Data**

The first important consideration in producing valid results is the recording of data as accurately and extensively as possible (Wolcott, 1994; Erickson, 1986), aided in this study by the use of video recording. The video camera operator was asked to capture as much as possible of what the teachers said and did - classroom movements, gestures, and utterances. Since the focus of the study is on instructional practices and teaching strategies, entire lessons were recorded concentrating mainly on what the teachers were doing. The other aspects of classroom activities, such as discussion among learners or learners' responses, were not prioritised in this study. Besides the use of video, the researcher took extensive notes about what transpired in the classroom, several points about which are important to make. Firstly, extensive notes served as a back up to the video recording in case there were technical problems. This would ensure that whole lesson would not have to be taught again to capture what happened. Secondly, as some lessons extended over an hour, the video operator had to change the cassette and this did not require the teacher to stop for a moment as the researcher filled in the gaps. Partly this procedure was intended to minimise our interruption of classroom proceedings. The notes also assisted in capturing what was written on the chalkboard, but was at too great a distance for the camera always to pick up clearly. More importantly, the notes taken during lessons were critical in detailing the context, largely through an ability to record different aspects simultaneously which a video alone does not have, for example, the number of learners in class and the seating arrangements.

### 3.2 Primary Data

The second consideration in seeking validity is based on a recommendation that researchers include as much as possible primary data so that readers can gain an idea of what that data looks like (Wolcott, 1994; Erickson, 1986). The aim is to work with the exact utterances and words of the research participants. The researcher transcribed the sounds from all the video recordings and extracted certain relevant parts to make the central claims of this research. The usage of long extracts may be tedious to some readers but, in order to do justice to the data, several long extracts were included. This does not mean that the extracts speak for themselves - they still had to be interpreted. Of primary concern here is that there should be a balance between providing too much detail and too little (Wolcott, 1994).

### 3.3 Duration of Fieldwork

Among the strategies used to ensure that the basic database is adequate for capturing the major features of the phenomenon under study, there was an extended period of data gathering. The researcher spent approximately 14 weeks collecting data at the research sites, not in one time slot (once-off) but spread over the first, second and third terms of the school calendar. While prolonged periods of data gathering make it possible to notice atypical practices (Kelly, 2000), conversely a short period of data does not allow for collection distortions to be completely controlled or eliminated. As a further strategy of ensuring the adequacy of the data, interviews were held with other research participants to solicit their responses on the way in which key research participants (teachers) presented the lessons.

### **3.4 Member check**

A further recommendation for ensuring validity is that there should be a "member check" of the case and data accumulated (Easthope and Easthope, 2000), so that research participants accept the accuracy and description of the data. This was taken into account in this study as the researcher shared his interpretation of the classroom practices with the relevant teachers (Interviews, 2001 and 2002). The video was jointly viewed by the researcher and the teachers, and the latter were asked if they would agree that what is captured in the video fairly represented the way they taught usually, not only in this video recorded lesson. Additionally, learners in focused groups were interviewed about teaching in this school, life in this community and the general conditions in rural communities. The interviews with learners were mainly intended to establish whether the teaching practices observed and video recorded were typical of the styles of teaching of the particular teacher. On this point learners were unanimous about the teaching practices observed, indicating that they reflected the common practices of the teachers observed. More specifically, they were also asked about problems they encountered in school that inhibited productive learning.

### **3.5 The Role of the Researcher**

Lastly, the researcher's role within the research context – speaking the local language, being familiar with the subject taught - is of crucial importance (Kelly, 2000). The role entails personal attributes such as ethnicity or the ability to participate in the discourse of the site and how one gains access to it, constituting what ethnographers refer to as 'emic perspective'. When the researcher was introduced to the morning assembly at Lebone,

the principal pointed out that the researcher was not a visitor but a local person: "Mr Phurutse *ga se moeng, ke ngwana wa mo*" ("Mr Phurutse is not a visitor, he is a family member") (Field notes, 2001). Similarly at Thuto, the principal indicated that the researcher belonged to the community and mentioned the nearby school at which I taught and some of the teachers among his staff with whom I had received my secondary and tertiary education. The point was to indicate to learners that the researcher is one of them and they should be open to interviews and conversations.

