

SUMMARY

The study investigates the potential of teacher talk in enhancing learner capacity to negotiate learning, premised on a view of classroom interaction as guided construction of knowledge. It examines the extent to which levels of oracy – essentially, awareness of the language of instruction, and the ability to use it more effectively - can be raised by exposing teachers to an in-service distance education language-based course. The main research questions are:

- a. What are the effects of the course in classroom text and discourse on oracy in the high school classroom?
- b. How can the quality of classroom discourse be assessed in a relatively systematic and objective manner?

With regard to the second question, an analytical framework was developed that defined three key constructs in terms of discourse acts, namely teacher dominance, teacher effectiveness and learner initiative, and these constructs formed the basis of the three hypotheses. Patterns of interaction in English, mathematics and geography classes during the first year of high school in Harare, Zimbabwe (main study) and Zomba, Malawi (supplementary study) were analysed. The Zimbabwe study used a pretest-posttest control group design, with six teachers in the experimental group and three as controls, while the Malawi study used a posttest-only control group design with three teachers in each group. The experimental groups took part in an intervention programme known as the Litraid Project, a course on classroom text and discourse. The findings, interpreted both quantitatively and qualitatively, showed that after intervention the experimental group teachers dominated classrooms less and used discourse input more consciously and effectively. Similarly, their learners showed improved ability to negotiate learning, as reflected in their heightened levels of initiative and discourse output, both in class and group discussion. Hence the conclusion that classroom praxis, specifically in English second language situations, benefits from a conscious enhancement of oracy, leading to more effective teaching and learning.

Keywords: classroom interaction; collaborative interaction; conversation analysis; discourse analysis; interaction analysis; teacher dominance; teacher effectiveness; learner initiative; guided construction of knowledge; negotiation of learning; oracy; scaffolding.

**THE EFFECTS OF A COURSE IN CLASSROOM
TEXT AND DISCOURSE ON ORACY
IN HIGH SCHOOL CLASSROOMS**

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Plato once said, “wise men talk because they have something to say; fools, because they have to say something”. It was not until I came across ideas from the Litraid Project in Zimbabwe that I realised that there was something to say about oracy relative to its effectiveness in the classroom. I drew inspiration from the ideas of those who initiated the project, namely, Dr. John Chapman, Rotarian of Rubery Club, England, and formerly a lecturer at the Open University (UK), and Neil Mercer, Professor of Education at the University of Cambridge. Previously, he was Professor of Language and Communications and Director of the Centre for Research in Education and Educational Technology. I am eternally grateful for their academic inspiration which made me explore how best to encourage teachers to talk when they have something to say, and to develop oracy skills on how best to achieve pedagogic intentions.

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Dedication

In probing classroom interaction as a social microcosm, it is noted that this pursuit interacted with the social macrocosm of which it is a part. I, therefore, dedicate the study to my family for the financial support and encouragement when drive and effort were waning, as well as to the struggling learners of Zimbabwe whose quest for knowledge in the face of unprecedented political interference inspired me to seek new solutions to old linguistic problems.

Abbreviations

AL - Applied Linguistics

CIDA - Canadian International Development Agency

ESL - English Second Language

FIAC - Flanders' Interaction Analysis Categories

FLINT - Foreign Language Interaction

IRF - Initiation-Response-Feedback

L1 - First Language

L2 - Second Language

NNS - Non-Native Speaker

SLA - Second Language Acquisition

SLANT - Spoken Language and new Technology

SLL - Second Language Learning

SSTEP - Secondary School Teacher Education Project

TL - Target Language

TMA - Teacher Metalinguistic Awareness

TTT - Teacher Talking Time

ZPD - Zone of Proximal Development

CHAPTER 1

INTRODUCTION

1.0 Preview

When I taught geography in high school, colleagues and I were keen to make learners participate more actively in oral tasks. This did not prove easy despite the fact that we all shared the view that active oral participation provided opportunities for more meaningful learning across the subjects. According to Dewey (cited in Chiang, 2002:1), “in a classroom in which voices are honoured, the teacher gains access to information about the child’s perspectives and subjective experiences that promote responsiveness to children’s learning needs”. I, therefore, became curious about ways of ensuring that teachers used the right type of language to motivate active learner participation. This concern eventually resulted in the present investigation aimed at establishing whether teachers who are exposed to certain ideas about classroom talk necessarily use language more consciously to encourage active learner participation in the negotiation of learning.

My observation was that the patterns of interaction we used as teachers (in the school where I taught) were deficient and, therefore, needed conscious enhancement. To address that, I thought of identifying and applying applied linguistic ideas and theories so as to improve teachers’ language skills in communicating school subjects. The issue of communication is linked to the concept of oracy, explained below. The understanding of teaching competence that my colleagues and I shared had been from the point of view of the individual teacher’s ability to apply ideas from educational psychology, educational sociology, and educational philosophy. In these fields, the importance of language has not been properly appreciated. However, in the present study, focus is on the role of language as a means of constructing knowledge and understanding. The motivation to explore the potential of language arose from

my participation in the Litraid course, a language-based in-service programme whose aim was to improve language skills used by teachers in the context of high school classrooms.

My preoccupation is with issues related to the use of English as a second language (ESL) to achieve learning goals. The issues are: the language of the teacher, the language of learners and the joint use of the language manifested when the two kinds of participant interact in the teaching-learning process. These are discussed bearing in mind the research problem and theories that inform classroom interaction. The rationale for the study and the research context are also explained. Directly related to the rationale and the context are the research aims and hypotheses to be tested. These will be discussed in conjunction with the research design and the analytical framework preferred for the study. The construct of oracy and concepts related to it will be defined and explained in context. Among such concepts are 'discourse', 'interaction', and 'conversation'. A brief explanation of the analytical framework will be given. In the next section, applied linguistic theories and ideas that inform the study are discussed.

1.1 Theoretical background

The Litraid course, a language-based course, was introduced in Zimbabwe to help in-service teachers develop an understanding of classroom text and discourse. I was involved in co-ordinating it, and that motivated me to establish its effects on oracy in the high school classroom. The title of the thesis was formulated with this focus in mind. From as early as the 1960s, the issue of classroom discourse has generated interest among applied linguists. This has led to research studies that, in turn, have contributed new theories and ideas in the field. Some of the theories form the foundation for my investigation as discussed in this section. As Spolsky (1990:4) puts it, "the effectiveness of practice depends on relevant theory; the relevance of theory depends on effective practice". Thus, the theories identified presently are expected to be relevant to the study. Constructivist theory is briefly explained in the context of

applied linguistics (AL). This is followed by the elucidation of conversation analysis and related concepts of discourse and interaction analysis. Oracy, a key idea in the study, will be discussed in so far as it relates to classroom interaction, as will the negotiation of learning.

Firstly, I examine constructivist theory, which explores how particular sorts of classroom discourse carry classroom knowledge, and recognises the role of language as a means of constructing knowledge and understanding (Mercer, 1995:4). According to this theory, knowledge is socially constructed, meaning that the study of learning as an individual process involves talk as a joint activity. Learning is, therefore, conceptualised as a sociocultural collaborative activity (mediated through language) in which the teacher provides support to the learner so that he can eventually stand on his own. Mercer (2004:139) has made the following observation regarding how thinking is based on ways with words:

A sociocultural perspective highlights the possibility that educational success and failure may be explained by the quality of dialogue, rather than simply in terms of the capability of individual students or the skill of their teachers.

The origins of the sociocultural perspective are mainly in the work of Vygotsky (e.g. 1978), which treats communication, thinking and learning as related processes. Classroom interaction practices are considered from the point of view of active engagement, theorised as a requisite to interaction and learning. In the interpretation of Vygotsky's (1978) theory, neo-Vygotskians such as Mercer and Sams (2006:508) have claimed that social involvement in problem-solving activities is a crucial factor for the development of individuals. As they put it, "intermental (social) activity – typically mediated through language – can promote intramental (individual) intellectual development". This claim has been widely accepted by researchers in the field who recognise the crucial role of the teacher. In a related study Edwards and Mercer (1987:5) had observed that the teacher's

questions, clues and prompts are used to achieve “insights that the pupils by themselves seemed incapable of”. Constructivist theory thus invites us to consider how the conversations, which take place in and around learning activities constrain or extend the intellectual potential of individual learners.

Bruner (1986), following the ideas expressed by Vygotsky, has referred to the support given to the learner as scaffolding. Scaffolding describes a particular quality of cognitive support that an adult can provide through dialogue so that the child can more easily make sense of a difficult task. Bruner (cited in Mercer, 1995:73) “describes it as a form of vicarious consciousness provided by the adult for the benefit of the child”. Thus, according to constructivist theory, knowledge is constructed in the company of others using language as a means for transforming experience into cultural knowledge.

Centralising language in the learning process shows the close link between constructivist theory and applied linguistics. Applied linguistics has been defined at different stages of the research tradition in the area, but scholars seem to agree that it is concerned with application of ideas from linguistics (as well as other disciplines such as psychology and education) to situations where language plays a role. A definition adopted here that is relevant to the present study is that of Brumfit (1995:27), who defines applied linguistics as “the theoretical and empirical investigation of real-world problems in which language is a central issue”. In this regard the definition recognises that the issue of oracy, of learning through talk is a real-world problem that continues to preoccupy scholars and is applied linguistic in nature.

As an applied linguistic phenomenon classroom interaction involves language input by the teacher, in the first instance and views about this have been expressed variously (cf. Barnes *et al.*, 1969, Nunan, 1992, Ellis, 1986, Krashen, 1985). One of the most commonly acknowledged views on the issue is Krashen’s (1995: 20-30) Input Hypothesis relating to second language acquisition (SLA),

which is arguably also applicable to the use of language across the curriculum. He argues that when comprehensible spoken language input is given, construction of knowledge is facilitated. Commenting on this, Ellis (1986:12-13) says, “learners appear to need L2 data that are specially suited to whatever stage of development they are at”. Essentially, therefore, providing learners with language they can understand, language consciously selected, can go a long way in promoting active participation, which results in the use of more personalised language. It is assumed that when learners can use personalised language, they will be in control of the topic under discussion, and able to construct knowledge.

Classroom interaction is conceptualised as the way teachers and learners negotiate learning during the teaching-learning process. In other words it is about acting upon each other reciprocally (Malah-Thomas, 1987) for educational purposes. Interaction theory recognises that comprehensible input and appropriately contextualised second language data are necessary for the negotiation of learning (cf. Krashen, 1982; Long, 1990). Thus, focusing the attention of classroom practitioners on ideas about teacher talk (as presented in the Litraid course) is expected to enhance teacher-learner interaction. It is assumed that teachers will be able to see their language responsibilities in a new light and practise from a position of linguistic enlightenment.

In this study, teacher and learner talk will be referred to as classroom discourse, a specific type of language that is distinguishable from other discourses by virtue of its situatedness in learning contexts. According to Mercer (1995:79), “discourse in this sense means language as it is used to carry out the social and intellectual life of a community”, with attention being paid to the organisation, coherence, and function of talk. The classroom is recognised as a community in which language is used in ways that follow certain specific conventions. For example, teachers ask questions, repeat certain things, give clues, comment, or correct, while learners give answers and respond to teacher directives. These

are examples of educational discourse used to get learners develop new ways of using language to think and communicate. It has been suggested that learners can only develop confidence in using new discourses by using them, and Mercer (1995:80) says, “while all students engage as a matter of course in educational discourse, they need opportunities to practise being users of discourse”.

When Skidmore (2004) talks about dialogic enquiry, in which knowledge is co-constructed as teachers and learners engage in joint activities, he also agrees with Mercer’s view. Later, Wells (1999:174) qualifies discourse as “the collaborative behaviour of two or more participants as they use the meaning potential of a shared language to mediate the establishment and achievement of their goals in social action”. Such discourse is supposed to be coherent and purposeful, and is described and interpreted to show what can be done with words to achieve pedagogic goals. Three approaches of analysing such discourse are discussed briefly below, and these are: interaction analysis, discourse analysis, and conversation analysis. They inform the theoretical basis upon which analyses will be carried out in Chapter 4 and more detailed discussion of these approaches is provided in Chapter 2, the literature review section of the study.

The first of the three approaches is ‘interaction analysis’. According to Chaudron (1988:14) it refers to “the analysis of classroom interaction in terms of social meanings and an inferred classroom climate”. This approach views interaction as a chain of teacher and learner behaviour, each one classifiable into one or another category. Interaction analysis thus investigates such relationships as the extent to which learner behaviour is the function of teacher-determined interaction. This approach is characterized by various observation systems and schedules for coding classroom talk (cf. Nunan, 1992).

Discourse analysis, on the other hand, is “an attempt to analyse fully the discourse of classroom interaction in structural-functional linguistic terms” (cf.

Chaudron, 1988:14). It is not concerned with inferred social meaning, and is best exemplified by the work of Sinclair and Coulthard (1975). Characteristically, the approach analyses classroom discourse through the study of transcripts, in which utterances are assigned to pre-specified categories. Discourse analysis is carried out on both written and spoken language.

Regarding conversation analysis, the data are the naturally occurring, non-elicited language, and like interaction analysis it is concerned only with spoken language. According to Nunan (1992:161) conversation analysts “favour a discursive interpretive type of analysis.” Typically, the analysis investigates such things as management of speaking turns, speaker selection and topic relevance. It also investigates the way speech acts combine to communicate pedagogic intentions.

What comes out clearly from this brief explanation of types of analysis is that there are overlaps among the three. The distinction of one from the other is not clear-cut, and depends on the emphasis of a given study. All are nevertheless tools for the explication of oracy, to which I now turn.

Discourse analysts today recognise the complex interactions through which knowledge is transmitted, displayed, or constructed. As Edwards and Westgate (1994:9) put it, “this is partly a matter of grammar, partly of social etiquette, partly of culture” and essentially of assuming that learners will be able to perceive the same situation as teachers do. This awareness of the language of instruction, and the ability to use it more effectively has come to be known as ‘oracy’ (Wilkinson, 1965). Professional acceptance of propositions about classroom discourse, the practical understanding of oracy in a range of settings, and the development of a theoretical rationale that underpins it have found expression in contemporary research, such as the National Oracy Project in the United Kingdom (1987 – 1991).

Oracy has been defined and explained by various scholars. McLure (cited in Edwards and Westgate, 1994:4) makes a distinction between oracy as a medium of learning in all subjects, and oracy as a subject in its own right. He explains that when viewed as a medium of learning, oracy refers to utterances, speech acts, and related language features consciously selected to negotiate learning. As a subject, it is a “further aspect of language competence, which teachers now have an obligation to promote alongside the traditionally recognised skills of reading and writing” (Edwards and Westgate, 1994:5). McLure (1988:302) observes that oracy, “recognises the diversity of language use according to speakers’ purposes, and the communicative versatility which is needed to meet the demands of different situations.” The increasingly wider currency of the term is also in itself indicative of its importance in the investigation of teacher talk, with its meaning remaining very much that given to it by its acknowledged originator, Wilkinson (1965:58-59) who wrote:

Oracy is not just a subject...it is a state of being in which a whole school must operate. Thus, oracy as linguistic competence is to be taught to teachers by creating many and varied circumstances to which speech and listening are the natural responses.

Mercer *et al.* (1999) have argued that oracy promotes concrete and sustainable improvement in reasoning as a result of training. Fisher (1995), in turn, stresses the need for various forms of dialogic activity as a precursor to improved performance across the curriculum, a position reaffirmed by Stables (2003:2), who says oracy “is a special type of dialogue within different areas of the curriculum”, informing a discursive model of teaching, and is based on the ideal speech for a given learning situation (Young, 1992). Teachers who are aware of the benefits of oracy will be expected to use talk more consciously and more effectively. They will be conscious that in dialogically organised instruction students are asked to think, not simply to remember (Skidmore and Gallagher, 2005).

In the Litraid course, oracy is defined as a kind of literacy. Chisman (cited in Louw, 1996:2) suggests that the definition of literacy should include communication abilities because “literacy without verbal interaction is likely to be stunted and dysfunctional.” From this perspective, oracy refers to the verbal communication abilities to be mastered by teachers as functional literacy pertinent to the learning process. Understanding of subject content without interaction would be partial and a product of mechanical decoding unless oracy is understood as a subject in its own right, and as a medium of learning.

The foregoing discussion has shown that theoretically, oracy is linked to optimal classroom talk as an interaction type in which a variety of genres is alternated as demonstrations used to motivate free expressions of views, opinions, and perceptions of a given topic (Taylor, 2006). Oracy can also be related to the notion of communicative competence, as developed by Hymes (1972b), and at a later stage Canale and Swain (1980), who have argued that the most important linguistic ability is that of being able to produce or understand utterances that are appropriate to the context in which they are made. Thus, as classroom interaction is here investigated, concern will be with the description of discourse features used as input, and the resultant discourse of learners. In this way the extent to which discourse is optimised for the learning context, and how certain types of intervention can promote oracy will be investigated. The underlying assumption for using constructivist theory, ideas about discourse and interaction analysis, and about my study is that it is through particular kinds of language that teachers and learners are brought together in a conscious effort to work jointly towards mutual comprehension of a topic.

Mutual comprehension of a topic is realised during the negotiation of learning (detailed in §2.5.3.2). Researchers in the field have theorised about this construct. Basically, negotiation is a form of interaction involving use of speech acts towards mutual understanding of content. As a concept, ‘learning’ covers a

broad area of speculation that includes psychological, sociological, philosophical, and applied linguistic perspectives. These are interrelated when the learning process takes place. However, my focus will be on the last mentioned perspective.

Negotiation of learning takes place at various levels such as negotiation of cultural beliefs, attitudes, feelings, and so forth. In my study, focus is on three, namely, negotiation of meaning, content, and form through the mediating influence of language. According to Van den Branden (1997) negotiation of meaning is concerned with maintaining mutual understanding between interlocutors. Negotiation of form focuses on grammatical utterances used in the negotiation process, while negotiation of content emphasises the production of accurate information for a given topic. Thus, the basis for effective negotiation is the consciously contrived teacher language input and active learner participation, showing evidence of interplay between the three negotiation types.

Negotiation of learning from the point of view of conversational analysis is made feasible through turn-taking. In terms of rules and procedures employed, conversation analysis has emerged from ethnomethodology (cf. Nunan, 1992). Conversation analysis involves the study of features such as allocation of turns, repair strategies, and the use of speech acts such as questions and replies in naturally occurring conversation. According to Van Lier (1988:94), in the classroom “the matter of who speaks and when is governed by regularities, whether we call them rules, regulations, routines, or conventions”. This means that when there is systematic allocation of turns, it is assumed that negotiation of learning will take place.

The theoretical background section examined key issues upon which the present study is based. The first issue to be discussed was constructivist theory, which posits that knowledge is socially constructed. In the theory, teacher input was considered crucial for purposes of constructing knowledge. This was followed

with a brief definition of applied linguistics, and how it links with constructivist theory. Classroom interaction was then explained in conjunction with negotiation of learning. Three approaches to the analysis of classroom discourse were briefly explained. The concept of oracy was then defined relative to other theoretical ideas.

1.2 Statement of the problem

In the present section, I spell out the research problem, and also formulate the research questions.

Professionally I have had the privilege of teaching in high school and supervising lessons taught by in-service teachers in Zimbabwe, Malawi and Botswana. For the most part, I have been involved in teaching English and geography to non-native speakers (NNSs) of English, I too being a non-native speaker. When I interacted with teachers of other subjects, it struck me that their main focus of teaching was assisting learners to read textbooks, copy volumes of notes, and write assignments and practice tests, which teachers would mark. Whenever I asked some of the learners to explain concepts and content from their notebooks, many found it difficult to do so, and said they did not know what the teacher had meant. I found that state of affairs untenable as it defied the commonly accepted purpose of schooling.

My assumption is that teaching should empower the learner to take control of newly constructed knowledge, and handle it in a range of ways. One such way is to be able to express that knowledge, clarify it to both the self and others, and make sense of it in situations beyond classroom lessons. Above all, I assume the teacher has a crucial role to play via the linguistic input provided. Observations of typical lessons raised my curiosity about teacher awareness of the potential of talk in achieving lesson objectives. My role as lecturer for in-service and pre-service student teachers was to assess teaching effectiveness and award grades for the individual lessons. In the majority of lessons taught in Zimbabwe, teachers

prepared impressive lesson plans in which objectives, teaching methods, content to be covered, and activities to be used (e.g. group work) were spelt out. However, when it came to actual teaching, the interaction was less than impressive.

In typical lessons, the teacher would ask questions, while pupils attempted answers. Sometimes learners got the answers right, and at other times got them wrong, then kept quiet, at which point the teacher would supply the correct ones. Learners would be assigned to groups, and often there were too many members per group, and some did not say a word (during discussion), while others used the mother tongue for off-task comments. Occasionally, new vocabulary related to content of different subjects came up. When that happened, three actions, by the teacher, were observed. The teacher who knew the meanings would use such register freely but remained insensitive to the fact that some learners did not quite understand it. Secondly, being NNSs, at times teachers did not know the correct meanings, so they would give the wrong interpretations, and that resulted in faulty conceptualisation. Thirdly, learners would react by remaining quiet, and when that happened, the teacher would ignore them, and simply continue with the agenda of transmitting knowledge.

In my opinion, there was something amiss about the extent to which teachers, though trained, were aware of the potential of talk in achieving learning goals. Being more concerned with transmission of content, they appeared to have problems with what language to use and how best to use it to ensure that learning occurred. In the majority of cases, learners would be guessing what they were supposed to do since teachers did not make lesson objectives explicit. Thus, my observation revealed a problem regarding interaction in the NNS classroom context. The teacher remained isolated from learners, and a chasm (Barnes *et al.*, 1969) existed between the interlocutors.

The situation described above presented a serious interaction problem at the level of the awareness teachers had about links between language and the content of school subjects; the extent to which teacher language awareness could be raised; and whether teachers could encourage interaction by using the discourse of teaching differently. To address the problem it was imperative to identify ways to intervene so as to improve oracy practices. At a time that I was exploring alternatives, an in-service course known as the Litraid Project was introduced in Zimbabwe. In it, I identified ideas about interaction that could be used to raise the level of language awareness among teachers. Course study materials were then used for intervention. Learners were exposed to the ideas, discussed their pedagogic implications, and applied those ideas to classroom lessons.

Intervention was meant to address the problem of how oracy can be improved. Specifically, an in-service course known as the Diploma in Classroom Text and Discourse was offered to in-service teachers so as to improve the way they use talk (oracy) in order to teach school subjects more effectively. The problem is captured in my first research question, namely:

- a. What are the effects of the course on classroom text and discourse on oracy in the high school classroom?

To answer that question, it was necessary to establish the discourse patterns that prevailed among teachers and learners before and after intervention, and hence my second research question:

- b. How can the quality of classroom discourse be assessed in a relatively systematic and objective manner?

The research questions are aligned with the aims of the study (cf. §1.5) and the three hypotheses (cf. §1.6). In an attempt to address the questions, the justification for conducting the study is provided in the next section.

1.3 Rationale for the study

The purpose of this section is to provide brief justification for the importance and relevance of the study in terms of two research questions just mentioned. With regard to the first question, there is good reason to establish the extent to which an intervention programme such as the course on classroom text and discourse might alter the way teachers use language to negotiate learning. The second one was to determine what constitutes quality teacher and learner discourse, that is, determining what effective discourse is and how such discourse accounts for active participation and learner initiative. The third objective was to establish ways of assessing discourse that can be made accessible to researchers.

In one of their early studies Barnes *et al.* (1969) established that the way teachers used language often acted as a barrier to learning. Similarly, as observed above (§ 1.2) when it comes to actual teaching, there are considerable problems of lack of interaction in my particular research context. These need to be addressed if meaningful learning should take place. There are various ways of addressing the issue, one of which is to ensure that “the child and the teacher mutually establish a universe of discourse” (Edwards and Mercer, 1987:49). This would ensure more meaningful communication, and there is need to intervene so as to promote mutual sharing of discourse. The need for intervention (cf. Van Lier, 1988), which involves exposing teachers to aspects of discourse pragmatics cannot be overemphasised, and accordingly it is vitally important that research is undertaken that can establish whether interventions such as the Litraid course do indeed influence the discourse of teachers and of learners for the better. Cleghorn *et al.* (1998) have, for example, confirmed that teachers can be trained to enable them to better negotiate learning and to integrate subject content with second language development (cf. § 2.5.3.3), but I am not aware of any

substantive quasi experimental studies of changes in classroom discourse that have been undertaken along the lines of my study in Southern Africa or elsewhere.

A further rationale, based on the second research question, is the need to establish more definitively what is meant by quality classroom discourse. The need to proceed on the basis of facts about the matter as opposed to guesswork cannot be overemphasised. This is because there are gaps in my research situation regarding what quality discourse is. Research by Cullen (1998), which was aimed at establishing characteristics of communicative classroom talk (cf. § 2.5.3.1) has motivated me to address that gap, and possibly make my own contribution within an environment where both teachers and learners are second language speakers of English, the medium of interaction.

Two teacher-specific features of quality discourse, and one for learners are of primary importance in the discussion aimed at filling the gap. For teachers, the first one is reduced dominance during interaction, and the second one is conscious selection of effective discourse in promoting the negotiation of learning. Researchers argue that the gap can be addressed. As an example, in what they refer to as teacher metalinguistic awareness, James and Garrett (1991) argue that through systematic intervention, teacher awareness of the more effective language can be enhanced. Logically, teachers whose metalinguistic awareness has been raised are likely to afford learners more opportunities to talk, thus becoming less dominant and more effective.

The learner-specific feature of effective discourse is most demonstrable when learners participate actively and initiate dialogue during lessons. Gaps have been identified in the literature in this regard, but more specifically in my research context where observation revealed a culture of silence on the part of learners, while teachers dominate talk (cf. § 1.2). Van Lier (1988) argues that learners can be taught how to show initiative through self-selection, floor-seeking, and other

discourse means. This is confirmed in a study titled “teaching children how to use language to solve Maths problems” by Mercer and Sams (2006). They demonstrated how learner initiative can be enhanced when the teacher guides the development of language skills associated with initiative and active participation.

Finally, it was noted (cf. § 1.2) that classroom practitioners lack specific ways of assessing – in a systematic manner – the essence of quality discourse. It is, therefore, rational to establish ways of doing that. To determine dominance, effectiveness, and initiative, it is essential to develop an analytical tool that can be used to comment objectively on discourse. Different applied linguists have attempted to address the gap in their different ways. In his research on classroom interaction, Stables (2003:1) provided important justification for studies in the field, arguing that such investigation gives insight into how learning via different forms of dialogue is made possible. Research into classroom interaction has continued in the USA (e.g. Cazden, 1995, Mehan, 1979, Dillon, 1994). In Canada, studies by Wells (1994) are well documented, while in Southern Africa studies by Probyn (2005), Kasule and McDonald (2006), Tichapondwa (2007) show the seriousness with which oracy is regarded in discourse pragmatics.

In the absence of a one-fit-all framework for the diverse situations about oracy, I propose to be eclectic by combining the wisdom of insightful observation (Barnes *et al.*, 1969); discourse analysis (e.g. Sinclair and Coulthard, 1975); sociocultural approach (Mercer, 1995), and other scholars. That way I will develop an analytical framework compatible with the situation in which my participants find themselves (cf. Vosniadu, 1996, who proposes the situativity theory).

Discussion of the rationale centred around gaps identified in the literature and the research context. Explanation of how gaps would be addressed was given as my justification for pursuing the study. Some of the gaps were: classroom teachers’

language use as a barrier to meaningful interaction; lack of intervention practices in the education system; lack of clarity on what quality discourse is; lack of knowledge on how learners can be taught how best to show initiative during interaction; and lack of an analytical framework that can be used to comment on discourse behaviour in situations where English is a second language.

1.4 The research context

In the present section, the research context is described in view of the research problem, theories that influenced the study as well as the rationale. The context represents the environment where the stated problem occurs, and is the background against which theories and ideas explained above are applied.

After gaining independence in 1980, Zimbabwe expanded opportunities for education by increasing the number of both primary and secondary schools. This meant the number of teachers had to be increased. The shortage of secondary school teachers was particularly severe, so the Ministry of Education introduced in-service courses for primary school teachers, with the objective of upgrading them to diploma level so that they could teach in high school.

In most cases the in-service programmes offered by the University of Zimbabwe were concerned with exposing in-service participants to more content and teaching methods in the subjects they were going to teach, and tended to be silent on how to interact more effectively. Ministry of Education officials were aware of deficiencies in the way qualified teachers used language but did not have an immediate solution to the problem. The then Minister of Education made the following observation:

Teachers who aspire to be effective must acquire the required content, and at the same time be able to explain complexities of their major areas communicatively. Teacher education ought to devote some time to the acquisition of communication skills. (Mutumbuka, 1986).

The point to note is that much as there was in-service training of some kind, it did little to raise the awareness of practitioners about teacher talk. Hence, the words of the Minister imply that support for the systematic development of teachers' oracy skills is essential. It was in this context that some kind of intervention was considered necessary. Such intervention would depart from the common practice of focusing mainly on subject content.

In Zimbabwe, selected schools constituted the main research context. A sample of participants (experimental and control groups) took part in the study. The lessons they taught were audio recorded, transcribed, and analysed, using an analytical framework. The discourse behaviour of participants, before and after intervention, was compared and conclusions drawn from the data using discourse acts as the measure.

In 2000, three years after introduction of the Litraid course in Zimbabwe, Malawi introduced a three-year in-service course to address the shortage of teachers in secondary schools by upgrading primary school trained teachers. The college of education in charge of the part-time distance education programme adopted the main ideas of the Litraid course (cf. Annual Report 2006 for Secondary School Teacher Education Project, Malawi), and incorporated them in the final year of training.

The institution responsible for implementing the course, Domasi College, invited me to evaluate the component of teacher education that dealt with the language issue in March 2006. I observed lessons taught by 'teacher-learners' (the name used for in-service teachers in Malawi), and I prepared a report for the Ministry of Education (Malawi) highlighting the performance of in-service teachers who had taken part in the intervention, compared with their counterparts who had not yet been in-serviced, but were awaiting their turn to do so. Thus, my research

context comprised classroom communities in Zimbabwe and Malawi, using the Litraid course as the intervention package.

At a time when the Ministry of Education (Zimbabwe) was trying to find a solution to the issue of improving teacher effectiveness, an opportunity came from the Open University (UK). The University, in conjunction with Rotary Club International, sponsored an in-service course for teachers, known as the Litraid Project. It comprised four modules that were aimed at helping teachers improve their listening, speaking, reading, and writing skills. The content for each module, and how it is related to the present study, is discussed later (cf. § 3.3.4.2). One of the objectives of the course (Mjanja, 1995; Chapman, 1995; Lloyd, 1995; Kuhudzai, 1995) was to raise teacher awareness on the importance of language in learning. In one of the modules it is stated that project team members:

... found pupils who could not answer questions accurately, and who did not branch out to draw on their language to pursue a topic orally. ... also found teachers who wanted to develop their pupils' communication skills, but were not quite clear how to do that.

(Lloyd, 1995:5)

This observation echoes the point I have already raised (cf. § 1.3) that there is justification in consciously introducing teachers to the discourse of the classroom.

There is a clear link between the intervention package and my study. At the general level, the course addressed language issues as they relate to a wider range of skills (listening, speaking, reading, and writing). For my research, the course was a welcome departure from current in-service courses that did not take language into account. More specifically, the course contained ideas about classroom interaction, which were compatible with some of the theories I prefer when discussing the theme (cf. § 1.1). For example, the course encouraged purposeful talk and peer interaction, which are main features of classroom

interaction. In that respect there is common ground between the intention of the Litraid course and my research aim. The major difference though is that while the Litraid course treats oracy as one of several language issues, in my case I give it undivided focus. There is an obvious convergence in the way the course perceives the problem of teacher talk, and my perception of the need to address deficiencies in the teachers' use language to negotiate learning. The Litraid course, therefore, played an important role in the formulation of research questions, aims, and hypotheses for my study.

The course was developed for the same context in which my research took place. However, it was written on the basis of assumptions which the course team had about problems of interaction, and not on the basis of research evidence. This influenced me to conduct actual research to establish the *status quo* so that I would proceed on the basis of facts. The other point of difference lay in the theoretical grounding of the course. I found its treatment of oracy somewhat narrow and limited. This was mainly because the course dealt with a wider range of classroom communication issues (listening, talking, reading, and writing), and that made it rather general. My focus was on teacher talk. That means the Litraid course set me exploring more theories of oracy in more depth. In order to come out with more objective findings from a domain that is subjective, the general nature of the course material influenced me to narrow my focus on oracy to a specific context where specific curriculum subjects were selected for investigation. Finally, of critical importance was that the course material was the only source used for intervention, and without it I would not have been able to assess how effective the application of ideas about oracy would be. What follows is a brief explanation of how the intervention was handled in the research context.

Initially, lessons of the control and experimental groups (Zimbabwe) were audio recorded before participants took part in the Litraid course (the first stage). This was followed by the second stage during which teachers were exposed to ideas

contained in each of the four modules (the intervention), and lessons were accordingly recorded after completion of each unit of study (interim tests). That way data were collected progressively. Analysis was carried out to assess the extent to which ideas had been applied in practice, and to compare performance before and after intervention (within the experimental group), and between the experimental and control group (for the Zimbabwe sample). For the Malawi sample, lessons taught at the post-intervention phase were observed. The way discourse was used by those who had been exposed to ideas about interaction was compared with that of counterparts (control group) who were about to start on the in-service programme.

In this Section I showed the link between ideas about oracy and the educational context in which the study is located. The research context was described, and an explanation given of how the Litraid course was used to intervene. The basis upon which the course was developed and its theoretical grounding were also explained. I then clarified the focus of the present study as influenced by the Litraid course, and concluded with a brief explanation of how intervention was handled in the research context.

1.5 Research aims

Having spelt out the research questions, bearing in mind theories and ideas about oracy, and having specified the rationale and the research context, research aims are now formulated. These are closely aligned to the research questions, and the first one is:

- a. to establish the extent to which teachers who are exposed to ideas about classroom talk use the English language more effectively to encourage learner participation in the negotiation of learning.

The second aim, on which the success of the first largely depends, is:

- b. to develop and apply an analytical framework that can be used to assess, in a relatively systematic and objective way, the quality of discourse used by the participants in the teaching-learning process

To realise these aims, data from actual lessons at pre- and post-intervention stages will be analysed using an analytical framework. Evidence from lessons at the two stages (from both the control and the experimental groups) will be compared. The aims are also considered in terms of the contribution their realisation would make at theoretical, descriptive and application levels.

From a theoretical point of view, the study aims to make a contribution towards theories and ideas (cf. § 1.1) about oracy. Drawing on constructivist theory as well as aspects of pragmatics (notably speech act theory) and conversational analysis (notably turn-taking), I aim to put in place a framework that explicates, in an analytical manner, key constructs relevant to the assessment of classroom discourse quality. These are: teacher dominance, teacher effectiveness and learner initiative. Thus the second aim formulated above addresses predominantly the need for the study to make a contribution at a more theoretical level.

At a more descriptive level, in other words, in terms of the contribution of my study as a description of what happens in a particular research situation and context, the first aim above is more relevant. My concern will be with assessing the effects of the intervention course. This means describing patterns of interaction and focusing on the discourse acts selected as teacher input to negotiate learning, as well as learner discourse in reply to elicitation when the teacher stands in front of the class, and also when learners work in groups. These descriptions will be related to the issue of quality regarding teacher discourse effectiveness and learner discourse initiative (both assessable through pre-specified categories).

At an applied level, a more indirect contribution of the study is envisioned. It is hoped that the findings of the study, particularly about dominance, effectiveness and initiative might be used to improve aspects of teaching and learning, more specifically the negotiation of content, meaning and form. Assessing the contribution of the study in terms of its aims will be part of the focus of Chapter 5.

In short, therefore, the expectation is that teachers who undergo the intervention will use discourse more effectively. Effectiveness is partly a theoretical matter in which teachers are guided by theories about oracy to select discourse that has greater potential for effectiveness, and help learners to generate extended discourse. Evidence for this would include learner discourse that shows ability to negotiate meaning, form, and content as a direct result of influence from the teacher's input.

In this section I examined the research aims, and indicated perspectives in terms of which the contribution of the study could be considered. These are the theoretical, the descriptive and the applicational. In the background of the discussion were theories informing the study, the research context, and the Litraid course used for intervention.

1.6 The hypotheses

An assumption has already been made that exposing teachers to ideas about the potential of teacher input is likely to yield positive results in the negotiation of learning, and the first aim seeks to establish the extent to which teachers exposed to ideas about classroom talk use language more consciously to encourage learner participation. The thinking is that teachers will apply theories about classroom interaction to solve practical learning problems. In view of this, hypotheses are posited relative to key changes expected in the discourse of teachers (first and foremost) after intervention, and in learners under their care (secondarily).

Two variables influence formulation of hypotheses in this study. The first is the Litraid course, which constitutes the independent variable. The second is the discourse behaviour of teachers and learners, the dependent variable that can be measured and analysed to determine the influence on it of the independent variable.

Three hypotheses are formulated and the key dependent variable in each is operationalised. Two hypotheses focus primarily on the teacher, and the third on the learner.

Hypothesis 1 (H1: dominance hypothesis)

Teachers who participate in the course on classroom text and discourse will dominate discourse less than teachers who do not participate in the course.

A causal link is thus hypothesised between participation in the course on classroom text and discourse and reduced dominance. Participation in the course as conceptualised in this study refers to the formal and active learning of oracy ideas by the target group of teachers. The ideas were contained in the course, which provided a guide about the use of English in the classroom (cf.§3.3.4.2, in which a summary of each module is given). Dominance refers to the extent of control of interaction by teachers and the quantitative operational definition of this construct is defined in terms of the proportion of discourse acts used by teachers as compared to learners (cf.§ 3.1 for more detailed operationalisation).

The hypothesis implies that when teachers' knowledge about classroom discourse is limited, they tend to dominate interaction. Discourse performance before exposure to the Litraid course, is tested by collecting and analysing the discourse used. The quantity and function of acts teachers prefer will be compared with that produced by learners.

Apart from the quantitative operational definition of dominance, this construct will also be interpreted from a more qualitative, or functional perspective. Informed by theories about classroom interaction, certain discourse acts are known to reflect dominance, so that apart from the proportion of discourse acts attributable to the teacher in a given lesson, the function of the acts commonly used will also be taken into account when testing the hypothesis. Some of the discourse acts of dominance include: asking polar and tag questions; giving stretches of content without inviting learners to participate in the dialogue; and asking and answering own questions.

Hypothesis 2 (H2: effectiveness hypothesis)

Teachers who participate in the course on classroom text and discourse will be more effective in that they make better use of discourse to promote the negotiation of learning than teachers who do not participate in the course.

In terms of this hypothesis, discourse is said to be effective when learning goals are achieved through the teacher's comprehensible input and appropriate learner response. Operationally, testing for effectiveness involves the identification and quantification of teacher discourse acts that have in the research literature been associated with negotiation of learning. Some of the acts known to be more effective in encouraging negotiation of learning include: asking questions without specific answers in mind; seeking clarifications from learners; asking open-ended questions; and inviting learners to explain subject-specific concepts in their own words.

Hypothesis 3 (H3: initiative hypothesis)

Learners taught by teachers who participate in the course on classroom text and discourse will show more initiative than those taught by teachers who do not participate in the course.

There is some overlap between H3 and H2 as ought to be expected. This is of course because teacher input influences and is influenced by learner output. Operationally defined, initiative refers in terms of turn-taking to how frequently learners bid for turns as well as to how often they self-select without waiting for the teacher to allocate turns. In terms of discourse acts, initiative refers to the use of discourse acts such as clarifications, counter-informs, and extended informatives. A detailed discussion of the interplay between teacher effectiveness and initiative is provided (cf. § 2.5.2.3 and § 3.5.3).

Quantitative measurement will therefore involve counting the number of bids and self-selections, and the number of clarifications, counter-informs, and informatives as they relate to the teacher's speech acts in a given transcript. In terms of qualitative measurement, initiative is measured by examining the function of the acts in context. Lack of initiative would be manifested in short responses in answer to closed questions; yes/no answers; choral responses; or non-verbal responses such as silence even when feedback is expected.

1.7 The Research design

In the present section I discuss the research design used to test the hypotheses. Supportive theoretical ideas are referred to as the discussion is taken through the issues of intervention; participant grouping; analysis alternatives; the paradigm selected for the experiment; and the quantitative-qualitative dichotomy.

My choice of design is influenced by ideas from a number of scholars including Seliger and Shohamy (1989), Van Lier (1988) and Nunan (1992). When they made specific reference to studies associated with second language learning, Seliger and Shohamy (1989:23) argued that such studies:

must be necessarily multifaceted and multidisciplinary taking account of knowledge and research methodologies from anthropology, psychology, sociology and others.

The scholars propose four parameters in their paradigm, namely synthetic and analytic approaches; heuristic and deductive objectives; control and manipulation of the research context; and data collection.

The first parameter distinguishes between a synthetic approach to the phenomenon being researched, which treats them as parts of a coherent whole, and an analytical approach, which focuses more on the parts themselves as separate entities (Seliger and Shohamy 1989:27). The approach in the present study is relatively analytical, in that very specific discourse acts and turn types are identified and quantified, although combinations of certain acts and types are put forward as operational definitions of more holistic constructs such as teacher dominance, teacher effectiveness and learner initiative.

The second parameter relates to whether the purpose of the research is heuristic or exploratory in seeking to discover features or patterns inductively, or whether it is instead hypothetico-deductive, starting from sets of hypotheses and seeking to test their validity. The present study, with its three central hypotheses about teacher dominance, teacher effectiveness and learner initiative, falls into the latter category.

With regard to the third parameter, Seliger and Shohamy (1989:24) ask: "What must be considered in the control and manipulation of different factors in second language research?" This parameter has direct relevance to the present study, as there is fairly high control of variables such as history and maturation as explained later in this section (and in §3.1 where a detailed description of the design is presented).

Related to this is the issue of control. Van Lier (1988) argues that applied linguistic research can be analysed in terms of, amongst others, an interventionist parameter. Nunan (1992:2) notes that research is placed on the

interventionist parameter according to the extent to which the researcher intervenes in the classroom environment. The quasi-experimental pretest-posttest control group design preferred for this study is characterised by a high variable degree of intervention. The degree of intervention is high in terms of the overall quasi-experimental design, because this includes the intervention course, which involved the manipulation of variables. On the other hand, the data then collected, before, during and after the course did not involve much intervention in the classroom environment except for the presence of the researcher and a tape recorder. In other respects it was naturally occurring lessons that were observed. Control of participants is thus rated as low because teacher and learner behaviour is allowed to remain what it should be, that is, essentially as normal teaching and learning.

The fourth parameter of Seliger and Shohamy (1989:24) is concerned with the way data are defined, collected and analysed. In brief, the present study defines data in terms of naturally occurring discourse. The data were collected essentially by way of audio-recordings, though field notes were also made and certain opinions were elicited by questionnaire. Analysis was to a large extent quantitative, though complemented with a fair degree of qualitative interpretation. (These issues are discussed and illustrated in Chapter 3, and find application in Chapter 4).

Quantitative analysis is in my study characterised by the inclusion of coding schemes in which teacher and learner discourse acts are assigned to pre-specified categories. This also includes “any other methods, which involve measuring the relative frequencies of occurrence of particular words or patterns of language use” (cf. Mercer, 2004:142). Numerical comparisons are made, which can then be subjected to statistical analysis. Normally, categories are treated as being discrete and mutually exclusive. This, in my opinion, is a major shortcoming of a strictly quantitative approach, for two reasons. Firstly, part of the meaningfulness of actual talk data is likely to be lost when focus is solely on

individual linguistic units. Secondly, static categories cannot capture the subtle meanings constructed when collective thinking takes place through talk, and for this reason qualitative methods are in this study used in conjunction with quantitative ones.

Qualitative methods include conversation analysis procedures, ethnography and sociolinguistic approaches. As Mercer (2004:142) puts it, “these methods rely on close, detailed consideration of carefully transcribed episodes”. In that respect, lesson transcripts are the proper basis for qualitative analysis. Categories are interpreted in functional terms and interpreted in order to comment on the dynamic nature of language when it is used for pedagogic purposes. It is when coherent talk, and not discrete speech acts, is analysed that insight into discourse effectiveness is gained. Admittedly, qualitative analysis is time-consuming, but it is nevertheless a better method than quantitative analysis when capturing subjective implications of talk. For systematic analysis of discourse acts, explained above, the design of my study could be characterised in terms of paradigms referred to by Nunan (1992:6) as follows: quasi-experimental (in that it is an experimental design but with existing classes of subjects rather than with randomly assigned groups (Nunan, 1992:27)); qualitative data (in that it is defined functionally); and both statistical, and interpretive analysis.

As mentioned earlier, the pretest-posttest control group design is used (Neuman, 2000). Measurement (M) of the dependent variable takes place before and after the treatment. Two groups are identified, namely the experimental group that receives the treatment (X), and the control group that does not (-X). This applies to the group from Zimbabwe, and can be illustrated in diagrammatic form:

Group 1 (Experimental):	M1	M2	X	M3	M4	M5	M6	M7
Group 2 (Control):	M1	M2	-X	M3	M4	M5	M6	M7

Two lessons by each teacher were recorded before intervention. Four lessons were recorded during intervention (interim lessons), and the last one after participants had taken the last examination. Thus, a total of seven lessons was recorded with every teacher who participated. The lessons recorded before intervention took place are referred to as the pre-test. Their purpose was to determine whether there was any initial equivalence in the discourse performance of the experimental and control groups. The interim tests refer to recordings during the intervention and posttests to recordings after intervention. These were aimed at comparing the discourse behaviour of the two groups. The difference between the pretests and posttests of Group 1 was compared with the difference between the pretests and posttests of Group 2. The difference between the pretests and posttests of Group 1, was also compared to establish if there was any change in the use of discourse by the same participants.

There was a variation with the Malawi group in that the observation was conducted at post-intervention stage only. The sample of teacher-learners who had undergone the in-service training constituted the experimental group. The control group was made up of teacher-learners who had not yet received training. Two lessons were observed for each teacher. The posttest was aimed at establishing whether there was any variance in the discourse behaviour of the two groups. The experimental group comprised three teachers, while the control group comprised the same number offering the same subjects (Geography, English, and Mathematics). Neuman (2000) refers to this as the Posttest-only control group design.

Group 1 (Experimental):	X	M1	M2
Group 2 (Control):	-X	M1	M2

Two features of the design deserve some explanation because they necessitated creation of the control group. These are 'history' and 'maturation'. Definition of these terms will be related more specifically to the study of oracy. For this study,

maturation refers to change that happens naturally to the discourse behaviour of participants over time, as opposed to change attributable to the influence of the Litraid course. History, on the other hand refers to pedagogic events occurring in the environment concurrently with the experimental variable (discourse performance) being tested. Events would include any new ideas about interaction that normally circulate in any education system, and could influence teachers' discourse behaviour. The presence of a control group makes it possible to control for history in the sense that should there be a significant change in the discourse performance of the experimental group, it can be concluded more definitively that such a change cannot be attributed to the general educational changes that may be taking place in the country's educational environment, but rather to the influence of the intervention programme.

Control for history and maturation is of importance because controlling variables assists validity rather than the reliability of the study. Validity refers to the extent to which a study genuinely investigates what it is intended to investigate. There are different types of validity, two of which are briefly mentioned at this stage.

According to Tuckman (1972:4) " a study has internal validity if the outcome of the study is the function of the programme being tested". External validity, on the other hand, "refers to the extent to which the results can be generalised from samples to populations" (Nunan, 1992:15). In my study controlling for variables such as maturation and history thus enhances its internal validity, while its external validity would be a function of the extent to which its findings can be generalised to larger populations. A degree of external validity had to be sacrificed in my study because the intensive discourse analyses it required meant that the representative sample was small: relatively few subjects comprised the experimental and the control groups.

A researcher has to consider not only validity, but also the reliability of a proposed study, and here too 'internal' and 'external' aspects are distinguished.

Internal reliability is concerned with “the consistency of data collection, analysis, and interpretation”, while external reliability is concerned with “the extent to which independent researchers can reproduce a study and obtain results similar to those obtained in the original study” (Nunan, 1992:14). Further discussion of both validity and reliability as they relate to my study will be provided in Chapter 3, where its methodology will be considered.

To sum up, this section discussed the research design preferred for the study. Discussion started with an explanation of the four parameters explained by Seliger and Shohamy (1989). This was followed by an examination of the intervention as an important feature of the design. A description of the pretest-posttest control group design (Zimbabwe) and the posttest control group only (Malawi) was given. Two variables (history and maturation), controlled to enhance validity were discussed, then reliability and validity were elucidated. Focus now shifts to the analytical framework, a key component of the research design.

1.8 The analytical framework

Closely linked to the research design (discussed above) is the analytical framework used to describe features of classroom interaction. Structuring of the analytical framework is aligned to the second research question, which seeks to establish how the quality of classroom discourse can be assessed in a systematic manner. Successful testing of the three hypotheses is dependent on the adequacy of the framework. Brief preliminary comments on the framework are made below, but a detailed account is provided in Chapter 3.

Hypothesis 1 claims a relationship between teacher participation in the Litraid course and reduced dominance, while Hypothesis 2 claims a relationship between participation in the language course and the use of more effective discourse. Hypothesis 3, on the other hand, claims a relationship between being taught by in-service course participants and a higher degree of initiative. Two

central issues relative to the analytical framework, are directly implied, namely, the linguistic features and the pedagogic functions they serve. The work of Sinclair and Coulthard (1975) addresses the issue of linguistic features most explicitly, and will be the primary source of the categories of language used to analyse and interpret the lesson transcripts. Van den Branden (1997) and Mercer (1995) address the pedagogic function of language, and their concern is with the educational function of discourse acts. Van Lier (1988), whose work explains the concepts of turn-taking and discourse quality, complements the work of Mercer. His elucidation of turn-taking and initiative is central in discussing learner discourse. Thus, in my study, the ideas from the aforementioned applied linguists are integrated into a framework for the analysis of pedagogical discourse to distinguish the effective from the less effective ones.

The linguistic categories proposed by Sinclair and Coulthard (1975) are premised on the conceptualisation of a lesson as comprising a number of ranks, described as: lesson, transaction, exchange, move, and act (cf. § 2.5.2.3). In that approach, a pedagogic move is realised by acts, while each act has a specific discourse function. A number of moves between the teacher and learners constitutes an exchange, as in this example:

T: Takesure, What is a plot?

S: The events in a novel.

T: Good

The exchange involves initiation (I) from the teacher; response (R) from the learner; and feedback (F) given to the learner's response (giving us the I-R-F formula). Thus, in the above extract, the teacher's initiating move is made up of two acts, while the learner's response is a move made up of one discourse act. Finally, the teacher's feedback is made up of a single speech act, which acknowledges the learner's reply. The speech act has been described as the smallest discourse unit in terms of its discourse function (Sinclair and Coulthard, 1975).

The function and the goals the acts achieve are issues taken up by Mercer (1995) and Van den Branden (1997). Van Lier (1988) then adds on the dimension about who initiates discourse, why, and to what effect. Thus, while Sinclair and Coulthard describe discourse acts, the other scholars invest pedagogic value in them (the quality of discourse). Basically, therefore, I will integrate the descriptive focus on linguistic units proposed by Sinclair and Coulthard (1975), turn-taking discussed by Van Lier (1990), and the pedagogic value of utterances (Van den Branden, 1997 and Malamah-Thomas, 1987). Mercer's (1995) perspectives on collaboration during peer interaction are also taken up.

In brief, the analytical framework comprises teacher and learner acts to be analysed, using pre-specified coding categories. For either party, these are subdivided into the effective and the less effective ones in terms of their potential to promote negotiation of learning. For example, under teacher categories the less effective acts will include display and polar interrogatives. Effective ones, on the other hand, will include referential questions and clarification requests. For learners, the less effective acts, in other words those that do not reveal initiative, include minimal responses and choral answers. Those that reveal more initiative include clarifications and counter-informs.

Throughout discussion in the foregoing sections, it has been implied that an analytical framework also serves an educational purpose, and is used to interpret how discourse participants use talk to negotiate learning either when teachers talk with learners, or when learners interact in groups. It was also explained that teachers ask questions creating the I-R-F exchanges described extensively by Sinclair and Coulthard (1975). In addition teachers summarise content, recapitulate prior discussion, and also "reformulate the contributions made to classroom dialogue by students" (cf. Mercer, 2004:145). They request clarifications, encourage and prompt learners to contribute to the dialogue.

Depending on teacher elicitations, learners give minimum responses, regurgitate the teacher's language, give clarifications or counter-informs, and so on.

These discursive techniques can be used either well or badly, but they are nevertheless recognised as talk that can be used by interactants to create a shared framework of understanding. In this respect it is pedagogic talk that is at the basis of the analytical framework. The role of the framework is, therefore, to specify and define analytical categories; spell out unambiguously the interactive function of categories; and explicate the connection between these functions and negotiation of learning.

1.9 The structure of the study

After the above brief discussion of the theoretical background, the research problem, rationale for the study, the context in which the study is conducted, the research aims and hypotheses, the research design, and finally the analytical framework, a brief summary of the remaining chapters is given.

Chapter 2 reviews the research literature on classroom discourse. It explains, illustrates, and evaluates existing approaches on classroom discourse as they relate to the present study. Insights drawn from the literature are related to the research aims, the research problem and the hypotheses. Chapter 3 discusses the research methodology of the study, including the analytical framework for analysing the discourse of learning, in some detail. Chapter 4 is concerned with the presentation and analysis of data, and presents and interprets the findings of the study. Chapter 5, concludes with an assessment of the contribution of the study and also outlines a number of implications and recommendations.

CHAPTER 2

KEY PERSPECTIVES ON ORACY AND NEGOTIATION OF LEARNING

2.0 Preview

One of the most insightful novels showing the classroom as a speech community is *Hard Times* (1854) by Charles Dickens. In that Victorian novel we come across the statement: "Teach these children nothing but facts, sir". This is followed by the schoolmaster's interaction with his students thus:

"Bitzer", said Thomas Gradgrind, "your definition of a horse."

"Quadruped. Gramnivorous. Forty teeth, namely twenty-four grinders, four eye-teeth, and twelve incisive. Hoofs hard but requiring to be shod with iron..."

"Now girl number twenty", said Mr Gradgrind. "You know what a horse is."

"Very well", said this gentleman, briskly smiling and folding his arms.

"that's a horse. Now, let me ask you girls and boys, would you paper a room with representations of horses?"

After a pause, one half of the children cried in chorus, "yes sir!" Upon which the other half, seeing in the gentleman's face that yes was wrong, cried out in chorus, "no sir!"

"Of course, no. Why wouldn't you?"

This episode of interaction raises important questions about teacher dominance, teacher effectiveness and learner initiative signified in the hypotheses (cf. § 1.6).

Practically, research on tasks, methodologies, learning styles and approaches in discourse processing has been largely confined to English as a subject.

Empirical evidence on how the same type of knowledge and skills about language can be harnessed to inform teachers of different school subjects is somewhat scanty. This is especially true where English is an L2 for both the teacher and pupils. A question related to this state of affairs comes to mind, namely: "Are there rules about how to structure classroom language - rules that teachers can apply to all subjects?" in order to attain cognitive goals through talk? (Tichapondwa, 1997:16). To explore this matter, related literature is placed in perspective.

The study addresses the place of language in learner intellectualisation, and focuses on the potential of teacher-talk in providing the kind of language and learning environment in which students' oracy can be developed. To date, a substantial body of literature on classroom discourse has developed, and in the subsequent sections, the literature pertaining to oracy will be reviewed. Discussion will take into account what research has been done and what gaps can be identified in the field. It is argued that research done in other parts of the world has relevance to the present study. This, according to Carstens (1995:187), is true of the situation with regard to text and discourse research in South Africa, but "if we want to be relevant in our research we also have to look at things from our point of view". This observation applies equally well to research such as mine that was undertaken in Zimbabwe, and so this chapter will, for example, also examine oracy practices in the African traditional education context, and in second language learning circumstances. This is followed by the examination of studies on oracy research, namely: insightful observation; coding schemes in interaction analysis; discourse analysis; turn-taking models; and finally, the collaborative interaction model.

The review will also describe typical empirical studies of oracy that were conducted to evaluate the applicability of the kind of approaches just mentioned.

The studies deal with ways of identifying effective talk; what negotiation of learning involves; the role of learning tasks in the promotion of oracy; teacher influence on peer interaction; and communication strategies.

2.1 Research methodology issues

In this section the focus is on the review of literature dealing with research methodology issues. The quantitative and qualitative aspects of applied linguistic research will be reviewed, and it will be argued that when conducting ethnographic research, the two can be combined for best results. I also explain ethnographic research, and relate the discussion to two approaches, namely, 'data-then-theory' and 'theory-then-data', which are of common occurrence in applied linguistic research.

One of the common challenges associated with research in applied linguistics, especially research in classroom interaction, is that there is no consensus among researchers on how best to analyse oral discourse. There has been substantial research whose main goal has been to determine what makes teacher talk an aid to learning (e.g. Chaudron, 1988; Mercer, 1995; Edwards and Westgate, 1994). Chaudron (1988:10) observes that there are methodological problems especially in L2 research, and that some of the investigations have "often been flawed, incomplete in analysis, and contradictory in outcome". When compared with the natural sciences, which are considered the most successful in coming up with findings that are more verifiable, definitive, and cumulative, applied linguistic research has been considered an intellectual terrain that is considerably less clearly defined. Lebaree (1997:7) makes this observation: "thus a soft applied field, it is characterised by high technological ambiguity (a diffused intellectual focus) and high resource dependency on an environment in flux". Given this, it is the objective of the present chapter to establish that the study of classroom talk is now supported by various theories and principles that make the investigation of

oracy less ambiguous. The question of ambiguity raises possible threats to the reliability and validity of studies in the field because of the role of, for example, cognitive, socio-cultural and emotional factors in classroom discourse.

A general methodological issue concerns the use of quantitative and qualitative approaches in applied linguistics. The combination of the two approaches contributes towards the reduction of ambiguities, as the brief characterisation of the approaches shows (cf. § 2.5.2). The quantitative approach involves numerical measurement, statistical analysis and drawing inferences about classroom discourse behaviour. Typically, discourse analytical studies take counts of categories of utterances to test a given hypothesis. The key epistemological tenet of the quantitative approach is therefore that features of phenomena can be isolated and described numerically. Mercer (2004:142) notes one disadvantage of using the quantitative method in oracy research, namely that “actual talk data may be lost early in the analytical process. All you work with are your coding categories and the ways these have been pre-determined can limit the analyst’s sensitivity to what actually happens”. It is for that reason that the qualitative approach is used to complement the quantitative approach.

Qualitative research would be preoccupied with the interpretation of the discourse, relying on the close detailed consideration of carefully transcribed episodes of talk. According to Rudestam and Newton (1992:31) “whereas quantitative data are evaluated using statistics, qualitative data are usually reduced to themes or categories and evaluated subjectively”. A major characteristic of the qualitative approach is that it can be used to describe and illuminate classroom dialogue, and is committed to the use of naturally occurring data. Researchers assume that “systematic enquiry must occur in a natural setting rather than in an artificially constrained one such as a laboratory-based experiment” (Marshall and Rossman, 1989:10). Ethnographic researchers (e.g. Reichardt and Cook, 1979; Grotjahn, 1987) nevertheless argue that quantitative and qualitative research methodologies are mutually dependent. Chaudron

(1988:16) says that the qualitative paradigm involves the collection of naturalistic and uncontrolled data, and the quantitative method is then used “to maintain a high degree of face validity in regard to objective measurements in controlled conditions”. In other words, when testing a hypothesis to do with the effectiveness of teacher discourse in the negotiation of learning, discourse acts will be quantified and described. This quantitative method will have derived from qualitative conceptual considerations about the construct of effectiveness.

The classroom discourse researcher’s responsibility, then, is to develop a research design that will as far as possible focus on naturally occurring data that will facilitate both clarity of description and depth of interpretation. The focus on naturally occurring classroom interaction has been referred to as linking with ‘the ethnography of speaking’ (cf. Hymes, 1972). The ethnographic approach is an important methodological consideration in applied linguistic studies. In the words of Chaudron (1988:45) the approach “is generally identified as a qualitative, process-oriented approach to the study of interaction”. Procedures in this approach involve observer participation, careful collection of data, uninterrupted record keeping and meticulous interpretation of data. These procedures characterise the present study in which teacher input, allocation of turns and specification of features of discourse are closely monitored.

Whereas researchers in the hard sciences claim that they can predict the effect arising from particular causes and effects of constructs they will be investigating (cf. Lebaree, 1997), ethnographers have legitimised the view that human behaviour cannot be understood without incorporating into the research the subjective perceptions and belief systems of those involved (Watson-Gegeo and Ulichny, 1988). This is because as Wallace (1991:76) puts it, “ethnography or participant observation is a social research method drawing on a wide range of sources of information”. In the case of a speech event in the classroom, for example, there are many factors at play during interaction. Brumfit (1997:23) holds the view that ethnographic research is influenced by several factors

impacting on the way language is used to solve problems. Van Lier (1988:54) gives culture and context as some of the factors. These have a moderating effect on language use patterns, which have been referred to by Sapir and Whorf (cited in Lee, 1997) as “patterned relations in speech”. It is these relations that account for the sustained patterns of discourse.

One methodological issue that has preoccupied ethnographic researchers is the question of data collection, which specifically seeks clarification on whether data should be collected with reference to a theory, or whether theories should arise from analysed data. Van Lier (1988) argues that ethnography is theory-building, which means data must be collected before arriving at a hypothesis. The practice of deriving theory from data has come to be known as ‘Grounded Theory’. Deriving theory from data collected from episodes of classroom interaction would be an instance of grounded theory. According to Glaser and Strauss (1967) grounded theory examines data as a whole before engaging in interpretation and explanation. This ‘data-first’ approach has provoked criticism from scholars, notably Long (1990), who argues that the ‘theory-then-data’ rather than ‘data-then-theory’ approach is more rational. This dichotomy raises questions about which of the two approaches to follow when investigating oracy.

Silverman (1997:25) has observed that there is some problem with the ‘data-then-theory hypothesis’ preference because “increasingly, ethnography begins with prior hypothesis and prior definitions.” The debate is significant for the present study in one particular way. It draws attention to the fact that like quantitative and qualitative methods that can be combined in the conduct of a study, the data-then-theory and the theory-then-data methods can be combined when investigating oracy practices. Essentially, the two are closely related simply because data will be needed to achieve research aims, as much as theories will be needed to guide the collection and interpretation of such data.

In this section an explanation of how both quantitative and qualitative approaches can be used in applied linguistic research was touched on. Ways of handling ethnographic research and interpreting naturally occurring discourse were discussed. This was done relative to research-methodological issues such as the data-first then theory and the theory-then-data approaches. It was noted that for the present study, the two will be combined for more reliable results.

2.2 Interaction in the classroom

In this section it is pointed out that classroom language primarily exists to fulfil pedagogic functions identifiable when interaction occurs. Presently, literature defining classroom interaction will be reviewed. The objective is to lay the foundation for subsequent discussion by explaining what classroom interaction is, and how it can be analysed as a type of discourse that serves a specific pedagogic function. The issue of discourse pragmatics will be explained relative to typical classroom interaction.

The language of the classroom has become a prominent topic for applied linguistic research, and as Edwards and Westgate (1994:1) rightly observe that “for a surprisingly long time, the questions which classroom researchers were most inclined to ask were about the outcomes of teaching”. This means few researchers involved themselves with investigating interactions through which knowledge is communicated. Recently, there has been an increase in studies in that field (Van den Branden, 1997; Probyn, 2005). The present study focuses on the recent developments with particular interest in classroom interaction, which is considered a special type of dialogue whose objective is to accomplish learning objectives. To learn successfully is a matter of mastering how to interact with the teacher. It is with this thinking in mind that the Bullock Report (1975:141) regards interaction as:

verbal encounter through which the teacher draws information from the class, elaborates and generalises it, and produces a synthesis. His skill is

in selecting, prompting, improving, and generally orchestrating the exchange,

and from the same perception the term 'teacher talk' has arisen (cf. Edwards and Westgate, 1994). Thus classroom lessons can be viewed as verbal encounters orchestrated by the teacher to aid learning. Classroom interaction involves an awareness of the language options allowing the teacher to exercise control over the interaction and, therefore, the educational process. In the words of Van Lier (1996:191) "when people with different goals, roles, and resources interact, the differences in interaction provide occasions for the construction of new knowledge". This view, therefore, centralises interaction in the negotiation of learning at three levels, namely, when learners get assistance from the teacher; when they interact with equal peers; and when they interact with less capable peers. This view, which has a direct bearing on the present study, hinges on the phenomenon already referred to as scaffolding after Bruner (1986). Put simply, scaffolding refers to the provision through conversation of linguistic structures that promote learner cognition.

It will be clear from the explanation of interaction that in societies across the world, teachers are vested with a particular responsibility for the process of helping others to develop knowledge and understanding. From the understanding that language exists to fulfil certain functions, and that these functions determine the shape of interaction (Nunan, 1991:44), the concept of genre is derived. Rogoff (1990) refers to this classroom genre as guided participation in which words are used to direct actions and to provide encouragement and feedback on the consequences of one's speech acts. Hoogsteder *et al.* (1996:347) further define teacher-learner interaction as "a mode with a typical dynamic. It is the framework giving meaning to the overall activity of participants". Thus interaction implies the crucial mediational role of the teacher.

Given the centrality of classroom interaction, researchers have also been preoccupied with ways of measuring classroom discourse, defined as the language used to carry out the intellectual activities of the classroom (cf. § 1.1). Interaction is thus measured through the analysis of language data. This practice has come to be known as classroom discourse analysis, which “analyses classroom discourse in linguistic terms through the study of classroom transcripts” (Nunan, 1992:3). Such analysis assigns utterances by the participants to predetermined categories. Sinclair and Coulthard (1975) introduced a discourse analytical system, which is based on description of analytical procedures (cf. § 2.5.2.3 for the more detailed discussion of the approach). Basically, their scheme consists of various structures, which are realised by ‘acts’. Each act, in turn, has a specific discourse function. In addition to this approach to discourse analysis other scholars have made an important contribution. For example, Van Lier’s (1988) ideas on turn-taking, initiative, and participation, and Mercer’s (1995) ideas about interaction in groups complement ideas by Sinclair and Coulthard (1975).

This kind of discourse analysis is based on what has come to be known as discourse pragmatics in applied linguistics research. For the discourse that is analysed to be considered communicative, it must have pragmatic meaning, defined by Cook (1990:29) as “the meaning, which the words take on in a particular context between particular people”. In other words, the function of classroom utterances must be established pragmatically. In the classroom context there is an unmistakable intention to pay attention to information, which is supposed to be relevant. It is for that reason that interlocutors co-operate, listen and react to what is said (cf. Grice, 1975). Formal features of language will be consciously selected to create and share knowledge (negotiation of learning). Spolsky (1990:90) refers to this as pragmatic competence, defined as “the ability to place language in the institutional context of its use, relating intentions and purposes to the linguistic means at hand”. Discourse pragmatics, therefore, acknowledges the universal cause behind conversational principles. Knowledge

of that helps teachers to interact more communicatively, and helps learners to reason their way from the formal aspects of language to their function, thus constructing coherent discourse from the language they receive.

In practice, discourse pragmatics involves communicative competence, comprising three distinct, but related competencies. These are: grammatical competence, which involves knowledge of lexical items and rules of morphology, syntax, semantics and phonology; sociolinguistic competence, involving sociocultural rules of use and rules of discourse; and strategic competence, which accounts for communication strategies that may be called into action to compensate for breakdown in communication due to performance variables. Teachers' level of competence in the three areas ought to be consciously enhanced, and that can be achieved by helping them develop new conceptualisations about teacher talk (cf. Probyn, 2005). This will help them rethink their role and that of learners to achieve learning goals. This is in a sense a kind of paradigm shift described by Van Aswegen and Dreyer (2004:295) in these words: "If old ways of thinking are not analysed, they remain unchanged, existing patterns continue, and structures of which we are unaware hold us prisoner".

Interlocutors contribute to interaction in various ways. Their roles could be either symmetrical or asymmetrical. In a didactic situation where there is a balance in the interactional roles of the adult and learners, and there is mutual understanding of content being discussed, this is regarded as an example of symmetry (cf. Bakhtin, 1986). In the interaction where the most competent participant, the teacher in this case, controls and dominates the learner in order to reach the goal with minimum fuss, the role distribution is asymmetrical because discourse is not balanced. According to Ngwenya (2006:47) the negotiated output between interlocutors "activates cognitive processes which may produce new linguistic knowledge or which may consolidate current knowledge." The linguistic instruments at the disposal of the participants are

mainly communicative ones such as requests, directives, demands, information-giving and language used to perform routines (Halliday, 1975). The foregoing explanation thus serves as a brief clarification of what discourse pragmatics in the context of the classroom involves.

The foregoing section defined classroom interaction as a special type of dialogue between teachers and learners. It was noted that interaction serves pedagogic purposes when the teacher mediates through language to help learners achieve intellectual goals. An explanation of how interaction can be measured was given, and there was clarification of how the discourse analysis approach can be used to analyse lesson transcripts.

2.2.1 Linking oracy with cognition and concept formation

This section addresses the question: How does learning take place when the teacher and learners engage in classroom dialogue? Given the common scenario in many classrooms that learning is best assessed through written work, this section redresses that balance by taking the discussion of oracy a step further. Cognition and concept formation are defined relative to interaction.

One of the assumptions for this study is that oracy is a communicative phenomenon which enhances the negotiation of learning. Learning itself entails the promotion of intellectual skills, which involve mastery of concepts through the mediating influence of language. The link between learning and language has preoccupied psychologists for a long time, and will be mentioned in passing because an understanding of oracy remains incomplete without background information about how it enhances conceptualisation. Vygotsky (cited in De Cecco 1967:56) says, "as long as we do not understand the interrelation of thought and word, we cannot answer any of the more specific questions in this area". He observes that speech is the outward manifestation of thought: that is, the learner who possesses discourse competence is able to execute complex strategies for processing information, solve problems, and come to an

understanding of new knowledge. Eysenck (1988) uses the term 'cognition' to define that process. Basically, all meaningful learning has to do with interactive experience, and learning is not an independent process, but is part of language. There is a close connection between cognition and concept formation.

A concept is a mental representation of a certain class of experiences, which is realised through speech. Carroll (1964), Piaget (1970), Vygotsky (1978) and Heath (2000) concur that profound changes occur in the child's cognition when he or she engages in more conscious interaction. Learner cognition involves the capacity to understand those notions being negotiated in a given topic by using appropriate language to clarify thought. In the context of many classrooms, where traditional thinking values written over spoken discourse, classroom practitioners are understandably at a loss when asked to explain precisely what students have learned when they have talked. Eysenck (1988:200) partially provides the answer when he says:

The starting point in language production is presumably some meaning that the language user wishes to convey, and the goal of comprehension is to understand the meaning of what has just been listened to.

So, when a learner conveys an idea, or shows an understanding of what has been said, that in itself is evidence of learning. This means that initiating discourse or responding to somebody's discourse signifies the individual's willingness to express thought, and illustrates that oracy provides observable reflections of intellectual processes. For example, the child who interacts with the teacher will be using language to accomplish important cognitive activities, which include directing attention, solving problems, planning, forming concepts and gaining control over subject content (Mussen *et al.* 1984:204-205).

In the foregoing, the link between cognition and concept formation, on the one hand, and oracy, on the other, was elucidated as a central notion in the understanding of classroom talk. However, there is also a close connection between oracy and the pedagogic context on the one hand, and oracy and affect on the other. This is discussed in the next section.

2.2.2 Linking oracy with context and affect

As the title of this section implies, there is a close link between oracy and the context within which interaction takes place. Further, the feelings of interlocutors (affect) are also significantly linked with oracy. In this section, literature about the linkage will be reviewed.

Context or situation refers to the educational and cultural environment in which teaching and learning take place. As recognised earlier, it is through interaction that learning objectives are realised. However, for interaction to be meaningful, there must be mutual understanding of the contextual background against which discourse is generated. On this matter, Eysenck (1988:207) says, "...different environmental conditions affect the things that people think about, and these come to be reflected in linguistic usage." Environmental conditions include curriculum subjects, lesson topics, the ethnic composition of the class as well as the cultural background of the school.

It is in the different environmental conditions that the support and collaborative interaction (cf. § 1.1) takes place. According to one of the views expressed by Vygotsky (1978:57) in his socio-culturally oriented theory:

Every function in the child's cultural development appears twice: first, on the social level, and later on the individual level; first between people (inter-psychological), and then inside the child (intra-psychological). This applies equally to voluntary attention to logical memory, and to the

formation of concepts. All the higher functions originate as actual relations between human individuals.

From the citation, two things are noticeable, namely that there has to be active inter-personal dialogue within the classroom context, and that there is voluntary attention by the learner. The decision to pay attention or not to do so is influenced by the way a learner feels (affect). As Bakhtin (1986:92) says, “our thought itself is born and shaped in the process of interaction and struggle with others’ thought...” This accentuates the close link between oracy and context. Similarly, in her ‘situativity’ theory, Vosniadu (1996) argues that behaviour should be investigated as interactions between social agents and the situation they find themselves in.

Turning to the issue of affect, scholars (e.g. Allman and Brothers, 1994; Schumann, 1998) have argued that teachers who intervene in the learning process must be sensitive to varying emotions among students. Lee (1997:5) observes that this enhances opportunities for collaboration, where learners feel emotionally free to make contributions. He further observes that teacher intervention is “linguistic enculturation, a quintessentially social matter that brings potentiality into actuality”, by taking into account learners’ emotional dispositions.

Learning, thinking and communication are, without exception, situated in a cultural setting and dependent upon the utilisation of linguistic resources for their realisation. Teachers who intervene in the learning process must be sensitive to the varying emotions among students. This enhances opportunities for collaboration where learners feel emotionally free to make contributions.

Various scholars (e.g. Allman, 1994:6; Allman and Brothers, 1994; Bruner, 1996, researching on the link between affect and oracy) recognise the influence of affect in the negotiation of learning. They observe that cognitive psychology neglects the place of emotion and feeling: “Surely emotions and feelings are

represented in the processes of meaning making and our construction of reality" (Bruner, 1996:12). This means the way interlocutors feel about academic conversation in a given context has significant bearing on the nature of knowledge constructed and the meaning negotiated. Positive feelings towards a certain body of knowledge are likely to encourage more meaningful participation and communicative discourse output.

Schumann (1998:238) affirms that position in these words: "...affect, in the form of stimulus appraisal, is important in second language acquisition and in all sustained deep learning." This implies that when attempting to solve a problem, the way learners feel should be taken into consideration simply because emotion biases them to focus on what is of interest to them. This limits the range of information that they will see as relevant. For example, when teachers present knowledge using certain discourse patterns, learners respond either negatively or positively. Emotions thus influence both the teacher and the learner with regard to where to look for a solution in the process of negotiation. In the words of Schumann (1998:245):

Where one decides to focus is essentially an emotional decision in which alternatives are appraised by schematic emotional memory according to the dimensions of stimulus appraisal (novelty, pleasantness, goal significance, coping ability and self image).

Classroom interaction, therefore, is a constant making, unmaking, and redefining of teacher-learner emotions, where intervention is expected to affect the form and function of discourse.

2.3 Oracy in traditional African education

In Chapter 1 it was noted that the Litraid course team found a culture of silence on the part of learners. What could be the possible explanation for this? Could traditional oracy practices in the upbringing of children have anything to do with a

culture of silence? Attempting to answer this question helps us find ways in which traditional patterns of interaction can either enhance or interfere with learner participation and effective use of discourse. In this section the objective is to review literature on how oracy manifested itself in traditional African education.

Sociologists (e.g. Castle, 1964) argue that African countries have introduced school subjects and teaching methods that are at variance with life as it is lived even today. They also acknowledge cultural differences between European and African backgrounds, and that every culture provides adults and children with a repertoire of interaction patterns. Hoogsteder, Maier and Elbers (1996:347) make this observation: "...in Western middle-class communities, situations are adapted to children. In many non-Western cultures, however, children are adapted to situations". This means that in the Western world, situations are considered to be changing so that children are taught how to cope with the dynamic socio-economic world. In African societies, on the other hand, situations were considered to be constant, and children were consciously prepared on how best to live in an environment that was more or less stable.

The second part of the quotation is still true (to some extent) of many traditional African societies where children are involved in the life of the community, first as close observers and gradually as participants. The adult's role is to fit the child into the environment.

In most traditional communities, instruction took the form of oral interaction. According to Mutswairo *et al.* (1996:65), this practice is captured in the concept of 'orature', a term that refers to a broad spectrum of genres commonly used for interaction. These included narratives, proverbs, riddles, songs and puzzles. Oral communication in Africa tended to be solidly context bound because the spoken word was not divorced from the day-to-day lives of interactants. Children heard proverbs from an early age when elders taught them by the evening fireside. Proverbs were used to explain customary law and enunciate rules of conduct in

life. As Gelfand (1979:120) observes: "...through them the child learns of the existence of social values and acquires yardsticks to measure them." The adult intervened by giving discourse input while children listened.

The adult narrator prepared his audience for a didactic story by firstly, appealing to the authority of elders, and secondly, by introducing proverbial terms couched in discourse that expressed wisdom. The silence and attentiveness subsequent to the input was a form of participation. Children listened to the detail, illustrative language, and the accompanying humour for individualised use at the appropriate moment. The common occasions when children engaged in interaction were in response to a request by the adult for them to complete the story in their own way, using language of their choice. Alternatively, the adult asked questions based on the story to check the extent to which children remembered important points.

When engaged in social chores, boys and girls repeated proverbs to one another or tested each other's knowledge. This was their output some time after having listened to adults. "Proverbs went beyond mere explanation of social values, and also served as commentary on people's experiences about medicine, courtship, hunting, trade, genealogy, craft, art, and conservation" (Gelfand, 1979:81). Utterances by children, therefore, made reference to reality as language was used in context to learn life skills. Thus, in traditional African settings, oracy was a condition of learning (cf. Wilkinson, 1965). Both Mutswairo *et al.* (1996) and Gelfand (1979) point out that the main feature was that mostly the child's discourse output only occurred in the presence of adults when the adult requested it. Output was deferred to other interactions with peers. Interactionally, this meant that in the presence of the adult, children listened in silence and the adult did more talking, except when she observed children interacting among themselves to see how much they could use discourse to solve problems.

Ideas discussed in the section so far point to the fact that although in African traditional education there was no formal instruction in the sense we know it today, adult-child interaction enhanced cognitive and social development through the practical curriculum that emerged naturally out of the physical and social situation. There seems to be some congruence between this collaborative co-authoring of knowledge, and Vygotsky's (1978) idea about the zone of proximal development. Castle (1964:40) says, "there were no grammar books, no writing, but correctness of speech as learnt by imitation of elders." Such learning, mediated through language, achieved the intended goals. The imitation of adults was contextualised to suit the individual's life circumstances. Today, a large part of this old way of communicating is steadily losing its relevance in a world so different from the African past. This is especially true for African classrooms where a second language is used for transaction, and school subjects have little relevance to the outside world, which the child has to grapple with everyday when the bell rings to free her from lessons.

A close examination of traditional oracy practices, combined with one's personal experience, leads to a number of explanations about learner silence and teacher dominance. Firstly, the older generation of teachers in African schools believe that it is the teacher's responsibility to dish out information. That is why teachers have the tendency of transmitting content and asking questions with answers in mind. To some learners it is only too obvious that the teacher pretends not to know the answer, and that makes interaction rather artificial. Secondly, learners might not want to respond out of sincere reverence for an adult reputed to be the fountain of knowledge. Thirdly, the learning environment can be discouraging because it is dissimilar to the traditional set-up where children gathered around the adult and did not have to bid for answers, but participated spontaneously. In today's classes there could be forty or more peers, and when one gives the wrong answer one risks being laughed at. Some learners, therefore, take comfort in silence. Fourthly, a learner might know a concept in the mother tongue, but lacks the English terminology to express it.

It is extremely difficult to discover what is left of traditional orature. However, one thing is certain when we deal with Western education, namely, that if teachers get to understand how talk functioned in traditional African learning, and draw insights from it that will afford them the opportunity to transform teaching styles and communicate more effectively and enjoyably with the learners. If it is unwise to pour new wine into old bottles, it may nevertheless be wise to pour a little of the old wine into the new.

2.4 Oracy and second language learning

In this section the link between oracy, on the one hand, and second language learning (SLL) and second language acquisition (SLA) on the other is examined. Given the background outlined in the previous section, it is necessary to answer the question: Does proficient use of language facilitate the learning and acquisition of an L2? To do so, relevant literature will be reviewed to show the distinction between second language learning and second language acquisition, and argue how both can be promoted through learning school subjects where the target language is the medium of instruction.

Cohen (1998:4) has defined a second language as “the language spoken in the community in which it is being learned”. For example, in the context of my study, English is a second language because it is commonly spoken and used for a wide range of purposes such as teaching, and the conduct of national and international transactions. A distinction is also made between a second language and a ‘foreign language’, and Cohen (1998:5) argues that unlike a second language, a foreign language is not spoken in the community “because the learners may have little or no direct contact with it”. An example of a foreign language is French that is studied at some schools in Zimbabwe, and this is done mainly for cultural enrichment.

Applied linguists (e.g. Ellis, 1986; Krashen, 1995) contrast SLL with SLA on the assumption that these are different processes. According to Ellis (1986:6), “the term ‘acquisition’ is used to refer to picking up a second language through exposure, whereas the term ‘learning’ is used to refer to the conscious study of a second language”. In his hypothesis about the acquisition-learning distinction, Krashen (1995:10) gives further insight on the distinction. He likens acquisition to the way children develop ability in their first language, and says, “language acquirers are not usually aware of the fact that they are acquiring a language, but are only aware of the fact that they are using a language for communication”. In other words, acquirers are not consciously aware of the rules of the language they have acquired. Thus it could be argued that it is possible for learners to acquire English as they interact with the teachers, without being conscious of its rules.

It will be observed that the argument forwarded by Krashen (1995) about the distinction between SLA and SLL is problematic because in practice, acquisition and learning are not easily distinguishable. For the present study, mastery of formal aspects of language will be considered an example of SLL. Acquisition, which is a more inclusive term, will be used to refer to all instances other than those where language form is the main focus of interaction.

On the other hand, learning a language refers to “conscious knowledge of a second language, knowing the rules, being aware of them, and being able to talk about them” (Krashen, 1995:10). In non-technical terms, learning is ‘knowing about’ rules of a language and its grammar (formal knowledge of a language). Error correction, learning of the specialist register of school subjects, and conscious teaching of vocabulary are examples of SLL. Conscious teaching of vocabulary and syntax specific to a given content area (negotiation of form) is a common occurrence in classrooms. Greenwood (2002:2) gives an example of how learning new words takes both will and skill on the part of students. He argues that “the facility to attend to words depends on metalinguistic

sophistication that can be fostered by teachers who assist students by thinking aloud, modelling, and guiding until effective learning strategies become automatic". SLL is, therefore, it is argued, crucial for the development of effective learner discourse in the classroom.

A suggestion, which has come to the fore in recent reassessments of the role of explicit knowledge of grammar in SL learning is the need to raise teacher consciousness (Rutherford, 1987). This is known as input enhancement, where teacher attention is drawn to those highlighted aspects of discourse, which play a valuable role in language learning by learners. Andrews (1999) introduced the term 'teacher metalinguistic awareness' (TMA), which Thornby (cited in Andrews 1999:163) defines as "the knowledge that teachers have of underlying systems of the language that enables them to teach effectively".

With particular reference to teacher-pupil interaction, metalinguistic awareness is used to draw attention to the degrees of sophistication that are possible in language awareness. At its most basic level, language awareness is simply awareness of speech, that is, our own and that of others. At more developed levels, it involves the ability to attend to the stream of speech and break it up mentally into various parts to consciously influence the language competence of participants in the learning process. Andrews (1999) confirms these views.

Thus, to be able to use discourse more effectively, and influence learning and acquisition, the teacher must possess explicit language knowledge, and successfully use such knowledge in context. These two levels of awareness have been described as the declarative and procedural dimensions of second language learning (Andrews, 1999). The former is concerned with the 'what' of the language, while the latter makes reference to the 'how' aspect. TMA ensures that students receive maximally useful input for learning.

Scholars have been concerned with ways that subject content can be taught so that speaking skills, needed for concept formation and negotiation of meaning, can be developed. Cleghorn *et al.* (1998: 464) carried out an investigation to find out the interplay between two functions of language in second language subject content classrooms. They examined these two specifics in Mathematics lessons in Zimbabwe: the transmission of facts and skills, and the provision of linguistic input for students to acquire the target second language. One of their findings was that some teachers use language in ways that explicitly help students to draw on prior knowledge, to make inferences, and to engage in cross-linguistic comparisons, while other teachers do not (Cleghorn *et al.* 1998). Thus, teachers whose language awareness has been enhanced, are in a better position to also enhance students' capacity to learn the second language. This makes the discussion of TMA an important aspect of the present study, which deals with interaction and the language of learning.

Teacher metalinguistic awareness allows for an in-depth understanding of principles of communication, which are transferable to other language contexts and situations, and as Borg (1999:97) observes, metalanguage (language about language, such as references to parts of speech, tenses, syntax, etc.) "does have a role to play in providing an economic and precise way of discussing particular functions and purposes of language." This implies that there is a close link between the function and form of classroom language used to carry out pedagogic activities. Van Lier (1996:203) clarifies the point thus: "when focusing on meaningful tasks that engage the students, we can see in many cases that in practice it becomes impossible to separate form and function neatly in the interactional work that is being carried out."

The purpose of this section has been to review literature about the link between oracy, second language learning, and second language acquisition. The section started with a definition of second and foreign language before distinguishing between second language learning and second language acquisition, though this

distinction remains a difficult and contentious one. Literature confirming how negotiation of content leads to acquisition and learning of a second language was then examined.

2.5 Research on classroom interaction

In this section research carried out about the kinds of analysis that have been applied to classroom interaction are discussed. A brief background to oracy research is provided (cf. § 2.5.1). This is followed by a section in which the main approaches selected for review are discussed. The third section reviews research literature, which demonstrates the applicability of the approaches (cf. § 2.5.3). However, before discussing the approaches, a brief recapitulation of analysis types is offered, thereby giving direction to the argument.

Earlier, it was noted that a conversation is talk with primarily social aims (cf. Fisher, 1996). In a typical conversation, the topic may be personal, and the purpose may not necessarily be shared or focused. Ethnographers (Austin, 1962; Firth, 1935; Hymes, 1967) have contributed insights about the social routines realised in conversation when conversants take turns. Turn taking reflects the fact that at any moment, a specific speaker can usually be identified as having the floor. When the turn ends, that of the next speaker can usually be expected to follow smoothly.

Unlike conversation, the interaction focused on in the present investigation is talk that has primarily educational aims. It is less personal and task related, and the purpose of communication needs to be made more explicit, shared and focused. In the present study the type of discourse analysis undertaken shares with interaction analysis a concern "with both the linguistic and non-linguistic aspects of spoken language, and attempts to articulate links between the linguistically focused rhetorical routines and social aspects of interaction" (Nunan, 1992:161). It is against this perception of classroom interaction that the background to oracy research is discussed in the next section.

2.5.1 The background to oracy research

Attention to comprehensible input and formal instruction has led to substantial research (cf. Krashen, 1982; Sinclair and Brazil, 1982; Mercer, 2005) on teacher talk. As we find in the early research by Barnes *et al.* (1969), the main goal has been to determine what makes teacher talk an aid to learning. A tradition of research whose goals are concerned with learner language behaviour is developing (e.g. Edwards and Mercer, 1987; and Edwards and Westgate, 1994). In the 1980s, applied linguists (e.g. Ellis, 1986; Chaudron, 1988) conducted research on whether learners' own initiatives and productivity in the classroom are the source of learning, rather than passive absorption of teacher's information. These studies inform the present research in several ways, including the examination of how enhanced learner participation contributes to more productive oral output.

Professional interest in classroom language, as we know it today, has grown with the recognition of its centrality in learning processes, and its value as evidence of how relationships and meanings are organised. One of the linguists whose contribution is worth mentioning is Searle (1975), who argued that all interaction is rule governed. He propounded two rules, namely, the regulative and the constitutive. He argued that classroom interaction is a regulated conversation type in which rules are said to be constitutive when they are recognisably part and parcel of the given situation in which a topic is pursued.

Grice (1975) makes a contribution to the idea of the regulated nature of conversation by proposing what he calls the co-operative principle, which, according to Edwards and Westgate (1994:10) "consists of a readiness to assume that our interlocutors' utterances mean something, and that it is our job to discern what that something may be".

Both Hymes (1972) and Searle (1975) have argued that any group of interactants sharing linguistic resources and rules is expected to reflect certain ways of conversing in the realisation of objectives. Hymes has defined such a group as a speech community, and Corder (1973:53) adds that a speech community refers to "people who regard themselves as speaking the same language", while Labov (1972: 120 - 121) defines it as a group of people distinguished by "participation in a set of shared norms". Arising from this theoretical position is a term now commonly used in oracy research, namely, 'the ethnography of speaking'. In the words of Hymes (cited in Coulthard, 1977:34):

... the ethnography of speaking is concerned not with language structure, but with language use... the ways in which speakers associate particular modes of speaking, topics, or message forms with particular settings and activities.

The classroom is a particular setting characterised by learning activities. In that regard, a teacher and learners in a classroom are a speech community that uses language to achieve specific goals. Given the brief background sketch in this section, specific approaches to oracy are discussed in the next section.

2.5.2 Approaches to the study of classroom interaction

As discussed above, investigation of talk started with analysis of conversation, which takes into account "the management of turn-taking, repair strategies, the resolution of ambiguities, speaker selection, and topical relevance" (Nunan, 1992:160). As an end in itself, talk is both fascinating and intricate, and the approaches discussed in this section have yielded interpretive procedures associated with the study of orderly communication. Broadly speaking, three main types of research into classroom discourse are identifiable. Stubbs (1979:17) describes them as insightful learning (Barnes *et al.*, 1969), coding schemes (Flanders 1970), and discourse analysis (Sinclair and Coulthard, 1975).

In addition, complementary ideas will be discussed, and these include turn-taking (Van Lier, 1988), and collaborative interaction (Mercer, 1995, 2005).

In reviewing the selected approaches to classroom interaction, the objective is to determine how the approaches are structured; the extent to which they have been applied to develop insight into oracy; their potential in linking oracy and the negotiation of learning; and the implications they have for the present study. Occasionally, extracts from transcribed lessons (from lessons taught by in-service teachers in Zimbabwe) will be used to exemplify ideas from the approaches.

2.5.2.1 Insightful observation

Studies by Barnes *et al.* (1969) have been referred to as insightful observation studies (cf. Stubbs, 1979) because Barnes and associates were mainly concerned with the description of how insights from contemporary linguistic studies in classrooms can be applied to interaction, rather than with psychometric analysis of units of interaction. As Barnes *et al.* (1969:13) observe, they "...expected that generalisations drawn from a few secondary lessons could offer little more than surmises which deserve further investigation by other means". They studied typical language used in 12 high school lessons, with the aim of investigating the linguistic expectations students brought to secondary school, and the linguistic demands made by teachers in the process of interaction. They also investigated the effect of teachers' language on learners and the use by teachers of a style of language unfamiliar to children. Teacher's oral exposition, the teacher's questions, and other language used in the process of teaching and learning were also observed.

Some of their findings were that teachers are accustomed to seeing students' correct answers as those given back in language comparable to that found in the teacher's input, that is, imitating what the teacher says. Also, that teachers tend to follow routine conventions when they use language in the classroom rather

than being governed by the need to communicate ideas in language that brings out interactive purposes.

One of the findings was also that very few questions were asked because the teacher was truly ignorant of the answer and wanted to know, and that it is not unusual for teachers to ask children to conform to an unstated criterion. In other words, “the teacher teaches within his frame of reference; the pupils learn in theirs, taking in his words, which mean something different to them” (Barnes *et al.*, 1969:29). Further, Barnes and associates observed that teachers tended to teach the terminology of the subject at the expense of promoting understanding of contextual meaning and functions. According to Mohammed (1996:288), by so doing, learners may “study the terms without understanding the grammar such terms refer to because they believe this is what teachers expect of them”. Sometimes teachers took specialist language for granted, and presented it unaware that learners would have problems as illustrated in this invented extract.

[1] Today we learn how water is **conducted**. We use a **beaker** in which we pour **red dye**. We stand it on a **petri dish** or **scalp**, then support the plant with the **scalp**.

The teacher here is insensitive to the problems, which specialist words (those in bold) might present in the process of concept formation. Commenting on teacher insensitivity, Heath (2000) concludes that the problems pupils have with a task lie as much with language in which the instruction is given as with the conceptual difficulty of the subject matter (cf. § 2.2. which deals with the link between oracy and concept formation).

The strengths of insightful observation are that for the first time in the analysis of classroom language, the less effective teacher questions are distinguished from the more effective ones. Secondly, research observations are related to the learning process, though in a limited manner. Thirdly, drawing teachers' attention

to the discourse of learning makes them more aware of the importance of language in enhancing learning.

As for the limitations, Barnes *et al.* (1969:47) observe that "it has so far proved extremely difficult to define the categories in such a way that the analysis can be reproduced by another investigator", mainly because the researchers' description of the language of instruction is rather impressionistic. This is a major limitation, bearing in mind that worthwhile research is about replicating findings through the use of comparable procedures. In other words, there is no system tied to the language data proper in the approach. Edwards and Furlong (1978) in their reference to insightful observation, argue that without some guiding orientation, the observer's attention will lack focus and his account is likely to be unreliable.

The foregoing discussion examined insightful observation, and demonstrated that the lack of principled oral interaction by teachers compromises attainment of educational goals. The strengths and weaknesses of the approach were highlighted, and as discussed in the next section, subsequent research has built upon this pioneer work to apply specific sets of oracy principles to raise teacher awareness of alternative interaction practices.

2.5.2.2 Coding schemes in interaction analysis.

The approach discussed presently distinguishes categories of student talk and teacher-talk. Inherent in this approach was an interest in the nature of the learners' behaviours and the interaction engendered by the teacher. Rex, Steadman, and Graciano (2005) refer to this as the 'process-product' approach, in which there is a central relationship between teaching processes and learners' products. In other words the model assumes that significant correlation exists between teachers' pedagogic discourse and the discourse output of learners. According to these scholars, "records from observed classroom events and activities are collected as pre-defined variables, which are counted and studied for covariance" (Rex, Steadman, and Graciano 2005:4).

The need to develop a system for examining classroom discourse has been recognized as important from both a theoretical and applied perspective. Love (1991) and Chaudron (1988) provide a summarized discussion of the work of scholars in the field, namely, Flanders (1970), Moskowitz (1971) and Naiman, Frohlich, Stern and Todesco (1978) (cited in Chaudron, 1988). It is on the basis of the summarized discussion that the coding schemes approach will be examined.

Flanders (cited in Love, 1991) applied his system extensively in pre-service and in-service teacher education. He specified coding categories on the assumption that classroom discourse can be objectively measured, and that categories described all verbal interaction in the classroom. He developed a scheme known as Flanders' Interaction Analysis Categories (FIAC). In the system, ten categories were identified for use by the observer who sat at the back of the classroom and coded the talk at three-seconds' intervals. Tabulations would then be made to develop a description of classroom interaction, and noting the frequency of utterances by either the teacher or learners. Calculated mathematically, in a forty-minute lesson there could be as many as 800 codings.

Two criticisms have been raised about FIAC. Delamont (cited in Love, 1991:32) observed that "codings were based on immediate observations, without opportunities for verification". In that respect codings would be inexplicit about the linguistic forms used and how they relate to each other. The second criticism by Sinclair and Coulthard (cited in Love, 1991:32) was that "the ten coding categories were rather crude and operated at different levels". This means there would be no way of telling whether the quantified utterances are relevant to learning objectives. In a sense, therefore, the coding schemes lack appropriate validation procedures. Notwithstanding these shortcomings, the legacy of categories provided by FIAC has remained a reference point for researchers who re-examined it with a view to refining it as explained below.

Moskowitz (cited in Chaudron, 1988) belongs to the same tradition of interaction analysis as Flanders. The scholar originated what has come to be known as the Foreign Language Interaction System (FLINT). Like FIAC, the system categorises classroom conversation into teacher and learner discourse. However, for Moskowitz the issue is not merely about quantities of speech acts but the quality and function of teacher discourse in terms of influence on learners. The FLINT system treats the unit of analysis as pedagogical discourse with the categories constituting the major criteria for segmenting the classroom interaction.

The approach was mainly used in L2 classrooms, and was later elaborated upon and modified by other researchers, often with combinations of categories being adopted for particular studies. Naiman *et al* developed the approach further as discussed below.

The system developed by Naiman and associates (cited in Chaudron, 1988) is an improvement on the work of Moskowitz. It maintains pedagogical discourse activity mode, subject and clues. Most importantly the instrument “breaks down in more detail the pedagogical function of the linguistic units being analysed” (Chaudron, 1988:36-37). The unit of analysis is the move, which elicits responses and evaluates them. The approach thus defines the sort of information teachers provide as feedback to learner responses.

A limitation of the approach is that teacher eliciting and evaluating, or student responding actions do not specify in what way the discourse is to be segmented. Also, interpretation of a discourse unit tends to be intuitive so that it is possible to have varying interpretations of the significance of a given utterance.

However, although the analytical systems developed by Flanders (1970), Moskowitz (1971) and Naiman *et al.* (1978) show a clear development that has

links consistent with actual teaching and learning outcomes, we cannot rule out the issue of idiosyncrasy. Depending on the individual researcher and his or her purpose of research, the instruments suggested in the systems might not be sufficiently objective and require further refinement. There is still a need for empirical validation of some of the terms and categories raised in the foregoing discussion. Approaches best known as discourse analysis made the investigation of classroom interaction more explicit. These are discussed in detail in the next section.

2.5.2.3 Sinclair and Coulthard's discourse analysis approach.

This section focuses on the analytical framework proposed by Sinclair and Coulthard (1975). A description of the framework is given, followed by an explanation of how analysis of speech acts, the smallest functionally meaningful linguistic units, can be used to interpret classroom interaction.

Researchers representative of this approach (Sinclair and Coulthard, 1975; Coulthard, 1977; Sinclair and Brazil, 1982) were influenced by the evolution of descriptive linguistics concerned with procedures for the description of supra-sentential structures: "In their system, the analytical level of discourse falls in between that of the linguistic level of sentential analysis and the social pedagogical level of programmes and courses" (Chaudron, 1988:40).

Sinclair and Coulthard (1975) set out four minimal criteria to be met in a descriptive system for spoken interaction, namely, that categories of description should be: finite in number; precisely relatable to the data; able to account for all data without missing anything out; and able to place restrictions on possible combinations of elements. This makes the classroom the ideal research setting because as happens to be the case with my study teacher-learner relationships are well defined and yield clear evidence in the transcribed episodes of speech. It is worth noting that Sinclair and Coulthard did not concern themselves with the connection between discourse and its pedagogic value. Rather, they

demonstrated that spontaneous classroom discourse is highly organised and amenable to structural analysis. It is because their system is well structured that it has been adapted for use in the present study.