An example of the importance of imparting this level of linguistic familiarity was that it facilitated teaching-learning environments wherein teachers could code-switch as they normally did, and learners could ask and respond to questions in their mother tongue. Had the researcher not understood the local language (in my case, North Sotho - one of the three main languages in the province) it would have constrained the way the teacher worked or engaged with the learners, perhaps leading to the teacher minimizing code-switching so as to accommodate the researcher (Phurutse, 2001). Thus the range of languages the researcher speaks is important as it can facilitate a more natural setting, instead of one designed artificially for research purposes. The obvious advantage of knowing the local language is that when teachers and learners code-switch, the researcher understand what they are talking about.

The *emic* perspective (Fetterman, 1998), on the other hand, has its disadvantages. It is important to step back and assume an external role of the scientist and reflect upon what is taking place. This calls for the *etic* perspective, which will facilitate objective analysis of teaching and learning in this study, by taking into account relevant literature about productive instructional approaches. In a way I have assumed different roles, of insider and outsider, that is, as a local person within an insider perspective not only of rural living but teaching as I practiced it in schools in the area. At the same time I was an outsider as I put on the research cap in order to understand what takes place in these schools and, more importantly, how can it be improved.

#### **4 Analytical Framework/Constructs**

One of the defining characteristics of case study research involves developing frameworks for analysis. The most important for this study are now outlined. Yin (1994) observes that case study research requires an outline of the analytical strategies that will be used to interpret research findings. Accordingly, the central aim of the strategies is to

indicate to the analyst "priorities for what to analyse and why?" (p.58). Yin outlines two such strategies that he argues are central for analysing data: (1) strategies relying on theoretical propositions, and (2) developing a case description. He also asserts that the theoretical proposition helps to focus attention on certain data and ignore other data. The proposition also helps to organise the entire case study and to define alternative explanations to be examined. The theoretical proposition in this study is based on the review of current literature on rural schooling in South Africa and on new insights provided by recent classroom-based research in the US. In view of the analysis of South African research, this study points out a number of problematic areas, such as an overemphasis of structure over agency in analysing the experiences of people who live in economically and socially depressed areas. It argues that while the social and economic conditions in which rural teachers work impact on their teaching, teachers act as recontextualising agents within their classrooms. This review also indicates that rural teaching is predominantly characterised in dichotomous terms – participatory/authoritarian or teacher-centred/learner-centred. It was pointed out in the opening chapter that this general description of rural schooling and living does not provide a comprehensive picture of life in these communities. More specifically, it does not indicate how the people and schools survive and cope with the lack of basic material needs.

The analytical frame developed in this study also drew from the work of Bernstein (1990 and 1996), wherein he talks of language of description of pedagogical discourses – regulative and instructional discourses. This was used to facilitate descriptions of teachers' moves in their attempt to create epistemological access into the substance of what they teach. In his earlier work, Bernstein (1966) referred to the regulatory strategy as the "expressive order" and the instructional discourse as the "instrumental order". Both the expressive and the instrumental orders reflect interrelated complexes of behaviour embodied within a school. The expressive order (which he describes later on as regulative) is a web of behaviour and activities, which regulate conduct, character and manner. The instrumental order (which he describes later on as instructional) is concerned with the acquisition of specific skills and bodies of knowledge (p.159). This analytical frame informed data interpretation and the analyst worked out categories that were mainly derived from classroom lesson data to make sense of teachers' instructional approaches. Great care was taken to ensure that the categories were developed sufficiently to capture classroom processes.

### **Sampling**



The sample was made up of six teachers in three schools – two teachers per school. The teachers were selected, taking into account a number of issues. The sample was to a large extent self-defining in the sense that the researcher asked learners and the principals about good teaching and who they would recommend be studied. Learners indicated that a good teacher is someone who is patient with the learners, explains the subject well and does not shout at them and ridicule them for committing errors in their responses to questions (Focus group Interview, 2000, 2001, and 2002).

The following section examines three examples from a geography teacher. These examples illustrate different aspects of the teacher's instructional approaches. The first one examines how the teacher attempt to work with learners inputs in order to facilitate access to disciplinary knowledge. With the second example, the teacher recruits common stock of knowledge in order to make the content accessible to the learners. In extract three, the teacher introduces learners to ways of reading the text - the meaning brought about by placing prefix on a sentence.

### 1. Working with the inputs of learners

The literature on productive instructional practices suggests that it is critical for teachers to work with learners' responses – either by elaborating on them, indicating their incompleteness or totally rejecting them (Ball, 1996 and 2000; Bell, 1999; Walch and Even, 2002). Some authors, for example Ball and Cohen, strongly argue that teachers need to "focus on listening to students' ideas as a source for insights into what they know, what we should explore, where we might go" (1996:13) What is suggested here is for the teacher to work with the responses of learners more so as he encourages their inputs by bringing in their daily experiences to the classroom discussions. In a way this would show that he values their inputs, even if they may be incorrect - as "an ear to the students" (Ball, 1996). Brodie *et al.* (2002) also observed teachers who did not fully hear what learners were saying. As she puts it: "Many of these teachers missed or ignored wrong answers or incorrect constructions, and *did not hear answers that could be constructed as partially correct*, or could be worked with. Teachers in this category seemed to be working with the notion that pupil participation and talk is useful, as an end in itself, rather than as a means to develop knowledge" (p554) [emphasis mine]. Brodie (2002:554) notes that teachers provide opportunities for learners' inputs in classroom discussions but do not engage with such inputs. What accounts for this kind of practice, according to Brodie (2002), is that often teachers could only hear the response they are looking for, that is, the correct answer or the answer provided by the text.

### Extract 1: Working partially with learners' inputs

The following extract is taken from a Geography lesson taught by Mr Senong at Legae Secondary School. The focus of the lesson was generally on types of settlement (rural and urban) and more specifically on patterns of rural settlement (village patterns). Village patterns result from both physical and human factors. For example, physical factors such as a mountain range or river system gives rise to a linear village pattern. Similarly, human factors, such as a railway line, can also result in a linear pattern. In this extract the teacher not only listens to what learners are saying but more importantly tries to work with learners' inputs, albeit to a limited extent. Briefly, the teacher does not ignore or pass learners' responses. It should be noted, however, that the teacher does not explicitly indicate the limitations of the learners' inputs. The extract starts at the beginning of the lesson, after the teacher has completed the rituals of exchanging greetings.

1. *Teacher*: We have our settlement types. We look at villages. What do we look at to classify our villages into settlement patterns? To be able to classify these villages into their different shapes, what do we look at? Before we can come to the main groups [linear villages, crossroads villages and round or square villages] what do we look at? Yes Tshepang [the learner did not have his hand up]
2. *Tshepang*: [Inaudible].
3. *Teacher*: I beg yours. Sorry, speak aloud.
4. *Tshepang*: Valleys.
5. *Teacher*: [waited for sometime, about 10 seconds, and apparently reflecting on the learner's response] Not necessarily. There is something we look at to classify these villages. Yes Ntlane?
6. *Ntlane*: Drinking water.
7. *Teacher*: Drinking water. Mmmm. Okay, Ramatsena?
8. *Ramatsena*: Slopes.
9. *Teacher*: Slopes. [waited for some time] Mmmmm Okay, Sello.
10. *Sello*: Mountains.
11. *Teacher*: [waited for some time – about 12 seconds] **Mountains**. Not necessarily. Ya Masekete.
12. *Masekete*: External appearance.
13. *Teacher*: [did not wait for sometime as in the previous responses] Thank you very much. We look at the external appearance [repeated]. Then by looking at the external appearance we are able to classify these villages into main groups.
14. *Teacher*: We have Round and square villages. The second types of villages are crossroads villages. And the last type of village pattern is the linear village. So when we look at the external appearance of villages, it gives us three main groups: round and square villages, crossroads villages and, linear villages.
15. *Teacher*: What cause other villages to have linear pattern? Sello what will make a village a linear pattern?