Sinclair and Coulthard (1975) proposed that a lesson can be analysed as having a number of ranks, namely, lesson, transaction, exchange, move, and act. Each constitutes the elements of the rank above, according to rank-specific structural rules. In the approach, a transaction is essentially an episode of talk on a particular theme, and usually consists of a number of exchanges. A common example of an exchange is a question followed by an answer, followed by an acknowledgement of that answer. The pedagogic move is usually made up of acts, each act having a specific discourse function. In this example:

[2] T : Peter, come in front,

the move comprises two acts serving the functions of nomination and directing a learner to perform an action. An exchange consists of three moves, and in conventional lessons, two are by the teacher, and one by the learner. Teachers and learners take part in exchanges for much of the time they will be interacting in the classroom. An exchange often consists of three moves: Initiation (I), Response (R), and Feedback (F) (I-R-F) as illustrated in the extract from my data:

[3] T . Takesure, what is a plot? (I)

S : The events in a novel (R)

T : Good. (F)

In the present study, the I-R-F conventional pattern of interaction is used as a main point of departure for discussion of discourse analysis. Firstly, because it still typifies the commonest way of teaching in my environment, and should be closely examined to establish how it could be put to best use. Secondly, I am

convinced that the I-R-F pattern should not necessarily make classroom interaction monologic and ineffective. Skidmore and Gallagher (2005) have argued that the teacher's uptake of what learners say is important in making the IRF dialogic. As an example, the teacher's feedback can be used to encourage learners to clarify, exemplify, expand and explain responses. According to Wells (1999:167), by using the IRF pattern, teachers have the discretion to choose between modes of interaction, which either constrain or encourage more purposeful discourse. It is in the light of this understanding that the study will focus on interaction when the teacher stands before a class, as well as when the learner collaborates with peers.

In what follows, the discourse units identified by Sinclair and Coulthard (1975) are summarised. This will be at the level of speech acts, with a clear distinction made between teacher and learner discourse. The potential that different speech acts have for the negotiation of learning will be explored more fully in Chapter 3, where the analytical framework of this study is set out. The present section focuses on work from which a major part of my framework is derived, starting with speech acts that are most generally attributable to the teacher.

a. Questions

Many different classroom acts are realised by questions, and Sinclair and Brazil (1982:60) suggest that questions serve an eliciting function. The first question category suggested by Sinclair and Coulthard (1975) is the polar interrogative or the yes/no question, as in:

[4] T: Is 12 the common denominator of 4 and 6?

In this instance, the initiation elicits a response that is either positive or negative, using a single word. The limitation is that the child is not really afforded the opportunity to use language to accomplish cognitive results. The question does not encourage any sort of negotiation.

The second category has been referred to as 'question tag', which is linguistically structured to signal that agreement would be the more congruent response, as in this example.

[5] T: The adjective formed from circle is circular, isn't it?

The teacher makes an assertion, then questions it. Thus, the learner is invited to give the proposition support. The initiation solicits the discourse of agreement, an interactional component that can hardly be effective because learners are not engaged in negotiation except to give assent (cf. Love 1991).

The third question category identified by Sinclair and Coulthard has been described by Love (1991:203) as display questions. Like the question tag and the polar interrogative, this question type is posed with an answer in mind. A clear example is:

[6] T: Which are the main causes of soil erosion?

Here, although an opportunity is created for the child to respond in more words than was the case in the two previous categories, the potential answer is limited to the regurgitation of discourse initiated by the teacher earlier. The question is constraining because it merely calls for repetition of content rather than its negotiation.

The fourth category is termed 'referential question', and its objective, according to Sinclair and Coulthard (1975), is the elicitation of informative content, for example:

[7] T: How are birds trapped in your home area?

Here, the addressee is required to supply content in his or her own language. Informative content refers to information necessary for discussing a topic. In this type of question, the teacher cannot predict the precise nature of the information and the discourse used to convey it. Thus, the use of referential questions is likely to facilitate more original discourse in which learners fall back on their own linguistic resources, and make use of context-specific forms and rules of language to express an understanding of the content they will be negotiating.

Love (1991:102) says that a referential question is “reinforced by longer pauses than any other type of question”. A pause or waiting time, though non-verbal, is observable and its pedagogic function is to allow learners to reflect on alternative language output fit to express conceptualisation of ideas in hand (cf. § 2.2.2). This means a pause (purposeful silence), following a referential question, encourages learners to plan their discourse output.

The objective of this section has been to qualify referential questions as a linguistic category with some positive influence on teacher-student discourse, and also to stress that it functions as a stimulus to student initiative in the negotiation of learning. The sub-categories identified as being less effective were also described.

b. Informs

In discussing their rank scale, Sinclair and Coulthard (1975:23) distinguish a number of informs whose basic syntactic structure is declarative. Informs are speech acts originated with a view to informing learners about classroom activities, or advancing the content of a topic. The informs selected for this section include those used for topic initiation, comments, informs drawing learner attention to personal experiences, and those in which the teacher requests the student to clarify a point.

One such inform is used for topic initiation, as in:

[8] T: Well, today we are going to look at the
topic: *Working together*

The discourse act *well* is referred to as a *frame*, which indicates the beginning of a transaction. The frame is followed by a *focus*, that is, a meta-statement about the transaction (Coulthard, 1977: 123). The exchanges following it often end with another focus, at the very end, summarising what the transaction was all about, for example:

[9] T: What I have said shows that a lot can be achieved
when people work co-operatively together.

Topic initiation informs serve three significant functions. Firstly, they oblige learners to be attentive when the lesson topic is announced (see extract 8). Secondly, in between the two focuses (8 and 9) is found the teacher's input comprising discourse on the content being presented. This also includes the language used to negotiate learning. Thirdly, the focus (extract 9), which summarises what the transaction was about, marks a clear boundary ending the topic initiation. Before the summarising focus, the teacher is expected to invoke the ground rules of classroom interaction by inviting learner participation using interrogatives, so initiating topic negotiation. Learners are expected to use teacher input as the basis for intake when formulating responses.

Sinclair and Coulthard (1975:42) include a further subcategory of informs labelled as *comments*. These follow student responses as in:

[10] T: What have people in rural areas achieved by
working together?
S: New schools and roads.

T: Yes, to cater for the increasing population.

In other words, in this subcategory, the purpose of the teacher inform is to exemplify, expand, justify, or provide additional information as an instance of negotiation of content. Comments are significant both functionally and linguistically as a kind of feedback in the process of scaffolding. For that reason, Love (1991) calls them development informs. Typically, development informs comprise declarative acts, which furnish additional information and examples in order to contextualise content discussed earlier (as in the last move by the teacher in extract 13).

Closely linked to topic development informs is a subcategory in which the teacher overtly prompts the child to use personal experience to formulate an appropriate response as in:

- [11] T: Yes, new schools. Think about your own community.
S: In my community, new bridges, new wells also
libraries came after working together.

Responding to the prompt, the learner makes an original contribution in personal discourse. Larsen-Freeman (1986:72-88) argues that use of discourse, which appeals to students' experience has a favourable influence on learner initiated discourse.

Another dimension of the topic development inform is when the teacher seeks clarification following output by the student. That way the learner is informed of the need to give further clarification to a point raised. For example:

- [12] T: So ...? Explain further how working together led to
those new developments.

The inform calls upon the learner to supply additional information (negotiation of content), in language that is appropriate for managing the topic (negotiation of form). Discourse analysts (e.g. Van den Branden, 1997) argue that the extent to which participants interactionally modified their output during negotiation was determined by the negative feedback received by learners. Negative feedback refers to any response by the interlocutor requiring the speaker to clarify what was said earlier. In the example above, for the teacher to understand fully what content the learner is trying to construct, the learner should originate more information. The learner is then compelled to question his language output, and to consciously select more appropriate discourse (i.e. structures and forms of language) in response to a clarification request.

Another subcategory of informs occurs when teachers answer their own questions upon realising that students remain silent:

[13] T: What makes the water evaporate?....Anyone? What
makes the water evaporate?... The wind, the sun,
OK?

The inform has a constraining effect on learner-initiated discourse because upon realising the silence, the teacher supplies the answer in order to save face (Burbules, 1993). This closes opportunities for student-initiated discourse since learners simply take in the information in silence.

Another subcategory of informs is when the teacher expresses disapproval or disagreement.

[14] T: No. No. Ratio is not expressed that way. You must
learn to think.

The learner is informed that the answer is incorrect, and that he must think, though without being taught how to do that. The inform has the negative effect of discouraging students from taking initiative and contributing freely to oral interaction, and that encourages silence.

Thus far, the analytical category of informs (and its subcategories) has been addressed with a view to illustrating its more effective interaction features. The subcategories with the potential for effectiveness are clarification requests, frame, comments, and prompts and those with limited potential are when teachers answer their own questions and when they express disapproval. In the next section directives are examined.

c. Directives

Sinclair and Coulthard (1975:41) indicate that on a functional level, directives request a non-linguistic response resulting in the performance of a physical action. Sinclair and Brazil (1982:75) echo the same idea by pointing out that directives call for mere acknowledgement, or a response in the form of a non-verbal action. This section focuses on measurable linguistic features associated with teacher directives. Most directives are linguistically realised by imperatives. Love (1991:198) indicates that such directives “use verbs of reflection and cognitive processing which suggest ongoing intellectual activity”. This means they encourage the learner to think creatively before giving a linguistic response, as in this example:

[15] T: Now, I want you to CHOOSE a secretary, READ
the relevant paragraph, and WRITE the correct answer.

While the choice of secretary, reading a paragraph, and writing the correct answers may seem to be demanding display of mere action, the eventual product is linguistic. The actions in which students engage require the activation of

relevant discourse in order to achieve the cognitive objectives of exercising choice, interacting with text, and writing (Love, 1991), which leads to the negotiation of form, meaning, and content.

Another subcategory of directives is the inclusive imperative. This speech act stimulates both behavioural and cognitive responses by learners as illustrated here.

[16] T: Let us imagine that we live in town. Think for a while about the benefits you enjoy. I then want you to explain in your own words....

The words *let us* and *we* have the social effect of encouraging a closer learning relationship between the teacher and the learner. The verbs *imagine* and *think*, on the other hand, encourage children to reflect on their stored language and plan a more appropriate linguistic response. By giving them time to think for a while, the cognitive load is lessened before a student initiates an answer (cf. § 2.5.3). Cognitive load refers to the pressure exerted on the learner to retrieve appropriate language without giving him or her any opportunity to reflect (cf. Dysthe, 1996). Pauses lessen the load by affording learners time to think before giving responses.

Learning oriented orders and inclusive imperatives have a positive effect on learner-initiated discourse (Van Lier, 1988). In direct contrast are orders such as:

[17] T: Could you please pay attention,
or
T: Say something. Don't just look at me or else....

The first one calls for attention, learner behaviour that is non-linguistic. Although at face value the second imperative appears to be encouraging learners to

initiate discourse, it is in effect a threat. Threats can thwart initiative, and drive learners into silence and avoidance (James, 1997).

Analytical categories attributable to the teacher have been noted. Under each one are subcategories, which the analyst can utilise. Some features can stimulate more effective discourse output, while others stifle it. Categories relating to learners are discussed below, and these include clarifications, informatives, and counter-informs.

Learner answers are moves that fit in with the questions asked by teachers. Responses may be syntactically and semantically dependent on the initiation. Sinclair and Brazil (1982:40) observe that “the first point to be made about responses is that we may expect to find an appropriate response to each kind of initiation”. It is reasonable to assume that there ought to be specific varieties of language output by learners to match each of the teacher utterances discussed above.

Some learner discourse acts will be more communicative than others. It is illustrated below that communicative discourse implies initiative as one of its characteristic features. Initiative can be described as the willingness to participate and to originate language that is more personal and influential on subsequent interaction on a given theme (cf. Van Lier, 1988).

d. Informatives

Three informatives are identified (cf. Sinclair and Coulthard, 1975), namely, regurgitation of content in reply to a display question, minimal responses and replies to referential questions. According to Sinclair and Coulthard (1975: 45), an informative is a response that is retrospective in focus, and in which the learner attempts to be “appropriate in the terms laid down” by the teacher through informatives, as in this example:

[18] T: List countries bordering Malawi.

S: Mozambique, Zambia, Tanzania....

The learner fulfils the teacher's predicting move by producing a reply in which discourse is used to regurgitate rather than negotiate content. In that case, the learner's answer is informative. However, the teacher's elicitation does not encourage original discourse output, so there is no learner initiative.

The second subcategory is what Sinclair and Brazil (1982:40) call a 'minimal response'. According to Hubbard (1998), responses in this subcategory are characterised by short formulaic expressions with some acknowledge turns. Acknowledge turns involve the learner indicating agreement. They are often no more than vocalisations (e.g. *uhu*, or *mhh*), and show the least learner initiative.

The third subcategory involves use of a wide range of constructions, which are neither predictable nor constrained. These are in response to referential questions. When the student responds to this type of intervention, he contributes new information (negotiation of content), which the teacher may not be able to predict. This is negotiated through comprehensible discourse (negotiation of form and meaning) as exemplified here:

[19] T: Why does this water not sink into the ground?

S: Sir it wouldn't. The soil is impermeable because it has been compacted. If you dig hard it will...

The learner reveals clear knowledge of language relevant to the topic under discussion. The extended discourse exemplifies initiative that is based on active engagement with lesson content.

e. Clarifications

Clarification refers to the extended discourse produced by the learner in response to the teacher's clarification request or non-comprehension signal (Sinclair and Coulthard, 1975). As already explained, the clarification inform signifies to the learner the need to supply further information, thereby clarifying content. Alternatively, the clarification could be in the form of comments on the content in more personalised language. Cullen (1998) regards clarifications as examples of a category of discourse that is experiential because learner response will be based on personal experience. Thus, the learner who is encouraged to clarify content is likely to produce more effective discourse in terms of both quality and quantity. The following is an illustration of this idea.

[20] T: What do you think is happening in the picture?

S: I see two people.

T: Uhu-u

S: One must be a shopkeeper buying... no...selling to a
buyer ... customer

T: So?...

S: There is misunderstanding...um. Money paid,
deposit. He wants deposit, I think.

The teacher initiates interaction through a referential question, and after each move by the learner she uses informs (e.g. *uhu-u, so...*) to stimulate extended talk. The learner also introduces new content, and self-repairs in order to communicate meaning. The discourse exemplifies two principles proposed by Tarone (1989) and Cohen (1997), namely, the learner's application of learning strategies using teacher input to develop linguistic knowledge; and the learner's attempt to use language more efficiently (production strategies). In the exchange cited above, learning strategies involve recall of relevant vocabulary needed to convey the appropriate content. Production strategies, on the other hand involve retrieval of vocabulary and its application in negotiating learning. Clarifications

are, therefore, evidence of effective use of discourse, but are different from counter-informs, which are discussed below.

f. Counter-informs

Counter-informs are retrospective moves originated by a participant to express a different position (Sinclair and Coulthard, 1975). For example, when one interactant initiates a move (prospective move) he or she expects a response (retrospective move). In reply the addressee gives an answer that is contradictory. Burbules (1993) has referred to such moves as divergent views expressed in discourse that is neither predictable nor constrained. Bakhtin (1981) refers to this as one form of *heteroglossia*, a term that means ideas are subject to multiple interpretation by participants. When a student initiates a particular contribution, requesting further information, or disputing a proposition, this shows active participation and initiative, whether it occurs when the teacher stands in front of a class, or when learners work in groups, for example:

[21] T: Many people flock to towns because rural areas are underdeveloped.

S: Maam, there are other reasons. Some people are Lazy...um...they don't want to work on the land

Here the learner's response expresses a divergent but original view, which disputes the teacher's position, and develops the discourse further by adding a new dimension to the negotiation. The retrospective counter-inform indicates initiative in the negotiation of learning. In his reference to counter-informs, Hubbard (1998) observes that they reveal the most initiative of all, given that they tend to be evaluative and introduce a new element, taking the discourse in a new direction. The counter-inform is also observable when the learner reacts to a peer during group work, and an example is when the learner says, *No, I don't agree*, or *That's not correct*. A detailed discussion of discourse acts that show active participation will be given in Chapter 3.

Despite the fact that the discourse analysis approach of Sinclair and Coulthard is more descriptive and more explicit than its predecessors, it has its limitations. Firstly, it oversimplifies classroom interaction by using the I-R-F pattern in which emphasis is on status and power relations. Stubbs (1983:134) argues that it is incorrect for the model to assume there is an agreement between teacher and pupils about classroom norms and conventions of interaction. The use of this descriptive system following the IRF pattern is unresponsive to more complex dynamics of oracy. Love's (1991:33) main criticism of Sinclair and Coulthard's model is that the approach does not include examples of lessons where students take control of the discourse of learning without necessarily showing allegiance to the I-R-F pattern. It has, therefore, been necessary to enrich the model by adding ideas about discourse analysis propounded by other scholars (cf. § 2.5.2.4).

To sum up, this section focused on the discourse analysis model proposed by Sinclair and Coulthard (1975). It has been argued that the power of the framework lies in the way formal and functional features of discourse (F-units) complement each other. The main argument was explained, namely that primary consideration of the effectiveness of classroom discourse is attributable to teacher intervention and teacher metalinguistic awareness. Selected features such as questions, informs, and directives were explored as input that accounts for learner output. In turn some of the discourse features originated by learners to fit teacher elicitation were identified. I demonstrated that some categories are more useful in the negotiation of learning than others. In the following section, ideas about turn taking are discussed in order to illustrate how they might complement the speech act based approach proposed by Sinclair and Coulthard (1975).

2.5.2.4 Turn-taking and initiative in classroom interaction

The discussion now shifts to two related issues. These are turn-taking and initiative. To begin with, the concept of turn-taking is defined in the context of the study. Thereafter, the different types of turns that show initiative are identified and related to classroom interaction. The discussion focuses mostly on the work of Van Lier (1988).

Review of literature about turn-taking and initiative shows a close connection between learner discourse acts (identified by Sinclair and Coulthard, 1975), such as certain informatives, clarifications, and counter-informs and conscious negotiation of learning, especially when learners make effective use of turn-taking opportunities, such as by self-selecting. Such learners, responding to prior turns, show active involvement in the dialogue. When they question certain opinions or express disagreement, they prospectively influence the direction of other turns in classroom talk. The personal views they raise serve as evidence of ability to engage with both the topic under discussion, and the activity on which that topic is based.

Van Lier (1988:94) defines turn-taking as "the systematic nature of speaker change in different settings", for example, the classroom in my case. When the teacher gives input, what does the learner do with her slot in terms of a contribution relative to content, form and meaning? Van Lier (1988:105) says, "because of the turn-taking rules, participants are restricted in their power and initiative to change and influence the discourse." This implies that the way turns are allocated either constrains or promotes initiative. Hence, there are ways of allocating turns that promote more effective discourse. In the example cited below, two ways of allocating a turn are shown. It is evident that the second one is less constraining than the first.

- [22] a. Water evaporates when it is heated, isn't it ?
b. Why does water evaporate?

In the first example the teacher's interrogative requires the learner to simply say, yes, and

there is no scope for learner initiative. Question 22(b), on the other hand, anticipates a turn in discourse that is more likely to contribute to further negotiation of learning. The response to question (b) would be less predictable than that to (a). Van Lier (1988) attributes educational function to these features of discourse, something Sinclair and Coulthard did not account for in their model.

One of the assumptions made by Van Lier (1988:91) is that "interaction presupposes participation, personal involvement, and the taking of initiative". Initiative can, therefore, be viewed as the learner's motivation to take part in classroom dialogue without coercion, and in the words of Van Lier (1988:92) initiative can be studied qualitatively in terms of "how intensely, spontaneously, and actively they do so". The intensity and spontaneity of initiative is manifested in the way turns are taken. Learners who initiate turns, as opposed to waiting for teacher-allocated turns, show evidence of initiative. Van Lier (1988) identifies four ways through which initiative is expressed, namely, through prospective turns (specifically, allocation), retrospective turns (specifically, self-selection), topic management, and sequencing of turns.

The first is the prospective turn of allocation, which looks forward to, and limits the next speakership, thus influencing the information generated to sustain the discussion. This could be in the form of a question or a clarification request. The second is the retrospective turn of self-selection, which is linked to a preceding turn. In a typical retrospective turn that shows initiative, the interactant will select himself or herself to respond to a question or a clarification request. Thirdly, initiative is manifested in the way the learner manages a topic. Topic

management is characterised by the way learners question certain aspects of content, disagree, raise personal opinions, or object to assertions. Fourthly, initiative can be shown when a learner gets involved in a series of sequentially related turns, which “influence the kind of activity that is being conducted” (Van Lier, 1988:123).

The foregoing classification is important for purposes of discourse analysis, that is “it should be possible to code every turn in a stretch of classroom talk in terms of the categories presented” (Van Lier, 1988:121). Further, a clear understanding of the classification makes it possible for the present study to distinguish between learner participation and learner initiative, which are focused on when testing Hypothesis 3. There will be a more detailed discussion on the issue in Chapter 3, where the framework will combine turn-taking and discourse act perspectives to throw more light on what constitutes initiative and how degrees of initiative can be assessed.

The use of initiative by learners should signal the genesis of productive rather than reproductive use of language in the construction of knowledge. In his argument on the matter, Kozulin (1998:154) states that:

Productive education implies that students should be oriented towards productive rather than reproductive knowledge. This should appear as a creative process, the process of co-authoring.

One concern of my study is to explore how the level of learner initiative can be enhanced through conscious involvement of learners. This kind of involvement has received attention from local scholars too, including Van Aswegen and Dreyer (2004:299), who argue that “one way to get students more actively involved in and outside the classroom is to structure co-operative interaction into classes so that students explain what they are learning to each other, learn each other’s point of view, and give and receive support from classmates”.

To sum up, initiative and turn-taking were discussed in this section, and it has been argued here that a close link can be forged between Van Lier's (1988) ideas on initiative and the aspects of the discourse analysis model proposed by Sinclair and Coulthard (1975).

2.5.2.5 Malamah-Thomas on classroom interaction.

Malamah-Thomas (1987) demonstrates the applicability of approaches examined in previous sections. Her discussion of typical classroom interaction sought to establish kinds of interaction that are likely to be most conducive to learning, as well as show the close link between oracy and pedagogy.

Malamah-Thomas (1987:5) says that having a teaching plan is just a beginning because "when the plan is put in action, things get more complicated". This is a reminder that the teacher's language action is followed by learner reaction, which makes discourse unpredictable, largely because "every interaction situation has the potential for co-operation or conflict" (Malamah-Thomas, 1987:8). Co-operation and conflict are directly influenced by the attitudes and intentions of interlocutors, and determine the way interaction takes place during a given lesson. In other words, where there are positive attitudes and intentions, chances for co-operation in the communication process are heightened. She argues further that having something to communicate does not necessarily mean the teacher will be able to communicate it. "Achieving communication requires a lot more effort and expertise" (Malamah-Thomas, 1987:11) because the interplay of personalities in the classroom can produce unpredictable results. It is on the basis of this reality that she revisits interaction analysis traditions and reinforces certain key ideas as explained below.

Drawing on Flanders (1970), Moskowitz (1971), and Sinclair and Coulthard (1975), Malamah-Thomas makes their ideas more relevant to practice. In particular, she specifies the importance of subject content as the basis for

interaction, leading to data that can be subjected to analytical instruments. This is manifested in the learning event and the context of pedagogic communication. The learning event takes place through language, the speech event, in which she identifies certain characteristics. Firstly, she argues that the addresser has to choose words that make his intention clear and the message must be accessible to the addressee. She then articulates a number of characteristics of the speech event, and these could be seen as a substantive contribution to our appreciation of oracy. These are:

Addresser: Teacher

Purpose: the teaching objective

Content: the syllabus item

Form: the activity

Medium: the spoken language

Setting: the classroom

(Malamah-Thomas, 1987: 34)

These are useful descriptive tools for discussing dialogue, qualifying speech acts, and explaining turn-taking. Each of the factors has some effect on the learner, hence the ideas by Malamah-Thomas are closely linked with turn-taking theory in a number of ways. For example, if a teacher does not make the purpose of communication clear, chances of conflict and lack of co-operation are high. Turns will not be as effective as expected, and opportunities for initiative would be minimised. Speech acts such as clarifications and counter-informs (associated with initiative) would then not be likely to occur. Finally, the ideas have a direct bearing on collaborative interaction, which is an important aspect of the present study.

2.5.2.6 Collaborative interaction

A major proponent of collaborative interaction is Mercer (1995, 2004). His approach will be discussed in detail (cf. § 2.5.3.6) where his experiment and its findings are explained. For now, only a brief description of his ideas will be made to show that like other applied linguists discussed above (e.g. Barnes *et al.*, 1969; Flanders, 1970; Sinclair and Coulthard, 1975) he too developed an approach to classroom interaction that has influenced thinking about oracy in a significant way.

Mercer, external assessor for the Litraid course (cf. § 1.4), is influenced by Vygotsky (1978), whose conception of teacher-learner interaction is that the teacher's linguistic support enables learners to develop competencies they would not accomplish on their own. His approach is based on findings from his study of classroom interaction with primary school children in England. Mercer (1995:13) describes what he calls "consciously planned intervention" in which teacher discourse is calculated to influence the performance of learners. Teachers who are exposed to principles of oracy were hypothesised to be more effective communicators, and to promote similar effectiveness in their pupils. When such teachers engage learners in collaborative activities, they help them gain new depths of understanding about the content (negotiation of learning). Mercer develops his ideas further as discussed in his recent publications (e.g. Mercer, 2000; Mercer, 2004), where he argues that by thinking together, learners who are given collaborative opportunities engage in extended discourse. He is also influenced by Cazden (1988), who advocates a reduction of teacher dominance, modelling the language used by teachers to give instructions, allowing learners to interact with one another on the basis of content-related activities, and observation of interactional patterns arising from peer activity.

Section 2.5.2 and its subsections has reviewed literature on approaches to the study of classroom interaction that have been developed from the 1960s to the present. These included insightful observation, coding schemes, discourse

analysis, turn-taking and collaborative interaction. The literature showed that to study the language of the classroom is to study the learning process, as well as the external and internal constraints upon it. It was also noted that the study of classroom interaction can be done relatively objectively by analysing interaction patterns between learners and teachers, and that such patterns are reducible to analytical categories labelled as discourse acts, a term used to define speech acts in terms of functional units of discourse (cf. § 3.5.2 for the detailed explanation of functional units). These can be analysed both quantitatively and qualitatively as processes that involve numerical measurement, statistical analysis, and drawing of inferences.

2.5.3 Empirical studies of oracy

The intersection between language and educational intentions has been addressed in the foregoing sections. The objective of the present section is to illustrate, with examples from applied linguistic research, how approaches discussed in previous sections have been applied in oracy research. A study is said to be empirical when it is based on observation or experiment for purposes of testing hypotheses, or demonstrating a known fact.

Findings from studies dealing with oracy research are summarised. The studies have been selected on account of their relevance to my research, and include those that demonstrate what effective talk is; those showing what negotiation of learning involves; and those about the importance of a task in the negotiation of learning at the levels of negotiation of form, meaning, and content. Studies on collaborative interaction are also reviewed. The aims of a particular study will be given, and this will be followed by a brief summary of the methodology used to collect data. Findings drawn from the study will be identified and these will be related to the present investigation.

2.5.3.1 Identifying effective talk.

What is effective talk in the context of the classroom? Researchers (e.g. Rex, Steadman, and Graciano, 2005:5) concur that effective talk proceeds in accordance with certain principles in which “specific manipulations of teacher behaviour are made to strategically change the interactions and create more productive student responses”. That means there are rules of oracy that can be followed as a guide to action. Some of these have already been alluded to (cf. § 2.5.1 which deals with approaches to classroom interaction). Alexander (cited in Mercer and Sams 2006:678) suggests that dialogic teaching is indicated by certain features of classroom interaction, such as questions that are:

structured so as to provoke thoughtful answers; answers which provoke further questions and are seen as the building blocks of dialogue rather than its terminal point; and individual teacher-pupil and pupil-pupil exchanges which are chained into coherent lines of enquiry rather than left stranded and disconnected.

When lesson transcripts are analysed to determine teacher effectiveness and learner initiative, these ideas, which are closely linked to turn-taking (cf. §2.5.2.4) will be taken into account.

Fisher (1996) carried out an investigation aimed at identifying the features of effective educational talk. Her subjects were undergraduate students taking part in seminars under the guidance of a tutor. Her method of data collection involved making video recordings of interaction, and these were later transcribed and analysed to establish exemplars of effective and less effective discourse with respect to the extent to which the tutor’s aims were fulfilled. Fisher’s (1996:242) argument was that “the purpose of the talk as perceived by the participants will produce different kinds of participation, which will be reflected in the discourse by the content introduced and various aspects of turn-taking which ensue”. She

expected educational talk to be task or topic focused, and to be distinguishable from mere social talk that is largely personal.

Fisher found that the talk was indicative of a lack of a shared aim between the tutor and students, as well as a lack of a shared view of how to address the educational aim. She also noted a conflict of purpose in which talk was largely dysfunctional. Evidence of effective educational talk was also reflected, and she identified four important characteristic features of such talk, namely that there must be an appreciation of the purpose of talk; a shared understanding of the relevant vocabulary; an acceptance of an educational agenda above a social agenda; and that all talk should be focused on a task in which knowledge is shared (Fisher, 1996:237).

The main conclusion from the study was that in the classroom where the four features were observed, turn-taking skills were key aspects of successful communication. "If topics are to be explored through discourse, it is necessary for speakers to build on the talk of previous speakers". Thus, where a shared aim is lacking, the purpose of talk as perceived by participants will lead to different kinds of participation, causing talk that is dysfunctional. Fisher's suggestion of the importance of a comprehensible task is particularly important for the present study because learning tasks determine to an important extent the quality and quantity of discourse that ensue during negotiation.

In research in Egyptian secondary schools, Cullen (1998), using methodology similar to that of Fisher, recorded lessons, transcribed and analysed them to establish the characteristics that make or fail to make classroom talk communicative. This, as he argues, is against a background where teacher talk is now generally recognised as a potentially valuable source of comprehensible input for the learner.

Cullen (1998:180-182) highlighted a number of qualities of communicativeness. Firstly, he noted from the transcripts that a communicative classroom seeks to promote interpretation, expression, and negotiation of meaning. In the second instance, learners should be encouraged to ask for information, express an opinion, agree or disagree with peers and teachers. Thirdly, the class as a “large, formal gathering, which comes together for pedagogical rather than social reasons” should have its own rules and conventions of communication understood by participants. Fourthly, effective discourse must be context specific.

The fifth, sixth, seventh, and eighth qualities relate to teacher discourse. The fifth is the use of referential questions, where the teacher asks questions to which he or she does not know the answer. The sixth has to do with content feedback, where the teacher’s response to contributions by learners focuses on the content of what the student says: the message, rather than the form (e.g. correctness of grammar or pronunciation). The seventh is the use of modifications to ensure learners comprehend input. Rephrasing a question to make it comprehensible is an example of modification. Finally, communicative discourse attempts to negotiate meaning with learners, for example, through requests for clarification or giving learners opportunities to interrupt when they do not understand.

Cullen (1998) then gives a number of characteristics of teacher talk that can be regarded as non-communicative. The first one is exclusive or excessive use of display questions. The second is form-focused feedback, that is, feedback, which only shows interest in the correct grammar. Thirdly, echoing of learners’ responses, when the teacher repeats what the learner has just said. Fourthly, using sequences of predictable I-R-F discourse chains (Sinclair and Coulthard, 1975), which tend to constrain learner initiative (Cullen, 1998:182).

It is, however, worth noting that according to Cullen (1998:179) good teacher talk does not necessarily mean little teacher talk. It does not follow that too much teacher talking time (TTT) deprives learners of opportunities to speak. He argues

that emphasis should be given to how effectively teachers are able to facilitate learning and promote communicative interaction because different topics demand different proportions of TTT.

To sum up, this section discussed findings from studies about characteristics of effective educational talk. The findings are relevant to the present study, which seeks to establish the effects of the course on classroom text and discourse on the oracy practices of high school teachers.

2.5.3.2 Negotiation of learning and classroom discourse.

In the introduction (cf. § 1.1) it was explained that when teachers and learners interact, there are a number of issues that can be negotiated. For my study, negotiation of learning is broken down into three levels, that is, negotiation of meaning, form and content. These negotiation types are explained later in this section, but briefly, negotiation of meaning refers to comprehension of a message, while negotiation of form involves production of grammatically correct utterances and negotiation of content focuses on the subject matter of a given topic. In this section, a study by Van den Branden (1997) on these three negotiation types is the primary focus. The study is reinforced by ideas from a number of scholars, notably Dysthe (1996) and Burbules (1993). Though ideas by these scholars do not derive from detailed empirical research, they are significant in so far as they make the concept of negotiation of learning more explicit. In subsequent sections, research literature specific to each of the three negotiation types will be reviewed. Thus, presently, the attempt is to answer the question: What does negotiation of learning involve?

As noted earlier (cf. § 2.5.3.1,) classroom interaction is a conscious activity from which learners derive cognitive benefits. This view recognises the relationship between teaching processes and student products (Turner *et al.*, 2002), thus implying active engagement of learners so that they are able to conceptualise. Negotiation of learning should therefore be understood in close conjunction with

the ZPD, theorised as the hypothetical space between assisted and unassisted learner performance.

Van den Branden's (1997) study in Italy investigated the effects of various types of negotiation on learners' discourse output in a foreign language learning context. His aim was to answer the question: Do primary school children modify their output as a result of negotiation with their interlocutors, and if so, how? The groups (control and experimental) comprised 16 children, with eight learners in each group, whose ages ranged from 11 to 12 years. The experimental group was under the influence of an adult guided on how to push the language output of learners. The learners were asked to solve a murder case involving four suspects. For each one, there were drawings describing what each suspect had done. The language task consisted in orally describing the drawings, responding to negative feedback. Interaction involved stimulating questions by the teacher that led to explanation. Occasionally the teacher requested learners to clarify the points they made. Conversations for both groups were transcribed and analysed. Negotiation sequences were isolated and assigned to one of the three categories (negotiation of meaning, form, and content).

Two key findings were that the extent to which the participants interactionally modified their output, during negotiations, was determined by the types of negative feedback they received. The second one was that learners who had been pushed during negotiations provided more essential information (content), and displayed a greater range of vocabulary than language learners in the comparison group who had not been pushed (Van den Branden, 1997:589). Data from the transcripts confirmed what negotiation of learning at the three levels is. Firstly, negotiation of meaning aims to restore and maintain mutual understanding. This refers to exchanges where interlocutors make joint efforts to deal with the problems of message comprehensibility. It happens when the teacher fails to understand the student's initial utterance, and opens a routine of negotiation of meaning with a clarification request, "pushing the non-native

speaker (NNS) to verbalise his meaning intention in more comprehensible terms” (Van den Branden, 1997:590). The examples used to illustrate negotiation types are drawn from Van den Branden, as in :

- [23] S: He was wearing a mass
T: Huh? What? What is he wearing?
S: A mask.
T: Oh I see

The learner’s second discourse act makes his intention more meaningful to the teacher by producing the act of clarification.

Secondly, form negotiations involve one interlocutor trying to push the other towards producing a formally correct and appropriate utterance. As an example, when a student violates some grammatical rule she should be asked to self-repair (Van Lier, 1988). The teacher opens negotiation by drawing the learner’s attention to the form of the utterance and the aim is didactic. Overt corrections of many errors, for example, are negotiations of form since they draw the learner’s attention to the formal aspects of language, for example:

- [24] S: He goed out at eight o’clock..
T: But uhm, goed, is that correct?
S: umm... went. He went out.

Thirdly, negotiation of content can be illustrated thus:

- [25] A: She was pushing her bike with the flat tyre.
B : And was it still raining?
A : Yes.

A's initial move is not queried by B's question since it is comprehensible. Instead, B pushes A to supply more content. Thus, negotiation of content requires the provision of additional information by interlocutors.

Pica *et al.* (1991) and Swain (1995) confirm that pushing language learners through these three forms of negotiation promotes language acquisition and cognition in a number of ways. For example, when the interlocutor shows interest in what the learner has to say, that encourages the learner to pursue the ongoing conversation and to engage in verbal interactions. Further, when the interlocutor gives non-comprehension signals, students may come to question their language output and respond accordingly. For example, clarification requests encourage the learner to comment on the content by furnishing additional information. Thirdly, by engaging in negotiation, learners experiment with new structures and forms, thereby enhancing discourse competence (Westgate and Hughes, 1997).

Dysthe (1996) takes the issue of negotiation of learning a step further. In her discussion of the nature of negotiation, she echoes Fisher's (1996) view that tutors and their learners have different and conflicting understandings when taking part in a particular discourse. Her argument is that it is when conflicting understandings are shared that negotiation occurs. Her contribution to the debate is that typical negotiation of learning is characterised by discourse in which there is high learner participation and open-ended teacher questions. She identified three teacher roles, namely, "encouraging students' own voices by inviting clarification; making the conflicting and diverging voices clearer by summing up the different opinions; and bringing in new information and points of view when prompted by comments from students" (Dysthe, 1996:408). This conscious manipulation of discourse has the potential to make the learning process more effective.

Dysthe (1996) recognises the importance of the varied backgrounds of teacher and students. These diverse backgrounds account for the conflicting voices to be

reconciled by the teacher. Dysthe calls this dialogical framework 'multivoicedness', a concept specifying the presence of many classroom participants whose many voices ought to be heard. Multivoicedness is characterised by two conditions, namely, agreement and disagreement about an issue forming the basis for interaction. Burbules (1993:110) distinguishes two types of multivoicedness, namely, the 'convergent' and the 'divergent'. In the convergent view: "the dialogical process is aimed towards a particular epistemic end point, a final answer or conclusion to the argument." In this case, the various positions taken up by different voices are resolvable into a consensus around a correct answer. In the divergent view, the dialogue is characterised by counter-informs in which participants express alternative views that may be different to those expressed by the previous speaker.

For Bakhtin (1981), dialogue is divergent. That means, given a problem to be solved, or a concept to be negotiated, plural meanings, ambiguous connotations, and associations, are ascribed to it by interlocutors. This puts speech acts at cross-purposes, multiplying possible interpretations rather than narrowing them towards a single one. The teacher's role is, therefore, to skilfully reconcile the many different views in order to achieve interactional purposes. This discussion of the nature of negotiation represents insightful principles to which teachers ought to be exposed if they are to influence students towards self-regulation.

To sum up, with the emphasis on negotiation of learning and offering learners the opportunity to construct meaning in their own words, there is an affinity between the dialogic conception of pedagogy and the constructivist approach (cf. § 1.1). The approach recognises that learning does not take place apart from the active intellectual, moral, and social engagement of the learner (Skidmore, 2004). Negotiation of learning is, therefore, aimed at enabling the co-construction of knowledge between learners and their teachers.

2.5.3.3 Negotiation of content

Van den Branden's (1997) study defined the three types of negotiation as shown in the previous section, but now focus shifts to more detailed explanation of how each negotiation type is realised. In this section discussion covers the negotiation of content. Two studies are reviewed for this purpose, and these are the work of Cleghorn *et al.* (1998) and that of Musumeci (1996). Cleghorn *et al.*'s (1998) investigation is concerned with the link between content negotiation and the development of discourse competence in mathematics where the language of instruction is L2 for both learners and teachers. Musumeci is concerned with the extent to which teachers and learners negotiate learning in content-based instructional settings.

The study by Cleghorn *et al.* is premised on four lessons taken from primary schools in Montreal (Canada), and in Zimbabwe. The research objective was to find "ways that subject content can be taught so that the understanding, speaking, reading, and writing in English for higher education can be developed" (Cleghorn *et al.* 1998:463). Lessons from primary schools in both settings were recorded, transcribed and analysed. Data were then compared in order to illustrate ways in which teachers in each setting couple development of the target second language with teaching of subject content.

Four key findings are identifiable from the investigation. Firstly, it was established that effective teachers from both settings seem to know that good teaching requires a dual focus on content and language. The second finding was that some of the teachers encouraged problem-solving, while also drawing attention to second language matters. The most interesting finding, which acknowledges the centrality of language to the construction of meaning in the classroom, is that where the medium of instruction is also a target second language, special attention needs to be paid to language itself. That means second language learning cannot be left to chance, especially where there are few out-of-school

opportunities for the language of education to be picked up. Fourthly, and crucially, the scholars established that effective instruction lies with a teacher's good teaching instincts, with a good command of the language of instruction as well as "the learners' home language, and with a good knowledge of the subject being taught" (Cleghorn *et al.* (1998:474).

Chamot and O'Malley (1996:82) echo the ideas of Cleghorn and associates by stating that in multicultural conditions effective instruction accomplishes two tasks simultaneously, by "conveying the meaning of the topic, and developing proficiency in the TL". Other researchers (e.g. Musumeci, 1996; Cleghorn *et al.* 1998) have demonstrated the inseparability of language and negotiation of content from proficient use of language. Musumeci (1996), whose study is summarised below, showed the inseparability of negotiating the content of geography from the language through which such negotiation takes place.

Musumeci (1996) examined how teacher-learner exchanges in post-secondary content-based instructional settings achieve the dual instructional objectives of mastering the subject matter and developing language competence. This she did by examining teacher-learner exchanges in a post-secondary content-based instructional setting, where 18 learners were taught through the medium of a second language (Italian). The interaction was recorded, transcribed, and analysed. The researcher considered the instructional setting to be a good example of an environment for acquiring subject matter and language.

Interesting results are identifiable from the study, more especially because one would have expected good evidence about the negotiation of content in classrooms taught by well-informed teachers. On the contrary, Musumeci's (1996: 314-315) findings showed that teachers speak more often, control the topic of discussion, and rarely ask questions to which they do not have answers. This led to the conclusion that "teachers are a loquacious, manipulative, power-hungry bunch of know-it-alls" (Musumeci, 1996: 314). The second finding was

that learners did not let teachers know in verbal ways when they had not understood verbally, but more often conveyed this through non-linguistic signals than by explicit requests for clarification. Unfortunately, teachers did not pick this up. The third finding was that teachers did not ask learners to modify their output, and in most cases avoided communication failure by “filling in the spaces” for learners to create a semblance of coherent conversation. This was meant to help learners save face linguistically, and the result was limited negotiation of content in the sense of encouraging learners to manage topics in their own language. The fourth finding was that in transmitting content in the geography classroom, teachers tended to ask display questions. “It was found that referential questions were almost non-existent” (Musumeci, 1996:317). From the findings, she drew one conclusion that is significant for my study, namely, that content-based classrooms present a particular hindrance to the use of referential questions, simply because the teacher will always be the expert. The study, thus, represents a step in understanding how negotiation happens in content-based classrooms, and why often it does not.

In conclusion, the two studies confirm the prevalence of the conventional role of the teacher as a transmitter of content. Generally speaking, teachers are mainly concerned with ensuring that content is received by the learners, but pay little attention to the language through which such content is mediated. That practice, however, has a constraining effect on learner-initiated discourse. Cleghorn *et al.* (1998) have confirmed that teachers can be trained to enable them to negotiate learning and to integrate subject content with second language development. The relevant insight from Musumeci (1996) is that if negotiation of content is to be optimised by way of two-way clarification requests, in which learners initiate exchanges and modify their output, it will necessitate change in the way teachers use language.

2.5.3.4 Negotiation of form and meaning

One of the most controversial areas of L2 pedagogy concerns the extent to which classroom teaching should focus on form and meaning. Much of the literature on the issue is specific to second language learning. However, the ideas can be applied to interaction in content subjects. Literature will, therefore, be reviewed in order to establish the feasibility of a dual focus in L2 instructional settings, and in settings across the curriculum. Two studies are reviewed, namely the study by Seedhouse (1997) focused on combining form and meaning in L2 instructional settings, and the second one by Lyster and Ranta (1997), which is concerned with the negotiation of form. The article by Fotos (1998), and ideas put forward by Gibbons (1998) will be referred to in order to reinforce researched ideas from the two studies.

The study by Seedhouse (1997) sought to establish three issues, namely, whether a dual focus ever occurs during classroom interaction; the interactional evidence from the classroom about negotiation of form and meaning; how that is achieved, and what the characteristics of such negotiation are. His data consisted of 330 transcripts of L2 lessons from 12 different countries. These were analysed and results shared against three criteria. The criterion used to establish the focus on form was that linguistic errors made by learners should be corrected rather than ignored. The criterion used to establish the focus on meaning was that the learners should contribute new information, which is personally meaningful to them, and thirdly the criterion used to establish focus on fluency was that learners should have control of interaction by taking turns as long as necessary.

A key finding with respect to the first concern was that occurrences of a dual focus were rare. It was established that in the case of an extreme focus on meaning by most teachers, there was a “complete absence of correction of erroneous linguistic forms” (Seedhouse, 1997:340). Teachers in the study did

not, therefore, meet the criterion about negotiation of form. This finding addressed the second concern, and pointed to evidence that error correction policy can play a vital role in the establishment of a focus on either form or meaning. Where teachers wanted to save learners' face, they played down formal correctness by paying more attention to meaning. In one instance where dual focus was attempted, Seedhouse (1997: 342) established that learners were able to contribute new information concerning their personal experiences, but simultaneous focus on form did not come out clearly. This was manifested in what he referred to as 'camouflaging'. This is a way of correcting learner errors in which the teacher "produces the target form for adoption by the learner without any overt or explicit negative evaluation or indication that an error has been made" (Seedhouse, 1997: 342-343). The problem with camouflaging is that it is not made explicit to the learner that an error has been made, and that they should stop and think how to correct it. It is probable that learners would make the same errors in future interaction. Thus, while teachers fulfilled the criterion of negotiation of meaning, the dual focus did not come out as clearly as it should to ensure more meaningful negotiation of learning.

Lyster and Ranta (1997: 184) proceeded on the assumption that "pushing learners in their output, rather than providing them with correct forms could benefit their interlanguage development". They argued in favour of more direct and overt corrective feedback so that "pedagogy and interaction would then work in tandem". The study is significant because it is concerned with negotiation of form in both second language learning and subject-matter lessons. The researchers studied the relationships among error types, feedback types, and immediate learner repair when negotiating content. The database is drawn from transcripts of audio-recordings in elementary classrooms. They coded learner errors arising from interaction and analysed them to establish the extent to which negotiation of form is reflected when content is taught.

Lyster and Ranta (1997) presented an analysis of classroom interaction that allowed them to characterise various types of corrective feedback used by teachers in response to learner errors. They identified six main feedback moves in the database, and these are: explicit error correction, recasts, elicitation, clues, clarification requests and repetition. The first was explicit error correction where the teacher supplies the correct form. The second was recasts, feedback in which teachers implicitly reformulated all or part of the learner's utterances. The third one is elicitation, which involves the teacher directly eliciting a reformulation of discourse by the learner. The fourth is when the teacher provides clues, and involves giving hints related to the learner's utterance. In clarification requests, the fifth move, the teacher uses negative feedback to show non-comprehension of the learner's output. Sixthly, in repetition as feedback, the teacher repeats the learner's ill-formed utterance, adjusting intonation to highlight the error. Lyster and Ranta (1997) examined the ways in which learners reacted to the different types of feedback immediately following corrective feedback. They referred to such reactions as 'uptake' and coded these utterances as either repaired or still in need of repair.

The findings revealed that recasts resulted in the lowest rate of uptake and repair. Like recasts, explicit correction did not lead to self-repair because it already provided correct forms to learners. In direct contrast, elicitation, metalinguistic clues, clarification requests, and repetition of errors not only led to higher rates of uptake, but all were able to elicit self-repair (Lyster, 1998). These four, therefore, are associated with negotiation of form, and are distinguishable from recasts (not focused on form) and explicit error correction (not focused on negotiation). It can be concluded that where these four are apparent, there is a dual focus because negotiation of form encourages accuracy that involves comprehensibility of content. As Lyster (1998:191) puts it, use of the four feedback types "returned the floor to students along with cues for the latter to draw on their own resources, thus allowing for negotiation to occur bilaterally".

The foregoing studies, which are mainly based on L2 English classrooms, nevertheless have relevance to content-based instructional settings. Error correction strategies and the focus on form and content continue to be problematic in African schools. Kasule and McDonald (2006:16), in their reference to the situation in Botswana primary schools have argued that pupils have limited opportunities for verbal interaction in the classroom. They go on to say, “the language error-correction techniques used, and the teaching attributes of the teachers were still wanting”. Teachers should, therefore, be exposed to knowledge about negotiation of form and meaning such as that discussed above.

Fotos (1998) describes arguments that have been advanced about focus on form and meaning as the incorporation of grammar instruction within communicative lessons. One of her arguments is that explicit focus on form is effective in communicatively based or content-based L2 classrooms. She is supported by Long (1988:11), whose view is that teaching grammatical forms in isolation, fails to develop the ability of learners to use such forms communicatively. Teacher initiated language and learner responses should, nevertheless, be grammatical if negotiation is to be effective.

Fotos (1998:302) suggests one useful idea that teachers should follow when focusing on form. This is implicit grammatical instruction, in which learners should be able to notice, then process linguistic structures introduced in the teacher's modified input. The idea is contrasted with that of explicit instruction proposed by Skehan (1996), who suggests that learners benefit from some type of explicit instruction prior to an activity. This practice helps them activate their previous knowledge of the target structures or, if none exists, facilitates awareness of the forms they will encounter or should generate when negotiating content. These two contrasting approaches are crucial with regard to teacher effectiveness, and this means that during intervention it is essential to expose teachers to the benefits of implicit and explicit grammatical instruction.

In a specific reference to language used in content subjects Gibbons (1998), like Fotos explains that the construction of new curriculum knowledge must go hand-in-hand with the development of the subject specific vocabulary. She argues that:

children's current understandings of a curriculum topic, and their use of familiar everyday language to express these understandings, should be seen as the basis for the development of the unfamiliar register of school; and that teacher-student interactions arising out of such understandings serve as a shared contextual basis from which these new meanings can be jointly constructed.