In turn 5, the teacher does not totally reject Tshepang's answer, hence his usage of the phrase 'not necessarily'. The teacher does not ignore or pass Tshepang's answer, which is not very far from the 'correct' answer, although it is in a twisted form. Valleys constitute an external appearance

that gives villages a particular pattern (say a linear pattern). But the teacher is not looking at the valleys or mountains or river or railway line, but at the external appearance of the villages. According to the teacher the answers provided in turn 6 and 8 are different from the one in turn 5 and 11, as the teacher does not comment on these answers. Perhaps these answers are far from the correct answer, unlike those provided by Tshepang and Sello. The only problem with the teacher's response to the four answers provided by the learners is that he does not indicate what is wrong with the answers given. Learners are not told what the limitations of their answers are. It is only in turn 13 that the teacher explicitly works with the learner's response because it is the answer that he is looking for. The teacher affirms Masekete's answer (MMPM 18<sup>1</sup>)

By not totally rejecting 'valley and mountain', the teacher knows that mountains and valleys shape the type of village pattern, but this would be an answer to another question related to settlement patterns: such as what factors influence settlement pattern. Learners can then answer this question by citing slopes, valleys and mountain range. The point is that mountains give shape to village settlement patterns but the actual words that the teacher was looking for are 'external appearance'. Learners have a sense that a slope, valleys, mountains, and even drinking water, give shape to village types and the teacher does not reject their answers. This indicates that he hears what they are saying although their responses are not what the teacher is precisely looking for. But the problem is that the attempt to work with learners' inputs is very restricted. It would have been insightful had the teacher indicated exactly what was wrong with an answer such as 'a mountain range or slope' instead of saying "not necessarily" which leaves learners in an uncertain state: not knowing exactly what is wrong with their answers as the teacher does not totally reject them. Working with learners' inputs in this case would have meant that the teacher responds specifically to an answer and indicates its limitations.

But the literature on productive instructional approaches suggests that teachers should explicitly indicate the inadequacies of learners' responses. This means the teacher's instructional approach is inadequate. It should be noted however, that in this study the question is framed differently in the sense that the focus is not on what is missing from the teacher's instructional strategy but what the strategy tells us. The emphasis is on understanding rather than evaluating teachers' classroom practice. That it falls short of what the literature claims to be productive is besides the point here.

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<sup>1</sup> See appendix for full notes

**Extract 2: Explaining a process by recruiting common stock of knowledge, providing implicit access to the central concept in the process.**

The following extract is taken from a geography lesson (lesson number 3), taught by Mr Senong at Thuto Secondary School. The topic of the lesson is "centralisation" and the teacher asks the learners to provide a definition of the concept. Building on the response of a learner (Turn 2), Mr Senong explains that "centralisation" refers to excessive concentration of people in cities, the reasons for which are explained by the teacher in this extract, pointing out to a number of factors that cause people to migrate to the cities, with the consequence that too many people settle there. In the rest of the lesson the teacher explains each factor that causes "centralisation". These factors are classified under 'push' and 'pull factors'. 'Push factors' deal mainly with unfavourable conditions in the place of origin and these factors push people into the cities - examples being: job opportunities, better transport system and better health services and facilities. 'Pull factors' deal mainly with favourable conditions in the cities. These factors pull rural people to the cities. As the teacher explains each factor, he indicates how it results in centralisation in urban areas. The extract is taken from the beginning of the lesson where the teacher has finished exchanging the daily rituals of greeting learners.

1. *Teacher*: Now we are going to start with centralisation. Can you define centralisation? [silence for some time, before a learner responded].
2. *Learner 1*: Excessive concentration of the population.
3. *Teacher*: Thank you very much. Excessive concentration of the population. But what does it mean? What does excessive concentration mean? Excessive mean too many. Too many people coming into the city. If people move from rural areas to urban areas in large numbers they cause this centralisation.
4. *Teacher*: What can be the cause of this problem? What makes people to concentrate in large cities? You can think of your brothers, mothers, fathers and sisters who move to the city. What push them out of rural areas?
5. *Learner 2*: [inaudible].
6. *Teacher*: She is talking about social services, better health facilities and education. These are social programmes. They need better education. In the rural areas they don't get these better facilities and services (well equipped schools). So they move to urban areas - to the cities. Now for example, here at St Ritas [a local hospital about 60 kilometres from the school], many patients are transferred to that hospital... what is the name of the hospital in Pretoria? What do we call this hospital?
7. *Learners*: Ga-Rankua.
8. *Teacher*: Ga-Rankua. People move from their local hospital to hospitals in the cities because of better facilities and services. It means that Ga-Rankua offers better health services. So people start to move from rural areas to urban areas to get these better services. *Re a kwisiasana?* ("Do you understand?")
9. *Teacher*: What other factors cause people to concentrate in the cities?
10. *Learner 3*: Job opportunities.
11. *Teacher*: Yes that is correct. I thought you will start with this one. Because you have parents, sisters and brothers who work in the cities. Employment opportunities cause people to concentrate in the cities.

In turn 3, line 3, Mr Senong explains that if people move from rural areas to urban areas in large numbers they cause "centralisation". Migration leads to centralisation which in turn becomes a problem for the cities. In turn 4, the teacher asks what factors 'push' people out of rural areas and into urban areas. The usage of the term 'push' is significant in the sense that the causes of centralisation are discussed under push and pull factors in the learners' textbook (Senior Geography, 1993). There are factors that 'pull' people towards the cities and factors that 'push' them away from the cities. In explaining why people concentrate in the cities in large numbers, the teacher points out that better medical facilities in the cities attract many people to the cities. In turn 6, line 2, the teacher mentions that better medical facilities and services result in migration, where many people move to the urban centres and cities. Again in turn 8, Mr Senong points out that people from the rural areas move from local hospitals to hospitals in the cities because of facilities and services. Mr Senong tells learners that there is a hospital in Pretoria to which most patients from the local hospital (St Ritas) are transferred, and he wants to know the name of the hospital. The response of the learners indicates that they are familiar with patients being transferred as they provide the name of the hospital the teacher is looking for: Ga-Rankua. This serves as common stock of knowledge that facilitates an understanding of why there is an excessive concentration of people in the cities (MMPM 4). The teacher mentions specifically that Ga-Rankua offers better health services. The teacher gives an example of patients being transferred from local hospitals to urban hospitals to receive better medical treatment (Turn 6, line 4). Through this example the teacher suggests that many people from rural areas settle in urban centres in order to be close to better medical facilities. The main concept the teacher mediates in this lesson is excessive concentration of the people in urban areas, which he does by referring to experiences of local people travelling to urban areas to receive better health care (MMPM 4).

It is possible to argue that the explanation is not complete in that the teacher does not mention that Ga-Rankua offers specialised treatment to specific diseases, unlike St Rita's hospital that offers general treatment. In other words, most of the hospitals that offer specialised treatment are in the urban areas and this explains why patients from rural hospitals are transferred to health institutions in the cities. But it is important to note that the example of Ga-Rankua works as a way of explaining to learners why people are transferred from rural hospitals to hospitals in the cities – movement of people that ultimately leads to excessive concentration of people.

What is also problematic with the example of better medical services and facilities is that the teacher does not explain that it is a combination of factors that lead people to migrate to the cities

and that some factors are more dominant than others. For example, the teacher himself points out that he thought that learners would list 'job opportunities' as the first factor that leads people to concentrate in the cities, as most of their parents, sisters, and brothers reside in urban areas because of vast job opportunities (Turn 11) (MMPM 5). Job opportunities seem to be the overriding factor in influencing rural people to migrate to the cities, as there are very few employment opportunities in rural areas. Differently put, medical facilities are only secondary as they depend on people working first to afford the services provided by the health institutions in the cities.

The following example looks at how the teacher attempt to introduce ways of interpreting the text. There were many examples cited in the main study but here a single example is provided.

### **Different ways of interpreting the text**

Analysis of teachers' instructional approaches also indicates the attempts they make to facilitate access to the discipline – part of meaning making – by indicating to learners how to interpret texts. Teachers select particular sentences, paragraphs, phrases and words that have more meaning than others, and explain this to learners. Understanding the meaning of these sentences, paragraphs, phrases and words is important for the overall comprehension of the text.

### **Extract 3: Working with prefix**

Extract 22, is taken from lesson 3 taught by Mr Senong at Thuto wherein the class was looking at the phenomena that result in fewer people settling in rural areas. The teacher introduces a subheading of the topic, 'rural depopulation' in the middle of the lesson. In this extract the teacher introduces learners to the meaning added by the prefix. The teacher also announces the subheading of the lesson.

1. *Teacher:* Rural depopulation. Let's look at rural depopulation
2. *Teacher:* What is meant by rural depopulation? What is rural depopulation? Do not answer in a chorus. What is meant by rural depopulation? The word depopulation comes from which word? It comes from which word?
3. *Learners* [in a chorus]: From population.
4. *Teacher:* [Repeating what the learners said]. Depopulation from population. Now, from which word does the word population come from?
5. *Learners:* Popular [some learners laughing].
6. *Teacher:* Yes, Yes, depopulation, population, popular. But in actual fact the word population comes from the word people. The people can become popular, meaning they become well known. Now what will the term depopulation mean because we cannot get deeper into this if we do not understand the term, the prefix "de"?
7. *Learner:* Migration of people.