This thinking provides insights for the present study by articulating a key point of view, namely, that specialist registers play a significant part in facilitating the acquisition of language associated with the geography or mathematics topic the students were studying. The citation thus shows that there is a close link between a clear grasp of lexical items in a given topic and the meaning constructed during interaction.

In the foregoing, the study by Seedhouse (1997) was reviewed. Its main thrust was a demonstration of the extent to which teachers combine form and meaning, and the desirability of the simultaneous focus in second language classrooms. The study by Lyster and Ranta (1997) was then discussed, mainly to establish how feedback types by the teacher encourage or discourage negotiation of form. Feedback types that enhance form negotiation as well as meaning negotiation were identified in the database. Although the findings mainly apply to L2 lessons, they are transferable to the teaching of content subjects focused on in the present study, where L2 speakers of English are still very much in the process of mastering the structures of the language and the specialist registers peculiar to the content being taught. This is because interaction in content subjects is mediated through language, a point stressed by Fotos (1997:302) who argues for methods of "integrating instruction with communicative language learning that

would enable learners to recognise the properties of target structures in context, and develop accuracy in their use". Ideas by Gibbons (1998), which specify the link between negotiation of form and conceptualisation in content subjects, were then briefly highlighted.

2.5.3.5 Peer interaction

Earlier (cf. § 1.1) it was noted that collaborative interaction is one of the aspects focused on by the intervention programme. The present section focuses on this aspect, guided by the view that collaborative learning occurs when learners are encouraged to achieve common learning goals by working together with one another. One way of making that determination is to observe how children negotiate learning in the teacher's absence after receiving instructions. Such peer group interaction is an issue of importance and Wilson and Haugh (1995:265) theorise that "when a pupil who understands, explains to another, the understanding is both extended and refined." In other words, for a learner who does not understand but can express herself without fear of redress among peers, the opportunities for negotiating learning are more likely to be enhanced. Research studies by Mercer (1995, 2004) and Wilson and Haugh (1995) are reviewed with a view to establishing evidence of collaborative interaction in today's classrooms, and the potential of using peer interaction to achieve cognitive intentions. Ortega's (1999) study will be discussed in order to shed light on the importance of giving learners time to plan before engaging in peer interaction. The review of these sources is undertaken against the background of speech act theory and turn-taking in the negotiation of learning (issues already discussed in foregoing sections).

In his study of collaborative learning, Mercer (1995) hypothesises that the learner's understanding may be shifted by interacting with another child having a different understanding of events. He uses the term 'socio-cognitive conflict' to take account of how interaction with more capable peers can improve individual discourse performance. The basic idea, according to Mercer (1995:90):

is that when two contrasting world-views are brought into contact, the resulting conflict has to be resolved to solve a problem. This is likely to stimulate some 'cognitive restructuring' some learning and improved understanding.

One of the projects from the national literacy drive (in the United Kingdom) , which resulted in key findings about peer interaction, was known as the Spoken Language and New Technology (SLANT) Project. The project was aimed at encouraging active participation in oral discussion based on a teacher-guided task. Mercer (1995) recorded 50 hours of classroom talk in ten English primary schools. The main objective was to see how computer-based activities stimulated talk among children, as well as to establish the teacher's role in organising and supporting joint activity at the computer. The following conditions were made clear to students before engaging in conversation. First, partners had to talk in order to do the activity. Second, there was to be co-operation rather than competition between partners. Third, before embarking on the task instructions were given in order to ensure that partners had a clear and shared understanding of what the activity involved. Fourth, every group member was expected to participate actively in the proceedings by expressing views freely. These conditions also served as criteria in the analysis of lesson transcripts.

Influenced by the work of Barnes *et al.* (1969) and Sinclair and Coulthard (1975), Mercer (1995) came up with a number of findings on the matter of group work. For example, by sharing ideas, children' understanding of issues under discussion is enhanced. Also, when children were paired with friends rather than acquaintances, they did more explicit reasoning through language and solved problems more successfully (the same kinds of opportunities did not arise in teacher-led discourse). Finally, group work stimulated talk in which partners present ideas clearly and explicitly, analyse problems jointly, compare possible

explanations, and reach joint decisions. That means that their reasoning is explicit in the talk, a matter consistent with conditions laid down before embarking on the task. This is to say learners gave information, provided counter-ideas, and evaluated each other's opinions.

On the basis of those findings, Mercer (1995:104) proposed that there are three main ways of talking and thinking in collaborative activities: disputational talk, cumulative talk, and exploratory talk. Disputational talk is characterised by disagreement and individual decision-making. There are few attempts to pool resources together. In the interaction there is evidence of assertions and counter-assertions that discourage constructive use of discourse during a collaborative activity. In cumulative talk, on the other hand, speakers build positively but uncritically on what is said by a peer. Interaction is characterised by consensus and confirmations, that is, simply agreeing with what a previous speaker says.

In exploratory talk, partners react critically but constructively to each other's ideas. When compared with the other types, in exploratory talk "knowledge is made more publicly accountable and reasoning is more visible in the talk" (Mercer, 1995:104). Progress is consequent upon the eventual joint agreement arrived at, as illustrated in this example.

[26] S1: Why do you say 8 is the common denominator of 4
and 2 ?

S2: When you divide 8 by these numbers there is no
remainder.

S1: What about 6 into 8?

S2: No. That does not work because there is a remainder of 2.

S1: Aha-a, now I understand.

For extended and meaningful discourse to occur while working in groups, it takes clear and explicit instructions initiated by the teacher which, as Gonzalez (1996)

and Nunan (1993) concur, should involve learners in comprehending, manipulating, and interacting in the target language as evidenced in the exploratory interaction cited above.

The study by Wilson and Haugh (1995) takes our conceptualisation of collaborative interaction a step further. The objective of the study was to establish whether a method of collaborative modelling originally developed for the teaching of reading skills may be utilised in generating pupil talk within the classroom. Pairs of learners were given different texts from Science, English, and Geography and asked to read these and then re-present them in another form (illustration, drawing, table, or chart). The talk emerging from the process was recorded, transcribed and analysed using five categories of talk. These were: asking one another questions related to the task; clarifying one's point of view; expressing a different view; self-selection; and extended comments. Learners used text to carry out the activity, and "they were given time and opportunity to ask questions about the nature of the activity and seek clarification on any aspect if necessary" (Wilson and Haugh, 1995:268).

The main findings were that all groups managed to generate and sustain their talk until they had finished the task. They participated freely and took control of the topic through successful management of turns. Wilson and Haugh (1995: 272) make the following observation:

In no case had the teacher to provide additional motivation, encouragement, or direction - all groups seemed to be engrossed with the activity, approaching it as a novel problem-solving task.

This shows the benefits of intervention in promoting purposeful talk. The present study will accommodate such insights in training tutors for the task of encouraging active learner participation and initiative.

The findings are presently summarised relative to the categories. Learners who expressed alternative viewpoints recognised each other's contribution and showed a willingness to place one's own experience and observation alongside another's as a resource in the jointly owned task. The activity involved elicitation and clarification requests leading to joint understanding of topics under discussion. This is referred to as 'reciprocity' after Halligan 1988 as cited in Wilson and Haugh, 1995:272). Reciprocity is characterised by utterances expressing mutuality (e.g. *yeah, yes...yes, you're right*, etc.). Wilson and Haugh (1995) also noted that learners used discourse markers such as: *yes... but or well...* in order to acknowledge the previous speaker's point of view before adopting an alternative one. They referred to this as the 'argumentational' category of discourse. Learner discourse also subscribed to what the researchers referred to as the 'hypothetical' category. This discourse type was marked by utterances such as *what if, I wonder if, might*, etc. These utterances led to more exploratory dialogue. The fourth observable category was referred to as the 'interpretive' category, as students expressed their understanding of the text by interpreting it and reasoning over its contents, giving ideas and suggestions in support of their views. Thus, effective talk is evident when pupils are able to use another person's talk to evoke deeper thought and understanding of the task.

The main conclusion, based on their findings, was that when group work is structured with more communicative ideas of interaction in mind, it results in purposeful interaction by learners. They are able to take part in the dialogue by responding to each other's questions without interfering with the flow and purpose of the discourse. The result is coherent dialogue in which the topic is discussed hypothetically, and content mutually understood.

In support of the foregoing findings, Ortega's study (1999:109) makes a further contribution by arguing that planning before doing an L2 task can promote an increased focus on form by providing "space for the learner to devote conscious

attention during pretask planning to formal and systematic aspects of the language needed to accomplish a particular task". Two groups (working in pairs) whose competence in language was considered high were identified. Both were going to retell a story. In each pair one participant read the story quietly then listened to it. The other only read the story quietly. Data were collected in individual sessions with each dyad. Both pair members were made aware of what their respective roles involved, and only the performance of the speakers was analysed. The participants who were going to listen to the story and retell it were given ten minutes planning time. During that time they were expected to prepare for the story retelling, while their counterparts did not get any planning time. Those under the unplanned condition were instructed to retell the story immediately after listening to it.

The results reflected that the group that had been given planning time showed more syntactic complexity, in promoting better fluency and a higher rate of words per utterance. The significance of these results is that allowing planning time before engaging in a task gives the learner opportunity to select more appropriate discourse as well as its extended use. This is largely because planning allows one to think before engaging in a task. As Ortega (1999:111) puts it "the opportunity to plan before L2 tasks lessens communicative stress and enables learners to free up attentional resources and redirect them towards a focus on form".

While Ortega's study applies to collaborative interaction in general, it is of particular significance to my study for two major reasons. The first one is that teachers tend to assign learners to do group work without giving explicit instructions or clarifying the roles of participants. Secondly, teachers hurry learners into group tasks without giving them time to plan what a particular group task involves. This results in disorganised and purposeless interaction.

In sum, this section reviewed literature about collaborative interaction by examining studies by Mercer (1995), Wilson and Haugh (1995) and Ortega (1999). The description of three types of peer discourse, the discourse categories that can be used to analyse peer interaction, and the importance of giving learners time to plan their responses have great potential for the present study. The issue of initiative and learner participation, which is addressed in one of the hypotheses of the study is influenced by the foregoing ideas. The pedagogic task is central to peer interaction, and as it is closely linked with the foregoing discussion will be discussed in the next section.

2.6 The pedagogic task and negotiation in a relaxed atmosphere.

Classroom interaction, analysis of which is the key focus of the present study, is based on classroom tasks around which discourse is generated, and in this section research literature about the characteristics of a good task is reviewed.

Learning tasks are at the centre of negotiation of learning, and a consciously structured task has the potential of securing learner understanding. This sort of understanding is presumed to have what Gonzalez (1996:287) refers to as “cross-situational consistency despite contextual influences”. This is so because there is a certain consistency in the way interactions are dealt with throughout the different situations that teachers and learners engage in on a daily basis.

Fisher (1996:249) argues that first and foremost, “discourse participants should recognise the educational purpose of the task”. One of his key recommendations is that the problem, which the task is set to solve has to be accessible to all participants so as to minimise conflicting interests. This means that where there is a shared understanding of the objective of the task, negotiation is likely to proceed in a regulated manner. A shared understanding relates to familiarity, and Gonzales (1996:288) qualifies this by saying: “the behaviour of adults and children also seems to differ as a function of their familiarity with the task, or its level of difficulty”. By implication, the teacher is more likely to adopt a more

directive role when a task is structured, difficult and new. Conversely, it is more likely for the teacher to let the child take the initiative and be the leader when the task is simple enough for the child to deal with.

Gonzalez (1996) has proposed that there should be teacher sensitivity in the determination of a task. Such sensitivity should be placed within a sociocultural framework. The view is that “adults can display different degrees of sensitivity towards the child’s competence and his or her possibilities for developing it if the interaction takes place in the child’s zone of proximal development” (cf. Gonzalez, 1996:290). Simply put, the scholar is suggesting that the teacher should have the skill of constructing tasks, which places demands on the learner beyond his or her present competence level. Conceived in this way, a good task should provide a chance for the child to learn.

The significance of ideas discussed above is that for more effective discourse to occur, the teacher has to be more explicit about the objectives and linguistic demands of a task, and ensure that learners are clear about the role they are expected to play. To play the assigned role so as to achieve learning goals will also depend on a relaxed atmosphere, as discussed below.

Lozanov (1978) specifies the requirements of an optimal learning environment, and concludes that effective learning takes place in a relaxed but focused state. In explaining his theory of Suggestopedia, in which he argues that teachers should consciously cultivate a relaxed learning environment (cf. Lozanov, 1978:109).

Scholars (e.g. Scovel, 1979; Stevick, 1976) say that Suggestopedia can best be understood as one of a range of theories that purport to describe how attentiveness is manipulated to optimise learning and recall. The implication for studies in the area of classroom interaction is that apart from language specific skills, teachers should also develop additional ones such as how best to create a

relaxed atmosphere so as to optimise negotiation of learning.

According to Lozanov (1978), a consciously manipulated learning environment contributes positively to the negotiation of learning as well as to the proficient use of language. Such an environment is characterised by features such as the appearance of the classroom, the furniture and the seating arrangement (e.g. participants sitting in a circle with the discussion proceeding like a seminar). The precise ways of using voice quality, intonation, and timing are important. In what he terms 'infantilisation', he proposes that authority should be used to suggest a teacher-student relation like that of a parent to a child. Above all, the primary role of the teacher is to create situations in which the learner is most suggestible, and then to present linguistic material in a way most likely to encourage positive reception and retention by the learner.

There is a close connection between Suggestopedia and ideas contained in the module *Learning From Traditional Education*, which is part of the Litraid in-service programme, as used in the present study (cf. Mjanja, 1995).

Learner roles, relative to Lozanov's ideas about relaxing the learning atmosphere, are characterised by learners giving themselves over to activities and techniques designed to help them gain self-confidence, spontaneity and receptivity (Bancroft, 1972:19). Such activities include role-playing, simulation games, and music and form important background material for the language-based in-service course in Module 3. Learners sit in a circle, which encourages face-to-face exchange and participation in an activity and language matters are introduced in a way that does not worry or distract students from the content. Essentially, therefore, "traumatic themes and material should be avoided" (Lozanov, 1978:278).

From the discussion of Suggestopedia, the close link between the idea of a relaxed atmosphere and a pedagogic task is discernible. The section has, *inter*

alia, discussed various characteristics of a pedagogic task, and argued that the principles that define good tasks apply across a variety of situations. A further point that is pertinent to the present study is that there should be teacher sensitivity when structuring a task. Among other considerations, sensitivity takes into account the sociocultural context in which participants engage in a task.

2.7 Communication strategies and the negotiation of learning

Negotiation of learning and meaningful participation involve the use of communication strategies. The focus of this last section of the literature review is on communication strategies, and the aim is to specify some of the strategies that research has shown to be commonly used by classroom interactants. The knowledge is useful relative to analysis of lesson transcripts and interpretation of discourse used to negotiate learning (see Chapter 4).

Cohen (1998:59) defines strategies as “steps or actions selected by learners either to improve the learning of a second language, the use of it or both.” Learning strategies are said to entail the storage, retention, recall and application of information about the target language as instanced in formal correctness. O’Malley and Chamot (1990:52) describe strategies as “complex procedures that individuals apply to tasks represented as procedural knowledge which may be acquired through cognitive, associative and autonomous stages of learning”.

Strategies for using language, on the other hand, involve taking action to apply information of the language that has been learnt, and this issue is discussed further by Cohen (1998: 5-6), who proposes that language use strategies include four subsets, namely, retrieval, rehearsal, cover and communication strategies. Retrieval strategies are those that require the language user to recover from memory the relevant language for a given situation, while rehearsal strategies involve the conscious selection of language before using it to communicate. Cover strategies are those strategies that learners use to create the impression that they have control over material. They involve use of alternative means of

communication such as gestures or resorting to silence when appropriate words cannot be retrieved. Communication strategies, on the other hand are the most inclusive of the four and involve the skilled use of language in a given situation. In this case it is skilful use of language to accomplish learning goals.

With reference to the two notions of second language learning and second language use strategies, Cohen introduces the concept of 'metacognitive strategies' to denote the steps taken in pre-assessing and planning what language to use in a communicative situation. Both the teacher and learners make use of metacognitive strategies when they plan what language to use prior to making utterances.

The issue of planning has generated ideas from interaction analysts (e.g. Ellis, 1986; Edwards and Mercer, 1987). There is consensus among the scholars that planning and monitoring of language use can be manipulated. Secondly, that language produced by learners after planning engages them in second language acquisition. Thirdly that when learners are given the opportunity to plan, they are able to focus more attention on the language requirements of the task they will be doing.

A communication strategy commonly used in pedagogic situations is codeswitching. With particular reference to the present study, the term 'codeswitching' is used when referring to classroom negotiation where either teacher or student, or both change for whatever reason from one language to another. The strategy has received detailed attention in discussions about bilingualism. The phenomenon here will be examined in the context of classrooms where both teachers and learners are non-native speakers of English.

Scholars and practitioners are divided regarding the value of codeswitching in the negotiation of learning. Some argue that it interferes with communication, while

others think otherwise. As Beardsmore (1996:45) puts it, codeswitching implies deviation from monoglot norms. However, in the same breath, he observes that “it is doubtful whether every departure from the monoglot norm by the introduction of elements extraneous to a given language should be seen as interference”.

It is, therefore, important to be clear whenever an instance of codeswitching is used to determine whether it is positive or negative. Clyne (cited in Beardsmore, 1996:47) prefers the term ‘transfer’ rather than ‘deviation’ when referring to elements of one language that are present in discourse that is primarily conducted in another language. McLure (cited in Edwards and Westgate, 1994) has pointed out that there is no consensus among researchers as to what constitutes a codeswitch. This is a pertinent research concern especially in L2 situations where the problem is that of deciding when the use of elements of one language within the context of another ceases to be interference, but represents codeswitching that is beneficial towards negotiation of learning.

If it is accepted that codeswitching is a discourse feature that should be incorporated into discourse analytical frameworks, it is necessary to determine criteria that can be used to investigate its link with oracy. The criteria would be based on the concept of transfer as defined above. Beardsmore (1996:50) suggests four criteria. The first criterion is “integration, that is, the regular use of material from one language in another in the form of an established loan” as in:

[27] T: After what I have said *pachine mibvunzo here?* (any questions?).

commonly used to check whether learners have questions or have understood the topic content. In this case, English (the second language), which borrows, is referred to as the ‘recipient language’, while Shona, from which the borrowed item comes is referred to as the ‘donor or source language’.

The second criterion is morphological transfer. Transferred lexical items can be categorised into loanwords or loanblends. In cases where borrowing from another language leads to enrichment and reinforcement of the recipient language's lexical stock, we refer to this as positive transfer, as in:

[28] T: Whenever you see a word with suffix - *ogy*, that suffix means *kudzidza nezve...*(the study of). Now see if you can give me the meanings of these words: *criminology*, *biology*, *psychology*, *astrology*, *pedagogy*.

The teacher here tries to facilitate conceptualisation by using the L1 equivalent of the suffix.

Syntactic transfer is the third criterion to be considered here as an instance of codeswitching. It involves the transfer of full sentences within stretches of discourse. Where a clear negotiation purpose is served, then the transfer is positive, while the reverse is true in the opposite situation.

The teacher who says:

[29] In our study of literature we come across a concept like 'plot'.
Kwete plot yomunda yamunoziva iya (not the plot referring to a garden which you are familiar with). The word has a special meaning

is codeswitching at the systematic syntactic level, that means changing from one language to another over phrases or clauses (Beardsmore, 1996). In this discourse, the switching serves the interactional purpose of clarifying a concept using Shona, the learner's L1. For switches to occur, the minimum bilingual community must exist, that is two interlocutors must share the same pair of

languages. MacLure (cited in Edwards and Westgate 1994) is of the opinion that codeswitches in the classroom are functional. For example, the teacher might use them for emphasis, clarification, elaboration of concepts, and providing further information for the sake of adding meaning.

Researchers (e.g. Fishman, 1970: 67) observed that habitual language choice in multilingual speech communities is far from being a random matter of "momentary inclination or inadequacy". Instead, proper usage in such communities indicates that "one of the interlocutors codeswitches to discuss particular kinds of topics". Thus, in bilingual communities certain elements extraneous to a particular language may be inserted by choice rather than unwittingly.

In conclusion, the section dealing with communication strategies distinguished between language learning and language use strategies, and underscored the fact that all the time participants interact in the classroom, they use the strategies to accomplish educational objectives. In English second language classrooms, codeswitching is prevalent, and the need to have a basic understanding of its implications in the negotiation of learning is key in determining the effects of teacher input on learner input. An appreciation of communication strategies depends on intensive teacher development. As I perceive the matter, teachers who are aware of the significance of communication strategies will be able to provide strategy awareness to their learners as a regular feature of interaction.

2.8 Summary

The primary aim of this chapter was to review research and related literature on oracy and the negotiation of learning. Generally, the discussion explored problems associated with English as the language of instruction in contexts where it is not the primary language of learners. In more specific terms, discussion focused on literature dealing with how oral interaction can be organised more effectively to teach both language and content. Within the

broader aim are subsidiary aims that were discussed in the foregoing sub sections.

Initially, the foundation for subsequent literature review was laid by defining the nature of applied linguistic research, the domain to which the present study belongs. In particular, the discussion dwelt on literature that gave insight into quantitative and qualitative paradigms (e.g. Seliger and Shohamy, 1989; Nunan, 1991; Silverman, 1997) that are applicable to oracy studies. Review of the literature was also conducted to establish alternative ways of overcoming perceived ambiguities associated with applied linguistic research. The ideas illuminated the key area of data collection, which scholars in the field of classroom interaction (e.g. Glaser and Strauss, 1967; Chaudron, 1988; Long, 1990) often found problematic.

The section dealing with concepts related to analysis of classroom interaction aimed at explaining three key concepts, namely, interaction as a classroom genre; the link between oracy and cognition; and how context and affect relate to oral interaction. A clear definition of classroom interaction was considered to be foundational here as scholars have attested (e.g. Nunan, 1992; Demo, 2001; Krashen, 1982; Bakhtin, 1986). The definition derived from the special relationship between interaction and communicative competence (cf. Canale and Swain, 1980; Kinginger, 2002), and similarly, it was essential to review literature that explored how oracy and cognition intersect (e.g. Vygotsky, 1978; Eysenck, 1988, Heath, 2000). Literature on the crucial issues of context and affect (cf. Vosniadu,1996; Schumann, 1988) was also reviewed in order to provide further insights relevant to my own investigation of the effects of an intervention course on oracy practices in certain ESL high school classrooms.

One of the subsidiary aims of the chapter was also to discuss patterns of oral interaction in traditional African education circumstances. Given that the present investigation was conducted in African schools, influenced by traditional

education practices, it was considered relevant to review literature in that field (e.g. Castle, 1964; Mutswairo *et al.*, 1996) to access ideas about oracy that could explain some of the phenomena about interaction in to day's formal classroom. As the schools in which data for the study were collected comprise speech communities for whom English is a second language, it was considered appropriate to find from related literature the extent to which classroom participants learn or acquire a second language when negotiating learning in different school subjects (e.g. Cohen, 1998; Cleghorn *et al.* 1998; Greenwood, 2002).

Later, the literature review shifted to one of the most important sections, very highly influential on the present study, namely approaches to the study of classroom discourse, with special reference to the purposeful transactional use of classroom talk, a central issue for the present study. Three approaches were singled out. First, insightful observation was discussed. This approach is associated with Barnes *et al.* (1969), and was mainly concerned with the description of insights about interaction rather than with the analytical interpretation of units of speech. The second approach involved coding schemes, and is associated mainly with Flanders, and Moskowitz (cited in Chaudron, 1988), and their frameworks for quantification of teacher-learner discourse units.

The third approach, referred to as the discourse analysis model, associated initially with Sinclair and Coulthard (1975), is mainly pre-occupied with procedures for the description of supra-sentential structures. It was noted that all three approaches have the potential of influencing research in the field of discourse analysis. Developmentally, this was noted in the work of scholars (e.g. Malamah-Thomas, 1987; Van Lier, 1988; Mercer, 1995, 2005) who made use of the approaches to analyse and influence pedagogic practices in their own contexts. Further research studies on the applicability of discourse analytical approaches were also reviewed. For example, the works of Fisher (1996), Rex, Steadman, and Graciano (2005) demonstrated ways of identifying effective talk.

Meanwhile, the work of Van den Branden (1997) defined negotiation of learning through an experiment that showed how negotiation, so vital to effective talk, takes place. Literature detailing research on negotiation of content (Musumeci, 1996) and the negotiation of form and meaning (Seedhouse, 1997; Lyster and Ranta 1997) was also reviewed because it reflected useful ideas applicable to my investigation, as were studies on peer interaction (Wilson and Hugh, 1995; Mercer, 1995).

The Chapter closed with a brief review of literature about communication strategies, and this was aimed at establishing a working definition of what these are, and how they are recognised during interaction. The work of Cohen (1998) and that of Beardsmore (1996) was particularly helpful in the definition of strategies as steps or actions selected either to improve the learning of a second language, the use of it or both.

Discussion in the chapter, as a whole, bore in mind the research question captured in Section 1.2 , namely:

What are the effects of the course on classroom text and discourse on oracy in the high school classroom?

In addition, the review helped achieve two additional objectives, that is, establishing the extent to which oracy principles can be applied across school subjects, and how best discourse can be measured more objectively. This was in the light of the primary aim of the study, namely:

to establish the extent to which teachers, who are exposed to ideas about classroom talk use the English language more effectively to encourage learner participation in the negotiation of learning.

The hypotheses were also borne in mind as the review was conducted. Three

constructs were referred to in the review, namely teacher dominance (Hypothesis 1), teacher effectiveness (Hypothesis 2) and learner initiative (Hypothesis3). The methodology of testing the hypotheses is addressed in the next chapter, where the analytical framework is described, explained, and illustrated in conjunction with the methods and procedures followed to accomplish the investigation

CHAPTER 3

RESEARCH METHOD

3.0 Preview

The objective of the previous chapter was to review literature pertaining to classroom oracy. In the present chapter, the focus is on the research method applied to fulfil the aims of the study and establish the extent to which the course in classroom text and discourse can be perceived to significantly alter patterns of interaction for teachers and learners as observed through their performance.

The first part examines a key methodology issue, namely, the research design. This is followed by discussion of the concepts of 'validity' and 'reliability' as they apply to the study. The next main section examines the procedures that were followed in the implementation of the quasi-experimental design. Starting with pre-intervention procedures, discussion will include how participants were identified. After that, focus will shift to preparations for intervention, highlighting procedures followed in Malawi and in Zimbabwe. This is followed by discussion of an important stage, namely trial testing, as a prelude to proper intervention. The intervention itself involved a number of stages including sharing ideas about oracy (involving exchange of ideas between course tutors and in-service teachers); procedures with study materials (involving discussion of the course content and how it was implemented); and the conduct of interim tests and posttests. The methodology of pretesting and posttesting makes it possible to look at the way teachers talk, and the way learners interact in groups, as well as how this changes over time. In addition, information about the development of shared understanding in the class as a whole is gained.

The next section of the chapter presents the analytical framework in the light of discourse analysis theories discussed in Chapter 2 and the hypotheses of the study. The objective is to develop a framework to analyse classroom discourse in

such a way that the quantitative results would easily translate into soundly based assessments of discourse quality. A practical demonstration of how analytical categories were applied will be given. The chapter concludes with operationalisation of the three hypotheses, and the main focus will be on three constructs (one from each hypothesis), namely dominance, effectiveness, and initiative.

3.1 The research design

This section discusses the quasi-experimental pretest-posttest non-equivalent control group design used to address the research problem and to test the hypotheses. After describing the sample of participants, the pretest-posttest method of gathering data will be highlighted. The design itself is directly linked to the hypotheses, and so these are first recapitulated.

Hypothesis 1 posits that:

teachers who participate in the course on classroom text and discourse will dominate discourse less than teachers who do not participate in the course.

Hypothesis 2, which is also teacher-oriented posits that:

teachers who participate in the course on classroom text and discourse will be more effective in that they make better use of discourse to promote the negotiation of learning than teachers who do not participate in the course.

Hypothesis 3 posits that:

learners taught by teachers who participate in the course on classroom text and discourse will show more initiative than those taught by teachers who do not participate in the course.

The hypotheses are influenced by the first aim, namely, to establish how in-service teachers who are exposed to theories about oracy can improve communication skills in the negotiation of learning. As implied above, three

constructs are central to the hypotheses: teacher dominance (H1), teacher effectiveness (H2) and learner initiative (H3). These constructs are briefly introduced and discussed in general terms now, but they will be fully operationalised quantitatively later (cf. § 3.6). In that section explanation and justification of acts that comprise operationalisations of the three constructs will be given.

Dominance refers to the situation where the teacher talks more than he should within a given lesson. It is a feature of classroom interaction characterised by the lack of shared aims between the teacher and learners (cf. Fisher, 1996). Teachers are said to be dominant when they use discourse that is marked by the transmission of content at the expense of meaning and form. For most of the time teachers ask polar and display questions with answers in mind, and on their part learners are expected to listen or give short answers in the same words used by the teacher. Characteristically, therefore, interlocutors rarely build on the talk of previous speakers. With regard to quantitative operationalisation, dominance is measured in terms of the proportion of teacher acts to learner acts.

The construct of effectiveness refers to the conscious choice of language that enables the discourse participants to achieve learning goals. It is manifested through the way teachers select discourse to negotiate learning (cf. § 2.5.3.1, which deals with ways of identifying effective talk). One of the features of effectiveness is comprehensibility of teacher input in which clarifications are sought through the use of open-ended questions (cf. Cullen, 1998). With regard to quantitative operationalisation, as will be seen later, effectiveness is measured in terms of the proportion of certain discourse acts, used by the teacher. This study will also seek to establish whether teacher effectiveness has any effect on learner initiative, the third key construct.

Initiative refers to the willingness of learners to participate in the classroom discourse. Quantitatively, it is measured in terms of the frequency of specific turn

types and discourse acts. Typically, initiative can be measured by counting the number of times learners bid to respond to teacher elicits, as well as how often they self-select (cf. Van Lier, 1988). As indicated earlier (§ 2.5.2.4), learners who show initiative tend to participate more actively, and this will be tested for in this study in terms also of the proportion of certain discourse acts they use. These include extensions, clarifications, and counter-informs. In as far as quantification is concerned, initiative is here therefore defined in terms of a subset of the discourse acts used by learners (including those that do not reveal particular initiative), while all the discourse acts engaged in by the learners relative to the teacher define the amount of learner participation. This more general concept 'participation' is, therefore, regarded as the converse of dominance.

The main focus of this study is on the Zimbabwe sample, which comprises the experimental and the control groups. The discourse of these two was recorded and assessed before intervention (the pretest), and after intervention (posttest). The assessment measures derive from an analytical framework specifically developed to test the hypotheses so as to establish the presence of dominance or the lack of it; the effectiveness of discourse; and evidence of learner initiative. The supplementary Malawi sample also comprised control and experimental groups. However, the design here was necessarily weaker, as the posttest only observation was used. This was because opportunities for observation arose only after intervention had already taken place.

From the two groups constituting the research sample in Zimbabwe, the control group comprised one teacher of English, one of Geography and one of Mathematics and their classes, while the experimental group comprised two teachers of each of these subjects and their classes. All teachers taught classes doing first year of high school (Form One) during the first term. The groups are said to be non-equivalent because the classes had differing numbers of learners. There were no changes in the composition of classes for the duration of the experiment. The groups thus remained intact.

For each teacher, two lessons were recorded at the pre-intervention stage. The intention was to establish whether there was any initial equivalence in the patterns of discourse used by the two groups, as well as to determine the proportion of discourse acts used by teachers compared to those by learners. Four lessons were recorded during intervention (interim tests), and one at post-intervention stage over a period of nine months.

Two variables around which the study is centred have already been referred to in Chapter 1. These are the intervention programme (the independent variable) that was aimed at causing changes in the discourse behaviour of teachers and, concomitantly, learners (the dependent variable). I am cognisant of the fact that there are other factors that could have a moderating effect on the discourse behaviour, and these include maturation and history (see Chapter 1 for an explanation of the factors), but steps were taken to control them by using the pretest-posttest control group design.

Controlling for maturation and history has a direct bearing on the research findings about the discourse patterns and the pedagogic functions they serve. The results plus the methods used for data capture do, in turn, have implications for two equally important and related notions, namely, 'validity' and 'reliability'. These are inseparable from any meaningful discussion about the design of a study, and are defined in the next section.

3.2 Validity and reliability

Five aspects of validity and reliability are explained relative to their importance in the research design. These are: construct validity, internal validity, external validity, internal reliability and external reliability.

With regard to construct validity, the central construct of the present study, namely oracy, can be regarded as valid if it is clearly defined in a way which

makes it accessible to outside observers. In other words, there is “need to describe the characteristics of the construct in a way which would enable an outsider to identify the characteristics if they came across them” (Nunan, 1992:15). The operational definitions of dominance (and its converse, participation), effectiveness, and initiative (cf. § 3.6, where the three are operationalised) provide clarity on what oracy is, and is not. As Nunan (1992:16) also puts it, “construct validity has to do with the question: Is the study actually investigating what it is supposed to be investigating?” It is therefore argued that the three secondary constructs, which are themselves clearly defined, provide a definition of what oracy is.

Internal validity refers to interpretability, that is, whether the relationship between the independent and the dependent variable is “unambiguous and not explainable by extraneous variables” (Seliger and Shohamy, 1989:105). Regarding the present study, internal validity refers to a situation where findings from the investigation of oracy are a function of intervention (the independent variable) on the discourse performance of interlocutors (the dependent variable), rather than the result of other causes not dealt with. Findings lack internal validity when they have been affected by factors such as history, attrition, maturation or comparability of subjects. For the present study, the control group was created in order to counter threats to internal validity.

External validity, on the other hand, refers to “the extent to which the results can be generalised from samples to populations” (Nunan, 1992:15). As indicated in Chapter 1, a degree of external validity had to be sacrificed in my study because the intensive discourse analyses required meant that the representative sample was small: relatively few subjects comprised the experimental and control groups.

Basically, reliability refers to the consistency of the results obtained from a study. In the present research, that would answer the question: How reliable are the

results on the link between discourse performance and intervention? The consistency with which data are collected; the way analysis is conducted; and the interpretation of data account for internal reliability. In my study a research assistant was engaged in the analysis in order to ensure internal reliability. On the other hand, “external reliability refers to the extent to which independent researchers can reproduce a study and obtain results similar to those in the original study” (Nunan, 1992:14). This means if a researcher were to carry out a study similar to the present one, and come up with comparable findings about the discourse performance of teachers and learners, that would be an indicator of the external reliability of the study. I believe that the relatively high degree of explicitness of the procedures involved in this study should enhance its internal and external reliability.

3.3 Investigation procedures

This section discusses procedures followed in relation to the research design, thereby clarifying how intervention was conducted. To begin with, a summary of the procedures is detailed, and that is followed by a discussion of steps taken leading to the ultimate stage of transcript analysis. Participant background and the composition of research groups are given. The experimental and control groups from schools in Zimbabwe constitute the main sample from which the corpus of lesson transcripts is drawn. The sample from Malawi schools, on the other hand, is regarded as merely supportive. In part, the procedures also cover the steps taken to prepare the research participants for intervention. This is followed by the elucidation of how pretests, interim tests and posttests were conducted. Three phases of testing will be distinguished, namely pre-intervention stage, interim intervention stage, and post-intervention stage. In view of the fact that intervention comprises a course on classroom text and discourse (the Litraid course), the content of each of the four modules and the objectives will be explained.

The chronology of events covers the *pre-intervention* stage, which involved sampling of participants and deciding on subject grouping. This is followed by the *preparation* stage. It involved contacting school heads and in-service teachers participating in the course.

Pretesting, which is the next stage involved three activities, namely, recording two lessons for each one of the teachers in the experimental and control groups; establishing the views held by participants regarding the language skill given the most attention; and establishing the negotiation type mostly focused on by the teachers before intervention.

The *intervention* stage is the next one during which course tutors discussed content from the course modules with in-service teachers. The *interim testing* stage focused on recording the four lessons taught by each teacher (one after each module). Finally, the *posttesting* stage involved recording of the lesson taught after the final examination; establishing the views held by participants regarding the language skill given the most attention after intervention; and establishing the negotiation type mostly focused on by teachers after intervention.

Before discussion of each one of the above-mentioned events, a brief description of the Zimbabwe project will be given. This will be followed by more detail in the respective sub sections.

The Litraid project, leading to a diploma qualification in classroom text and discourse was introduced as a pilot project in Zimbabwe in 1988, then as a full course in 1996 with the view to upgrading primary school trained teachers (cf. § 1.4) so that they could teach in secondary school. The programme was sponsored by Rotary Club International (Ruberly Club) of the United Kingdom, with the expertise of applied linguists from the Open University (UK). In

collaboration with the University of Zimbabwe and Rotary clubs in Zimbabwe, study materials were developed to suit the Zimbabwe educational environment.

The course was open to teachers who held a Primary School Teachers' Certificate, and had taught for five or more years. The in-service teachers got support from tutors in the country's 10 regions in terms of guidance with study modules and weekend tutorials. Tutors also marked assignments (one after each module). The course lasted nine months of study by distance education. During the period teachers studied ideas about classroom interaction with reference to the subjects they offered. Opportunities were provided during weekend tutorials for peer interaction, and sharing of insights from the study modules. At the end of the nine months of study, the in-service teachers sat an examination, and successful completion led to the award of the diploma recognised by the Ministry of Education for purposes of promotion and salary increment.

3.3.1 Pre-intervention procedures

On the basis of the above, the objective of this section is to explain procedures followed before intervention. In particular, it details how sampling of participants and school subjects taught was done.

3.3.1.1 Choice of participants

The choice of teachers from schools in Zimbabwe (the core sample) was governed by a number of criteria. To begin with, they were supposed to be practising in high school with a minimum of five years' teaching experience. The assumption was that teaching experience of five years and above reflected some degree of continuity in the same job, so the probability of having developed specific patterns of interaction would be high among such participants. Only certificate holders were selected so that after undergoing the in-service training they would receive a higher award, the Diploma in Classroom Text and Discourse. This would be an incentive for doing the course as it led to professional recognition that attracted two additional salary notches.

There are 10 administrative regions in Zimbabwe's education system. For the Litraid course, taught by distance education mode, each region enrolled 50 participants, giving a total of 500 in-service trainees countrywide. From these, 200 were high school teachers (that is 20 per region). It was from this population that a decision had to be made about who should take part in the experiment. In view of geographical distances, I ruled out random sampling, a procedure that normally ensures that every member of the population has a chance to be selected. If I had opted for this method, chances were that some of the participants were going to be drawn from the remotest schools where access would be difficult due to transport constraints.

Eventually, I opted for purposive case study sampling. In this research, the term case study is used to refer to a detailed account of the development of a small group of individual teachers (cases) over a period of nine months. Evidence of individual development is captured in lessons taught during the research stages. Purposive sampling refers to the identification of participants on grounds of convenience and participant accessibility. The investigation was, therefore, confined to a small population of teachers. Studying a small number of research subjects is accepted research practice, and as Brown (1988) and Silverman (1997:22) point out, when dealing with case studies, it is the quality of analysis rather than the recruitment of a large sample that counts. The samples are described in the next section.

3.3.1.2 The experimental group

In line with purposive sampling, eight teachers enrolled on the in-service course were initially identified from five schools in the high-density suburbs of the city of Harare. High-density suburbs are home to working class families who cannot afford fees for the expensive schools located in the low-density areas. In the sampled schools, English, the language used to conduct lessons, is a second language for both teachers and learners.

Teachers offering Science, English, Geography, and Mathematics were identified within accessible locations. Two teachers were allocated to each subject. Altogether there were eight cases to be studied, but as explained later, only six ended up taking part in the experiment. The choice of participants was limited by the availability, in the vicinity, of teachers enrolled on the programme. All teachers taught classes doing first year of high school (Form One), and the average age of learners was 14 years. The rationale for focusing on first year of high school was to ensure consistency in terms of syllabus topics covered and learner age group. Both factors (syllabus topics and learner age group) can be influential on the content, language used, as well as the academic level at which teachers would be operating. The allocation of two teachers per subject was meant to ensure there would be enough data for analysis from two rather than one person. The two Science teachers, however, opted out of the course during the pre-intervention stage so only three subjects (English, Mathematics and Geography) were focused on. After this initial sample attrition, the group remained intact up to the end of the study.

Teachers for both the experimental and control groups held primary school teachers' certificate qualification obtained in three years after four years of secondary education. All had teaching experience of five or more years. For purposes of identification, reference and analysis of lesson transcripts, the teachers are referred to as T1 and T2 for each subject (as shown below). For example, Mathematics T1 simply means the first Mathematics teacher, and Mathematics T2 means the second Mathematics teacher:

Mathematics – T1 and T2

Geography – T1 and T2

English – T1 and T2

In addition to the six teachers, 14 others, also enrolled on the Litraid course, but who did not have their lessons recorded, were identified to respond to the questionnaire on language skills and negotiation types.

3.3.1.3 The control group

Three teachers (control group), as opposed to six in the experimental group, were identified to teach the selected three high school subjects. Their teaching experience and professional qualifications were similar to those of the experimental group. They too taught a Form 1 class and, like the experimental group, their lessons were audiotaped before intervention, during intervention when teachers from the experimental group taught lessons after each of the four modules, and after intervention. The control group was not exposed to the intervention programme. Teachers were identified as follows:

Mathematics – (C)

Geography – (C)

English – (C)

In this case (C) stands for 'control' lesson.

In addition to the three teachers, 20 teachers, not enrolled on the in-service course, and whose lessons were not recorded, were identified to respond to the questionnaire on language skills and negotiation types. Thus altogether 23 teachers responded. These were all from one school, following an arrangement with the school head.

The rationale for having two groups was to enhance reliability and validity. The two groups, constituting the core sample, are represented below.

Table 1 The nine teachers forming core sample (Zimbabwe teachers)

Group	Maths	English	Geography
Experimental	2	2	2
Control	1	1	1

3.3.1.4 The Malawi sample

In 2001 the Malawi Government, with the assistance of the Canadian Development Agency (CIDA), adapted the Litraid Programme to upgrade primary school trained teachers. The objective was to address the serious teacher shortage in high school. The project was known as the Secondary School Teacher Education Project (SSTEP). Teachers would be upgraded to diploma level so that they could teach in what are known as community day secondary schools. The diploma programme was sanctioned by the University of Malawi, and was housed at one of the associate colleges, namely, Domasi College of Education. The programme was delivered using a combination of residential training and distance learning.

Teacher-learners (as they were called) spent two months of residential training at Domasi College in Zomba. This was followed by 10 months of study by distance education. During that period, field supervisors gave the necessary support. The course included the study of classroom communication and specialisation in two subjects (e.g. Geography and History, or some other combination). During that time, ideas from the intervention programme were studied, and discussed with peers and field supervisors in what was referred to as study circles, conducted weekly. A study circle was made up of a group of 10 teacher-learners under a field supervisor.

In a typical study circle, three things happened. Firstly, there was face-to-face tutoring of modules. Secondly, there was extensive discussion of ideas about language and personal experiences, using ideas from the Litraid programme. Lastly, there was micro-teaching, to be followed by a post-mortem on language

as it related to the negotiation of learning. In-service teachers did assignments after each module and, at the end of the study period they sat a written examination.

In March 2006 I was invited to spend two weeks in Malawi to evaluate the project. One of the areas I was expected to make recommendations on was teaching practice. I however, took the opportunity to focus on the effectiveness of oral discourse as teachers and learners interacted over a topic. Two weeks in advance of the consultancy, I liaised with the distance education Co-ordinator of Domasi College to identify any three teachers of Mathematics, Geography, and English. These were to be drawn from the group that had written its final examination for the diploma course, and teaching in Zomba urban. My sample, therefore, comprised three teachers in the experimental group, and three in the control group made up of teachers who were about to start on the in-service course. The groups are represented in diagrammatic form thus:

Table 2 The six teachers forming the Malawi sample

Group	Maths	English	Geography
Experimental	1	1	1
Control	1	1	1

Strictly speaking, the Malawi sample is regarded as being supportive of the core Zimbabwe sample. This is because only posttest data were collected, and that was through observation rather than audio-recorded transcripts. The value of having this group was to establish the effect of the Litraid course ideas on the discourse performance of teachers in two different countries.

3.3.2 Preparation for intervention

This part of the study describes the procedures taken to contact research participants and other people considered important in the successful conduct of the research. This was in preparation for intervention.

3.3.2.1 Preparation in Malawi

In preparation for working with the Malawi sample, prior arrangement was made for me to observe lessons taught by both groups. Since this was not going to cause any major disruption in following the syllabus, I requested that the three teachers on the experiment, and the three in the control group should teach the same topics. The field supervisor organised that the following topics be taught: Physical divisions of Malawi (Geography); Algebraic Expressions (Mathematics); and a poem: "Market Women" (English).

Circumstances did not allow me to do pre-intervention observation for the two groups. However, I was satisfied that observing teachers who had undergone a study programme similar to the one by teachers in Zimbabwe, would yield further insights about classroom discourse. In that case, teachers who had completed the study programme would serve in lieu of the experimental group. The group was defined as experimental because like their counterparts in Zimbabwe, participants had taken part in the in-service course. Similarly, those waiting to start on the programme, served as the control group because they had not participated in the Litraid course. The limitation was that only field notes were used as the data, as opposed to the more objective method of recording proceedings. Two lessons by each teacher were observed, and notes made.

3.3.2.2 Preparation in Zimbabwe

In Zimbabwe, preparation involved contacting school heads and the participants. Before meeting participants, it was necessary to speak to school heads personally about the investigation. I informed them that research was going to be carried out with some teachers in their schools, and that the intention was to find ways of improving interactive communication in the different curricular subjects taught through English as the medium of instruction. In all instances, I received

support mainly because proficiency in English is considered generally poor in schools.

I explained the purpose of my visit as an attempt to improve interaction between teachers and learners during lessons. Teachers' ideas on how they themselves used English currently, and what they thought ought to be the ideal ways, were going to be helpful. I requested the permission of school heads to visit the identified teachers for a period of nine months. I then went on to meet, as individuals, the six teachers on the experimental group, and the three in the control group. This was meant to prepare them for the pretests.

3.3.3 The trial tests and pretests

In this part of the study, I begin with an explanation of how teachers and learners were prepared to respond to questions about the language skill they rated highest out of listening, talking, reading, or writing. A brief explanation will also be given on the preliminary discussion held with teachers to ensure they would respond to questions about the negotiation type they rated most important (negotiation of content, negotiation of meaning, or negotiation of form). I also focus on procedures taken to conduct trial tests and pretests.

Before intervention, a form was circulated to teachers and learners in both the control and the target groups to elicit views held about the general language skill regarded as most important in the classroom. There was a preliminary explanation of what each skill meant, and no value judgment of its importance in classroom interaction was given. The feedback was treated as a kind of pretest.

Similarly, teachers were also requested to indicate the negotiation type they preferred most (content, meaning, and form). This was after preliminary explanation of what each type involved without giving any further value judgment. The same process was repeated after intervention. The assumption was that there is a link between the negotiation type preferred most and the pattern of

discourse used by the teacher (see Appendix C for the forms used to elicit data about language skills and negotiation types).

Before recording the lessons (the pretest), two activities were undertaken, namely, the grand tour and the familiarisation tour. 'Grand tour' is a term used by ethnomethodologists (e.g. Sacks, 1989; Schegloff, 1980) to refer to preliminary visits. These preceded the recording. I went round to the respective schools just before the pretest began. The tour afforded me the opportunity to observe the general atmosphere in the schools, and to familiarise myself with the research environment. During the one hour I spent in every school, I devoted about 40 minutes to each of the teachers taking part in the experiment, and the remaining 20 minutes or so talking with the school head about language issues in education. I took note of routines in distribution of learning materials, desk arrangement, organisation of timetables, and the general atmosphere of individual classrooms. Thereafter, I worked out a timetable with the teacher as to when recording would take place. This laid the foundation for the subsequent visits.

After the grand tour, it was important to familiarise teachers and learners with the process of audio recording. Although teachers are used to visits by education officers, the idea of having a visitor with a recording gadget was new. This was true for the learners too. I took the occasion to explain the purpose of my visit. As already clarified above, the explanation was simple, namely that I wanted to see how teaching and learning took place in history, geography, or any other subject. I promised learners that they were going to listen to their own voices when the tape was replayed.

I went on to record for a few minutes, then stopped to replay and complimented them for the way they were responding to the teacher's questions. The same procedure was followed with control classes. Initially, there was nervousness and apprehension, but in my judgement, the familiarisation tour facilitated a more

relaxed atmosphere for purposes of recording pretest lessons. Each teacher in the control and experimental group (Zimbabwe sample) taught two pretest lessons. These were later transcribed and analysed together with interim tests and posttests.

This section paid close attention to the procedures followed in order to prepare for intervention in both Malawi and Zimbabwe. To prepare the core sample, in the latter country, the grand tour and trial tests were carried out. After the pretests, actual intervention took place and this is explained in the next section.

3.3.4 Intervention procedures

To intervene is to take conscious steps to address a problem, and in the present study intervention involved using the Litraid course to address the issue of oracy among high school teachers. Intervention occurred in two specific ways, firstly, the preliminary discussion with in-service teachers, being orientation on theoretical ideas about oracy. This was considered important in view of the fact that oracy, as a skill where communicative versatility is objectified, requires active teaching and explanation of theories so that teachers who become “aware of linguistic matters can more efficiently facilitate the guided construction of knowledge” (Tichapondwa, 2006: 63).