8. *Teacher:* Ya, that's correct, but I want to know the meaning of the word (prefix) "de".
9. *Teacher:* Right, depopulation is the movement of people from a certain area to another. So if we talk of rural depopulation, therefore we mean movement of people, migration of people from urban to rural areas
10. *Teacher:* Ya, right, why do people move? Why do people move from their areas to other areas – to urban areas?

In this extract the teacher introduces learners to ways of interpreting the text. He indicates that 'depopulation' is derived from another word 'population' which itself comes from the word 'people' (MMPM 9). In turn 6, the teacher points out that **depopulation** is derived from 'people' and not 'popular'. By explaining the meaning of 'depopulation', the teacher facilitates access to disciplinary knowledge. It is important to note that the teacher emphasises that without an understanding of the concept 'depopulation' the class cannot go deeper into the topic of the lesson (Turn 6, line 3). Other examples in this instance could be words like 'decentralisation', which comes from 'centralisation'. This is a concept that is also treated in geography. Another example can be desegregation, which comes from segregation.

At the same time that the teacher introduces learners to ways of interpreting the text, he attempts to work with their inputs. In this extract the teacher explains concepts by drawing on learners' understanding. He invites them to explain and build on their inputs. He attempts to find out their comprehension of certain words and through this explains the key concept they are going to engage with in this lesson.

### **Discussion**

The earlier sections of the paper indicated ways in which procedures were worked out to produce credible classroom data - accurate and extensive recording of data, use of primary data, duration of fieldwork, member check and the role of the researcher. Analytical constructs were also developed taking into account suggestions from the relevant education literature and preliminary readings of the data. It was also pointed out that the framework within which the paper is structured focuses on understanding the reality studied much better rather than refuting certain theories or claims.

The analysis of the three extracts, indicate various aspects of teaching that the teacher attempts to engage with - facilitating access to school knowledge by recruiting common stock of knowledge (knowledge that learners are familiar with), working with learners' inputs and introducing ways of interpreting a text as in the use of prefix. In making sense

of the different 'moves' the teacher makes, the analysis was informed both by what the literature takes to be productive instructional approaches and what teachers are actually doing in this classroom. Of particular importance is that the extracts, to a certain extent, do not neatly fit what the literature on productive instructional strategies takes to be effective and adequate approaches. To cite an example, the literature argues that the teacher should hear what learners are saying and not only the correct answer as defined by the text. The geography teacher did not spell out the limitation(s) of the learners' responses. In the example of Ga-Rankua and St Ritas hospitals, the teacher did not indicate that Ga-Rankua is not just located in an urban area and offers better medical facilities but that its main function is to offer treatment to specific diseases such as sugar diabetes. To repeat, the teacher's explanation in this instance was incomplete. The question then arises as whether the teacher's instructional strategies should be dismissed as unproductive and doing that will amount to throwing the baby with the bath water.

At issue here, is that constructs from the literature should not be taken purely as they are, especially as contexts and professional training of teachers differ. Neither should teachers' instructional strategies considered in isolation from the relevant literature. Working both with the literature and empirical findings results in credible conclusions. This also serves as a timely reminder that we cannot start entirely from a clean slate. Considerable scholarship has described the areas we are examining and this need to be acknowledged. Conversely, the work produced by education researchers and analysts should not be taken as *the* only truth.

### **Conclusion**

By employing interpretive case study research methodology, this paper illustrated a pointed analysis of the instructional approach of one teacher - instructional approaches that do not fit the categories described in the literature. This resulted in the adaptation of the categories borrowed from the literature in order to adequately capture the teacher's 'moves' in this paper. Working with both the constructs from the literature and the data results in conclusions that are credible about the reality studied.