The second way involved manipulation of the independent variable, during which process teachers participating in the experiment applied ideas from the Litraid course in typical lessons. In this section, therefore, an explanation of how intervention was carried out is given. The content for each study module is also summarised so as to give an idea of how the study material was related to classroom interaction, and how course tutors guided in-service participants in the application of ideas from the study materials.

3.3.4.1 Sharing ideas about oracy

In the early stages of intervention, induction tutorials were held. Litraid course tutors interacted with course participants in order to share course objectives. The following extract from one of the early recordings shows how tutors presented oracy ideas. (IS = In-service teacher).

[1] Tutor: Using the language of science, the language of history... the language of biology correctly... and to make pupils talk more actively during lessons.

IS1: (shaking his head). So what will the qualification be called?

Tutor: Diploma in Classroom Text and Discourse.

IS2: I don't see the point if I do not learn more about Geography, my subject.

Tutor: Do you agree that sometimes you experience language problems when you are teaching?

IS1: I know I do.

Tutor: Do you sometimes notice that pupils don't want to talk even when you want them to?

IS1: Of course they don't most of the time, but they get answers correct when they write, anyway.

IS3: But...then it means you expect us to learn how to make them talk, or something like that?

IS4: I think teachers tend to talk too much.

Tutor: Exactly. There are guidelines you will learn from this course to make learners play a more active role during your lessons.

IS1: So, you mean that will apply to every subject?

Tutor: Precisely. In fact these are new developments we learn about in the field of language and education.

The tutor manages to negotiate meaning regarding what the course is all about. At the end of their conversation, there is mutual understanding that the aim of the course is to encourage them to use the specialist register of different school subjects correctly; encourage oral participation by learners; discourage silence; and time the intervention correctly. The negotiated position between tutor and in-service participants is that the course is not about learning more subject content, or asking students to write more exercises, but about how to use teacher talk more purposefully.

The preliminary intervention was also aimed at helping in-service teachers define the three negotiation types, thus enabling them to distinguish one from the other. It was at this stage that the theories of oracy (cf. § 1.1) were discussed. The course tutor spent two separate one-hour sessions with the six teachers participating in the experiment (in Zimbabwe). Firstly, they defined 'negotiation' together, starting with the personal understanding that teachers had. Secondly, the course tutor explained the three types of negotiation to be focused on during oral interaction. Thirdly, he explained the concept of oracy by singling out teacher talk and explaining its potential in the negotiation of learning. Fourthly, they did activities based on examples from English, Geography, and Mathematics in which participants were expected to distinguish one negotiation type from the other. Extracts of interaction would be analysed to stimulate discussion on negotiation types that were evident.

During the preparation key concepts such as 'interaction', 'conversation', 'dialogue' and 'discourse' were explained to the in-service teachers. It was presumed that this type of intervention, augmented by close study of four modules, would enhance the teachers' ability to apply ideas about oracy more consciously and more effectively.

3.3.4.2 Procedures with study modules

In this section, procedures followed in presenting modules are briefly explained.

Intervention involved one face-to-face tutorial at the beginning of each module. During that interaction, ideas presented in the module were discussed together with guidance on how to tackle the tutor marked assignment. Thereafter, in-service teachers worked on the study material individually in their respective schools. They then tried the new ideas, and some of their lessons were recorded. In addition, they worked on tutor-marked assignments, thereby reinforcing theories about oracy. Field tutors took a similar approach with teacher-learners in Malawi. To shed light on the ideas to be acquired by participants, the content of the modules is summarised.

The title of the first module was *Learning From Traditional Education*. It drew on traditional story-telling techniques, games, proverbs, and riddles as used to teach children in traditional communities. The module presumed that discussion with teachers on how to use oracy skills had the potential of creating awareness about alternative ways that can be used to facilitate the negotiation of learning through talk, as well as promote a relaxed learning atmosphere. The potential for using oracy principles from traditional African practices, and the significance of a relaxed learning atmosphere are discussed in the literature review (cf. § 2.3). Some of the activities advocated in the module are role-play and simulation games transacted with teacher guidance as learners sit in a circle (Bancroft, 1972). The presumption is that that arrangement encourages face-to-face exchange and more spontaneous participation and initiative.

Module 2 (*An Introduction to the Teaching of Reading*) was concerned with ways of promoting reading skills. Printed materials for the different school subjects serve as sources of information that constitute the basis for purposeful interaction. Some key ideas which teachers were expected to learn were that

choice of texts and tasks arising therefrom, determines the extent to which learners are encouraged to talk. Cullen (1998) and Van den Branden (1997), observe that negotiation of learning is dependent on the content conveyed in reading texts. Teacher discourse input and learner output would, therefore, be strongly influenced by the content of a given text.

Module 3 (*Not Just Playing Around*) discussed the applicability of role-play and simulation in the teaching of different subjects. Underpinning these methods is the idea that through role-plays children are motivated to learn English, their second language, as well as the language of school subjects by building on and extending their knowledge and experience. As indicated in Tichapondwa (1997:7), "...the learner's communicative abilities are developed through their involvement in a range of meaningful, realistic and worthwhile tasks." The issue of learning a second language, while engaged in some content, has received support from Cleghorn *et al.* (1998) (cf. § 2.4).

Module 4 (*Varieties of Text*) exposed teachers to the concept of genre and examined oral and written forms of texts. The module introduces the argument that while certain ways of presenting texts from different school subjects may come automatically to the Geography, Mathematics or Biology teacher, students have difficulties understanding the specialist vocabulary. It is, therefore, necessary for teachers to authenticate such genres. Authenticating means making content more accessible and realistic by relating it to experience, and that takes place through the mediating effect of language. Thus, learners can respond more appropriately to knowledge if they see how it functions in context. In the literature review (cf. § 2.2.3) it was indicated that effectiveness of pedagogic discourse is context specific. Since, generally speaking, learners find difficulties understanding the specialist vocabulary of school subjects, it is argued (in the module) that teacher input should be consciously formulated to make learners see reason to communicate, and do so more effectively (cf. Malamah-Thomas, 1987).

The modules are influenced by applied linguistic ideas, including some from an unpublished paper by Mercer (1991), titled *Learning through talk* (prescribed reading for the course). The writer points out that the programme should not simply make teachers encourage more talk during classroom activities, but rather "encourage a better and more effective use of talk for learning". In addition to that, Mjanja (1995: 1) suggests that the teacher should regard herself as the equal of pupils in terms of being open to learn new ideas; lead children by consent; give corrections carefully, avoid ridicule; and include questions to which she genuinely does not know the answers. Mjanja's ideas were actually used in Module 1, and teachers were supposed to apply them.

These ideas vindicate what was discussed earlier (cf. § 2.5.3.3) on the matter of task negotiation in a relaxed atmosphere. The idea of teachers regarding themselves as the equal of pupils, and leading children by consent is attributed to many scholars, including Lozanov (1978). His suggestopedia theory specifies the requirements of an optimal learning environment, such as a relaxed teacher-pupil relationship and sensitivity to the learners' emotions. Closely linked with suggestopedia is Krashen's (1982:31) affective filter hypothesis. In that hypothesis, he argues that performers with high motivation; low anxiety; self confidence and a good self image tend to do better in second language acquisition, and presumably, in the negotiation of learning. This kind of thinking permeates the content of the Litraid study material.

Neil Mercer, who assisted with the structuring of the Litraid course, also served as its external assessor. His major contribution was in the area of group work, where the main focus was on peer-group interaction (cf. § 2.5.3.6). His influence is clearly evidenced in two oracy strategies, that is, role-plays and simulations, in which he stresses the importance of well-chosen tasks for more purposeful collaborative interaction. Louw (1995), one of the course team members, echoes Mercer's idea that teachers should set activities that help students use language

more effectively as a tool for solving problems rather than setting activities that focus on formal aspects of language only. A reminder is raised in Module 4, and derives from Widdowson (1979:117):

Students, and especially students in developing countries, who have received several years of formal English teaching, frequently remain deficient in the ability to actually use the language and to understand its use in normal communication whether spoken or written.

This pronouncement recognises a definite language gap in ESL teaching-learning contexts. It is a pointer to the problem statement (cf. § 1.2), and also confirms why the present study is justifiable (cf. § 1.3, which deals with the rationale).

The foregoing sections achieved three objectives. Firstly, preliminary discussion between tutors and in-service teachers was described as the first step of intervention. Secondly, the way the course material was used, was explained. A brief characterisation of each module was then given. Thirdly, and finally, Mercer's contribution to collaborative interaction was acknowledged. When teachers had participated in the discussion of ideas about oracy, the stage was set for interim testing.

3.3.5 Interim tests and posttests

In this section an explanation of lessons that form the database is given, and in the process the justification of lessons selected for analysis is offered.

Three lesson types were recorded for analysis for both groups. Type 1 was the lesson taught during the pre-intervention stage over a period of four weeks, and two lessons were recorded per participant. Type 2 was the lesson taught and recorded progressively after every module. Four lessons were recorded per participant. Type 3 was the lesson taught after the Litraid course examination

had been written. One lesson was recorded per teacher. The four lessons taught after every module constituted the interim tests. Four representative transcripts were analysed, and these are lessons by one teacher, namely English (T1). The ones after the examination constituted the posttest. Each teacher on the control group taught the same number of lessons as those taught by teachers on the experimental group. Altogether, the experimental group taught 42 lessons, while the control group taught 21. These lessons constitute the primary data for the study.

The main database (i.e. that in terms of which the hypotheses were tested) is made up of 22 lesson transcripts (nine before, four during, and nine after intervention). The pre-intervention lessons were the three taught by the control group, and the six by the target group, all being the first lesson taught in the project. The post-intervention lessons were the last lesson taught by all the nine teachers after the course had been completed. That means the first and the seventh lesson (one taught when all four modules had been completed) were selected, and these appear in Appendix A. Although the hypotheses needed to be tested in terms of the posttest results relative to the pretest ones, one further data item was included for supplementary discussion. This was a set of interim tests for one teacher (cf. Appendix D), which were also analysed to explore and illustrate possible changes in the discourse patterns that might be evident progressively as teachers engaged in the study of individual modules. The quantitative and qualitative analyses will be based on the 22 lessons. The duration of a full lesson is 40 minutes, but only 15 minutes of talking time was transcribed for every lesson. For each recording, I allowed the class to settle down for five minutes before recording the 15 minutes of interaction. This was to ensure uniformity when it comes to analysis.

3.4 Transcription and preparation for analysis

This section discusses procedures followed in transcribing lessons and explains how the research assistant was trained in order to assist with the analysis. Symbols that were used for transcription are described.

The procedure involved listening to the recorded lessons, and using transcription symbols to reduce classroom dialogue to written discourse. Lesson transcription is a well-acknowledged methodology in discourse research, as Heritage (1984:238) observes:

The use of recorded data is an essential corrective to the limitations of intuition and recollection. It permits other researchers to have direct access to the data about which claims are being made, thus making analysis subject to detailed public scrutiny and helping to minimise the influence of personal preconceptions or analytical biases.

For purposes of analysis the symbols explained below were used.

Silence is one of the commonest non-verbal features observed during classroom dialogue. A distinction is made between short and long silences. The short silence is a type of pause by either the teacher or learner before proceeding. It is usually brief, and for analytical purposes lasts two seconds or less and rarely interferes with the flow of discourse.

Long silences (over two seconds), on the part of learners, tend to have a noticeable influence on the flow of discourse. They could be either a sign of unwillingness to participate, or a lack of adequate linguistic resources to participate in the dialogue. The short silence is represented by three dots (...), and the long silence by six dots (.).

Another feature is what Sinclair and Coulthard (1975) call silent stress. Essentially, this is an instructional pause, and normally follows a question or an informative. Operationally, teachers use the silent stress to allow time for reflection, or underscoring a point. This paralinguistic feature will be represented by this notation symbol: - - - -. More often than not, the researcher comes across utterances that are inaudible, to the extent of not being clear enough for purposes of communication. The following symbol will be used: --- ---, Another commonly used symbol is one that shows that either explanatory information is given, or that translated utterances are enclosed. Brackets are used to show this. In typical classroom situations, there are also many times when teachers ask questions and expect choral responses. That means they leave gaps (a type of instructional pause) and expect learners to fill in as in this situation.

[2] T: Mozambique is the neighbouring country of ____ and
was ruled by the _____ before independence.

Learners are expected to shout out 'Zimbabwe' and 'Portuguese' respectively. The following are the symbols that summarise the foregoing explanation.

... short silence

..... long silence

- - - - instructional pause

--- --- omission of parts of discourse

() explanatory information, or translated utterances

_____ gap to be filled in a chorus

The symbols discussed above, in conjunction with the coding categories (cf. § 3.5.1), constitute the notation for analysis of discourse.

Attention now shifts to the analytical framework that was used to analyse the discourse of learning as it appears in the data of this study.

3.5 The analytical framework

This section is concerned with the analytical framework in terms of which the research questions are addressed and the hypotheses tested. A brief explanation of the measure used to quantify amounts of discourse - the F-unit - is given, followed by examples of how it was applied. The role of the research assistant is also spelt out. After that, coding categories preferred for the analysis will be fully explained and justified, in the process distinguishing the less from the more effective teacher and learner discourse. A selection of the more effective categories for both teachers and learners will be given separate attention as a way of preparing for their use in Chapter 4 where data will be analysed. Teacher discourse features will be examined in relation to teacher domination and effectiveness. As far as learner discourse is concerned, the more effective discourse will be examined in conjunction with the central issue of initiative. The applicability of the analytical framework will be illustrated with reference to an extract from one of the lessons. Briefly, an explanation of how hypotheses are tested is given.

3.5.1 Hypothesis testing

The testing of the three hypotheses will involve operationalisation of three constructs, namely, teacher dominance, teacher effectiveness and learner initiative (cf. § 3.6). Operationalisation of dominance will, among other things, involve quantification of discourse acts, whose length is measured in terms of F-units, and the comparison of proportions of teachers' as opposed to learners' discourse acts before and after intervention.

To operationalise effectiveness (H2), discourse acts considered to be effective as teacher input will be selected, based essentially on inferences drawn from previous research studies. These too will be analysed in pretest and posttest lessons for both control and experimental groups. Qualitative and more holistic

analysis of discourse as it unfolds will also be conducted in order to deepen the interpretation of the results.

Learner initiative (H3) is operationalised by identifying discourse acts that are associated with initiative. These will be used to analyse the discourse performance of learners taught by the experimental group teachers exposed to the Litraid course, and that of learners whose teachers were in the control group and did not benefit from the intervention. The findings will indicate in particular the extent to which learners from the experimental group show more evidence of initiative during post-intervention lessons compared to their performance in pre-intervention lessons.

3.5.2 Functional units and discourse acts

The discourse unit used to measure quantities of discourse in this study is the 'discourse act', which resembles the speech act (cf. Sinclair and Coulthard, 1975), but whose length is defined in terms of functional units (F-units). This latter measure, rather than the speech act, was found more appropriate for assessing the amount and quality of discourse produced by classroom interactants. Thus, for example, Sinclair and Coulthard (1975:48) classify the following part of an answering move by a learner as a single speech act, that is, a reply:

[3] He's rather free to – rather free in criticising somebody else yet he might not like to be criticised.

[4] He's rather free in criticising somebody else.

The speech act analysis would treat [3] and [4] as one act. An F-unit based analysis, on the other hand, would identify [3] as consisting of two discourse acts (both classified as clarifications in my analytical framework), the first being equivalent to [4] and the second to "yet he might not like to be criticised himself".

Thus in a system that sets out to assess the amount of discourse that a speaker produces, due recognition is given via F-unit analysis to the fact that [3] exemplifies more discourse production on the part of a learner than would [4].

Typically, functional units encompass clauses and non-clausal expressions that are functionally equivalent to clauses. The explanation of F-unit structures preferred for the present study derives from Lieber (as cited in Hubbard 1989: 119 –121). In the discussion of F-units here, a slash (/) marks an F-unit boundary. An important point to note about F-unit analysis is that the F-unit was originally applied only to written data, so there is a need to make some modifications in order to accommodate certain aspects of spoken interaction. The necessary modification is that whenever it is clear from the discourse that a new speech act is uttered, a new F-unit will be analysed, no matter how short as in [5]:

[5] T: Which is the best way to solve this problem? / Peter.

Though short, *Peter* serves the function of nominating somebody to give a response, so it is analysed as an F-unit.

In the present study, the F-unit was adopted based on the structures proposed by Hubbard (1989:119), who specifies the main divisions as those between “coordinate and subordinate F-units”. These will be explained, supported by invented examples of my own, starting with the four coordinate F-units:

- a. Full clauses joined by coordinating conjunctions or punctuation marks, as in:

[6] She couldn't sing / and the class laughed at her.

- b. Clauses exhibiting gapping in a non-initial member, as in:

[7] Netty described the triangle / and Nomsa the rectangle.

- c. Clauses containing conjoined verbal structures, as in:

[8] Girls speak good English / and communicate more clearly.

- d. Conjoined non-verbal elements within a clause, when an overt marker indicating a change in rhetorical function is present, as in:

[9] Arnold is a mathematician / and thus very accurate.

Subordinate F-units are as follows:

- a. Adverbial subordinate clauses and clause equivalents, as in:

[10] He uses the ruler / in order to draw a straight line.

[11] As the beaker heats / many reactions take place.

[12] He ploughs along the slope, / where erosion takes place.

- b. Non-restrictive relative clauses, sometimes contained within another clause (hence double slashes), as in:

[13] The teacher argues that osmosis, // which is a slow process // starts when there is water.

c. Non-restrictive appositives of the reduced relative type, as in:

[14] The teacher argues that osmosis, // a slow process // starts when there is water.

d. Non-restrictive appositives of exemplification, as in:

[15] This happens because of demobilisation, / i.e. the retrenchment of some soldiers.

e. Absolute constructions related to adverbial clauses, as in either:

[16] The villagers being poor, / they had no food.

or

[17] Sandra, / her dress torn, / shouted at the boy.

In the present study, which applies F-unit analysis to spoken discourse, it should also be noted that any appropriately meaningful speaking turn, no matter how short, should be analysed as being one F-unit long (cf. Hubbard, 1998).

I engaged a research assistant, a second year university student, studying linguistics as his first major to independently analyse a sample of the selected transcripts. We compared the results of segmentation, reconciled the F-units, and quantified them. The purpose of involving a research assistant was to ensure there was high internal reliability. Collaboration with the assistant enhanced the analysis and minimised the influence of personal preconceptions and analytical biases on my part.

3.5.3 Coding categories

In this section, the description and justification of the coding categories is given. This is mainly based on the work of Sinclair and Coulthard (1975), though as indicated above, the acts identified in my analysis were based on F-unit

measures and called discourse acts to distinguish them from speech acts, even though the two will often overlap. Examples of discourse from lesson transcripts will be cited to illustrate how the categories are applied.

Coding categories are pre-specified classifications of discourse units meant to ensure that the analyst is clear about how the discourse of teaching and learning can be segmented. As Love (1991) has observed, the system proposed by Sinclair and Coulthard (1975) requires further development at the level of the act in order to provide manageability in terms of its application. One of the modifications to the use of speech acts in my study is the preference for functional units as the basic unit of segmentation and measurement (as already explained).

Ideas from interaction analysts (e.g. Van Lier, 1988; Mercer, 1995) are also incorporated to add quality by focusing on the educational function of speech acts. What follows is a characterisation and justification of each category under two classifications, namely, those categories attributable to the teacher, and those attributable most typically to the learner.

3.5.3.1 Categories attributable to the teacher

The following broad categories of discourse act, in this study usually termed discourse acts (as segmented in terms of F-units), and their sub-categories, are discussed: directives, elicitations, informs, and the non-verbal category of silent stress.

a. Directives

Sinclair and Coulthard (1975:41) have indicated that on a functional level, directives request a non-linguistic response resulting in a physical action to show that one is listening, reading or writing. They are linguistically realised by imperatives, and are determined by the perceived status of the teacher. Two

subcategories have been identified for purposes of analysing transcripts in the present study, namely, requests and nominations.

i. Requests (r)

Two types of requests are taken into account. One is behaviour-oriented and the other is learning-oriented. In either case requests are realised through questions and orders. Directive questions are realised through the use of modals *could*, *can*, *would*, etc. Behaviour-oriented requests require that learners demonstrate certain behaviour, as in this example where the request is in the form of a question:

[18] T: Before working in pairs, / can you please open your textbooks / on page 52?

In this instance the question directs learners to perform the act without giving any verbal response. Other common examples are manifested through imperatives where the teacher commands without politeness markers, for example:

[19] T: Stop what you are doing / and pay attention

Learning-oriented requests, on the other hand, allow for verbal responses. Typical examples are when the interlocutor is requested to read something, explain a point, replace one language item with another, or say something. Love (1991:198) observes that “learning-oriented orders indicate cognitive processing which suggests ongoing intellectual activity”. Thus, either behaviour-oriented or learning-oriented requests are unmistakably identifiable by the purpose they serve, namely, asking somebody to do or say something.

ii. Nominations (n)

In Sinclair and Coulthard’s system, nomination refers to the act of giving learners permission to talk. It is realised through linguistic features such as: *yes*, *you*,

anybody, Peter. Its function is to allocate a turn to the learner. This is the sense in which the category of nomination will be used when conducting discourse analysis in the present study. Nomination should not be confused with those situations when teachers name somebody to control behaviour. That will be an order, as in:

[20] Peter ... / sit down

Learning-oriented nominations systematically give participants turns to speak. When learners become aware of the pattern of nomination used, they get prepared to take initiative in the dialogue. According to Van Lier (1988), nomination could also take the form of signalling by pointing a finger or use of some other postural orientation.

b. Elicitations

Many different classroom acts are realised through elicitions, a broad category that includes different question types. Sinclair and Coulthard (1975:33-35) indicate several subcategories. In the present context elicitation will be used as a general term at a higher level of the act category. Sinclair and Coulthard refer to two different types of teacher elicitions, namely, real questions and test questions. These serve learning and management functions. The following seven sub-categories are identifiable: polar questions, question tags, display questions, checks, loops, referential questions and clarification requests. These are explained below.

i. Polar questions (pq)

This is an elicitation item that simply requires yes/no answers relating to the content around which dialogue takes place, as in:

[21] T: Does length times width give us the area of a triangle?

A polar question is different from a check elicitation, essentially a management question which helps the teacher organise lesson procedures as explained in (iv) below. The polar question has limited potential to stimulate learner initiative since learners are merely required to say either *yes* or *no* without being obliged to say anything further.

ii. Question tags (qt)

The question tag is normally attached to an informative, and its most apparent function is that of involving learners to be more attentive to the teacher's informs (Sinclair and Coulthard, 1975), as in:

[22] T: 8 multiplied by 4 equals 32 / Isn't it?

The learner's response is merely to agree with the teacher, so there is little contribution to the discourse.

iii. Display questions (dq)

This is an interrogative asked with an answer in mind in order to test knowledge. Sinclair and Coulthard (1975) refer to this as a test question, and argue that the potential responses are considerably more limited compared to those arising from real questions. Although the interlocutor answers in more words than happens in polar questions or question tags, the linguistic output is expected to do no more than replay language memorised from previous transactions, as in:

[23] T: What did I say are the causes of poverty in developing countries?

As will be noticed in the transcripts, there are cases when a display question is characterised by a request to fill in a gap, as in:

[24] Here we need to calculate the ___?

Learners are supposed to supply the word *area*. At times confusion arises when a decision has to be made whether an elicitation is a display or referential question, as in this example:

[25] What do you call a person who buys from a shop?

Three or more possible answers come to mind: *customer*, *client* or *patron*. For the present study this will be regarded as a display question because the teacher has alternative answers in mind.

iv. Checks (ch)

Basically, a pedagogic check is realised through polar interrogatives. It serves a management function by ensuring that interlocutors can see or hear properly, and establishes whether participants are ready, have finished, or are experiencing any problems. Check interrogatives are genuine questions to which the teacher might not know the answer. It is only after clearing possible difficulties that the transaction can progress unimpeded. Like the polar question, a yes / no response is expected, as in:

[26] T: Have we all finished reading?

In the hands of a teacher whose awareness of language has been enhanced, checks can clear the way for initiative and use of more purposeful discourse.

v. Loops (l)

According to Sinclair and Coulthard (1975) a loop is recognised through the use of expressions like *pardon*, *come again*, *I beg yours* or *What did you say?* Its function is to return the discourse to the stage where it was before the learner spoke. The loop clears the way for unimpeded dialogue to take place. It is, therefore, closely linked with negotiation of meaning.

vi. Referential questions (rq)

A referential question is an interrogative that is formally distinguished from display questions in that the teacher does not have specific answers in mind (Van Lier, 1988). Sinclair and Coulthard refer to referential questions as 'real questions', and these are usually followed by instructional pauses to allow time to think. Secondly, one cannot predict the language likely to be used to respond to a referential question such as:

[27] T: Why do you regard lack of education as a cause of poverty? - - - -

This is different from a display question in three specific ways. It solicits appropriate content from the addressee's experience, not the teacher's. Secondly, the choice of language is not constrained. Thirdly, the length of the turn is likely to be more extended than one based on a question requiring the learner to merely list some items.

vii. clarification requests (cr)

A clarification request is usually in the form of a question. The interlocutor expresses non-comprehension and makes the learner clarify his or her position. According to Van Lier (1988), the use of clarification requests encourages learner initiative by engaging the learner in extended discourse, thus promoting original discourse, for example:

[28] What do you mean / when you say life is cheap in rural areas?

Clarification requests are also realised through non-comprehension signals in response to a previous speaker's utterance. Some of the examples are: *Meaning...?*, *So...?* or *Why do you say that?*

c. Informs

As the name implies, the function of informs is to inform. Sinclair and Coulthard (1975) acknowledge that teacher informs traditionally constitute the bulk of classroom discourse because the teacher's role has been considered to be the transmission of information. Some informs have the potential to stimulate initiative, while others achieve the exact opposite. Thirteen sub-categories have been identified (informatives, markers, extensions, exemplifications, metastatements, evaluations, prompts, accepts, starters, clues, cues, conclusions, and threats) regarding teacher discourse. Each one is explained separately as follows:

i. informatives (i)

Typically, an informative focuses learner attention on the content and objectives of a transaction by giving information (Sinclair and Coulthard, 1975). It should not be confused with a metastatement, which informs learners about the lesson structure. Here is an example of an informative:

[29] T: This is how you do it. / Whole numbers must be multiplied first

The discourse acts give topic-oriented information, which the learner will use to work on subsequent tasks.

ii. Markers (m)

Sometimes informatives are preceded by more general topic organisers, which act as focusing moves (in Sinclair and Coulthard's terms) during classroom transactions. Such organisers are referred to as markers e.g.

[30] T: Now - - - - after our discussion of the causes, / we examine ways of preventing soil erosion.

The framing move *now* is distinct from the focusing move. The marker is a speech act realised by items like *well, good, right, OK*, etc. It is normally followed by a short pause, and its function is to mark boundaries in the discourse.

Sinclair and Coulthard (1975:43-44) include a number of informs under the broader term of 'comment' whose function is to exemplify, expand, or provide additional information. However, as Love (1991) puts it, the speech acts which constitute comment-type informing moves are significant enough in both functional and linguistic terms to warrant separate categorisation, and include extensions and exemplification.

iii. Extensions (ext)

Extensions are a common speech act in the discourse of teachers and learners. They are primarily used to provide additional information, and one can provide additional information to what one has said. This could be additional discourse to an initiation, clarification or evaluation while remaining within the same topic sphere. The following is an example of extension to a clarification.

[31] S: Do not leave a job (clar) thinking there are many jobs to choose from. (clar) You can fail to get another one. (ext)

In the example, the last discourse act is an extension. The next example shows an extension which follows an informative.

[32] S: There is another site, (i) the space behind the garage (ext)

The second act is an extension of the first, which marks semantic extension where original meaning is further extended. As teacher input, extensions clarify content, and prepare learners for enhanced involvement. On the other hand teacher extensions can have a negative effect on learner discourse especially when the teacher extends whatever he says without allowing learners to do so

themselves. The more positive side of extensions is when learners extend their points of view. This would show active involvement in the dialogue, and can be evidence of initiative.

iv. Exemplifications (exe)

Exemplification is a comment-type inform distinguishable by the inclusion of examples that clarify the topic further. In many cases the use of discourse markers such as *for example*, *for instance*, *as in*, etc. are used after an informative, for example:

[33] T: There are different causes of soil erosion, / for example, erosion by wind / and erosion by run-off water.

When they follow teacher-initiated questions, exemplifications encourage participant initiative, for it is when learners draw on their experiences that they originate more personal and extended discourse.

v. Metastatements (ms)

According to Sinclair and Coulthard (1975) a metastatement is a speech act that informs learners about the lesson structure and enables them to understand the purpose of subsequent information. A metastatement also enhances a sense of direction regarding lesson progression as illustrated in this example:

[34] T: In today's lesson... / we are going to read the poem silently. /After that we read it aloud.../ then I will ask you to answer questions in groups./

The above move comprises discourse acts distinguished by a time adverbial referring to the ordering of activities. The verb is usually expressed in the future tense, and that prepares learners for active participation in the planned learning events.

vi. Evaluations (ev)

One inform identified by Sinclair and Coulthard (1975) is the evaluation. This speech act is closely related to the learning process, and presents the cognitive status of the teacher's inform. It is realised by the use of the demonstrative pronoun to refer to prior or subsequent information, using the present tense as illustrated in this extract.

[35] T: That is a very important point

There is often an overlap between an evaluation and the act referred to as the 'accept'(see viii) below. An evaluation makes a value judgment of a given response while an accept simply accepts or acknowledges the appropriateness of a response. There are many acts that can be categorised as examples of evaluation (e.g. *A good explanation, Your answers are correct, You were not listening*). The act serves as positive feedback that encourages learner initiative when responding to teacher-initiated questions.

vii. Prompts (p)

These are "precisely bounded discrete units" (Van Lier, 1988:101) quite distinct from evaluation speech acts. While an evaluation gives feedback on the value of a response, the prompt pushes the learner to say more about the content, as in this example:

[36] T: ...Go on

The acts are supportive of the learner's effort to communicate and build his confidence to speak on. Sinclair and Coulthard (1975) identify discourse acts that characterise prompts, and some of these are: *go on, come on, don't give up*, etc. Prompts reinforce responses and can also be used when there are repeated lapses of silence in the course of a transaction. Paralinguistic signals such as

nodding can also be used to signify that the speaker is talking sense and should continue with his/her turn.

viii. Accepts (acc)

One discourse act that is subsumed in Sinclair and Coulthard's evaluation inform is the accept. It is distinguished by its function to accept what an interlocutor has said. Procedurally, it is preceded by a learner's response to a question. Thus, it is feedback characterised by short formulaic utterances such as: *good, correct, next, absolutely, etc.* When the teacher accepts a given response he/she acts as a sounding board for learner language, and the reassurance given will spur learners on.

ix. Starters (s)

This is a subcategory in Sinclair and Coulthard's inform act. In a typical starter, the teacher directs learner attention to an area of study. Its function is to make a correct response more likely, for example:

[37] T: Find the answer in paragraph 3.

x. Clues (cl)

The clue usually follows an elicitation to which no reply is forthcoming. It provides additional information, which helps the pupil give a response in appropriate discourse. An addresser might signify a clue thus:

[38] T: Why do trees not have leaves in Winter? / Think about rainfall- - -

The second part of this move typifies a clue, an act that is often followed by a pause to allow time to plan the most suitable discourse.

xi. Cues (cu)

In a cue, the speaker gives a few words as a signal for somebody to do or say something. Examples of utterances characteristic of the cue are: *don't shout out answers, hands up first before you answer, say something...don't just look at me. Is Themba the only one?* Its function is to evoke an appropriate bid as well as to ensure discourse transactions take place in an orderly fashion.

xii. Conclusions (conc)

A conclusion is realised by a statement that summarises what the previous stretch of discourse was all about. It is recognised by words at the start of a statement, e.g. *to sum up, so, to wind up*, etc. It is the converse of metastatement in that its function is to show learners what was negotiated. No discourse is expected after a concluding remark.

xiii. Threats (thr)

Threats tend to be common across classrooms, and are realised by expressions of one's intention to punish if learners do not behave as expected. Here are common expressions used by teachers.

[39] T: Say something / or I'll send you out

[40] Delayed break / if you fail to finish writing

Threats tend to have a negative influence on a learner's willingness to contribute to classroom discourse. Their function in developing discourse competence, if any, is limited. Besides, threats make the learning atmosphere unrelaxed.

Silent Stress (ss)

This is a paralinguistic discourse feature realised by a pause following an elicitation or a marker. One of its functions is to indicate a transaction boundary, as in:

[41] T: Right - - - / let's start the discussion.

When it follows an elicitation, it avails learners an opportunity to reflect before contributing to the discourse, as in:

[42] T: How do fish breathe in water? - - - -

To sum up, the following teacher categories have been identified as those with greater potential for stimulating initiative and purposeful discourse among learners: clarification requests (cr), evaluations (ev), referential questions (rq), prompts (p) and clues (cl). These will be applied in Chapter 4 to determine the effectiveness of teacher discourse at the pre-intervention and post-intervention stages of the study.

Code-switching

A common discourse feature identified during interaction is the 'codeswitch'. Basically, it is realised when the interlocutor's first language is introduced into the discourse of the target language, English, in our case. A codeswitch is not a discourse act category as such, but can fall into any of the foregoing categories. In [43] it serves as an informative:

[43] T: Calculate the circumference of a circle. / Circumference means
denderedzwa riya ramunoziva (That familiar shape you already
know)

Teachers were also observed to use codeswitches to threaten non-participating learners in language they relate to more emotionally than English would, as in:

[44] T: *Vamwe venyu muchafaira./ Imhaka yenyu* (Some of you are going to fail/ It's your fault)

Teachers also tend to use codeswitches at the conclusion of a lesson or some other part of the transaction to find out whether learners have any questions, or have understood the content. In that case, it is used as an elicitation to check learners' progress:

[45] T: *Pane ane mubvunzo here?* (Anyone with a question?)

Codeswitches serve different functions, some positive and others negative. They have an important role to play in developing discourse competence, as well as in shedding light on classroom discourse situations where both the teacher and learners are non-native speakers of English. Codeswitches are an overlay on the existing act categorisation.

In the foregoing section I explained coding categories pertaining to teacher input, and that was mainly on the basis of Sinclair and Coulthard's (1975) model and ideas from Van Lier (1988). The latter re-examined the system proposed by his predecessors within the context of turn-taking and initiative. The description of each category was followed with an indication of its potential for effectiveness in the conduct of discourse. In the next section, attention shifts to analytical categories pertaining to learners.

3.5.3.2 Categories attributable to learners

Learner categories fall under the broader category of replies, which are referred to as informs in my study. This is because learner discourse informs in reply to the teacher as well as to peers. The discussion of learner discourse is also based

largely on Sinclair and Coulthard's (1975) speech act categories as applied to classroom discourse. The discourse acts identified in the utterances of learners are, nevertheless, in this study integrated with aspects of Van Lier's (1988) views about turn-taking, especially with reference to the issue of initiative.

To recapitulate, initiative, the voluntary participation in classroom discourse, is regarded as primary evidence of effective teacher input (cf. § 2.5.2.6). As Van Lier (1988: 109) has observed, initiative is manifested in the interplay between prospective and retrospective turns. The former refers to the way a turn is linked to subsequent turns. As an example, teacher elicitation are said to be prospective in the sense that they influence learner replies. In turn, retrospective turns are those linked to previous turns. In that case, learner replies would be retrospective. Essentially, therefore, as the discourse of learning can be measured in terms of numbers and types of discourse acts, as well as aspects of turn-taking, the extent to which initiative takes place can be determined.

In addition to retrospective and prospective turn-taking as evidence of initiative, Van Lier (1988:123) says, "topic control and management are important manifestations of initiative". That means that where the discourse shows that the learner contributes to the flow of interaction that would be evidence of initiative. Similarly, when the learner manages the topic through self-selection it shows active involvement.

Self-selection occurs when the preceding speaker has given up a turn or the contribution needs some improvement. The learner does not wait for the teacher to allocate a turn. In other words, self-selection adds to naturalness of the discourse and alleviates the predictability that can interfere with more effective classroom discourse. Self-selection is an example of what Mercer (1995:104) calls exploratory talk in which partners engage critically but constructively. Typically, self-selections occur in conjunction with bids.

A bid is realised by verbal as well as non-verbal items such as *me teacher...*, *sir...*, *miss...* or a raised hand and clicking fingers. According to Sinclair and Coulthard (1975) the function of a bid is to signify a desire to participate in the discourse. A class characterised by enthusiastic bidding shows learner willingness to take initiative in the dialogue. The teacher with well-developed language awareness will capitalise on such enthusiasm to improve learner discourse output.

Neither self-selection nor bid is part of the discourse act framework, but are added in as far as they combine with discourse acts. This is reflected in Tables 10 and 11. To be sure that the learner was not selected by the teacher's gaze, for example, only turns in which the learner was heard to take over from a fellow learner without waiting for a teacher allocated turn, will be treated as self-selection. Similarly, the bid is also not easy to identify in audio-recorded lessons. However, when clicking of fingers or expressions such as *me teacher* could be heard, they were categorised as instances of bids.

Informs

As already pointed out, learner responses will be referred to as informs in my study, and these are the equivalent of Sinclair and Coulthard's (1975) replies. These scholars base their coding of learner utterances on replies, which are appropriate responses to elicitation. The scholars divide learner replies into two categories, namely, minimum responses that match test questions, and wide-ranging replies that match real questions. Four types of inform are identified for coding purposes in my study, bearing in mind that the inform relates directly to a preceding elicit. The following are some of its sub-categories.

i. Minimum responses (mr)

This is realised in two ways (Van Lier, 1988:92). Firstly, by a class of small linguistic items in response to question tags or polar questions, and takes the

form of agreement with the teacher through vocalisations (*mmh...*, *ummm...*, *uhu...*). To borrow Hubbard's (1998:662) explanation this type of minimum response is "no more than vocalisations" which provide bare minimum information in response. Yes/no replies are also examples of minimum responses in answer to polar questions, tag questions or check questions, as in:

[46] T: Are we together?

SS: yes

Secondly, minimum responses are identifiable when learners respond to test or display questions, as in:

[47] T: How many weeks do we have in a year?

S: Fifty two weeks.

The response is mere regurgitation of content, showing no initiative on the part of the learner.

ii. Clarifications (clar).

This is a type of reply that is retrospective. It is output that follows a request for further information, or elucidation of a point made previously (Van Lier, 1988), as in:

[48] T: So?...

S: So ... wood burns / When it burns there is carbon monoxide, /
which is poisonous / when you breathe it in

A clarification is a reply to a non-comprehension signal coming from either the teacher or from fellow learners. Clarifying a point shows active learner involvement in which extended discourse is originated.

iii. Counter-informs (cinf)

This is a linguistic feature used by the respondent to dispute a proposition. Typically, a counter-inform is retrospective and is a reflection of learner initiative, and manifests personal involvement in the interaction. Counter-informs result in active origination and pursuit of discourse during which the speaker expresses various points around a problem (Van Lier, 1988). Crombie (1985) and Hubbard (1998) concur that a counter-inform challenges or presents an alternative to a previous utterance as illustrated in this extract:

[49] T: Therefore many people flock to towns/ because rural areas are
underdeveloped

S: Not in every case/ ma'am. /There are other reasons. / Some
people are lazy.../ don't want to work on the land

The move by S retrospectively articulates a divergent but original view, which adds a novel dimension to the topic under negotiation. If the teacher's prospective turn was meant to conclude the discussion as indicated by the word 'therefore', the learner's contribution is surprising by the way it presents an alternative summing up. The counter-inform reflects very considerable initiative, given that it is evaluative, original, and introduces a new dimension, which the teacher did not predict.

Avoidance (av)

Van Lier (1988:113) observes that a turn is allocated when its speaker has been specifically given the obligation to speak. However, there are times when the speaker does not take up the turn. Instead, he / she remains silent, and one of the reasons for the silence is the lack of appropriate language to contribute to the dialogue and manage the topic. This is recognised by a silence of two or more seconds. I shall refer to this as avoidance. This non-verbal category can be collective, for example, when a response is expected from the whole class but is

not forthcoming. The following is an example of avoidance, where learners remain silent after a question has been asked.

[50] T: What is the difference between osmosis and diffusion? - - - -

/Anyone?

SS:.....

Silence stalls the flow of dialogue and can be a cause of embarrassment to the inexperienced teacher. Some teachers eventually answer their own questions, or threaten learners with some form of punishment, a practice that stifles initiative. Avoidance was very common in the lesson transcripts, and for that reason I raised it as a non-verbal category that can easily be coded.

Hesitations (hes)

Sinclair and Coulthard (1975) refer to hesitation as uncertainty about what to say or do following an elicitation. It is realised by a small class of discourse acts recognised as expressions of hesitation *-umm-ah...*, *eh- eh*, *er-er* etc. Hesitations are usually manifested when the pupil attempts a reply, but is uncertain what content or words to use. Expressions of hesitation could be followed by short silence. In some cases hesitation allows the learner time to reflect before making a contribution to the discourse. It is also when the learner shows uncertainty that the teacher comes in with a clue to encourage output. In short, the measurement of initiative will be based on selected categories from those identified above, namely the discourse act categories of clarification, counter-inform, and extension, and the two turn-based categories of self-select and bid.

Symbols are assigned to each coding category for ease of reference as follows:

Label	Symbol
Directives	
Requests	R
Clarification request	Cr
Nomination	N
Elicitations	
Polar questions	Pq
Question tag	qt
Display question	dq
Check	ch
Loop	l
Referential question	rq
Informs	
Informatives	i
Marker	m
Extension	ext
Exemplification	exe
Metastatement	ms
Evaluation	ev
Prompt	p
Accept	acc
Clue	cl
Starter	s
Cue	cu
Conclusion	conc
Threat	thr
Silent stress	ss
Minimum response	mr
Clarification	clar
Counter-inform	cinf
Avoidance	av
Hesitation	hes

3.5.3.3 Application of coding categories

I now illustrate application of the categories by analysing an extract from a Geography lesson. This illustrates how data analysis will be conducted (using discourse acts) in order to arrive at the findings discussed in Chapter 4.

Exchange type	Initiation	Act	Response	Act	Feedback	Act
Boundary	1. Today we are going to learn about evaporation	ms				
	2. We shall come across new words you should learn	ms				
	3. OK	m				
Tr elicit	4. On a hot day like this what happens to water when you put it outside in a dish?	dq				
	-----	ss				
	5. Yes Mapodi	n	6. umm ...	hes		
	8. Butter melt not water	ev	7. it melt	mr		
Ppl respon s	9. So ?...	cr	10. Disappear think	I clar	11. There is a better word	cl
Tr. reini tiation	12. Come on...try	p	13. Is it evaporate?	mr	14. Quite correct	ss acc

	15. Now... Can you suggest more examples of evaporation?	m dq	16. When you hang clothes on the line...	mr		
	17. What about them?	cr	18. Wet clothes get dry which means water evaporate	ext	19. Good example	ev
	20. Some more ----	p ss				
	21. Anybody?	n	22.....	av		
Tr code switch	23. <i>Taurai</i> (Talk)	r	24. The water in the river is empty	mr	25. Do you mean the river is getting dry?	pq
Tr elicit	25. Explain what you mean	cr	26. S1: The river is dry	clar		
			27. S2: Water melt	clar	29. Great	acc
			28. S3: No ah...water evaporate	cinf /ssel		
	30. Now... what evaporation? ----	m/ rq ss	31. SS.....	av		
Tr	32. Try don't be	p			34. That's to the point	ev

prompt	afraid		<p>33.um...er evaporation takes place when it is hot.</p> <p>Clothes dry and rivers lose water .</p>	ext	<p>35. So, it has to be hot and there must be wind for evaporation to take place</p>	ext
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The foregoing analysis illustrates the applicability of some aspects of my adaptation of Sinclair and Coulthard's (1975) model. There is a total of 47 discourse acts, and of these, 29 (62%) arise from the teacher, while 18 (38%) come from learners. This computation demonstrates how coding categories can be applied in a relatively objective manner to compare quantities of discourse.

The quantities can also be interpreted qualitatively. For example, the pupil hesitates before giving the reply, *it melt* which happens to be an inappropriate minimum response. Another pupil initiates a response focusing on the vocabulary item. This initiation: *Butter melt... not water* is a counter-inform to the register *melt*. Without disturbing the smooth flow of the dialogue, the teacher prompts the learner with *so...* which re-initiates the exchange. The clarification: *disappear* shows the continuous involvement of learners as they take an active part in the negotiation. Without discouraging the learner, the teacher uses a clarification request as a reminder that there is a better word. This is followed by silent stress (instructional pause), and that avails learners the opportunity to retrieve the most suitable word. Despite that, there is a long silence. Realising this, the teacher expresses encouragement, *Come on, try*, and that leads to an answer: *Is it evaporate?* This is not a question as it appears, but an informative reply. The teacher accepts it as correct. Up to that point, negotiation of form seems to have

taken place successfully, and that can be interpreted as evidence of effective discourse.

By looking at the proportion of teacher to learner discourse acts, it will be clear that the teacher's is much higher. This information could be used to test the hypothesis of dominance, but at the same time when we look at the way turns are taken, and the function of discourse acts, we are also able to test the hypotheses dealing with discourse effectiveness and learner initiative. Clearly, the teacher follows his prospective turn [4], a display question, with silent stress, and clarification requests e.g. [9] and [17]. He also makes use of prompts e.g. [12] and [32]. All these have the potential to stimulate initiative. In reply, learners extend the dialogue in more personalised language e.g. [18] and [26]. Further, they also show initiative when learners take turns by self-selecting, as in [27] and [28]. This brief analysis shows how Van Lier's (1988) classifications can be integrated with those proposed by Sinclair and Coulthard (1975) in order to test hypotheses.

The marker and the elicitation, *now, suggest more examples of evaporation* take the discourse a step further. To show their understanding of the term 'evaporation', personal examples are supplied, thus suggesting appropriate content in language that the teacher could not predict. The illustration of 'evaporation', therefore, is evidence of negotiation of learning at two levels, namely, negotiation of meaning and content. The invitation to suggest more examples, makes learners contribute more freely and in comparatively longer stretches of discourse. The teacher achieves this through brief clarification seeking elicits, silent stress and acceptance of what is said. The codeswitch, *Taurai* (Talk), serves a similar purpose of encouraging participation. After it, the interaction moves forward more swiftly, with interlocutors shifting roles to negotiate at all three levels objectified in the study. The learner who had not quite internalised the meaning of 'evaporate' realises an error in her contribution, and self-corrects. Another learner self-selects without waiting for turn allocation. This

convergence of purpose between the two interactants represents the effectiveness of language when it is more consciously handled. Evidence of conscious selection of discourse does not only lead to extended discourse, but also promotes initiative, as evidenced in learner self-selection.

In this section, the coding categories constituting the core instrument for discourse analysis were clarified. Without them research findings can only be a matter for guesswork and would lack validity and reliability. It was also demonstrated that speech acts can be analysed quantitatively, in terms of the F-unit based notion of discourse acts. Thus, counting the discourse acts gives a broad indication of the degree of teacher dominance and pupil participation. Where the level of participation is high, the proportion of teacher-initiated discourse is expected to be lower than that of learners.

One modification made to Sinclair and Coulthard's (1975) model is the addition of other coding categories considered appropriate for the present study. The adaptation and integration of Sinclair and Coulthard's (1975) model with ideas from other discourse analysts has resulted in an analytical framework useful in determining the effects of teacher input on the modified discourse output of learners. Application of the framework demonstrated that the coding categories are discrete linguistic entities.

3.6 Operationalising the hypotheses

This final main section operationalises the three hypotheses in some detail, an issue introduced earlier (cf. § 3.5.1). Each hypothesis will be restated, defined operationally, and discussed from the quantitative and qualitative points of view. The analytical categories, already discussed in previous sections, will be further justified. The views expressed by earlier researchers (cf. Chapter 2) will also be taken into account.

3.6.1 Hypothesis 1

The hypothesis states that:

Teachers who participate in the course on classroom text and discourse will dominate discourse less than teachers who do not participate in the course.

The main construct operationalised here is teacher dominance. This is tested quantitatively using statistical tests. Quantitative measurement of dominance involves comparison of frequencies of discourse acts by both the teacher and the learners in a given interactional episode. It is presumed that a higher proportion of teacher acts reflects a low level of learner participation (cf. §3.6.3 for the operationalisation of participation). The converse of dominance is a lower rate of participation by learner.

Teacher dominance has preoccupied discourse analysis research from as early as the 1960s when researchers (e.g. Barnes *et al.* 1969) investigated the discourse of teachers and learners when interaction takes place. Cullen (1998) comments that during the early days of research into classroom interaction, good teacher talk meant little teacher talk since it was thought that too much teacher talking time deprived learners of opportunities to speak. This is still an issue today. However, while the question of how much teachers talk is still important, emphasis is also placed on how effectively they are able to facilitate learning and to promote communicative interaction. A good reason for this shift is that teacher talk is recognised as a potentially valuable source of comprehensible input (cf. Krashen, 1981).

3.6.2 Hypothesis 2

The hypothesis states that:

Teachers who participate in the course on classroom text and discourse will be more effective in that they make better use of discourse to promote the negotiation of learning than teachers who do not participate in the course.

The construct 'effectiveness' is operationalised quantitatively in terms of the proportion of specific discourse acts: clarification requests, referential questions, prompts, clues, and evaluations. Qualitative operationalisation will involve interpreting the effect of discourse acts on negotiation of learning. Clarification requests encourage learners to expand on their informs in original language. Similarly, because the teacher asks referential questions without a particular answer in mind, and because such questions are open-ended, learners generate more original discourse. Evidence of such language is also reflected when learners are given clues and prompted to speak on. These acts depend for their effectiveness on a clear awareness of how best to allocate turns (cf. Van Lier, 1988 for an explanation of allocating turns to good effect).