## Appendices

**Table 1: Regulatory/Instrumental Discourse**

Pedagogical Goal (RPG)	Pedagogical Moves (RPM)
<p><b>Behavioural regulation in order to</b></p> <ol style="list-style-type: none"> <li>1 Discipline the learners</li> <li>2 Handle issues that are secondary to the lesson</li> <li>3 Establish whether learners are paying attention</li> <li>4 Establish whether learners understand</li> <li>5 Indicate ways necessary for learning the field of knowledge/text</li> </ol>	<ol style="list-style-type: none"> <li>1 Raise your hands</li> <li>2 Encourage learners to copy from the chalkboard</li> <li>3 Asks closed questions (Ask rhetorical questions)</li> <li>4 Asks open questions and engages</li> <li>5 Asks open questions but answers them himself/herself</li> <li>6 When refuses learner's response, explains</li> <li>7 When refuses learner's answer, does not explain</li> <li>8 Gives instructions in appropriate time</li> <li>9 Controls group work</li> </ol>

**Table 2 Instructional discourse**

**Field 2: Meaning Making: Making content accessible**

Pedagogical Goal (MMPG)	Pedagogical Moves (MMPM)
	<ol style="list-style-type: none"> <li>1. Announces topic</li> <li>2. Indicates relevance and applicability of the topic</li> <li>3. Blurs the boundaries between school knowledge and everyday knowledge</li> <li>4. Recruits common stock of knowledge</li> <li>5. Selects parts of the text that are more important/ Indicates key features</li> <li>6. Divides topic into simple manageable units</li> <li>7. Accepts answers that are valid within the discipline</li> <li>8. Provides diagrammatic representation</li> <li>9. Selects a particular line and explains a point that has a general use for reading</li> <li>10. Explains a word that has a particular use in the text that could not be understood by learners</li> <li>11. Code-switch</li> <li>12. Temporary divergence, to explain new concepts</li> <li>13. Use of other sources (not the prescribed text only; journals, magazines/newspapers)</li> <li>14. Asks open questions</li> <li>15. Asks closed questions</li> <li>16. When refuses learner's response, explain</li> <li>17. When refuses learner's response, does not explain</li> <li>18. Affirms learner's response</li> </ol>

## References

- Ball, D L (1993). Moral and Intellectual, Personal and Professional: Restitching Practice, in Buchmann, M and Floden, R E (1993). *Detachment and Concern: Conversations in the Philosophy of Teaching and Teacher Education*, London, Cassell
- Ball, D and Cohen, D. (1998) *Instructional Innovation: Reconsidering the story*
- Ball, D.L and Wilson, S.M. (1996). Integrity in Teaching: Recognising the Fusion of the Moral and Intellectual, *American Educational Research Journal*, Spring, Vol.33, No. 1, pp 155-192
- Brodie, K (2000). Constraints in Learner- centred Teaching: A Case Study, *Journal of Education*, no 25, pp 131 160
- Denzin and Lincoln (1994) (eds) *Handbook of Qualitative Research*, London, Sage
- Denzin and Lincoln (2000) (eds) *Handbook of Qualitative Research*, London, Sage
- Eisner. E.W Forms of Understanding and the future of educational research, *Educational Researcher*, 22,7,pp.5-11
- Hammersley, M and Atkinson, P (1995) *Ethnography: principles in practice*, 2<sup>nd</sup> edn, London, Tavistock
- Lampert, M. (1993). Practices and Problems in teaching authentic mathematics. In F, Oser, A, Dick (Eds) & J. L Patry, *Effective and Responsible teaching: The new synthesis*, pp 295-314, San Francisco: Jossey-Bass
- Moore and Muller (2002) The Discourse of voice and the problem of knowledge and identity in sociology of education. *British Journal of Sociology of Education*
- Wallach, T and Even, R. (2002). Teacher Hearing Students, Proceedings of the 26<sup>th</sup> Conference of the International group for the *Psychology of Mathematics Education*, University of East Anglia
- Wolcott, H.F (1994) *Transforming Qualitative Data: description, analysis, and interpretation*, London, Sage
- Woods, P (1996) *Researching the Art of Teaching: Ethnography for Educational Use*. London, Routledge
- Yin, R.K (1998). Levels of Analysis.. in Meriam, S, B, California, *Qualitative Research and Case Study Applications In Education*, Josse-Bass
- Yin, K. R (1994) Designing Single-and Multiple-Case Studies in Bennet, N et al, *Improving Educational Management through Research and Consultancy*, London, The Open University