Chaudron (1990) argues that effective interaction hinges on scaffolding, the provision through conversation of linguistic structures that promote understanding (cf. § 2.5.3.1). It is in this respect that effectiveness is perceived in the negotiation of learning. The understanding of content, the meaning constructed from guidance by the teacher and the use of formal aspects of language (e.g. relevant register for a given topic) will depend on the conscious choice of language to achieve learning goals. By definition, therefore, effectiveness refers to specific manipulations of language to create more productive learner responses.

3.6.3 Hypothesis 3

The hypothesis states that:

Learners taught by teachers who participate in the course on classroom text and discourse will show more initiative than those taught by teachers who do not participate in the course.

The construct of 'initiative' will be discussed in conjunction with 'participation'. Initiative refers to the learner's motivation to take part in classroom dialogue

without coercion. It is operationalised quantitatively in terms of the proportion of specific learner discourse acts (clarifications, counter-informs and extensions) and turn-taking acts (self-selects and bids), while participation will be operationalised in terms of the number of all discourse and turn-taking acts performed by learners (i.e. the converse of teacher dominance). The rate of contribution is measured by tallying the frequency of turns taken by individuals, and high and low rates become clear when a count is made of discourse acts.

Qualitative operationalisation will involve interpreting the effect of these acts on negotiation of learning either when the teacher stands before the class or when learners interact in groups. Both initiative and participation are closely dependent on how turns are allocated, as explained earlier (cf.§2.5.2.4). Van Lier (1988) clarifies the more from the less productive ways of allocating turns.

3.7 Conclusion

The present chapter demonstrated how the discourse analysis model can be applied to shed light on the educational benefits of oracy. The research design, procedures and stages of intervention followed when testing the hypotheses were explained. The methods that were followed in the process were clarified in conjunction with the concepts of validity and reliability. The ideas used to prepare teachers for a more informed approach to classroom discourse were also discussed. This was followed by a clarification of the background from which participants were drawn. The advantages of purposive sampling were then explained in light of the geographical location of participants, and the limitations encountered. I then described the systematic ways followed in contacting participants. Among the procedures were the briefing, and the grand tour, during which mutual agreement about time-tabling and related matters was reached. The analytical framework was then described and the last section operationalised the three hypotheses. In the next chapter the analytical framework will be applied in the analysis of data.

CHAPTER 4

RESEARCH FINDINGS

4.0 Preview

Although the two central research questions of the study inform both this chapter and the previous one, it could be said that in Chapter 3, where the analytical framework was presented and the key constructs of dominance, effectiveness and initiative operationalised, there was somewhat stronger focus on the second research question: How can the quality of classroom discourse be assessed in a relatively systematic and objective manner? The present chapter, on the other hand, is more concerned with the first main research question, namely: What are the effects of the course about classroom text and discourse on oracy in the high school classroom?

The chapter is structured around the three hypotheses following the research procedures detailed earlier (cf. § 3.3). The pretests, interim tests and posttests, key events in the procedures, are the basis for the testing using lesson transcripts as the main source of data. The first research aim (cf. § 1.5) is to establish the extent to which teachers who are exposed to ideas about classroom talk use language more effectively to encourage learner participation in the negotiation of learning. This is based on the assumption that teachers lack some of the skills before they are exposed to the intervention programme. The first step was, therefore, to establish the prevailing patterns of interaction. This was done by soliciting views about the language skills valued most by both teachers and learners (listening, talking, reading, or writing). Views about the most preferred negotiation type (content, meaning, or form) were also solicited at the pre-intervention and post-intervention stages. It was felt that these views would reveal the attitude held about language and negotiation type preferred most, and this could have some influence on discourse performance. Bearing that in mind, patterns of interaction were established by analysing pre-intervention lessons,

and comparing the discourse performance of the control and experimental groups to determine whether there was initial equivalence in the discourse patterns of the two groups. Reference will be made to lesson transcripts (Appendix A), tables (Appendix B) and statistical results (Appendix E).

The analyses will serve as the foundation of the most important objective of this chapter, namely, testing the hypotheses. Hypothesis 1 suggests a claim about dominance. Hypothesis 2 is about effectiveness, and Hypothesis 3 about initiative. They are to be tested primarily by comparing discourse performance before and after intervention. Teacher dominance will be tested by comparing the total quantities of discourse acts produced by teachers with those produced by learners at pre-intervention and post-intervention stages. Teacher effectiveness, on the other hand, will be tested by comparing the proportion of a selection of suggested effective teacher discourse acts relative to all other acts they use.

Learner initiative will be tested by examining the proportion of a selection of learner discourse acts, and turn-taking features (self-selections and bids) relative to all other acts in a given lesson transcript. The last part of the chapter synthesises the findings of the three hypotheses by showing how dominance, effectiveness and initiative are related in real time interaction in the classroom.

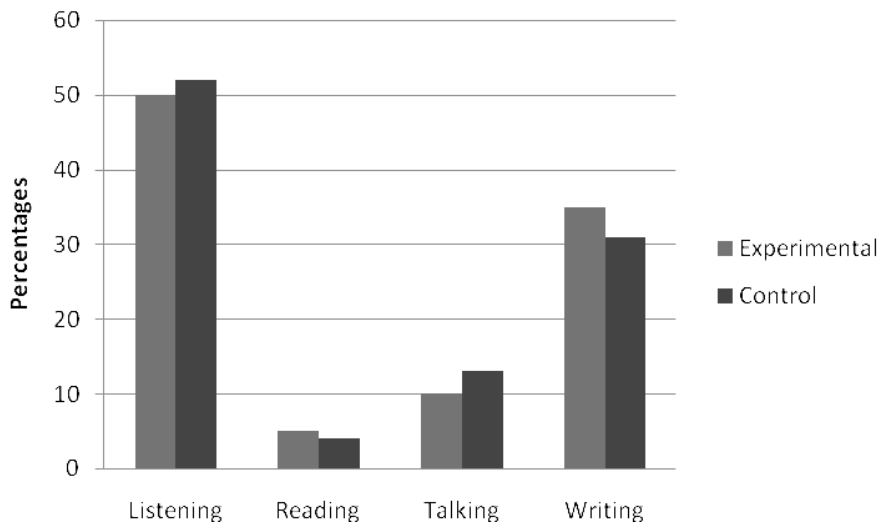
4.1 Views on language skills

Listening, talking, reading, and writing are the broad language skills at the disposal of teachers and their pupils. It is argued that establishing teacher preferences of a particular skill will have implications on their discourse behaviour. As an example, the teacher who prefers learners to listen for most of the time is likely to dominate interaction by doing most of the talking. It is, therefore, the objective of this section to establish the views held by teachers and learners about the aforementioned skills before and after intervention took place.

Teachers and learners from the control and experimental groups (Zimbabwe) were requested to indicate the skill they rated highest in the classroom. This followed the preliminary discussion with both groups (as explained in §3.3.3). According to the results given in Table 3 (Appendix B), the highest percentage of teachers in both groups (control 52% and experimental 50%) prefers learners to listen for most of the time, while preference for talk is a mere 13% for the control group, and the experimental group accords it only 10%. Both groups thus share the attitude that listening is the most important skill. This is illustrated in Figure 1, based on responses from 23 teachers (control group) and 20 teachers (experimental group).

Figure 1: Rating of skills – teachers (pretest)

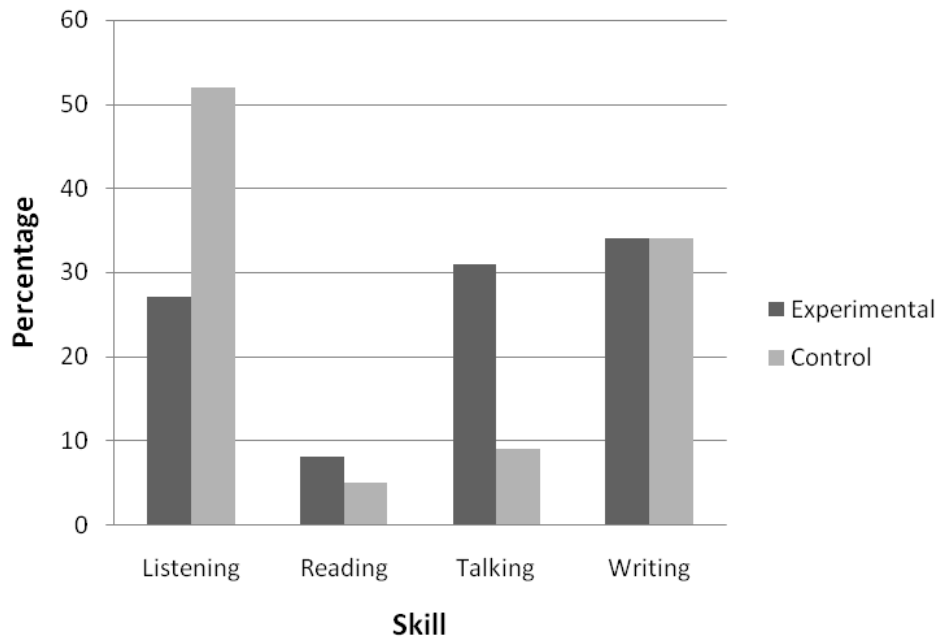
(N = 23 control and 20 experimental)



At post-intervention, the views expressed by teachers from the control group did not change in any significant way, while those of the experimental group show some significant change. This is illustrated in Figure 2.

Figure 2: Rating of skills –teachers (posttest)

(N = 23 control and 20 experimental)



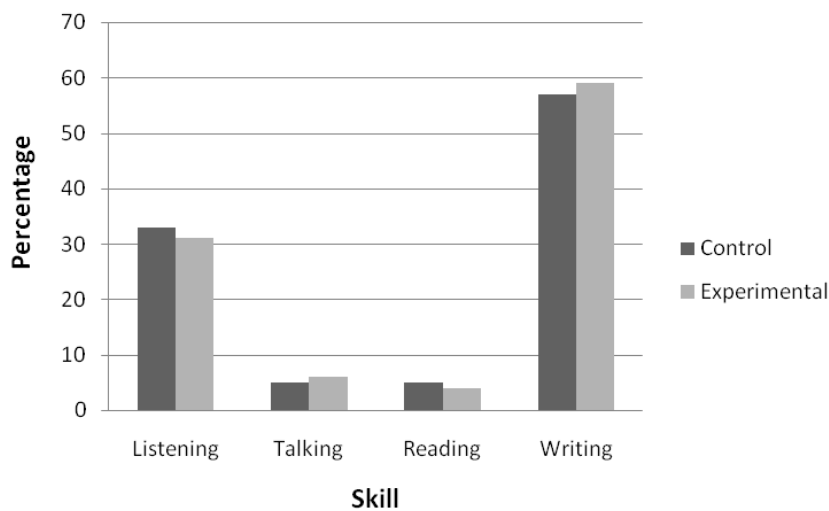
There is a marked change in the attitude of teachers who participated in the intervention course, as reflected in their expressed views. However, the attitude of the control group does not show any change. For example, the group still rates listening highest (52%), the same result as that for the pretest. Their rating of talking as highest has dropped from 11% to 9%. For the experimental group, statistics show a significant drop on listening from 50% (pretest) down to 25% (posttest). There is, however, a rise from 10% (pretest) to 30% (posttest) in their rating of talking.

Contrary to teachers' responses, learners share a different view, and the majority consider writing as the skill that they should mainly focus on. A total of 118 learners taught by the three control group teachers, and 242 taught by the six

teachers on the experimental group gave their responses. The population remained intact for the nine months during which period the research was conducted. At the pre-intervention stage percentages as high as 57% of the control group, and 59% of the experimental group confirm that view as shown in Figure 3. This shows a clear variance in the expectations of classroom participants before intervention. Preference for talk among learners is even lower than that for teachers (5% for the control group, and 6% for the experimental group).

Figure 3: Rating of skills – learners (pretest)

(N = 118 control and 242 experimental)

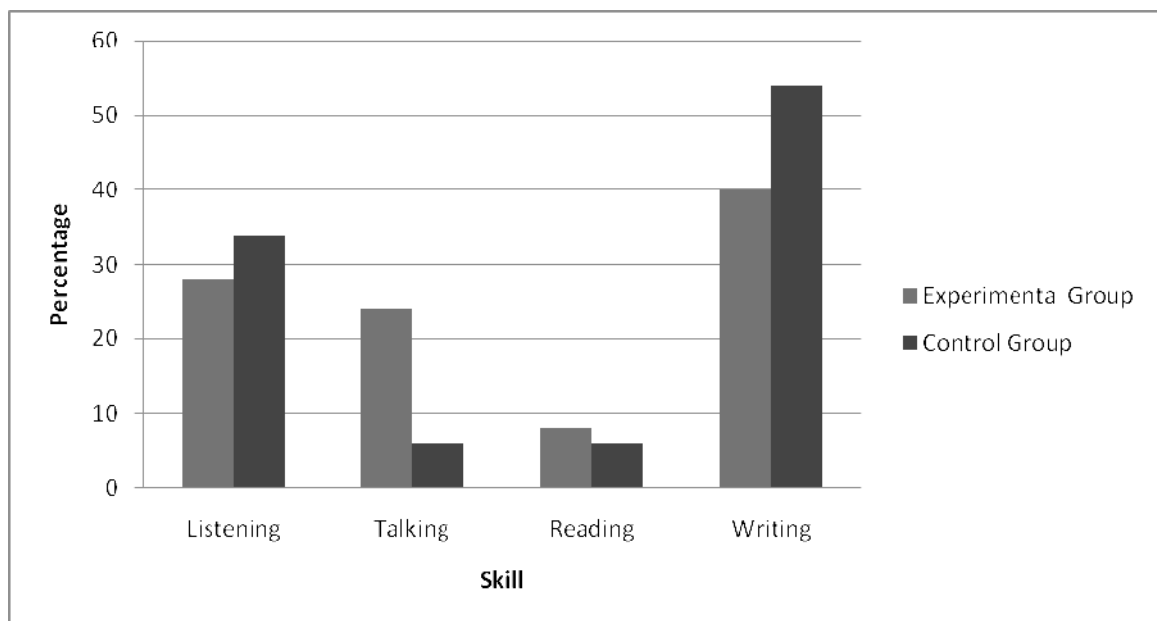


To sum up, as the pretest stage data suggest, teachers prefer that learners should listen while learners themselves prefer to write most of the time. Neither teachers nor learners think that learners should be allowed more talking time. The posttest results, however, show a change in the views expressed by teachers and learners from the experimental group (see Table 4). Significantly, both show more appreciation of the importance of talk.

At pre-intervention only 6% of these thought talk should receive most attention, but after intervention, this rose to 24% as illustrated in Figure 4.

Figure 4: Rating of skills – learners (posttest)

(N = 118 control, and 242 experimental)

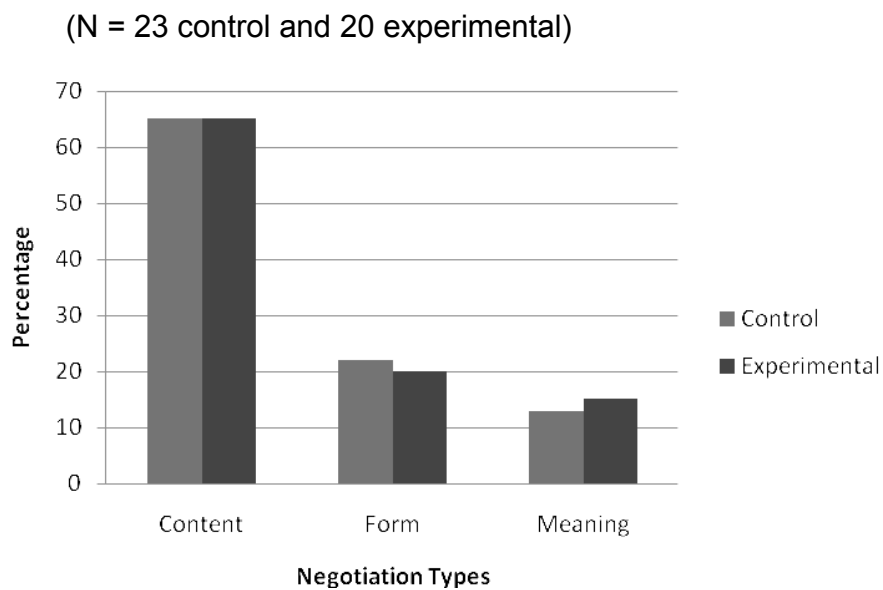


4.2 Views on negotiation types

Three negotiation types constitute a major focus in the discussion of oracy, and these are negotiation of content, negotiation of form, and negotiation of meaning. Reference has already been made to them in previous sections (cf. § 1.1). At the beginning of the project, teachers were given a short preliminary explanation of what each negotiation type involves (cf. §3.3.3). Thereafter, participants were requested to fill in a form indicating the negotiation type they preferred most (see Appendix C). Pre-intervention findings show that more teachers in both the control and experimental groups view negotiation of content as the most important type of negotiation to be focused on. This echoes findings by Musumeci (1996) in which she established that without some form of guidance, teachers tend to speak more, control the topic of discussion instead of allowing

learners to do so, and rarely ask questions to which they do not have answers (cf. § 2.5.3.3 detailing research studies on negotiation of content). It was found that 65% of teachers from the control group thought negotiation of content should be given prominence, while 65% from the experimental group thought that way. Figure 5 illustrates this.

Figure 5: Negotiation types – teachers (pretest)



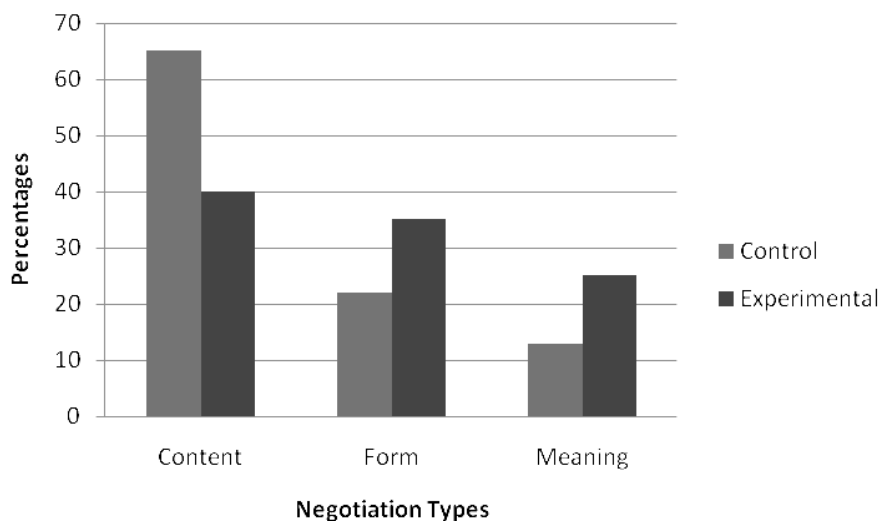
In traditional classrooms, the teacher's role has often been perceived as one of transmitting knowledge. It is, therefore, assumed that when teachers prefer negotiation of content above negotiation of meaning and form they are likely to dominate discourse since they will be concerned with transmitting knowledge while learners listen.

Figure 6, on the other hand shows a difference in the perceptions of the experimental group at post-intervention. The teacher's preference for negotiation of content drops from 65% to 40%. This suggests a changed picture because their preferences for the three negotiation types are balanced. The study by Cleghorn *et al.* (1998) confirms that teachers can be trained to enable them to simultaneously integrate negotiation of content with second language

development, thus striking the balance confirmed in the post-intervention findings of the present study. The views of the control group, on the other hand, remain much the same as at the pre-intervention stage.

Figure 6 : Negotiation types – teachers (posttest)

(N = 23 control and 20 experimental)



Having established the views held about the general language skills and the negotiation types, focus now shifts to the testing of hypotheses in terms of findings derived from analysis of lesson transcripts. In the process, the connection between classroom practice and views established in the foregoing sections will be examined.

4.3 Hypothesis 1: teacher dominance

Teachers who participate in the course on classroom text and discourse will dominate discourse less than teachers who do not participate in the course.

In their discourse analytical account of classroom interaction, Sinclair and Coulthard (1975) highlight the turn-taking pattern of moves that has come to be known as Initiation- Response-Feedback. On the basis of this pattern, they

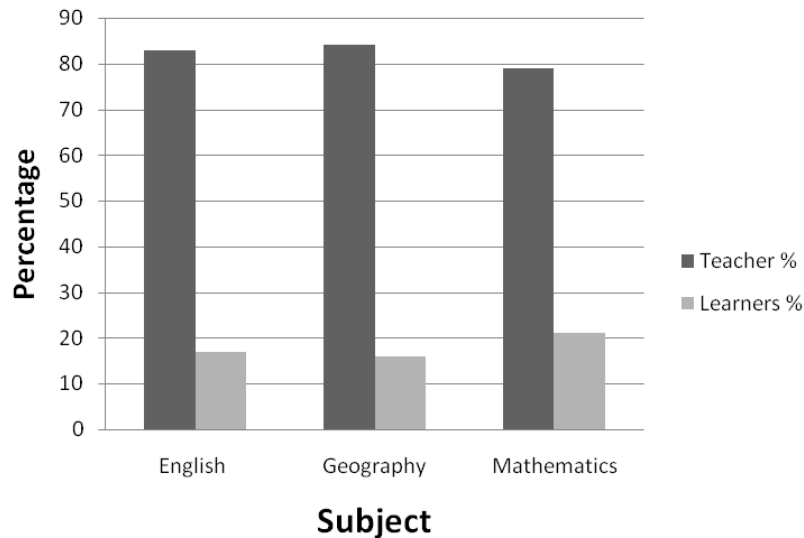
describe the speech act as the smallest functional unit of interaction (cf. § 2.5.2.5 for the fuller discussion). In testing for dominance, the I-R-F pattern (and the speech act realisations of this pattern) will therefore be a major feature. The pattern suggests that the teacher talks for two-thirds of the time when interaction takes place around a given topic. My study, therefore, seeks to determine the extent to which exposure to the intervention course results in reduced dominance if the I-R-F pattern remains largely in place. For this section, in particular, testing involves comparison of the proportion of teachers' versus learners' discourse acts before and after intervention. Basically, quantities of discourse acts are objectified as a reliable measure of dominance. The value of the concept 'discourse act', which resembles that of 'speech act' was explained earlier (cf. § 3.5.2).

Dominance is a feature of classroom interaction in which the teacher affords limited opportunities for self-expression, and is characterised by the prevalence of extensions, question tags, polar interrogatives and display questions (cf. § 3.1, where the construct was operationalised). To measure dominance, the discourse of the participants in pretest and posttest lessons was quantified and placed in categories. A comparison of the proportion of the acts used by teachers relative to that of learners was then made using the chi-square statistical test. As already justified in (§ 3.3), only 15 minutes of oral interaction for a given lesson were recorded to ensure reliability and validity of the results. It is assumed that the lower the proportion of discourse acts by learners, the more dominant the teacher is.

4.3.1 Results

Results following testing for dominance are the main focus for this section. Figure 7 (derived from Table 6 in Appendix B) shows quantities of discourse acts performed by each teacher from the control group, and by their learners before intervention.

Figure 7: Dominance measures – control group (pretest)

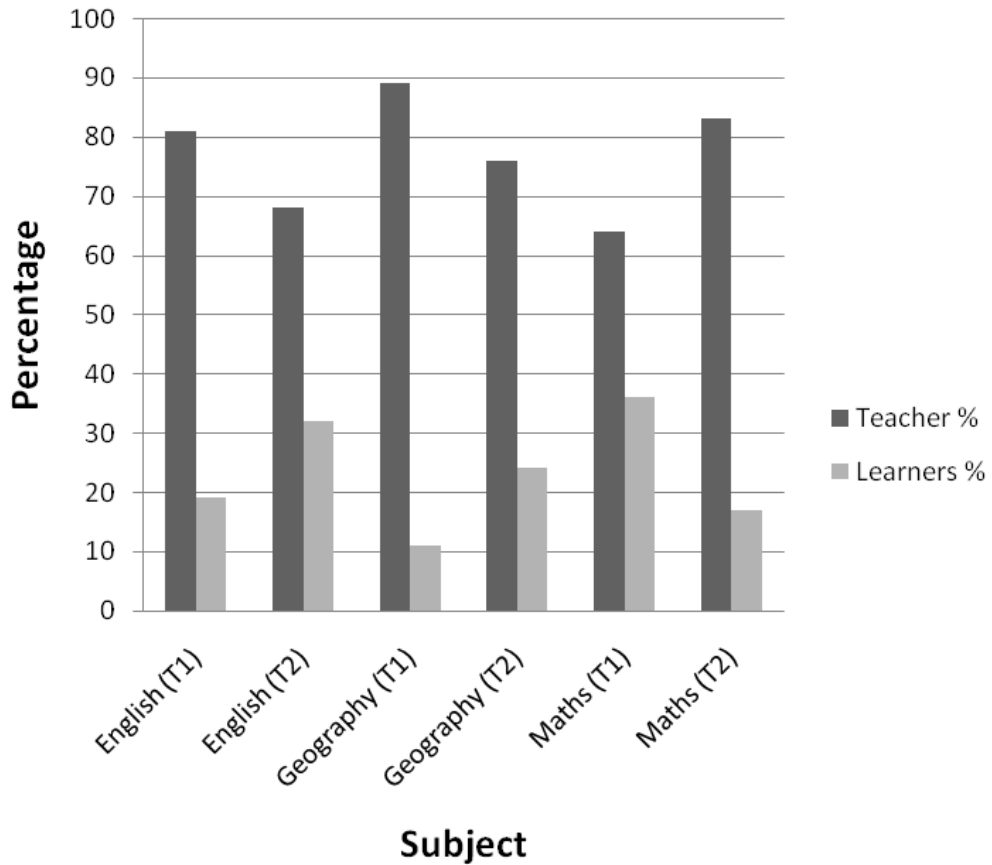


It is clear that the proportion of teacher discourse acts in each of the three subjects is much higher than the two-thirds to one-third ratio established by Flanders (1970), with the Geography (C) lesson, for example, having the highest teacher-learner proportion of 84% to 16% respectively (see Table 6, Appendix B).

The performance of the experimental group at pretest shows a close similarity with that of the control group. The Geography (T1) lesson has by far the highest teacher dominance level at 89% to 11% as illustrated in Figure 8, based on statistics from Table 7 (Appendix B).

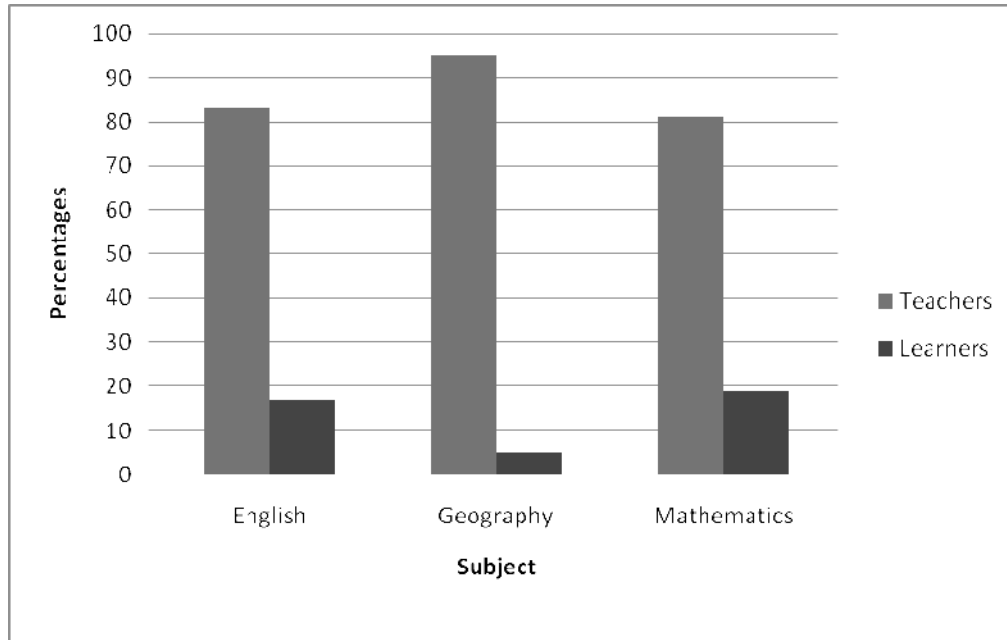
For both groups the ratio of teacher discourse acts compared to that of learners is much higher. This shows that before teachers from the experimental group are exposed to the Litraid course their discourse performance is comparable to that of teachers from the control group, hence there is initial equivalence.

Figure 8: Dominance measures – experimental group (pretest)



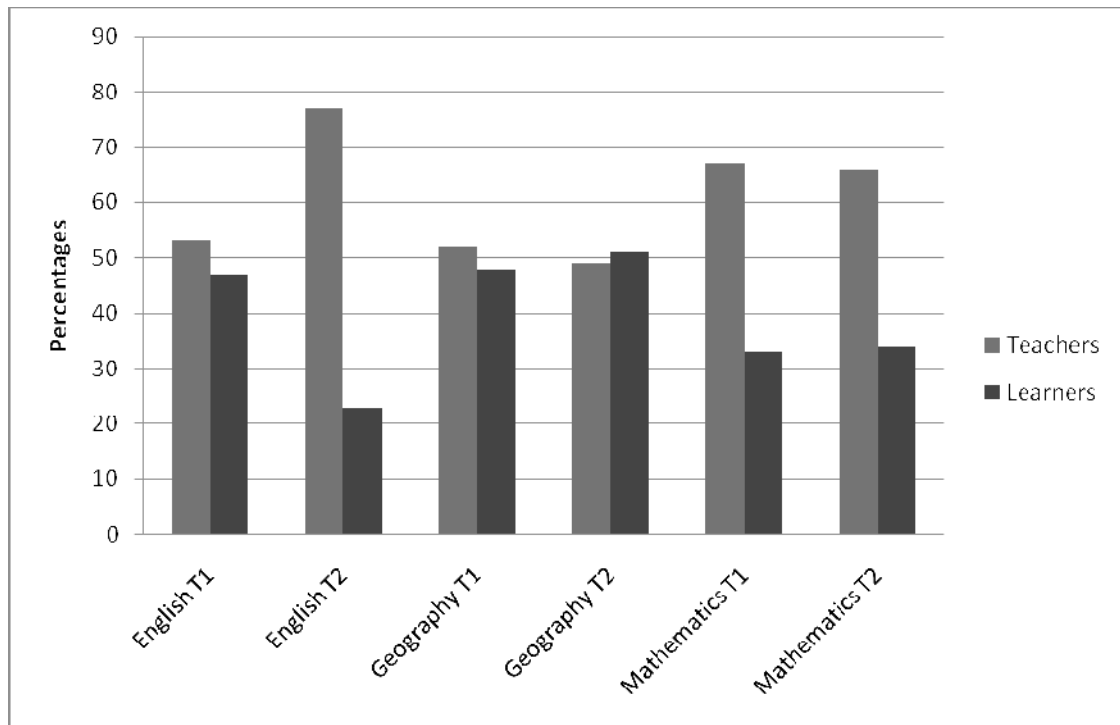
At posttest there is no significant change in the level of dominance by teachers from the control group. With reference to control group teachers (English (C), Maths (C) and Geography (C) the proportion of teachers' discourse acts is much higher than that of learners, and remains unchanged at both research stages. For example, in the pretest, Geography (C) teacher accounts for 84% of the discourse acts, and learners for only 16%. The ratio of the posttest is even higher, at 95%, showing that teachers continue to dominate interaction. This is illustrated in Figure 9 where the other two results show an equally high level of teacher dominance.

Figure 9: Dominance measures – control group (posttest)



For the experimental group, the statistics show a different trend (cf. Figure 10, which is based on statistics from Table 7). In the pretest, the proportion of discourse acts by teachers is higher than that of learners. However, there is a significant reduction of acts in posttest lessons as in Geography (T2) where the ratio is 76%: 24% (pretest), and 49% : 51% (posttest). The one exception, however is the English (T2), which has remained high at 77% discourse acts for teachers compared to 23% for learners. This variation shows that there are exceptions regarding the amount of teacher discourse. It varies from lesson to lesson depending on a number of factors. One such factor is the objective of the lesson, and what role the teacher should play to ensure that intervention produces the desired results. Figure 10 illustrates the teacher-learner discourse proportions at posttest.

Figure 10: Dominance measures – experimental group (posttest)



A similar trend is observable in the longitudinal sample of interim lessons taught by English (T1) after exposure to each of the four modules (see Appendix D) for the transcripts). In the pretest, the teacher's share of discourse acts was 81%, while after each module studied her share was as follows: after Module 1, 38%; after Module 2, 47%; after Module 3, 23%; and 50% after Module 4 respectively. In all the interim lessons and the posttest lessons, there is evidence that there is a significant reduction of dominance by the teacher after participating in the course on classroom text and discourse, although one should be extremely cautious and not generalise from a single sample.

The teacher dominance hypothesis, like the other hypotheses, was tested statistically by way of Chi-square tests (source: *Vassarstats: Web site for statistical computation* at <http://faculty.vassar.edu/lowry/VassarStats.html>).

Here, the tests compared the pretest and posttest totals of the set of teacher discourse acts identified relative to the learner

discourse acts in each group. The result for the control group confirmed that there was no significant difference between the two stages (cf. Appendix E, Statistical Report 1, where the value for Chi-square is 1.13, and so at 1 degree of freedom the significance level (p) is 0.2878, which is far too high for the required significance threshold of $p \leq 0.05$). The result for the experimental group, on the other hand, revealed a very significant difference between the pretest and posttest (Appendix E, Statistical Report 2 indicates a value for Chi-square of 33.92, and so at 1 degree of freedom the significance level is $p < 0.0001$, well below the significance level required). In combination, given also the broad equivalence of the control and experimental groups prior to intervention, the two statistical tests thus provide strong support for Hypothesis 1.

4.3.2 Discussion

It is worth noting that a decrease in the quantities of discourse acts does not necessarily mean that teachers used more effective discourse. The decrease, however, implies a higher level of awareness of oracy principles. Thus, for teachers to be less dominant it is necessary for them to develop explicit knowledge of the language of teaching and learning, and Rutherford (1987) has referred to this as input enhancement. Whether reduction of discourse acts on the part of the teacher is a feature of effectiveness will be one point of discussion in the next section.

4.4 Hypothesis 2: teacher effectiveness

Teachers who participate in the course on classroom text and discourse will be more effective in that they make better use of discourse to promote the negotiation of learning than teachers who do not participate in the course.

Effectiveness as a construct involving the conscious selection by the teacher of language to achieve learning goals was operationalised earlier (cf. § 3.1) in terms of the following discourse acts:

- Clarification requests (cr)
- referential questions (rq)
- evaluation (ev)
- prompts (p)
- clues (cl)
- silent stress (ss).

All these acts have been associated in the research literature with more effective negotiation of learning (cf. §2.5.3.2). Having established above that the experimental group teachers became, in broad quantitative terms, less dominant, what is investigated now is whether they did not merely say less, but also actively exploited the power of certain discourse acts to improve interaction and learning. To do this transcripts were analysed to establish the discourse patterns of both the control and experimental groups in pre-intervention and post intervention lessons, and specifically to look at the function of discourse acts.

4.4.1 Results

The present section focuses on the quantitative analysis of discourse acts associated with effectiveness. To accomplish this, reference is again made to statistics presented in the form of graphs and those presented as tables. The Chi-square statistical test was used to determine whether there was any significant change in the use of discourse by teachers who took part in the intervention course.

When comparison of the use of the more effective categories by the two groups at pretest stage is made, it is clear that there is limited use of such acts. For

example, from Geography lessons (Geography (C) and Geography (T1) pretest), the percentages of effective discourse (defined here in terms of the occurrence of the six acts) in the 15-minute interaction time, is 12% and 7% respectively. However, for the posttest, there is a marked difference between the discourse performance of the two. Geography (C) makes use of 0% of effective discourse, while Geography (T1) shows a jump from 7% to 33% (cf. Table 8 and Table 9). More generally, it appears from scrutiny of the frequencies for other lessons that teachers belonging to the control group consistently use less effective discourse at both stages, while the opposite is true for members of the experimental group (see Table 8 and Table 9 in Appendix B). Figure 11 illustrates the performance of teachers from the control group in terms of effectiveness measures.

Figure 11: Effectiveness measures – control group

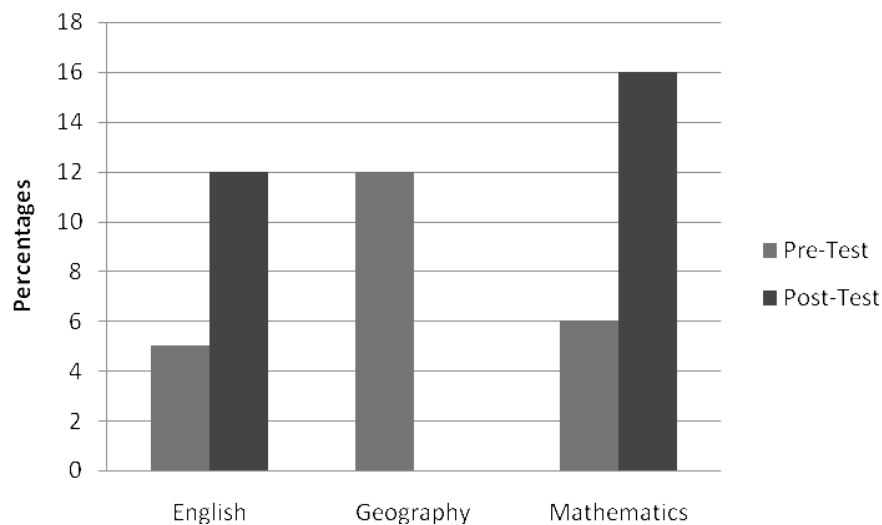
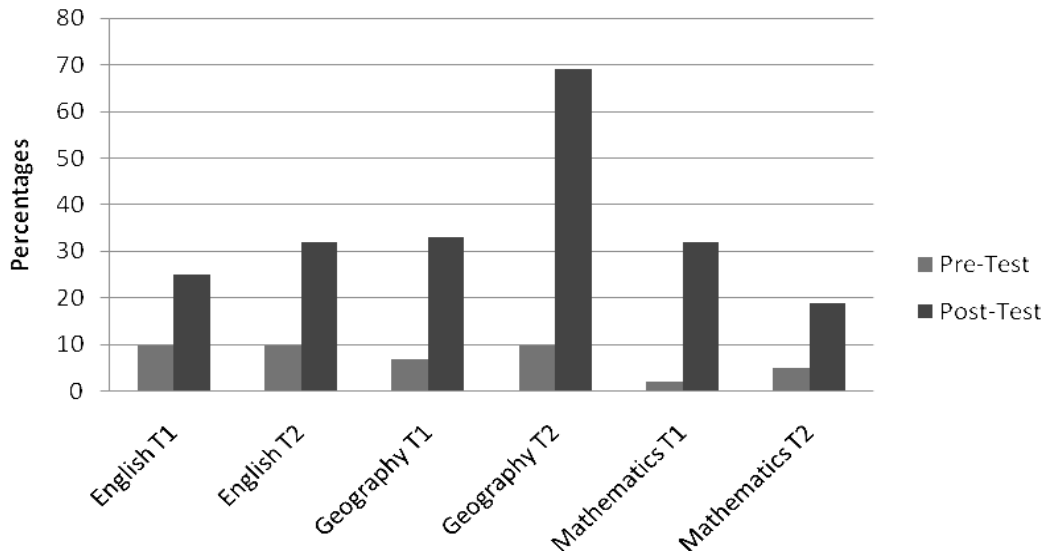


Figure 12 illustrates the performance of teachers from the experimental group in terms of effectiveness measures. It will be clear from the statistics that those teachers who had exposure to the in-service course show some consistency in the selection and use of more effective discourse. This is the exact opposite of their counterparts in the control group. In a sense, therefore, the results show

that the course on classroom text and discourse has some effect on teacher discourse.

Figure 12: Effectiveness measures - experimental group



The teacher effectiveness hypothesis was tested statistically by way of Chi-square tests that compared the pretest and posttest totals of the set of teacher 'effectiveness' acts identified relative to the remaining teacher acts in each group. The result for the control group confirmed that there was no significant difference between the two stages (cf. Appendix E, Statistical Report 3, where the value for Chi-square is 0.23, and so at 1 degree of freedom the significance level (p) is 0.6315, which is far too high for the required significance threshold of $p \leq 0.05$). The result for the experimental group, on the other hand, revealed a very significant difference between the pretest and posttest (Appendix E, Statistical Report 4 indicates a value for Chi-square of 63.11, and so at 1 degree of freedom the significance level is $p < 0.0001$, well below the significance level required). In combination, then, given also the broad equivalence of the control and experimental groups prior to intervention, the two statistical tests provide strong support for Hypothesis 2.

4.4.2 Discussion

The present section dwells mainly on the quality of discourse with special focus on the function of acts in real time interaction. Pretest and posttest discourse will be analysed using the pre-specified categories to determine the presence or absence of effectiveness in the speech episodes. Reference will be made to quantitative data wherever necessary, thus illustrating the close link between quantitative and qualitative analysis. Occasionally, the relationship between dominance and learner participation, as well as that between effectiveness and learner initiative will be highlighted, leaving the more detailed discussion of these issues to the synthesis section (cf. § 4.6).

Statistically, out of the 66 acts by the control group teacher of English (C) at pretest (Table 8), only three are categorised as effective. These are two prompts and a silent stress, equivalent to 5% of the discourse. The first utterance is a full clause joined by a co-ordinating conjunction as in :

[1] Writing is the most important skill (i) when learning English (ext).

The function of the two discourse acts is merely to give information. The elicited:

[2] Can someone tell me the the noun from the word hot? (dq)

is a display question posed with a specific answer in mind. Its effectiveness in promoting meaningful negotiation of learning is, therefore, limited to the negotiation of form. Subsequent discourse acts also serve very limited discourse functions mainly because they are polar questions, question tags and extensions. Typically, the function of an extension is to provide additional information to the informative the teacher has already given, as in:

[3] T: Drought is a period (clar) when there is not enough water. (clar) Our cattle go thirsty... (ext) and rivers become dry. (ext)

The four acts are concerned with transmission of information, and show limited potential for learners to participate. In the lesson, at no point does the teacher require learners to clarify anything, and at no point do we see the teacher evaluating learner contributions. Similarly, there is no scope for prompting learners to take part in the dialogue. Normally, teachers are expected to give clues, but here there is a clear absence of such discourse even in situations where there is an opportunity to do so. The following extract is a typical example:

[4] T: What noun do we get from the word 'old'?... (dq) Anyone? (n)

S: Age (mr)

T: Wrong (ev) Who can give us the correct word? (n)

In this situation, the first act is a display question asked with a specific answer in mind. The teacher's negative evaluation stifles learner participation. A clue would probably have been more appropriate, by giving additional information to help the learner formulate an appropriate response.

Similar patterns of interaction are noticeable in lessons from the control and experimental groups before intervention, as shown from statistics in Table 8 and Table 9 (Appendix B). The Mathematics (T1) lesson (pre-intervention) illustrates how teachers who participated in the Litraid course lacked discourse effectiveness before exposure to the course. Out of 46 discourse units, there is only one instance of effective discourse, a prompt. Interaction is characterised by question tags, polar questions and use of extensions. The teacher is mainly looking for correct answers, as in:

[5] T: She got it right (acc) but is it correct to say 0 multiplied by 8? (pq)

SS: No-oo-o (in chorus) (mr)

T: You first of all write this zero down (i) then the number you would multiply. (ext) Right... (m) and do the last one. (r)

Clearly, the most competent participant - the teacher in this situation - controls and dominates the learner in order to reach her intended goal with minimum fuss. As observed earlier (cf. § 2.2.1), role distribution in this type of situation is not balanced, and transmission of content seems to be the primary goal. Opportunities to seek clarification from learners, through referential questions, prompts, and clues abound, but these are not exploited. Thus, for all teachers at pre-intervention, the mediational role seems to be on content transmission characterised by teacher dominated talk, while learners listen most of the time. Learners are also required to do a great deal of writing, a situation confirmed in Figure 3 where the rating of listening, talking, reading and writing was presented graphically. Learners rated writing most, and although teachers rated listening most, they also made learners do a lot of writing.

Furthermore, the features of pretest lessons include a predominance of display questions, question tags, and polar questions. Additionally, off-task use of codeswitching is prevalent. Teachers tend to be preoccupied with transmission of content at the expense of two other negotiation types, namely negotiation of meaning and form. There is characteristic failure to share lesson objectives at the beginning of lessons, and that results in lack of focus. Although the discussion is focused on testing Hypothesis 2, which is concerned with teacher discourse, reference to learner discourse will be made occasionally, thus showing the overlap between Hypothesis 2 and Hypothesis 3, a matter discussed in detail in the synthesis section (cf. §4.6).

The choice of discourse by teachers in most pretest lessons reflects constraining discourse (cf. Sinclair and Coulthard, 1975) and minimum responses and the non-verbal paralinguistic feature of avoidance on the part of learners. The Mathematics (T2) pretest lesson is representative of this, as [6] shows.

[6] T: What would you use to measure the length of your desk?... (dq)

SS:

T: Don't look at me..... *Musangonditarisa* (Don't look at me) (cu)

SS:

T: Talk..... (r)

The long silence by both participants is indicative of constrained participation and that does not result in active and purposeful participation on the part of learners. Realising that no response is forthcoming, the teacher uses the cue by codeswitching to Shona (*Don't look at me*). That discourse act stifles initiative, and makes the learning atmosphere less relaxed. The teacher actually ends up answering his own question, effectively dominating the interaction. There are many occasions when teachers end up answering their own questions in the pre-intervention lessons (see lessons in Appendix A). No clues are given, nor do the teachers use prompts to encourage learner participation.

A common pattern of interaction is the use of codeswitches mainly to express disapproval, seek approval, or to threaten. These constrain learner discourse output. The English lesson English (T1) (pre-intervention) is illustrative as shown in this extract.

[7] T: which may be described as adjectives...(ext)

Handiti...(Isn't it?) (qt) *Tawirirana?* (Agreed?) (ch)

SS: *E-ee-e* (Yee-e-s)

T: *Pana vamwe venyu vasina kumbotaura.* (ev) *Kuramba makanyarara so.* (cu) *Muchanhuhwa mukwana.* (ext) *Taurai mweya unonhuhwa ubude mukwana.* (r)(There are some of you who have not said a word. If you remain silent like that you will develop a foul smell. Speak in order to expel the foul smell)

Firstly, the initial move simply invites choral agreement in which no substantial language is contributed. Secondly, the teacher codeswitches to Shona.

Significantly, this reflects teacher dominance because he simply informs learners that they are not contributing as much as they should. This is a kind of condemnation that stifles initiative. Here, as in many other instances the teacher resorts to off-task codeswitching, and dominates the discourse (six speech acts), while there is only one discourse act produced by learners. No clarification requests are used to stimulate participation.

The teachers' elicits invite choral responses, and these abound in the transcripts as pointed out in [7] above. The Mathematics lesson (Mathematics (C) pre-intervention) presents two varieties of choral responses. The first is in response to either a polar question or a question tag. The second is choral gap-filling, clearly illustrated in:

[8] T: We were saying something (i) now...(m) $4 - 1$... (ext) Isn't it? (qt)

SS: (in chorus) Yee-ee-s (mr)

T: Subtract 1 in brackets...(i) Isn't it? (qt)

SS: Yee-e-es (mr)

T: We need to find the common ____? (dq)

SS: (in chorus) denominator (mr)

The language used to solicit responses is constraining, and confirms pre-occupation with transmission of content, typical of the majority of teachers in the pre-intervention stage. Where learners are requested to fill in gaps, teachers often have specific answers in mind, and the objective to inform about specific subject content is not to be interfered with. In the majority of pretest lessons there is little concern with negotiation of meaning. That is why the teacher (Extract 8) is satisfied with affirmative responses only. The data confirm that where polar questions or question tags are asked, and where teachers request learners to fill in gaps, the result is domination by the teacher, and reduced opportunities for learner initiative. This is a clear example of the teacher talking to himself while learners listen, a kind of monologue (cf. Nystrand, 1997).

In the majority of lessons it is noted that learners are not informed about lesson objectives. The extract from the Geography (C) pre-intervention lesson is representative of this and [9] illustrates the point.

- [9] T: What is the most precious thing in your life?.....(rq) Yes...(n)
Anyone? (n)
S: Water (mr)
T:Yes...(acc) she thinks it is water.(ext)
S: Food (mr)
T: Right...(m) Yes (n)
S: Clothes (mr)
T: Clothes...(mr) Yes (n)
S: Fruits (mr)
T: Fruits...(acc) Yes...(acc) We are going to have a vote over those...(ms)
food...freezits...clothes...money... shelter...water...(ext) (They vote).
So... water is most precious. (i)

The teacher has one correct answer in mind, but time is wasted as pupils engage in a hit-or-miss language ping-pong game. The elicitation is essentially a display one. Learners have to guess, because they do not share the lesson objectives. Language expectations are not made clear, so time is wasted on irrelevancies. Participation is so constrained that it is reduced to one-word answers on the part of learners while the teacher dominates the dialogue.

A similar pattern is evident in the Geography (T2) lesson (pre-intervention) on relief and contours. The lesson also reveals that teachers have difficulties handling specialist register in their respective subjects. This recalls the findings of Barnes *et al.* (1969) in which some teachers were using specialist language without explicitly presenting it.

[10] T: What is relief?... (dq) Yes (n)
 S: Relief is map (clar)
 T: Map? (with a raised voice)... (ev) What map? (cr)
 S: Mountains and rivers (clar)
 T: Good. (ev) Mountains and rivers. (ext) Relief means land features. (i)
 Say land features (r) everybody. (n)
 SS: (In chorus) Land futures /features (pronouncing it differently) (mr)
 T: Now... (m) what are contours? / (dq) Anyone... (n)
 S: Drains used to prevent erosion in fields. (clar)
 T: I mean contours for relief. (clar)
 SS:..... (look confused)

The pattern of interaction recalls the fictional extract (at the beginning of § 2.0) in which the Victorian teacher is concerned with transmission of content. To begin with, lesson objectives are not shared although the teacher introduces jargon. The concept of 'relief' is confused with a map. The teacher's evaluation of that is an expression of surprise, but then she does not know how to deal with it, and goes on to introduce another specialised register item, 'features', which reveals evidence of limited metalinguistic awareness. All she requires is a reply in chorus focused on pronunciation. Learners pronounce it differently simply because it is an unfamiliar lexical item. The teacher fails to evaluate learner responses, or to use clarification requests in a manner that would encourage pedagogic focus. Barnes *et al.* (1969) noted a similar finding in which learners failed to make the abstraction expected by the teacher. Far from helping learners to bridge the gulf between her frame of reference and theirs, the Geography teacher's language acts as a barrier of which she seems quite unaware.

Thus, pre-intervention patterns of interaction were characterised by acts that are hardly effective. Teachers tended to ask display questions with answers in mind; answer their own questions when learner replies were not forthcoming; and used discourse of disapproval when dealing with wrong responses. The transcripts

also illustrated that the primary focus is on negotiation of content at the expense of negotiation of form and meaning. The tendency was to transmit information, and there was a noticeable absence of clarification requests, referential questions, prompts, clues and instructional pauses. Post-intervention lessons reflect a different picture.

Starting with the English (C) post-intervention lesson, there is evidence from Table 8 that the teacher uses 12% of the teacher's discourse is effective categories. Although this shows some difference over the 5% noted in the pretest lesson, it is still a relatively low. Counterparts in the control group reflect similar performance. As in the pretest lesson, dialogue in the English (C) posttest lesson is characterised by the use of display questions, as in:

[11] T: What else? (dq) There is something you are leaving out...(i) The word begins with letter 's'...(p) not a snake of course. (ext)

Differences are noticed in lessons taught by the experimental group teachers at interim and posttest stages. The English (T1) pre-intervention lesson (see Appendix A) is characterised by discourse acts that constrain learner expression. Question tags and polar questions abound. In most cases the teacher answers his own questions, and engages in lengthy explanations, thus depriving learners of the opportunity to participate actively. However, the four lessons from the one set of interim tests, examined more closely for illustrative purposes (see Appendix D), reflect a degree of progression towards more effective discourse.

The lesson after Module 1 is characterised by clear instructions at the beginning, and these focus learner attention on the objectives. Teacher intervention is made up of clarification requests (e.g. *What do you mean?* and non-comprehension signals (e.g. *Explain...*). In the lesson after Module 2, the teacher asks referential questions (e.g. *Why is that interesting?*) and such questions are followed by instructional pauses. Evidence of effectiveness from Module 3, which is on group

work, will be discussed under initiative measures (cf. § 4.5). The lesson after Module 4, which is concerned with meanings of words, manifests similar discourse acts that effectively lead learners to do most of the talking and relate the formal definitions of words to real life situations. On the basis of my reading of transcripts of the other interim lessons in the two groups, it would be generally true to say that the evidence of effective discourse, identified in the longitudinal analysis of this particular teacher is representative of the improving performance of his counterparts in the experimental group, though not of the control group.

Analysis of posttest lessons shows awareness by teachers about the positive effects of consciously selected discourse on learner initiative, which will be the focus of the next section. One must, of course, consider the relationship between effective teacher discourse features and learner initiative as this is revealed in the unfolding discourse. Mathematics (T1) post-intervention is a case in point. The allocation of turns at pre-intervention, by the same teacher had shown a number of limitations associated with the predominance of the less effective discourse, but not so in the posttest. The lesson begins as follows:

[12] T: We want to look at area...(ms) What is area?- - - (i) You did this in primary school. (p) Let me give you time to think - - - (i) Right. (m)

The function of the informative focuses attention on the content to be negotiated. This is followed by an open-ended elicit requiring a reply that the teacher cannot predict too easily. A prompt, aimed at encouraging learners to draw on their primary school experience is made. A silent stress then follows in order to allow learners to think and not merely to recall content. The teacher is conscious of what discourse to select as the lesson progresses.

The clarification request, followed by an instructional pause (*So what do you mean ? - - -*) effectively prompts the learner to speak on while holding on to the turn allocated previously. The teacher consciously gives positive evaluation of

learner responses before asking questions that require original feedback in original learner language as exemplified in:

[13] T: That's good. (ev) Why would you use centimetres? (rq)

The second act prospectively makes the learner take control of the topic as negotiation of content, form, and meaning are alternated. At the content level, the allocated turns in [13] result in the supply of information, communicated in specialist register as a precondition for negotiating learning. In other words learner responses would involve the use of register related to the topic 'measurement'. In the process, meaning is negotiated as learners are asked to apply the new knowledge by calculating area. They can only do so if they know the meaning of area, and the special register of millimetres, centimetres and metres. In his research Seedhouse (1997) came out with a similar result, namely, that effective teaching often combines focus on form and meaning in L2 instructional settings (cf. § 2.5.3.4 for details of the study).

The Geography (T2) lesson also reveals effective talk proceeding in accordance with principles where discourse acts are manipulated to strategically change the interaction patterns and create more productive learner responses (as explained in § 2.5.3.1). In this lesson, out of 49 acts, 20 of them or 69% are categorised as effective, much higher than seven such acts (10%) at pretest. Like most posttest lessons for the experimental group, there is an increase in the number of referential questions, instructional pauses, and clarification requests as illustrated in [14]:

[14] T: What do you think? (rq)

S: It means the employer wants somebody qualified. (clar)

T: Suppose there are qualified people? - - - - (cr)

S: Umm...maybe no money (clar)

T: Meaning? - - - - (cr)

The function of the first referential question is to invite a response in which the individual contributes information related to the topic in original language

(negotiation of content). The dialogue continues with clarification requests, followed by instructional pauses (e.g. *Meaning?* - - -). As noted earlier (cf. § 3.5.2) in a clarification request, the teacher requests the learner to make his / her point clear (e.g. *Meaning?*). The instructional pause (a paralinguistic feature) avails learners of the opportunity to reflect more before contributing to the discourse. This confirms Love's (1991) observation that a pause, following a referential question encourages learners to plan their discourse output.

There was also evidence of effectiveness in all three post-intervention lessons that were observed in Malawi. In a Geography lesson on the physical divisions of Malawi, the teacher's discourse was characterised by clarification requests and instructional pauses (e.g. *What do you mean?* - - - and *What about it ?*) and these encouraged originality by learners. In this way the vocabulary of Geography (negotiation of form) and relevant information (negotiation of content) were handled competently. Similarly, the post-intervention Mathematics lesson promoted dialogue through referential questions (e.g. *How did you get that?* or *Why do you say so?*), and prompts such as (*Try...don't be shy. Come on Vedi*). All these were evidence of effectiveness.

In sum then, the more qualitative discussion in this section pointed out some of the consistent differences in the choice and use of discourse acts between pretest and posttest lessons for teachers in the experimental group. Four important more general characteristics of effective talk can be inferred from the transcripts. Firstly, there is an appreciation of the purpose of talk by teachers; secondly, there is a shared understanding of relevant vocabulary between participants; thirdly, much more talk was focused on a task in which knowledge is shared; and lastly, the teachers consciously used discourse acts to negotiate learning. These findings confirm the more effective use of discourse by teachers who participated in the course in classroom text and discourse. Rex, Steadman, and Graciano (2005) confirm that when specific manipulations of teacher behaviour are made to strategically change the interactions in class, this creates

more productive negotiation of learning (cf. § 2.5.3.1), as has indeed been the case in my study.

In this discussion, data were interpreted qualitatively to determine changes in the discourse effectiveness of teachers, with the main focus remaining on the six discourse acts that the study has identified as constituting teacher effectiveness (clarification requests, referential questions, evaluations, prompts, clues, and silent stress, also referred to as instructional pauses). The discussion started with an examination of effectiveness of discourse in pretest lessons where it was illustrated that for both groups, the more effective discourse acts were less evident and there was instead, a preponderance of those discourse acts associated with ineffectiveness of teacher discourse. After establishing a broad initial equivalence of the two groups at the pretest stage, the discussion focused on posttest discourse performance. Qualitative analysis showed that teachers from the control group reflected no real change in their choice and application of discourse, while experimental group participants appeared to demonstrate a significant appreciation of the sort of discourse acts that promote more purposeful classroom interaction.

4.5 Hypothesis 3: learner initiative

Focus now shifts to H3, which states that:

Learners taught by teachers who participate in the course on classroom text and discourse will show more initiative than those taught by teachers who do not participate in the course.

H1 and H2 test for dominance and effectiveness, respectively. The focus of this section is on initiative, which in this study is in a sense a measure of the quality of participation shown by learners. The more general term 'participation', is simply the proportion of learner acts relative to the teachers' (cf. § 3.1). Not all acts of participation, however, necessarily indicate initiative. The discourse acts: extensions, clarifications, and counter- informs were identified as the most typical

indicators of initiative. In turn initiative is also shown when learners bid for turns and when they self-select. These turn-based categories, in conjunction with the three discourse acts, were also posited as further evidence of the active participation that one associates with the idea of initiative during interaction.

Both initiative and participation are influenced by the discourse used by the teacher, as shown in the results below.

4.5.1 Results

The section begins with examination of results on participation, and those on initiative follow later.

As indicated earlier, participation is simply the converse of dominance in that it is defined as the proportion of learner discourse acts relative to teacher discourse acts. Statistics in Table 6 and Table 7 (Appendix B) confirmed that the proportion of teachers' discourse acts in both the control and experimental groups was much higher than that of learners at pretest. The findings can be interpreted to mean that learner participation at pre-intervention stage was minimal. On the other hand, the proportion of discourse acts by learners, whose teachers had participated in the intervention course increased very significantly (see Table 7 in Appendix B) given that the findings on the teacher dominance hypothesis are at the same time findings on learner participation.

While it is argued that the experimental group shows an increase in the number of discourse acts used at posttest, it will also be argued that an increase in the proportion of acts does not necessarily mean that there is more learner initiative. Learners could, for instance, simply be parroting what the teacher compels them to without being original. Three learner discourse categories and two turn-taking categories (see Table 10), considered to be evidence of active participation were applied. These are:

Clarification (clar)

Counter-inform (cinf)

Extension (ext)

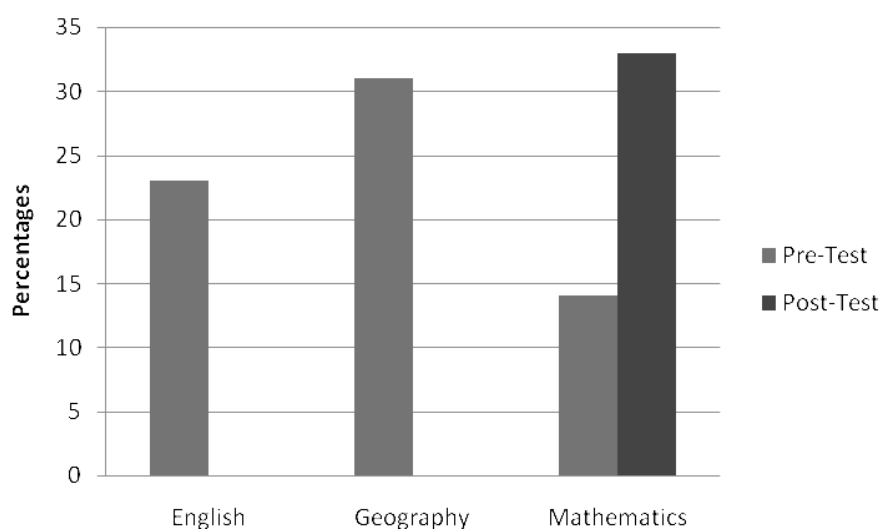
Self-selection (ss)

Bid (b)

Starting from the top, a clarification stands out as output that follows a request for further information, or elucidation of a point made previously. A counter-inform is used by the learner to dispute a position, and probably signifies the most initiative because it is evaluative and introduces a new element, which takes the discourse in a new direction. An extension is reflected when the learner provides additional information to topic initiations, while remaining within the same topic sphere. A statistical test is then applied to establish whether there are significant differences in use of discourse acts associated with initiative between pretest and posttest transcripts. Before that, a brief explanation of statistics from Table 10 and Table 11 (Appendix B) is given.

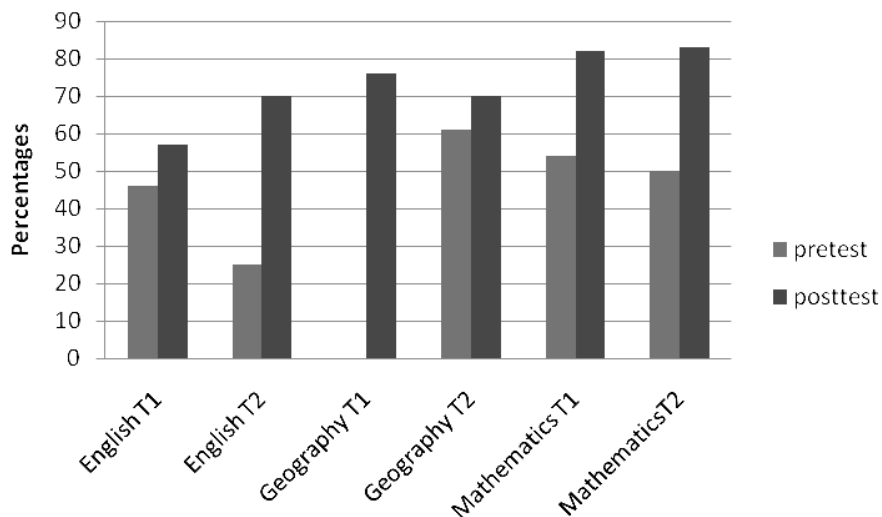
Table 10 presents statistics from the six lessons taught by the control group (three at pretest and three at posttest). It is striking that out of the total number of discourse acts in each of the six lessons, there is little evidence of discourse acts reflecting either participation or initiative. This is presented in Figure 13.

Figure 13: Initiative measures – control group



Turning to Table 11, which deals with the experimental group, the pattern is similar to that of the control group at pre-intervention. There is a lower proportion of discourse acts of initiative. Statistics, therefore, show that the level of initiative for the two groups is comparable before intervention. On that premise, it is logical to do intra-group comparison with the experimental group to establish whether they display improved initiative at posttest (having been taught by teachers who participated in the intervention course). This is shown in Figure 14.

Figure 14: Initiative measures learners-experimental group (Pre-test and Post-test)



The learner initiative hypothesis was tested statistically by way of Chi-square tests that compared the pretest and posttest totals of the set of learner 'initiative' acts identified relative to the remaining learner acts in each group. The result for the control group confirmed that there was no significant difference between the two stages (cf. Appendix E, Statistical Report 5, where the value for Chi-square is 0.24, and so at 1 degree of freedom the significance level (p) is 0.6242, which is far too high for the required significance threshold of $p \leq 0.05$). The result for the experimental group, on the other hand, revealed a very significant difference

between the pretest and posttest (Appendix E, Statistical Report 6 indicates a value for Chi-square of 25.08, and so at 1 degree of freedom the significance level is $p < 0.0001$, well below the significance level required).

In combination, then, given also the broad equivalence of the control and experimental groups prior to intervention, these two statistical tests provide strong support for Hypothesis 3.

4.5.2 Discussion

As explained (cf. § 3.6.3) 'initiative' is a narrower construct that is included in 'participation', and the focus here will be qualitative analysis to establish the manifestation of the two. The constructs are examined to test for initiative when the teacher stands before the class as well as when learners work in groups. Reference will be made to the negotiation of form, meaning and content as interaction takes place.

4.5.2.1 Initiative when the teacher stands before the class

Table 10 and Table 11 (Appendix B) show very little evidence of discourse of initiative at pre-intervention for the control and the experimental groups. The English (C) lesson is a case in point with just three acts of initiative evident out of the 13 discourse acts by learners. Initiative is constrained because the teacher does not provide scope for learners to clarify or extend their responses in original language. This is mainly because the teacher seems to be concerned with achieving the goal of transmitting content. There is limited negotiation of meaning as the teacher asks for grammatical correctness without contextualising the lexis as exemplified in [15]:

[15] T: What is the noun from the word ...'hot'? (dq)

S: Heat (mr)

T: What noun do we get from the word 'old'? (dq)...

S: Age (mr)

T: Wrong (ev)

Only one-word answers are given, and when the learner is informed that the answer is wrong, no opportunity is given to clarify. Further, there is no bidding for answers to show that learners are enthusiastic to make a contribution. Even where there is room for learners to clarify, they are encouraged to respond in chorus, while turns are allocated in such a way that learners cannot even self-select. This is evident in the Mathematics (T1) lesson, and [16] brings this out clearly.

[16] T: Did he get it right? (pq)

SS: (chorus) Yeeees (mr)

T: She got it right (ev) but then is it correct /to say 0 multiplied by 8?
(pq)

SS: (After looking at the teacher's face, they all shout in chorus)

Noo-ooo (mr)

T: What should she have said? (dq)

SS.....

Learners are aware that the teacher's first question merely looks for concurrence, while the second one requires them to simply say *no*. To encourage initiative, the teacher could have asked why they think the answer is correct. That would have led to clarification by the learners, resulting in meaningful learning. When asked: *What should she have said?* they simply withdraw into silence with diminishing evidence of participation. The Mathematics (C) lesson, like the other pretest lessons, shows fewer acts of initiative, hence limited negotiation of learning, as shown in:

[17] T: Subtract 1 in brackets...(i) Isn't it? (qt)

S: (in chorus) Yee-eees (mr)

T: What do you get? (dq)

S: (in chorus) Three (mr)

T: Right. (m) Then we have $2/3$ here (ext) but then we need to ___?

(dq) We need to find the ___? (dq) Yes (n)

S: Common denominator (mr)

In this lesson the potential to make the learners more actively involved was not exploited. The teacher proceeded by asking question tags and display questions to which minimum responses were given.

At post-intervention stage there is no significant difference in the discourse performance of learners from the control group. The English (C) lesson, for example, displays characteristics similar to those observed at pre-intervention. It is also a comprehension lesson by the same teacher. The questions asked by the teacher constrain learners to answer in single words, as in:

[18] T: Somebody to read these words (r)

S: Investigate (mr)

T: Right (acc) Class together (n)

SS: (in chorus) investigate (mr)

T: Then here... (r)

S: Crash (mr)

T: Class (n)

SS: (in chorus) Crash (mr)

Learners are not pushed to clarify or explain what they say in extended discourse.

There is evidence of initiative and active participation by learners taught by the intervention course participants. Analysis of interim lessons taught by English (T1), for example (Appendix D), shows discourse of initiative when the teacher stands before the class. In the lesson after teachers have studied Module 1, the

interpretation and contextualisation of proverbs leads to self-selection and bidding for answers without waiting for teacher allocated turns. S1, S2 and S3 take part more actively than they did in the pre-intervention lesson under the same teacher. There is further evidence of this in the post Module 2 lesson where learners counter-inform on what peers say, and offer clarifications of their views in extended discourse. The teacher's choice of discourse accounts for this as exemplified in the post Module 4 lesson. S2 gives the counter-inform *no* in response to the view expressed by S1. The teacher then asks a 'why' question, and that stimulates a more thoughtful clarification. Thus, in all the four interim lessons, there is evidence of meaningful application of the new words and active contribution of relevant information. There is, then a good deal of evidence here of the learners benefiting from the opportunity to negotiate learning.

There is also ample evidence of clarifications, counter-informs and extensions of discourse. The teacher's non-comprehension signals and the clarification requests push the learners to initiate new information and clarify such information in a manner showing that meaningful learning is taking place. The Geography (T2) lesson contains clear indicators of initiative, as in:

[19] S: Meaning that the employer does not have enough money. (clar) No money

to pay them. (ext)

T: Suppose he has money? (cr) - - - -

S: He has enough people. (clar) Enough for the money he can afford to pay (ext)

T: What causes that?.....(dq)...You see what I mean?... (ch) when there are no jobs (ext)

S: Overpopulatio....(mr) meaning too many people in a small place (clar)

T: Overpopulation? (acc) That's correct (ev) How does overpopulation cause unemployment? (rq)

S: Simple(i) jobs are few. (clar) I mean too many people (ext) when there are few jobs. (ext)

T: Very interesting.(ev) What are some of the results of overpopulation? (dq)

S: Malnutrition (mr)

T: What do you mean? (cr) - - - -

Earlier it was noted that oracy accounts for the promotion of intellectual skills (cf. §2.2.2). In the foregoing representative extract, the teacher collaboratively provides support to learners so that they can eventually stand on their own. That was referred to as scaffolding (see also Section 1.1) when teacher's questions, clues and prompts are used to achieve insights that learners by themselves seem incapable of.

The manifestation of initiative in this lesson and in other post-intervention lessons confirms the findings by Alexander (2004). In a comparable research, he found that where questions are structured so as to provoke thoughtful answers, the answers provoke further questions, and are seen as the building blocks of dialogue rather than its terminal point.

In [19] the allocation of turns is consciously done, and although there is no evidence of self-selection by learners, the first utterance by the learner indicates that there is negotiation of meaning in personal language. The second act is an extension that clarifies the first one. After the teacher's display question, the learner supplies further information (negotiation of content), and the act *Enough money he can afford to pay* is a clarification that moves the dialogue forward with teacher elicits which are open-ended. When the teacher asks: *What causes that?* the learner volunteers the term *overpopulation*, a specialist register pertinent to the topic. This is immediately clarified (evidence of initiative in the negotiation of both meaning and form). Subsequently, the other learner's utterance demonstrates ability to handle a topic by explaining how overpopulation causes

unemployment (example of extension). As the dialogue progresses, the teacher's acts express non-comprehension, thus stimulating more original discourse in which meaning, form, and content are negotiated. For this group that did not participate actively at pretest stage the situation is very different at post-intervention, showing enhanced initiative.

Evidence of counter-informs and self-selection was also identified in post-intervention transcripts. As noted earlier (§ 3.5.3.2), self-selection is identified when a learner takes the floor without waiting for a teacher allocated turn. Extract [20] from Mathematics (T1) is a case in point:

- [20] T: Why would you use centimetres? (rq)
S: Razor is little... (clar) A book is big (ext)
T: So? (cr) - - - -
S: To measure the desk (clar)...also to measure the wall (ext)
T: What else? (dq) Look around you...(cl)
S1: Myself (all pupils laugh) (mr)
S2: No (cinf) ...Sir (n) My length. (clar)
S3: Not length. (cinf)...Is it length? (pq)

The learners respond to referential questions with answers that show initiative after looking around the learning environment. Although they do not bid after the question: *What else?*, there is evidence of enthusiasm to participate, and that comes to the fore when S2 and S3 self-select. Learners do not wait for turns to be allocated, and both S2 and S3 give counter-informs in which divergent views are expressed, and positions disputed.

Extract [20], like [19] contains evidence about the connection between teacher effectiveness and learner initiative that characterises interaction in most post-intervention lessons. For example, the teacher asks a referential question to seek clarification. In turn, the learner gives the clarification, and building on the

answer, the teacher prompts the learner to add more information and allows thinking time by pausing after the elicitation. The learner takes the initiative by responding in extended discourse, and the teacher pushes for more output by giving a clue. One learner takes the discussion further by giving a brief clarification. Immediately, S2 self-selects and gives a counter-inform in which he contributes to the negotiation of content and form. Retrospectively, S3 then also self-selects, and the counter-inform leads to negotiation of learning in original discourse.

In two Geography lessons observed in Malawi, two teachers taught the same lesson on physical divisions of Malawi. The lesson by the teacher who had not taken part in the in-service course revealed similar characteristics as those found in the pre- and post-intervention lessons by teachers (control group) in Zimbabwe. There was no evidence of counter-informs or clarifications by learners, instead there was a repertoire of choral replies and regurgitation of facts in response to the teacher's discourse comprising display questions and question tags.

The lesson by the teacher who participated in the Malawi in-service course reflected teacher awareness of discourse acts that stimulated higher levels of participation. The lesson started with specification of objectives, followed by transmission of information. After that the teacher sought explanation of some concepts to be given in learners' own words. The result was learner feedback in which new information was given in original language. Extensions were also noted as the topic was controlled. Discourse such as: *Any comments* or *What do you mean?* resulted in learners self-selecting to express their own views. An example was when three learners gave counter-informs with reference to two concepts, namely, 'physical feature' and 'physical division'. They gave responses and expanded on them in language the teacher could not predict. Although the lesson was not recorded, the observation, supported with field notes, identified a high degree of initiative.

To sum up, this section showed how learners under those teachers who underwent in-service training developed the ability to participate more actively in classroom dialogue when the teacher stands in front of the class. Their counterparts, on the other hand, continued to use discourse as they did at pre-intervention, reflecting little evidence of initiative. In what follows, discussion focuses on initiative when learners interact in groups.

4.5.2.2 Initiative when learners work in groups

Group work is one of the oracy issues that the Litraid course encouraged. As observed earlier (§ 2.5.3.5), group work is characterised by collaborative interaction, which occurs when learners are encouraged to achieve common learning goals by working together rather than with the teacher. In that respect, learners are given instructions on a task, work on their own, and guide each other's dialogue so as to achieve learning goals. In this section, attention is paid to learner initiative from the point of view of group interaction. Analysis is accomplished through a dual focus on the transcripts, in terms of both learner and teacher discourse, though primarily on the former, and the discussion will be guided by the typology of disputational, cumulative, and exploratory talk referred to earlier (cf. § 2.5.3.5).

One of the oracy principles associated with effective teacher discourse is that pupils engage in open extended discussion when talking with peers outside the visible control of the adult (cf. Mercer, 1995). This means we expect the discourse used during group work to reflect the use of those discourse acts associated with initiative. Such usage is dependent on the quality of teacher-initiated informs; the nature and clarity of task; and the extent to which rules for peer interaction are made accessible to the children.

The general picture that emerges from an analysis of pretest transcripts is that of a lack of awareness (on the part of teachers) that collaborative interaction can

help achieve pedagogic goals. In the majority of lessons, group work is either not encouraged or is engaged in as a mere routine obligation. Where attempts are made, there is little evidence of initiative. In the Mathematics (C) lesson (pre-intervention), the teacher says:

[21] T: Let's now answer these questions (i) in our exercise books...
(ext) No time for group work. (i)

The directive creates the impression that working in groups is not that important, and is a waste of time. Instead learners should write. The effect of this is to close opportunities for talk. This pattern is reflected in other lessons, including Geography (T1), where the teacher gives instructions and learners respond thus:

[22] T: Now... (m) what I want you to do ... (i) just for about a minute... (ext) in your groups... (ext) I want you to visualise... (r) to put into mind what you have seen outside (clar) and just write down what you have seen. (r) work quickly (r) (Pupils work in groups)
S1: The soil washed away (i)
S2: Uhu-u (acc)
S1: *Nyora pane iyi* (Write here) (r)
S: Is this what the teacher wants? (ch)

The instructions, in the form of a directive, do not define the task clearly. Learners are to “just write down” what they saw outside without any clarification why and how they should do that. That in itself is constraining. The directive word ‘visualise’ is new and does not improve the chances of purposeful interaction. Then we are back to writing, which the teacher emphasises, at the expense of talking. This, too, is hurried. One minute is hardly enough for learners to generate discourse. Once in their groups, their discourse is mainly a regurgitation of language used by the teacher prior to the activity. Similarly, there is hesitation to do anything autonomously, lest that runs counter to teacher expectation, and

hence the unwillingness to take initiative. The mother tongue is used, and only to direct somebody where to write, rather than negotiating learning through clarifications and counter-informs.

In the Mathematics (T2) lesson an exercise is written on the board as a follow-up to interaction on the topic 'Length'. The teacher then gives this directive :

[23]T: Quickly. (r) Get to your groups...(r) and write the answer. (r)

There is no explanation of what the task involves, and emphasis is on writing although arrival at written answers should depend on purposeful talk as a pre-condition for better written work. The pattern of interaction shows that whatever the groups do has also to be done speedily. This perfunctory approach reflects a lack of awareness of how peer interaction can be used to stimulate initiative. Though not present in the group, the teacher's dominance can still be felt, and it negatively constrains discourse output as the group encounter proves in [24]:

[24]S1: Who is going to write? (dq)

S2: *Nyora iwe* (You write) (r)

Ndini ndinogara ndichingonyora.(i) *Nhasi handidi.* (ext) (I am the one always writing. Today I don't want)

S4: But why did the teacher say we use metres (cr) and not ruler (ext)

S3: Never mind (i)

S1: 1000 metres equals one kilometer (i)

S4: No. (cinf) 1000 metres equals 10 millimetres (cinf)

S3: I can't remember what he said. (i)

S5: You just write 10 mm. (r)*Achatikorekita* (i) (He will correct us)

The lack of explicit rules about group work leaves learners uncertain. In the attempt to refocus the dialogue, S4 asks, *But why did the teacher say we must use metres not ruler?* This clarification request does not get any clarification

from peers. Instead, group members are supposed to continue sharing the wrong information through counter-informs that are counter-productive. They dispute in the mother tongue about who should write. This off-task discourse is both psychologically and emotionally disorientating thus preventing a more desirable atmosphere for interaction, and worse still it stifles initiative.

The teacher's ineptitude with the language of group work accounts for a number of interaction problems including misconceptions when S4 equates 1000 metres to 10 millimetres. Due to improper use of informs prior to peer interaction, negotiation of content, form and meaning is stalled. The concepts of metres or millimetres have not been grasped at all. Learners have problems with the register and, in the atmosphere of uncertainty, S5 uses informative discourse to assure peers that it does not really matter what they write. Since the teacher knows everything, he is going to correct them anyway. As a result they do not see any need to clarify their views in extended discourse. This is because it is what the teacher says that matters, and not what learners say.

A further example of constrained group interaction is from the lesson English (C) in which peers from the control group continue to show the lack of initiative at post-intervention stage as in:

[25] S1: *Nyoraka* (r) (Write)

S2: A- *tanga iwe* (cinf) (No. You write first)

S3: *Kurumidzai kani* (r) (Hurry up)

S4: *Haugoni kuspela iwe* (i) (You can't spell)

S5: *Ndipei ndinyore ini* (r)(Give me , and I will write)

S1: What are we supposed to do? (rq)

This episode typifies disputational talk. All participants take an active part, but there is little evidence of co-operative engagement with the task. The exchange is, therefore, unproductive. In a comparable study, Mercer (2004) confirms that

such a pattern of interaction is common when teachers lack exposure to ideas about oracy.

In lessons observed in Malawi, use of the mother tongue (Chichewa) during group work was just as common as in the lessons observed in Zimbabwe. My main problem, however, was that I could not understand what pupils were saying to one another. The one extreme example of discourse breakdown was when a group sat for three minutes just looking at each other. When I asked why, they responded that they did not know what they were supposed to do in the Mathematics task about algebraic expressions. This finding confirmed the point that where group instructions are not given in comprehensible language, and where objectives of a given task are not clearly spelt out, there can be no real initiative. Learners are constrained by the lack of effective teacher input.

This section so far has illustrated the poor extent to which initiative is evident during peer interaction at the pre-intervention stage. Lessons revealed a general pattern by teachers in which a lack of awareness about effective discourse for preparing and then facilitating group work resulted in opportunities for learner initiative being lost. This was true of both the experimental group and the control group.

There was, however, evidence of enhanced initiative even in the interim lessons. A representative example is the post-Module 3 English (T1) lesson about role-play (see Appendix D). The teacher comprehensibly outlined the situation from which the role-play was to be created. The learner playing the role of father initiated the discussion, then asked an open-ended question that set the other discourse participants thinking. This was followed by suggestions and counter-informs. Clarification requests (e.g. *What do you mean?*) led to further clarification of lexical items, resulting in mutual understanding of the topic. The teacher's instructions, given through effective discourse, led to exploratory talk

realised through self-selections, counter-informs, and clarifications, thus reflecting a high level of participation.

Evidence of initiative in post-intervention lessons was also noticed. Teachers who participated in the course chose the discourse of instruction more consciously. As an example, the teacher of the Geography (T2) lesson gives the following instructions:

[26]T: I notice you have many good points about geography today. (ev)
We did not hear from everyone (i) so to give everyone a chance let's work in groups(r). Remember this point : (r) Ask your friend to read out their point. (r) Before the secretary writes that down ask questions. (r) No use of Shona. (i) OK? (ch) English only as used in geography. (i)

In this instance, the task is clearly defined, and as argued earlier (§ 2.6), a consciously defined task has the potential of securing learner understanding. The teacher is more deliberate in her choice of discourse acts, and does not hurry learners as she did during pre-intervention. Discourse acts are chosen more consciously and systematically, and are deliberately calculated to encourage participation, as well as to ensure that learners have a clear idea what is expected of them.

The first discourse act, though not quite correctly expressed, is an example of positive evaluation of learner contribution. It therefore, becomes logical to afford everyone the opportunity to talk, and that is best done in groups. The first inform is followed by a directive, which gives precise points (rules) to be observed during peer interaction. The teacher emphasises that dialogue must be conducted in the language of the subject in order to encourage interaction through the target language, English, which is the medium of learning. The following interaction took place after the teacher had given instructions:

- [27] S1: Jowa...(n) you are the chairman (i)
 S2: Yes...(acc) let him chair (ext)
 S3: So...(m) let's take turns (r) read your reasons quietly (r) before you tell us (ext) - - - -OK... (m) My reason is that people run away from poverty.(i)
 S4: What poverty? (rq)
 S3: They think you get rich in town. (clar) They think there is money in town (clar) In rural areas people are poor (ext)
 S5; Uhu ...(acc) and also to look for jobs (ext)
 S6: It is ummm...I mean...smart in town (i)
 S3: It is hygienic. (ev) Use short cut. (r) How do you spell that word? (dq)
 S4: Go on...(p) I'll check in the dictionary (i)

The positive influence of the teacher's discourse is evident in the learners' replies and the way they control their own discourse. For a start, the turn-taking is well organised. Through a directive by a peer, one of them is nominated to chair, and this is accepted without dispute. The group leader (S3) re-interprets teacher instructions and further clarifies how the task ought to be handled (an example of initiative). This he does through what we may term 'inclusive discourse' (*Let's take turns*). Everyone is expected to take part and that creates opportunities for initiative. The silent stress (- - -) is used to allow thinking and planning time. The chairman then starts the discourse with his own reason, through an inform that is in original discourse towards the negotiation of content. The negative feedback (*What poverty?*) stimulates a clarification from S3 in which new content is added and expanded upon (using extensions), and this serves as evidence of critical engagement in topic exploration.

The response makes the content clearer and adds new information to that given originally. S5 agrees through the minimum reply *uhu...* (cumulative talk) before contributing new information. Then S6 also contributes (*It's smart in town*), an example of further negotiation of content. The unpredictable response from S3:

It's hygienic. Use short cut, is a counter-inform reflecting learner ability to use retrieval strategies when the opportunity to do so is made available. In a retrieval strategy, learners recover the relevant discourse from memory in order to solve a problem. The introduction of *hygienic* is a contribution associated with the negotiation of form, and learners show resourcefulness when they find the correct meaning (from the dictionary) on their own initiative. In their exploration of the task, learners share ideas, provide reasons for their opinions, question each other, and self-select, and these are instances of initiative and exploratory talk (Mercer, 1995).

This result confirms that learners taught by teachers whose metalinguistic, or more especially discourse awareness has been enhanced are able to take control of a topic and use extended discourse away from the visible control of the teacher. The dialogue reflects the idea of reciprocity (cf. Wilson and Haugh, 1995, and already discussed in § 2.5.2.6) in which learners demonstrate the ability to recognise discourse junctures in terms of when to gain the floor, and when to make a contribution. There is joint construction of new knowledge that leads to mutual understanding. This is made evident through clarification of opinions held, and giving counter information to shed more light on the issue under discussion. Further, learners also assume the role of the teacher by stimulating exploratory talk through clarification requests, evaluations, instructional pauses and prompts. In this regard, learner-learner exchanges are evidence of maturing communication skills, and these findings resonate with those of Mercer and Sams (2006) showing that the use of more effective discourse achieved learner initiative and better learning outcomes. Moreover, my finding also shows that the teacher can act as an important guide for learners' own use of language for constructing knowledge (cf. Mercer, 1995).

The above findings are comparable to those obtained from lessons observed in Malawi at posttest stage. Two teachers taught a poetry lesson. They taught a poem "Market Women" and both used group work. The teacher who had not

participated in the Litraid programme read the poem aloud, and asked two learners to also read it aloud while others listened. After that he asked learners to work in groups and answer questions written on the board. These are some of the questions I managed to capture in my field notes.

- [28] 1. Where do the women sell their goods?
2. Where do the women get goods from?
3. What do you call people who buy goods from women?
4. Who looks after children when they are away at the market?

I observed children working in groups, but they interacted in Chichewa, while the secretary wrote answers in English. The way turns were allocated did not encourage active participation. Loud reading by two learners is mere routine that does not show initiative. Display questions led to the reproduction of language from the poem, and learners merely gave back information without processing it. There was potential for learners to clarify content in extended discourse (which would have been evidence of initiative), but the teacher failed to encourage it as he failed to ask referential questions and seek clarification on specific aspects of the poem.

The second teacher, who had participated in the in-service course, handled the same poem rather differently. Her approach, as summarised in my observation notes, was as follows. Firstly, she engaged in dialogue with pupils by asking them to explain: what happens at the market; why people sell goods; where they get goods from in order to sell at markets in Zomba; and how easy it is to earn a living from buying and selling. She asked them to read the poem quietly, after which she asked them some questions. Thereafter, she gave them instructions for group work. They were to play four roles, one of a customer and three of vendors selling sugar cane, fish, and avocado pears. I then observed them playing such roles before each group dramatised in front of the class.

The teacher began by appealing to the learners' personal experience about life at the market. In turn they volunteered answers in extended language to justify the points they raised. They were prompted to clarify words and new examples (negotiation of learning). Unlike their counterparts, in the other lesson, they expressed disagreement with peers. Through clarifications, counter-informs, and extensions, meaning was created and disputed in the buying-selling process. New information was supplied as the customer was pushed to make up his mind to settle for one item. Real language that is unpredictable was used to solve a life-like problem through collaborative construction of meaning and knowledge, as learners asserted, challenged, explained and requested. At the cognitive level, talk by the four learners manifested itself as thought and action while reasoning was visibly being pursued. To that extent, peer-interaction during the post-intervention phase in Malawi too, stands as evidence of initiative in the negotiation of learning.

This section was concerned with qualitative analysis of transcripts to establish the extent to which initiative is manifested when learners work in groups. Coming after quantitative results, it adds more depth to those results by highlighting connections between the discourse acts of the teacher and those of learners as the interactions unfolded. In particular, discussion centred around the link between effectiveness of teacher discourse and learner initiative. It was established that at pre-intervention stage, both the control and the experimental groups manifested a low degree of initiative. The opposite was, however, true for the experimental group at post-intervention.

4.6 Synthesis

In this chapter the results on the testing of each hypothesis were presented, followed by discussion. The present section focuses a little further on showing how the three key constructs of dominance, effectiveness and initiative relate to one another. This is based on the findings on the three hypotheses in terms of what happens in real time interaction. The relationship is examined with the

primary objective of classroom interaction in mind, namely, negotiation of learning. To recapitulate, negotiation of learning is an interactive process in which there is conscious intention to enable learners to construct meaning from subject content through interaction with others (cf. § 2.5.3.2 for more detailed explanation). It is with this perspective in mind that the relationship between the three constructs is examined, and also to underscore the point that learners who are pushed during negotiation provide more essential information (negotiation of content), display a greater range of vocabulary (negotiation of form) and show an understanding of content (negotiation of meaning) (see for example, Van den Branden (1997)). I shall begin with the connection between dominance and learners' level of participation.

In real classroom interaction, dominance measures from Table 6 and Table 7 show that for both control and experimental groups the proportion of teachers' discourse acts is much higher than that of learners during pretests. This led to the conclusion that, before taking part in the intervention programme, teachers tended to dominate interaction.

Conversely, the level of learner participation was low. Teacher discourse was characterised by polar questions, question tags, display questions, and extensions in which after initiating dialogue, the teacher went on to transmit information, and to answer his or her own questions. In turn, learners gave minimum responses, that is, one-word and choral answers. In most cases they were also silent, and the result was limited negotiation of learning. There was no evidence that learners took part in the processing of content, nor did they make use of new vocabulary to demonstrate that they had derived meaning from the lesson. This shows, as can be expected, a clear relationship between dominance and a low level of participation. The following extract from the English (T1) (pre-intervention) lesson is illustrative.

[29] T: We are using describing words...(i) Isn't it? (pq) We were using describing words. (ext)
SS: We were using describing words (mr)
T: What type of person he is...(i) Isn't it? (pq) That is an adjective (i) Isn't it?(pq)
SS: Ye-ee-es (mr)
T: Yes...(acc) Can you give me some more examples? (r)
S: Good (mr)
T: Yes (acc)
S: Tall (mr)
T: Yes (acc)
S: Like (mr)
T: Come again (l)

Turning to effectiveness, which refers to the selection and use of language to achieve the best learning results (cf.§ 3.6.2), this construct has a close connection with both participation and initiative. Earlier (§ 3.6.3), initiative was defined as the learner's motivation to take part in classroom dialogue without coercion and it was operationalised for this study as the kind of learner participation that is characterised by counter-informs, clarifications and extensions. Evidence from interim tests and posttests of teachers from the experimental group showed that when teachers use effective discourse, defined in terms of referential questions, clarification requests, prompts, clues and evaluations, learners showed more initiative.

For example, all four interim test lessons by the English (T1) teacher (see Appendix D), selected for sample longitudinal analysis, reflect that the teacher makes good use of more effective discourse to encourage initiative and negotiation of learning, with learners clarifying their views in extended language and giving opposing views through counter-informs, as in the lesson taught after Module 2:

[30] T: Why is that interesting? (rq) - - - Anyone? (n)

S3: I think...er-rr you should not marry someone because he is handsome (i)

T: Do you agree? (pq) - - - Faina (n)

S4: Yes (acc) a person can be handsome but have bad manners (clar)

S5: Like in the passage (i) the boy does not show respect for our tradition (ext)

S6: What does 'exceedingly' mean? (rq)

It is clear that answers to the teacher's elicitation, an open-ended question, cannot be predicted, and will require construction of personal meaning by supplying information (content) in pertinent vocabulary (negotiation of form). This is what happens when divergent views are expressed, and learners volunteer answers without coercion. There is negotiation of learning as the teacher guides construction of knowledge based on the text that learners read at the beginning of the lesson.

In general, this study finds not only that teacher dominance limits the amount of discourse that learners produce (this is so, in effect, by definition), but that it also tends to place constraints on the quality of their participation. It also finds that the more effective the discourse selected by the teacher, the more the initiative demonstrated by learners.

4.7 Conclusion

The primary focus of the chapter was to present findings arising from testing the three hypotheses spelt out (cf. §1.6). The testing was around three constructs, namely, dominance, teacher effectiveness, and learner initiative. These had been operationalised in Chapter 3. Analysis of the lesson transcripts, the main

database for the study, was influenced by theories on classroom interaction, specifying the potential of talk in promoting learning results.

Presentation of findings started with the analysis of views expressed by teachers and learners on the four skills commonly used in the classroom: listening, talking, reading, and writing. It was assumed that the skill preferred most would have some influence on the discourse behaviour of classroom participants. This was followed with a discussion of the negotiation type preferred most by teachers: negotiation of form, negotiation of content, and negotiation of meaning. In exploring views on the two issues, there was comparison of findings from pre-intervention and post-intervention responses. The findings were that at posttest teachers who participated in the intervention programme showed awareness of the potential of talk in negotiating learning, and also that there ought to be a balance between negotiation of form, content and meaning.

Discussion then shifted to Hypothesis 1, paying special attention to the construct of dominance. The proportion of acts by the teachers was compared to those of learners at the two stages of the study in both the experimental and control groups. The statistical testing showed very strong support for the hypothesis and thus for the fact that the intervention course led teachers to dominate the classroom less.

Hypothesis 2 was tested in order to determine the extent to which the discourse acts that characterise effectiveness were more evident in the discourse of teachers after they had participated in the Litraid programme than before, and more evident than in the control group at both stages of the study. Here, too, the statistical testing showed very strong support for the hypothesis and thus for the fact that the intervention course influenced teachers to use more effective discourse. The more qualitative discussion that followed gave depth to this finding by examining the discourse of interaction as captured in the transcripts.

Finally, the results of Hypothesis 3 were presented. 'Initiative' and 'participation' were briefly explained, and initiative was operationalised for the study in terms of three categories of discourse act. Again, the statistical testing showed very strong support for this hypothesis too, and thus for the fact that the intervention course had enabled the teachers to create a discourse environment much more conducive to learner initiative. In the qualitative analysis, the connection between effective use of discourse by the teacher and the resulting higher levels of discourse initiative on the part of learners was demonstrated. Further, it was also noted that learners under the influence of teachers whose metalinguistic awareness had been raised were able to work more productively in groups, and to negotiate content, meaning, and form outside the immediate control of the teacher.

The chapter concluded with a brief consideration of connections between the main classroom discourse constructs put forward – teacher dominance, teacher effectiveness and learner initiative (and more generally, learner participation) – which the findings of the study could be said to help validate.

CHAPTER 5

DISCUSSION

5.0 Preview

The present chapter starts with a brief review of the study as a whole, followed by discussion of its main findings. This leads on to an evaluation of the study that considers some of its limitations and its strengths, and then a number of its more important implications are spelt out in conjunction with various recommendations, many of which link with suggestions for further research.

5.1 Brief recapitulation

One of the assumptions made in Chapter 1 (cf. § 1.2) was that it is through language that teachers and learners are brought together in a conscious effort to work jointly towards mutual comprehension of a topic (Van Lier, 1988). Related to this was the second assumption that teachers whose input fails to encourage extended discourse to negotiate learning are likely to benefit from exposure to ideas about classroom interaction. Both assumptions link with the primary aim of the study, namely, to establish the extent to which teachers, who are exposed to ideas about classroom talk use language more effectively to encourage learner participation. The key research question was: What are the effects of the course on classroom text and discourse on oracy in the high school classroom? The question thus seeks to find whether any discourse changes occur in the interaction patterns of teaching and learning after the intervention programme has been applied. In all, the aims led to the generation of three hypotheses, of which two are centred on teacher discourse, and the third one on that of learners. Establishing whether any discourse changes occur is guided by the second aim, namely, to develop and apply an analytical framework that can be used to assess, in a relatively systematic and objective way, the quality of discourse used by the participants in the teaching-learning process.

Chapter 2 provided a review of approaches to discourse analysis relevant to the investigation of the potential of teacher-talk in an environment conducive to the development of learners' oral proficiency in the negotiation of learning. The work of Sinclair and Coulthard (1975) on classroom discourse was considered central to the investigation, together with the works of other scholars (e.g. Mercer, 1995; Van Lier, 1988) whose contribution to educational linguistics either complemented the work of Sinclair and Coulthard, or extended its scope. Broadly, the chapter examined quantitative and qualitative approaches to the analysis of classroom discourse and its pedagogic functions.

In Chapter 3 the focus was on the research methodology. The pretest-posttest control group research design was described in conjunction with research procedures and the intervention stages. It was explained that the design included pretests, followed by interim tests and posttests. The analytical framework in terms of which teacher-learner discourse would be analysed, was explained. This framework was presented as an eclectic one that built on combined insights from various language educationists and applied linguists (e.g. Barnes *et al.*, 1969; Sinclair and Coulthard; 1975; Van Lier, 1988; and Mercer, 1995). This was followed by a discussion in which analytical categories were identified, and explained in context. The possible overlaps between some of the categories (e.g. 'evaluation' and 'accept' or 'display' and 'referential questions') were clarified so as to remove, as far as might be feasible, any ambiguities when it comes to the analysis of transcripts. Most importantly, the three hypotheses were operationalised, and the three analytical constructs, which are central to the investigation were identified: teacher dominance, teacher effectiveness and learner initiative. Another concern of the chapter was to explain key ideas in the four study modules forming the basis for the intervention course. It was in terms of exposing teachers to ideas from the modules that change in their discourse behaviour and that of their learners was hypothesised.

In Chapter 4 findings of the study were presented. The analysed lesson transcripts were used as the basis for the investigation and evaluation of classroom discourse patterns before and after the intervention. Quantitative and qualitative methods (described in § 1.7 as being complementary) were used to analyse the discourse manifested in the transcripts. With reference to Hypothesis 1, dominance was defined analytically as the proportion of teachers' discourse to that of learners within a speech episode of 15 minutes for a given lesson. For Hypothesis 2, effectiveness was defined in terms of the proportion of teacher discourse act categories that were considered to be most relevant to effective negotiation of learning. Hypothesis 3 in turn operationalised initiative in terms of the proportion of learner act categories considered to be most relevant to this construct. The development of these three analytical constructs provided the basis for the quantitative testing of the hypotheses, but the complementary qualitative perspective explored relationships between teacher dominance, teacher effectiveness and learner initiative in interactions as they unfold.

5.2 Review of findings

This review starts with the results arising from responses to questionnaires about activities preferred most and the negotiation types preferred most. This will be followed by the review of results arising from testing each of the three hypotheses.

At both pre-intervention and post-intervention stages teachers were asked to indicate the activity they preferred learners to do most during lesson time (listening, talking, reading or writing), and learners were also to indicate which of those four they preferred most. At pretest, both the control and experimental groups of teachers emphasised that learners should listen most of the time. On the other hand, the majority of learners expressed the view that writing should be focused on most. It was also found that reading was rated lowest by both teachers and learners. At posttest there was little change in the attitude of teachers and learners in the control group. Teachers in the experimental group,

however, showed a marked change in their attitude towards talk. It was more positive than before intervention. The same change was noticed among the learners under their care (cf. results in §4.1). The conclusion that can be drawn is that the teachers, prior to participation in the in-service course, had a limited awareness of the potential of talk, and such teachers can be expected to dominate interaction. The opposite is however true for teachers who were exposed to ideas about oracy. They became more aware of the importance of talk, and such teachers can be expected to be less dominant than their counterparts, and therefore affording learners more talking opportunities.

There was a similar pattern among teachers concerning the negotiation type they preferred most when teaching (content, meaning or form). Both groups preferred negotiation of content most at the pre-intervention stage, and while there was a significant shift in the preference of teachers from the experimental group after intervention towards negotiation of meaning and form, those from the control group showed no change in their preference for the negotiation of content. Teachers who focus mainly on content can be expected to dominate interaction, resulting in constrained participation by learners.

Pretest results arising from testing for Hypothesis 1, in which the construct of dominance was focused on (cf. § 4.3.1) showed that in both groups the proportion of teachers' discourse acts was considerably higher than that of learners. Transcripts showed that learners were listening most of the time, while teachers talked more than they should have. Post-intervention results, which in the experimental group showed a very significant reduction in the proportion of teacher discourse acts and a concomitantly very significant increase in the proportion of learner acts, thus provided strong support for Hypothesis 1 and testified to the positive influence that ideas from the intervention course can have on teacher discourse.

More qualitative examination of the data in context supported this conclusion as it showed that before intervention teachers tended to use many more discourse acts that stifle origination of discourse such as: display questions, tag questions, polar questions, off-task codeswitches, long chains of extensions and threats. The I-R-F pattern characterising much of the pretest interaction reflects a pattern of teacher-led recitation, which tends to reinforce the teacher's authority as the transmitter of received wisdom, while imposing restrictions on student initiative.

On the other hand, one of the findings was that not all lessons taught by participants on the intervention programme showed a reduction in the number of acts by teachers. Some lessons had a higher proportion of teacher discourse acts at post-intervention than at pre-intervention. A number of factors explains this, for example, the fact that different topics or lesson approaches might demand that teachers talk more in one lesson than in others. However, the construct of teacher discourse dominance in my study, defined in terms of the proportion of teacher discourse acts to those of learners, is a relatively basic measure that encompasses only the quantity of discourse produced, without considering the quality of different discourse acts in the context of the classroom. An analytical construct in this study that does attempt to achieve the latter is that of teacher discourse 'effectiveness'.

Conclusions about discourse effectiveness are guided by findings in respect of Hypothesis 2. To investigate the construct I looked at the views expressed in the questionnaires about the negotiation type preferred most, to begin with, then at the evidence of interaction from the transcripts. Findings showed that there was a change in the experimental group teachers' perception of negotiation types, with a clear reduction in the transmission of content as the priority. It was then concluded that the intervention course positively influenced teacher perception of negotiation types, more especially because statistics (see Table 5) showed a near balance in the way these were perceived after intervention (content = 40%, form = 35%, meaning = 25%).

The teachers' changed perception about the most preferred negotiation type was reflected in the discourse they used, and confirmed by the findings on teacher discourse effectiveness as operationalised in terms of the total proportion of six teacher-specific discourse acts (clarification requests, referential questions, evaluations, prompts, clues and silent stress) relative to all other acts in a given episode of speech. The difference in the proportion between the analysed pretest and posttest lesson transcripts for the six teachers taking part in the course, showed a statistically very significant change, thus reflecting improved discourse effectiveness through a more conscious choice and use of discourse acts. A paralinguistic discourse feature that research results confirmed as being effective is the silent stress or instructional pause (cf. § 3.5.3.1). Results (cf. § 4.4.2) showed that instructional pauses after referential questions give learners time to think and to select appropriate language that is both original and extended.

The more qualitative analysis of teacher discourse effectiveness also reflected how improved language awareness derived from the course led to more conscious attempts by the teacher at interaction evident, for example, in the use of open-ended questions that stimulated original language based on personal experience. In many instances there was conversational adjustment and competent management of a topic either when the teacher stood in front of the class (cf. § 4.5.2.1) or when pupils worked in groups (cf. § 4.5.2.2). Further, display questions were asked to encourage more focused dialogue as more thinking time was afforded.

Hypothesis 3 was tested with the main focus on the construct of initiative, defined as the willingness to get actively involved in classroom discussion (cf. § 3.1). The broader notion of learner participation, the converse of teacher dominance, was also discussed relative to initiative, but this latter construct was operationalised in terms of the proportion of three specific acts (extension, clarification and counter-inform) in learners' discourse as compared to all other

acts they produce. Results (§ 4.5.2.1) confirmed that in the experimental group learners at posttest stage, showed statistically very significantly more initiative, and qualitative discussion showed learner initiative to be supported when teachers gave explicit instructions for group work, asked more referential questions and made clarification requests. Discourse was used purposefully to negotiate learning both when the teacher stood in front of the class and when learners worked in groups. However, counterparts in the control group did not manifest this change in discourse behaviour. These findings help to confirm the theoretical viewpoint that knowledge is socially constructed and is mediated through language (cf. Mercer, 1995).

The conclusion that can be arrived at is that when teachers use discourse more consciously, and when they give clear instructions for group work, learners participate more actively and show more initiative. Further, the level of awareness that teachers display is attributed to the effects of the intervention course, rather than to chance factors, given the quasi-experimental design of the study and the fact that counterparts in the control group did not manifest any substantive changes in their use of classroom language. Teachers who participated in the programme were able to do things with words that they could not do before.

To sum up this section, the review of results took the study a step further by confirming that there are some types of teacher discourse acts and speech modifications, which facilitate negotiation of learning. As to whether it is a good or bad thing for teachers to spend the higher percentage of class time talking depends on the objectives of the particular lesson. Results also confirmed that when teachers are given specific training they manage to extend their waiting time after asking questions, leading to increased participation by learners. Results showed that when teachers use referential questions they stimulate learner initiative, prompting learners to provide significantly longer and syntactically more complex responses. Finally, the use of an analytical

framework to investigate discourse patterns, followed by quantitative measurement and qualitative interpretation of interaction, confirmed that the discourse of a particular genre with particular purposes can be measured and assessed relatively systematically.

5.3 Contribution of the study

A key question is what the study contributes in the light of the foregoing review of findings. The question is addressed by specifying what the investigation achieved by testing the hypothesis as well as what was achieved in response to the two aims:

- a. to establish the extent to which teachers who are exposed to ideas about classroom talk use language more effectively to encourage learner participation in the negotiation of learning;

and the second one:

- b. to develop and apply an analytical framework that can be used to assess, in a relatively systematic and objective way, the quality of discourse used by the participants in the teaching-learning process

The aims play a key structuring role in this section. Discussion will begin with a brief acknowledgement of some of the limitations of the study before its contribution is considered.

As observed in Chapter 1, the research population was rather limited, and further, research participants were confined to schools in urban areas, namely, Harare (Zimbabwe) and Zomba (Malawi), thus excluding rural learners. Notwithstanding that, data from which conclusions are drawn is about interaction in typical classrooms whose procedures in pursuit of learning can still arguably to some extent be generalised to other classrooms in disadvantaged areas in

Southern Africa at similar grade levels, where the medium of instruction is not the learners' mother tongue. It should also be noted that the limitation to urban schools derives partly from a positive factor, namely that the study was conceived in terms of a fairly ambitious quasi-experimental design with a lengthy intervention period, which meant returning again and again to record lessons.

A further limitation was the size of the research population. There were only nine participants in the core sample (Zimbabwe), six who took part in the course and three who were in the control group. It is however argued that in terms of my analytical framework, discourse had to be analysed intensively in order to arrive at reasonably objective quantitative measures for testing the hypotheses, as well as to enable me to interpret the statistical findings more qualitatively. Breadth of scope was therefore sacrificed for depth.

A third limitation related to the difficulties inherent in developing and applying a framework for analysing functions in discourse, where for instance some categories almost inevitably overlapped to an extent. To counter this limitation, clarification of categories that overlap was given (cf. § 3.5.3). Additionally, some of my analyses were checked by another analyst in an attempt to enhance reliability. Mitigating these limitations should help to enhance the value of the study to those who might access it, such as other researchers, teacher educators, educational planners and curriculum developers.

The fourth and final limitation relates to the method used to gather data, namely, audio-recording of speech episodes. This posed difficulties regarding the operational definition of initiative with specific reference to two turn-taking acts: self-selections and bids. One couldn't be totally certain about identifying them by merely listening. If the interaction had been video-taped, it would have been easier to capture both of these acts through the way learners acted non verbally before answering a question.

The strengths of the study can be assessed in terms of its contribution at theoretical-methodological, descriptive and applicational levels. At a theoretical level, the study has contributed by developing a framework for explicating, in a reasonably objective manner, the notions of teacher dominance, teacher effectiveness and learner initiative from a discourse analytical perspective. This framework was applied within a quasi-experimental research design to establish the effects of an innovative course on classroom text and discourse in terms of these three key constructs, and the findings that emerged feed ideas back into theory about what types of act characterise classroom discourse that enhances the negotiation of learning.

In terms of the contribution of a study at a more descriptive level, one is more concerned with description of a particular situation, in this case the detailed analyses of the classroom discourse of certain groups of teachers and learners that are made available, as well as the account of changes brought about in the discourse behaviour of some of these teachers and learners by the Litraid course, which has been, in both Zimbabwe and Malawi, a programme that has involved quite substantial numbers of participants. My study has thus also played a role in evaluating empirically aspects of an important local in-service course.

Insights from the study have the potential to also make a contribution at a more applicational level. In showing that by focusing on oracy teachers achieve better learning results with their learners, it implies changes needed in teacher education. Conventional approaches to teacher training that focus on educational psychology, educational sociology and teaching methods should be modified to include a strong focus on oracy and the role of teachers in promoting it in their classrooms in the interest of more purposeful interaction. More specifically, for example, results from testing the initiative hypothesis make an important contribution to researchers, teacher educators and curriculum planners because they prove in practical terms that certain teacher-initiated discourse acts are closely related to learner discourse behaviour in which extended discourse is

originated. Such results show the interconnectedness between teacher effectiveness on the one hand and initiative and participation on the other. The study showed that when teachers consciously select certain discourse acts, learners participate actively, using discourse acts such as counter-informs, clarifications and extensions. The study showed also that this is not confined to one subject, English, as has been the trend with previous studies. Thus the study makes a contribution by demonstrating that ideas about classroom interaction can be applied to different subjects (e.g. English, Geography and Mathematics). Curriculum planners who access the study should find it valuable for making the necessary changes regarding the link between oracy and the subjects of the curriculum.

The study showed that where teachers prefer that learners listen and they do most of the talking the result is that learners are constrained and are discouraged from contributing meaningfully to classroom discourse. The converse of this situation was that when teachers selected effective discourse acts, meaningful learner discourse was encouraged. This finding is repeated here in order to make an important point regarding the contribution that the study could make with regard to educational planning. Educators in Malawi and Zimbabwe have made an effort to introduce change by implementing the intervention course in classroom text and discourse. However, it would appear that some of these changes fail, partly because educational planners do not always understand the essence of that change (an issue taken up more generally by, for example, Van Aswegen and Dreyer, 2004). In a sense my study addresses this problem by attempting answers to the research question (cf. § 1.2):

What are the effects of the course on classroom text and discourse on oracy in the high school classroom?

The results have confirmed how beneficial the learning of oracy principles can be to teachers, first and foremost, and then to learners. Given that educational

policy makers are concerned about poor learning results (cf. § 1.4, where the then Minister of Education in Zimbabwe was quoted as expressing concern about the lack of communication skills among qualified teachers), accessing this study should help them appreciate that teacher talk is a more important aid to learning than they had imagined.

Certain more specific implications of my study, which also reflect its contribution potential, are included in the following section.

5.4 Implications, recommendations and further research

As certain implications of the study are discussed, recommendations will be made from two viewpoints, namely, those relating to the course on classroom text and discourse and similar courses, and those relating to future research. Limitations of the study, already alluded to (§ 5.3), the analytical framework that was used to analyse transcripts and the findings of the study will be the basis upon which recommendations are made.

The first recommendations will be made on the basis of observations on the study's limitations, before moving on to those arising from the research findings. The first limitation was that of a small research population, where data from only nine teachers and their learners formed the corpus for analysis. Although this was mitigated by the need for intensive analysis of the transcripts, the implication still remains that it is difficult to generalise the findings to larger populations. Moreover, the limited number of participants was from urban schools only.

One cannot, however, rule out important differences between urban and rural schools, and these differences have major implications on discourse performance. The differences are manifested in several ways such as organisation of learning environments, availability of learning resources, the social environment, and exposure to opportunities to speak a second language outside the school. The social environment of urban schools tends to have a

positive influence. For example, learners are more likely to be exposed to television from which they experience English being spoken by first language speakers. On the other hand, rural learners are likely to be constrained by the lack of language models in the out-of-school environment. Each environment, therefore, has a direct impact on how learners respond to teacher input and the willingness to contribute in the second language during class discussion.

A recommendation is, therefore, made for future research on classroom oracy. Firstly, the research population should be broadened to include both rural and urban teachers covering a broader spectrum of curriculum subjects. The present study focused on two countries only, but if the impact of the study is to influence pedagogic practices on a wider scale, then schools in several countries in the sub-region should be included in the research. The research could start with a pilot before undertaking the main one over a period longer than that taken in conducting my study. Results would then be likely to be more reliable, valid and so more generalisable.

There was quite a lot of evidence (§ 4.4.2) of silence by learners following teacher elicitation. This was a common discourse pattern for pretest lessons and for posttest lessons taught by teachers who did not take part in the in-service course. This occurred despite the argument that referential questions generally lead to the generation of original discourse by learners (cf. § 2.5.2.5). Learners simply remained silent and this resulted in teachers answering their own questions in extended discourse that denied learners opportunities to contribute to the discussion. To a certain extent, this pattern also explains the higher overall proportion of teacher discourse acts, which illustrates teacher dominance. One implication is that learners probably did not have adequate linguistic resources to contribute to the dialogue (cf. Barnes *et al.*, 1969). In other words, they know how to say something in the mother tongue, but lack the English vocabulary to say it. Also it could have been because they were unfamiliar with the content under discussion and did not know what to say. Perhaps more importantly, though, one

possible explanation linked to learner silence in the wake of referential questions, display questions or clarification requests is the issue of how children were taught in traditional African societies (cf. § 2.3). The tendency was for them to listen quietly to the adult (Castle, 1964). As already noted, they were not expected to dispute what adults said. Silence was a very common feature of discourse in lessons observed in both Malawi and Zimbabwe. The implication for this state of affairs is that the cultural background of both teachers and learners with respect to learning influences their interaction patterns very strongly.

It is therefore recommended that curriculum planners and course developers give special attention to the provision of learning materials across the curriculum that stimulate, from early grades on, the use of the medium of instruction in meaningful learning interaction, promoting context-specific English (in this case) that will enable learners to play a more active role in classroom dialogue (cf. Cleghorn *et al.*, 1998). Secondly, with regard to traditional ways of learning, researchers in classroom talk should investigate the whole issue of interaction associated with learning in traditional situations, and identify aspects of these situations that need to be avoided, and more importantly others that can be built upon, in the quest for more effective classroom learning.

The use of display questions has been associated with teacher dominance. While in testing for effectiveness, referential questions were said to be a more effective discourse act than display questions (cf. § 3.5.3.1). However, it was noted from most post-intervention lesson transcripts, and specifically where results from testing Hypothesis 2 were presented (§ 4.4.2), that teachers whose metalinguistic awareness had been raised used display questions more creatively, leading to more original discourse output. There is evidence, for example in [14] (§ 4.4.2) showing that display questions can lead to more referential questions, which make learners contribute and support their views in original language. Besides, claims for the legitimacy of display questions remain indisputable. In this and other comparable situations teachers still need to test

knowledge to determine how best to progress lessons. The implication is that display questions should not be dismissed out of hand as being uncommunicative, and hence the argument that for courses such as the Litraid course to achieve increased effectiveness, alternative and better ways of using display questions deserve more attention than is presently the case. Thus study material should include a section on elicitation types, their purpose, and how they complement each other as the chief means of eliciting learner responses (Tichapondwa, 2007). To be more specific, it is recommended that the present Litraid course should devote an entire section to that in order to raise teacher awareness about the significance of questions. In its current form, it is silent on this.

One result that emerged while testing for effectiveness is the use of the specialist register (Barnes *et al.*, 1969) of a given topic. Findings (§ 4.4.2) showed that at both pretest and posttest stages some teachers are not sensitive that the new vocabulary they use as input for dialogue poses problems for learners. In one example a Geography teacher did not realise that the word *relief* was not understood, while the word *feature* was confused with the more familiar word *future*. The conversational demands made on learners observed in both Zomba and Harare were often very considerable, and learners felt both frustrated and excluded. This resulted in characteristic silence and withdrawal, leaving the teacher dominating the dialogue. Similarly, in one English lesson the teacher who requested that learners form a noun from the word *old* gave the answer as *adult*, which was incorrect. The implication is that teacher's insensitivity to special register interferes with all the three negotiation types because when there is inaccuracy in the use of vocabulary or a lack of proper explanation of words, it is not possible to negotiate meaning and to make sense of the content. Also, when the teacher uses words and terms wrongly this compromises effectiveness and for teaching and learning to take place successfully, a good command of basic English by the teacher is considered a pre-requisite.

A recommendation on the register issue is that course developers concerned with the place of language in the classroom should undertake appropriate research and include ideas about register in course material to guide practitioners on ways of ensuring that learners' frustrations with unfamiliar vocabulary are addressed. The Litraid course does not address the issue in any way. Regarding poor command of English on the part of teachers, the recommendation is that applied linguists and educationists should research the extent of the problem in specific communities and assist course developers to produce language upgrading materials that are relevant to teachers' needs. My experience in colleges of education in Zimbabwe and elsewhere in the region has shown that there is commendable enthusiasm for teaching general English, meant to assist teachers to further develop basic language skills, but unfortunately teacher educators are not well guided on the nature and scope of the 'General English' they are supposed to teach.

In testing Hypothesis 3, focusing on initiative (and indirectly on participation), key findings about group work were presented (cf. § 4.5.2.2). Results from pretest lessons showed that teachers did not give explicit instructions; they did not clearly define group tasks; and tended to allow too many learners per group. This led to disorderly interaction and disoriented discourse output, often conducted through the mother tongue. In the majority of cases observed, the exchanges were non-task oriented, as Malamah-Thomas (1987) has put it. This implies that when aims of interaction are not shared, learners' attempts to communicate are constrained and little is achieved by way of intellectual development, with little or no initiative on the part of learners (cf. Hypothesis 3). However, after teacher language awareness had been raised (post-intervention), both teachers and learners became more purposeful in their use of discourse, being more conscious of what to say and how to say it (Swain, 1995).

Two related implications are identifiable. The first one, relating to the management of learning, is that in the absence of clear instructions and a clear

definition of the task, there is no clarity what learners are supposed to say regarding the content, and what language would be appropriate to convey meaning. The large numbers per group worsen the situation because opportunities for participating more frequently are reduced. Although there was improvement in the way experimental group teachers handled group work, there were still instances where problems were noted. The mishandling of group work happens against a general background in Zimbabwe and Malawi alike, where theories about the issue are taught in pre-service courses and often talked about in staff rooms, yet as results showed, teachers do not practise what they preach. In my opinion, researchers in Southern Africa should undertake more context-specific studies about group dynamics in the classroom. This should take into account the fact that English is a second language as well as incorporating ideas about ways in which group learning was facilitated in traditional African communities. Research findings should then be made available to curriculum developers, teacher educators and educational planners.

In the review of findings about the activity which teachers prefer learners to do most, and the negotiation type they prefer most when teaching, three important results emerged. The first one was that at pretest teachers preferred to see learners listening, but at posttest there was an increased acceptance that learners should be encouraged to talk. Linked to this result was the second one, namely, that at both pretest and posttest stages, the reading skill was not given much prominence (§4.1). The third one was that at pretest stage teachers showed the highest preference for negotiation of content compared to negotiation of form and meaning (§ 4.2). The conclusions, which relate to dominance (Hypothesis 1) were that when teachers prefer learners to listen most of the time, they tend to dominate lessons. Similarly, when teachers showed a preference for the negotiation of content, the result was teacher dominance of discourse and they tended to use less effective discourse (§ 4.4.2).

The first implication is that although listening, talking, reading and writing are common classroom activities, there is no shared awareness among practitioners about how these should be related in practice. This suggests a recommendation about awareness creation in which the potential for each aspect to improve understanding and learning is explained, and recommendations about practical application made to teacher educators. When teacher educators accommodate this in their training schedule, this should be followed up with workshops aimed at explaining the aspects in question. One of the most unfortunate practices in schools (as observed in Zimbabwe and Malawi) is that the most accepted measurement of learning, in all subjects, is written examinations and regular written tests, and oral ability is regarded largely as irrelevant to the testing process. School inspectors also emphasise evidence of written work as a matter of policy. There should be some effort to address this matter by giving more prominence to oracy in the classroom.

5.5 Synthesis

This final chapter started with a review of the first four chapters. Focus then turned to the main findings, followed by an account of limitations of the study and then an assessment of its contribution at theoretical, descriptive and applicational levels. This led naturally on to discussion of implications and then recommendations, which included those relating to further research. In this respect, several propositions were made with a view to encouraging scholarly enquiry in areas related to talk among teachers and learners.

Through the quasi-experiment at the heart of this study, it was verified that the Litraid language-based in-service intervention course had considerable influence on patterns of classroom interaction. By reflecting during the course on why they ask certain questions; on the effectiveness of such questions in terms of teaching and learning goals; on the effect such questions had on learners; and on the way learners responded to different linguistic input, teachers developed the capacity to use discourse more purposefully for the negotiation of learning through

enhanced learner initiative. At the simplest level it was demonstrated that whenever learners are encouraged to participate in talk, they have to think about what to say, as well as think about what they hear from teachers and peers. Logically, therefore, one of the opportunities school should offer learners is that of being able to exploit interaction with teachers and peers to develop their thinking, learning and understanding. The benefits of the Litraid course for teachers and learners, as revealed by this study, should be taken cognisance of also by teacher educators, curriculum planners, policy makers and researchers interested in applications of discourse analysis. Mercer (1995:6), who views the use of language as a social mode of thinking, makes the following conclusive observation:

By using language to learn, we may change the language we use. This is why an analysis of the process of teaching and learning, of constructing knowledge, must be the analysis of language in use.

Reflecting on my study, I take the view that my decision to investigate the Litraid course as a useful applied linguistic intervention instrument proved fruitful, and it opens up further a debate whose educational implications can be far-reaching. While education systems in Southern Africa are becoming aware that language, in particular teacher talk, is inextricably bound up with the negotiation of learning, they should now be prepared to go beyond the erroneous view that only teachers of English (or the relevant medium of instruction) are the custodians of what should happen when language is used in various learning contexts. Talk should now be regarded in all classrooms as a powerful facilitating force for learning rather than being treated as disruptive noise, lacking in seriousness of purpose.

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APPENDIX A

LESSON TRANSCRIPTS

Maths: Pre-intervention = 3 lessons (1 control (C) and 2 experimental (T1 and T2))

Maths: Post-intervention = 3 lessons (1 control (C) and 2 experimental (T1 and T2))

Geography: Pre-intervention = 3 lessons (1 control (C) and 2 experimental (T1 and T2))

Geography: Post-intervention = 3 lessons (1 control (C) and 2 experimental (T1 and T2))

English: Pre-intervention = 3 lessons (1 control (C) and 2 experimental (T1 and T2))

English: Post-intervention = 3 lessons (1 control (C) and 2 experimental (T1 and T2))

Total = 18 lessons

Pre-intervention Maths

Subject : Mathematics

Total = 104 discourse acts

T= 82. S = 22 (79% :21%)Topic: Fractions

Stage : Pre-intervention (C)

T: We were saying now 4 minus 1... (i) isn't it? (qt)

SS: (in chorus) Yee-e-ees (mr)

T: Subtract 1 in brackets...(i) Isn't it? (qt)

SS: (in chorus) Yee-ee-s (mr)

T: What do you get? (dq)

SS: (in chorus) three (mr)

T: Right. (m) Then we have got $\frac{2}{3}$ here (ext) but then we need to ___? (dq). We need to find the ___? (dq) Yes (n)

S: Common denominator (mr)

T: Quite correct. (acc) What common denominator do we use...? (dq) Yes... (n) At the back. (n)

S: Six (mr)

T: That is six...(acc) isn't it? (qt)

SS: (in chorus) Ye-ee-ees (mr)

T: Right. (m) 3 can divide into 6...(i) Isn't it?. (qt) We now have a common denominator (ext). Isn't it? (qt)

SS: (in chorus) Yee-e-ee-s (mr)

T: So we are adding now our whole number...(ext) plus a fraction (ext) Is it? (qt) Do you follow what I say? (ch) What do we get? (dq) We get__ ? (dq) Try (p)

S: 3 and $\frac{3}{6}$ (mr)

T: Is that correct? (ev)

SS: (in chorus) Yee-ee-s (mr)

T: But is that enough? (ev)

SS: (in chorus) Noo-oo-o (mr)

T: What is the next stage? (dq) The next stage.....? (dq) Yes? (n)

SS:

T: What do we reduce to the lowest term? - - - - (dq) What is the common denominator here? _ _ _ _ (dq) A number which can divide into 3 as well as into 6? (dq) Yes (n). Penny (n)

S: 3 into 3 (mr)

T: What is the common denominator there? (dq)

S: Three (mr)

T: Three...(acc) Isn't it? (qt) Now what type of number is this?(dq) I mean

3 $\frac{1}{2}$...(ext). What do you call that number? (dq) Yes (n). You call it a __? (dq)

S: Mixed (mr)

T: That's a mixed number...(acc) Isn't it? (qt) What is a mixed number?(dq) Why do you say it is a mixed number? (dq) Why? - - - - (dq) What is mixed? (dq) If I write a 2 here,(clar) is 2 mixed? (pq)

SS: (in chorus) No-oo-o (mr)

T: Why do you say it is a mixed number?... (dq) Can you give a reason why you say it is mixed? (r) Yes...(n) Kapelo (n)

S: One plus one is two.....(clar) umm...it is two (ext)

T: Yes ... (n) Kapelo (n) You have got 3 $\frac{1}{2}$. (ext) Why do you say it is a mixed number?... (dq) Why? (dq) How is it mixed? (dq) Yes (n). Rebecca (n).

S: Because it is a whole number and a fraction (clar)

T: Quite right. (acc) It is a whole number here and a __? (dq)

SS: (in chorus) Fraction (mr)

T: *Ndazozviona kuti hamugoni* (I now realise you don't know what you are doing) (ev) *Munoda kudzidziswa naanobva Hingirandi here?*(Do you want to be taught by somebody from England?) (pq). What is our whole number?.....(dq) What's the whole number?... (dq) Eh yes.(n)

S: Three (mr)

T: That's our whole number. (acc) And the fraction?... (dq) and the fraction...? (dq)

Yes, (n) Archibald (n)

S: One half (mr)

T: In other words one half is our ___? (dq)

SS: (in chorus) Fraction (mr)

T: And three is a whole number (ext) so we say $3 \frac{1}{2}$ is a ___? (dq)

SS: (in chorus) Mixed number (mr)

Subject: Mathematics

Total = 72 discourse acts

T = 46. S = 26. (64% ; 36%)

Topic: Multiplication

Stage: Pre-intervention (T1)

T: We also learned how to multiply by 10. (i) We also learned how to multiply by 10. (i) Somebody to multiply that number by 10.....(r) What is 7 multiplied by 10? (dq) Then what is 4 multiplied by 10? (dq) Come on. (p) This is primary school revision. (p)

S: We say 1 multiplied by 7, (clar) then we add 0 equals 70. (clar) We say...1 multiplied by 4, (ext) then we add 0 equals 40 (ext).

T: Did he get it right? (pq)

S: (chorus) Yeees (mr)

T: Another one. (n) Who can multiply this number for us? (r) As you write on the board (i) say something. (r) 8 multiplied by 10 is the number (clar)

S: 1 multiplied by 8 equals 8, (clar) then we add 0 (ext) ... it becomes 80. (ext)

T: Ok. (m) She got it right, (acc) but then is it correct to say 0 multiplied by 8? (pq)

S: (After looking at the teacher's face they all shout in chorus) No-oo-o (mr)

T: What should we have said? (dq)

S:

T: Why do you keep quiet? (cu) Brenda (n) Say something (cu)

S: 0 multiplied by 8 (clar)

T: 0 multiply 8? (ev) Brenda? (n)

S: You first put 0 (clar)

T: You first of all write this 0 down (ext) then the number you would multiply (ext). Right...(m) and the last one? (dq) Who can come and multiply this one? (r). Multiply by 10 again... (r) The number is 29 (ext).

S: We say 1 multiplied by 29 equals 29 (clar) then we add 0...(clar) It becomes 290 (ext).

T: OK...(m) Did she get it right? (pq)

S: (in chorus) Ye-ee-ees. (mr)

T: Let's read the answer (r)

SS: (in chorus) 290 (mr)

T: Right.... (m) We want to look at 15 multiplied by 20...(i) No longer 10 now (ext) This is how you do it. (i) Write 0 first, (ext) then 2 multiplied by 5 equals 10. (ext) Write 0 carry 1 (ext). OK (ch) 2 multiplied by 1 equals 2 (ext) plus 1 equals 3 (ext). Answer is 300 (ext) OK? (ch) What is 20 multiplied by 17? (dq) James (n)

S: We write 0 first, (clar) then 4 multiplied by 9 equals 36. (ext) You write 6 carry 3 (ext) 4 multiplied by 7 (ext) got it? (ch) that is 28 plus 3 (ext)

Total = 47 discourse acts

T = 39. S = 8. (83% :17%)

Subject: Mathematics

Topic: Length

Age Group: 13 year-olds

Stage: Pre-intervention (T2)

T; What would you use to measure the length of your desk?... (dq) This long desk... (ext)

SS:

T: Don't look at me *Musangonditarisa* (Don't just look at me) (cu). Say something (r). *Ndati* (I said) What do you use to measure the length of a desk? (dq) The one you are sitting on (ext) - - - Temba.....(n)

S: ah-h ...ruler (mr) it is ruler. (mr) I mean centimetres (clar).

T: You use metres .(cinf) Do you understand? (ch) John (n) come forward, (r) and measure this desk (r).

S: (Measures while others watch in silence)

T: Tell us what you get (r)

S: 5 rulers each 30 cm. (clar) The total is... 30 cm .(ext)

T: You were not listening. (ev) Sit down. (r) I said we use metres. (cinf) Right? (m) There are 100cm in one metre. (i) There are also 10mm in a centimetre. (ext) Is that correct? (pq) Right... (m) How many metres in a kilometre? (dq) I said how many metres in a kilometre? (dq)

S: Sir ...(n) umm-a-a...500 (clar) I think 500.(clar)

T: Where did you get that? (ev) There are 1000 metres. (cinf) Repeat that all of you. (r) One kilometre equals 1000 metres.(ext) Altogether. (n)

SS: (in chorus) 1 kilometre equals 1000 metres (mr).

T: Excellent (acc). We call that length. (clar) A metre is shorter than a kilometre. (clar) but a metre is longer than a centimetre (ext). A centimetre is longer than a millimetre (ext). Any questions? (ch) Now, (m) go to your groups (r) and do some writing (r). Here are the questions (i).

Mathematics : Post-intervention

Subject: Mathematics

Total =62 discourse acts

T =50. S = 12. (81% : 19%)

Topic: Trigonometry

Stage: Post-intervention (C)

T: In the last lesson we calculated the degrees of an isosceles triangle(i). Who can give me the approximate answer for the two angles in this triangle? (dq) (draws the triangle on the board). Yes (n). Answer for the two angles - - - - (r) for the two angles...(ext) Isn't it? (qt)

SS: (working out the answer)

T: Anybody? (n)

S: 50 and 80 degrees (mr)

T: Well done (acc). Is it? (qt) What is an isosceles triangle? (dq)

S: With all sides equal (clar).

T: With all sides equal? (ev) With all sides equal? (ev) Is it? (qt) No (cinf). Anyone know the correct answer? (n)

S: With two sides equal ...(clar) Ma'am (n)

T: Two sides equal...(acc) Isn't it? (qt) Very good (acc). Today we do trigonometry ratio. (i) (Writes words on the board). Anybody knows what this means? (n)

SS:

T: Right (m) You express it like this (i)

Tangent of an angle equals opposite over adjacent (clar)

SS: (Make inaudible noises, and look puzzled). (Whispering) *Wazvinzwa here iwe ?*

(Did you understand him?) (ch)

T: Look at this triangle on the board (r) The words 'adjacent' and 'opposite' are not the same as 'sine' and 'cosine', or 'hypotenuse'. (i) Do you understand? (ch)

SS: (Some shake their heads, while others shout in chorus) Yee-e-ee-s (mr)

T: Let me see if you understood what I said. (ch) What is ratio? - - - -(dq)

SS:

T: Anybody?- - - - (n)

SS:(Whispering inaudibly)

S: Ma'am... (n) Did we do this? (pq)

T: Easy...(i) If you are 14 years old (exe) and your sister is 7, (ext) How do you express the ratio? (dq) Try...(p) Kundai (n)

S: A-aaa-mm...not sure (mr) Is it 21? (pq)

T: Wrong. (cinf) Isn't it? (qt) How do you get that? (dq)

S: $14 + 7$ equals 21(clar)

T: That's wrong. (cinf) Very wrong (ext) Is it? (qt) Another person to try (n)

S: 14 and 7? (with raised voice) (clar)

T: No. (cinf) No. (cinf) Do you say 14 to 7?... (pq). This is how you write it: 14:7. (i).Very easy... (p). Isn't it?... (qt) Think. (r) I want you to think. (ext) Your problem is that you don't think (ev)

Subject: Mathematics

Total = 105 discourse acts

T = 71. S = 34. (67% : 33%)

Topic: Area

Stage: Post-intervention (T1)

T: We want to look at area (i) What is area? (rq) You did this at primary school. (p) Try (p)- - - - Right...(m) Yes (n)

S: It is distance covered (clar)

T: Well tried. (ev) You say distance?... (pq) Anyone with a different answer? (n)

S: I think it is place covered (clar).

T: Let's put our answers together. (i) Area is the space covered by a shape (clar) Look around you (r) What area can we calculate? (dq) - - - -

S: Area of this room (clar)

T: Good (acc) - - - -

S: A desk (mr)

T: Anything else? (rq)

S: Bench (mr).

T: Right.(m) On the board I have written millimetres ...(i) I have also written centimetres...metres...kilometres...(ext). Here is a razor blade. (i) What can you use to measure it? (dq) - - - -

S: I think... (mr) ummm... ruler (clar) No...centimetres (mr)

T: For the razor blade?... (pq) Are you sure? (ch) What will you use to measure this textbook? (dq)

S: I will use centimetres for the book (clar)

T: What are your views? (rq) Do you agree? (pq)

SS: (Chorus) Yees (mr)

T: Why would you use centimetres? (rq)
 S: Razor is little...(clar) A book is big (ext).
 T: So ?- - - - ((cr)
 S: Millimetre is fit to measure the razor ...(clar) I think...(ext)
 T: That's good...(acc) What would you use the metre for? (rq)
 S: To measure the desk...(clar) Also to measure the wall (ext)
 T: What else? (dq) Look around you - - - - (cl)
 S1: Myself (mr) (All pupils laugh)
 T: So you want to calculate the area of a person? (pq) Very interesting (p).
 S2: No...(cinf) Sir...(n) My length (clar)
 S3: Not length...(cinf) Is it length? (pq)
 T: Now (m)It's not length (cinf). What do you use to measure yourself? (dq) Don't be afraid to make mistakes (p).
 S: Tall (mr)
 T: What about short? - - - - (cr) OK... (m) you measure a person's height (ext). Let's move on (r) (teacher draws a rectangle and a square on the board).What do you call this figure? (dq) You have seen it before (cl). What do you call it? (dq)
 SS:.....
 T: Heh? - - - - (cr)] Rectangle (i). This is a rectangle (ext). This one is a square (ext). I want two people to measure the sides of these figures (r). What do you use? (dq) Metres or what? (cl)
 S: No (cinf) We use millimetres (clar)
 T: Do you agree? (pq)
 S: No (cinf). We use centimetres (ext).
 T: Let's try centimetres (r).
 SS: (Two pupils measure the sides of the shapes)
 T: What did you get? (rq)
 S: I measured the sides of the rectangle. (clar) I get 25cm for long side...(ext) I also get 15 cm for short side (ext)
 T: So the sides are not the same? (pq). What about the next shape? (rq)
 S: All sides have the same length. (clar) I got 20 cm (ext)
 T: All sides are equal...? (pq) I want an answer from everyone (cu). What is the difference between a square and a rectangle? (dq) I give you two minutes to jot down your answer (p) - - - - (Time is given to jot down answers) Tendai...(n) What did you write? (rq)
 S:I did the rectangle first (clar). The sides are not the same (ext).
 T: Anything else? (p)
 S: On the square sides are the same length (clar).
 T: What word do we use instead of the same? (dq) - - - - Forgotten? (pq) Think. (r) So you should use the word equal (ext).
 S: Two sides of a rectangle are equal (ext).

Subject: Mathematics

Total = 122 discourse acts

T = 81. S = 41 (66% : 34%)

Topic : Triangles

Age group: 13 year-olds

Stage: Post intervention (T2)

T: We are going to talk about triangles. (ms) I know that in primary school you did something about triangles. (ext) What do you still remember ? (rq)- - - - Yes (n) Peter (n)

S: Our teacher said a triangle has three sides (clar)

T: Good (acc) Is that all? (cr) - - - -

S: Ma'am (n) a triangle has angles (clar)

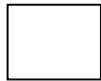
T: Correct. (acc) What about types of triangle? (rq) Anybody? (n) Jomo (n). Try (p).

S: I think there are many types ...(clar) ummm...rectangle (ext) I mean a ectangle. (ext) a-a-a-mm...there is another one (ext) square. (ext) That's all I know (ext).

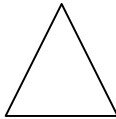
T: Well tried. (ev) A rectangle has its opposite sides equal (clar) Two of the opposite sides are longer than the others (clar) as in this diagram (exe) (teacher draws on the board)



A square has all its four sides equal. (clar) Understand ? (ch) Here is an example (exe) (teacher draws on the board)



That means triangles are different from rectangles and squares (clar).]There is one major difference. (i) I wonder whether anyone has seen it (ext). Look at this triangle (r). Temba (n).



S:

T: I will give you a hint. (cl) Look at the number of sides. (r) Simba (n) Can you explain? (cr)

S: There is a difference (clar) The first two have four sides (clar). A triangle has three (ext) In a rectangle there are four sides. (ext) Two are the length...(ext) They are equal. (ext) Two are width (clar) and they are equal. (ext) This is a square (clar). It has four sides...(ext) and all its sides are equal (ext).

T: Hands for him (ev). Are there any questions about the differences? (ch) - - - - Let's move on. (r) I said we are going to talk about triangles in this lesson (ms). There are three types (i). OK...(m) such as equilateral triangle. (exe) All sides of an equilateral triangle are equal. (clar) The word 'lateral' means 'side'(clar). Let us suppose each side is 20 cm long (i) The equilateral triangle will look something like this (exe) (Teacher draws the triangle on the board). Right (m). Kondo... (n) come in front (r) and explain what an equilateral triangle is (r).

S: Here are three sides. (clar) The word lateral refers to sides. (ext) I measured each of the sides...(ext) It is 20 centimetres...(ext) so the sides are equal (conc). That's why we say it is an equilateral triangle (ext).

T: Any questions? (ch) - - - - Right (m) Let's move on (r) The next one is an isosceles triangle. (i) (Teacher writes the spelling on the board). Isosceles Triangle...(ext). Everybody (n).

SS: Isosceles triangle (in chorus) (mr).

T: What type of triangle is this (drawing it on the board) (dq)

S: Ma'am...(n) ummm... unsure (mr) Its sides not equal (clar)

T: You are getting there (ev) but not quite. (ev) The answer is that two of its sides are equal (clar) and the third one is not equal to the other two. (ext) I shall draw an isosceles triangle (i) (draws on the board). This side is 15 cm. (clar) The second one is also 15 cm...(ext) and the third is 20 cm. (ext) That is an isosceles triangle. (ext) Right (m) Any questions? (ch) Feel free. (p) Yes (n) Aby (n)

S: What do you call this triangle ... (i) a-a-ammm...this one (ext) I can't explain (ext) but I know it...(ext)

T: Draw it on the board (r).

S: (Draws a right-angled triangle and writes 90 degrees on one of the angles). It looks like this (clar) It has three sides (ext).

T: The angle where Aby wrote 90 degrees is called a right angle (clar) Can you see it? (ch) Right angle (ext) Altogether (n)

SS: Right angle (in chorus) (mr)

T: Because one of the angles is a right angle (clar) we call this a right-angled triangle (ext) The longest side opposite the 90 degrees (clar) is called a hypotenuse (ext) Altogether (n)

SS: Hypotenuse (in chorus) (mr)

T: Are there any questions? (ch)Yes (n) Chipu (n)

S: Does an equilateral triangle have a hypotenuse? (dq)

T: Good question (ev). Anyone to help me? (n) Yes (n)

S: No...it doesn't (cinf) I think we talk of a hypotenuse (clar) when the side is opposite 90 degrees (ext)

Geography: Pre-intervention

Subject: Geography

Topic: Water

Total = 102 discourse acts

T = 86. S = 16. (84% : 16%)

Stage: Pre-intervention (C)

T: If you were asked the most precious thing in your life (i) what would you say?... (rq) What is the most precious thing in your life?..... (rq) Anyone...? (n)

S: Water (mr)

T: Yes...(acc) She thinks it is water (ext)
S: Food (mr)
T: Right...(acc) Yes...(n)
S: Fruits (mr)
T: Fruits...(acc) Yes (n)
S: Clothes (mr)
T: Clothes...(acc) Yes (n)
S: Money (mr)
T: Money (acc). When you start working you get lots of money (ext). Yes (n)
S: Shelter (mr)
T: Shelter...(acc). Anybody else? (n)
S: Freezits (mr) (Class laughs)
T: Freezits... (acc). She can't do without freezits (ext). Right...(m) Shoes ... (ext) Right...(m). We are going to have a vote over those...(i) Some say water is precious...(ext) Others say food... freezits...clothes...money...shelter (ext). That's very interesting (ev). But which is which? (dq) I want you to tell me. (r) You are going to show by raising your hand (ms) to show which one you think is precious (ms). Are we together? (ch) Do not vote twice. (cu)You are going to have one vote. (r) Right... (m) (Voting takes place). How many for water? (ch)...thirty eight...(acc) Most of us think water is the most important thing. (i) Right...(m) Why do you say water is precious?.....(rq) Why do you say water is precious? (rq)
S: We cannot live without water (clar)
T: We cannot live without water (ext) That's what she thinks. (ext)Yes (n)
S: Water can help us in many things (clar)
T: Sorry...(l) Speak up (l) Come again (l)
S: Water helps us in so many things (clar)
T: Right (m) Water can help us in so many things. (acc) Anybody else? (n) Anybody else...? (n) Anybody? (n)
S: Water makes us good health (clar)
T: Gives us good health. (cinf) That's what she is saying (ext) Right (m) Our topic for today is 'Water'. (i) Right... (m) A resource that is never lost (ext) Right (m) Anybody who can tell me what this word means?... (rq) The word is 'resource'...(ext) The word 'resource'...(ext).
Come on (p)
S: I think it gives life (clar)
T: Yes...(acc) Something that gives life (ext) Anybody else? (n) Yes...(n)
S: Light (mr)
T: Resource...? (cr) Something that we need...(ext) Can I have someone else? (n) - - - Anyone (n) Right (m) A resource is something that we need... (clar) and most people cannot do without it (ext)

For example we have got water here. (exe) It is a resource. (ext) Can you give me other resources?
(dq) Other resources...? (dq) Air is a resource...(exe) Minerals are resources...(exe) Soil is a resource
(exe) Yes...(m) Any other? (dq)

S: Shelter (mr)

T: Umm...There are other examples (i) No...what we use to make shelter are resources (cinf) For
example what do we use to make shelter? (dq)

S: Bricks (mr)

T: Where do we get bricks from? (dq)

S: From soil (mr)

Subject: Geography

Total = 91 discourse units

T = 81 . S = 10. (89% : 11%)

Topic: The Rain Drop

Stage: Pre-intervention (T1)

T: Ok...(m) The effects of rain on bare ground. (i) Right (m). Today we want to talk about something.
(ms) Something that's very dangerous to the environment (ext). Can you give me the most dangerous
thing in the world...? (dq). What is the most dangerous thing? (dq) Yes (n)

S: Fire (mr)

T: Can you speak up (cu).

S: Earthquake (mr).

T: An earthquake (acc) What else? (dq)

S: Rhino (mr)

T: A rhino (acc)

S: A lion (mr)

T: A lion...(acc). Yes (n).

S: Hyena (acc).

T: Right (m) It all depends on what each and everyone of us fears. (clar) Today we want to talk about a
bomb. (i) How many of us have seen a bomb? (ch)..... What is a bomb...? (rq). Ha? ...(cr) What can
it do? (dq)

SS.....

T: What is a bomb?.....(rq) Right (m) Maybe you can say it is something that destroys. (i) Right...(m)
It is something that can destroy. (ext) Right (m) Where have you heard about bombs exploding? (dq)
Yes (n)

S: War (mr)

T: At wars (acc) Today it's not a war as such. (i) We are going to talk about a certain bomb (ms) A
bomb that is destroying our environment. (ext) Destroying our soil. (ext) The kind of bomb we are
going to talk about is the one you are experiencing these days. (i) Almost everyday we are having it

(ext) What are we having?... (dq) Almost every day... (ext) Just now I was complaining about what is happening. (clu) Yes (n)

S: Rain... (mr).

T: Rain...(acc) The bomb we are going to talk about is the rain drop (i) Can you see this? (ch) (showing an aid) That's a raindrop...(clar) That's a bomb (ext) When the raindrop falls (i) it comes as one, (ext) but there are millions of them (clar) Do you see just one raindrop coming from the sky ? (pq) You see a lot of them (ext) Right...(m) When one raindrop reaches the ground...(clar) Right...(m) When the ground is bare...(ext) When there is no soil...(ext) When there is no grass or litter...(ext) it hit the soil (clar) or it hardens the soil. (ext) It makes the soil very hard. (ext) The water does not sink into the soil (clar) because the soil is already hard (clar). It goes down (ext) forming a small ___? (dq)

SS: (Chorus) Hole (mr)

T: Do you understand? (ch)

SS: (Chorus) Ye-e-e-s (mr)

T: Now...(m) Let's go outside. (r) Don't stand on the patch of soil (r) I want somebody to come...(r) somebody to just put your hand here (r) to feel... (r) How is it? (dq)

S: Hard (mr).

T: It is hard (acc) That is because the soil is compacted. (clar) I want you to do something...(i) Do it in just for about a minute...(r) in your groups...(ext) I want you to look...(r) to visualize...(r) to put into mind what you have seen outside (clar) and just write down what you have seen.(r)

Subject: Geography

Total = 96 discourse acts

T = 73. S = 23. (76% : 24%)

Topic: Relief and Contours

Stage: Pre-intervention (T2)

T: (Writes topic on the board). What is relief? - - - - (dq) Hmm...anyone (n) What is relief? (dq)

SS:

T: We did mountains and rivers last lesson...(p) Didn't we? (qt)

SS: (Chorus) Ye-e-e-s (mr)

T: What is relief?... (dq) Use your Atlas. (r) Yes...(n) You (n)

S: Relief is map (clar)

T: Map (with raised voice)...(ev) What map? ((cr)

S: Mountains and rivers (clar)

T: Mountains and rivers...(ev) Good (acc). Relief means land features (clar). Say land features (r).

SS: (chorus) Land features/futures (mr) (pronouncing it differently)

T: Right...(m) What are contours? (dq) Anyone...? (n)

S: Drains...used to prevent erosion in the fields (clar).

T: I mean contours for relief (clar)

SS:(Look confused)

T: Right...(m) They are lines (clar) used to represent land features on the map...(ext)

S: So the map is contours...? (pq) Ma'am...(n)

T: No... (cinf). Shows you don't listen (ev).What did I say ...? (dq)

S: Lines used to present land features (clar)

T: I said represent...(cinf) I did not say present (ext). Other words are: key... grid... scale...(i) These are easy for you. (ext) Do you understand? (ch) Can you tell the class what key is...? (dq) Someone to try (n) Paul...(n)

S: Umm...will try(clar) unlock the door...(clar) or something like that...(ext) not sure maam...(ext)

T: Think of the map (cl) Key is used for reading a map. (ext) Look in your atlas for the answer... (s) What about grid? (dq) Anyone? (n)

SS:

T: Grid is the system of numbered squares (clar) printed on a map (clar) It is used as a basis for references. (ext) Who can tell us what scale is? (dq) Think before you answer (r) Sarah (n)

S: You weigh something on a scale (clar)

T: Yes you do...(acc) but that has nothing to do with land features. (cinf) Scale refers to the reduction (clar) or enlargement in picture (clar).

S: Is that in the textbook?... (pq) Ma'am...(n)

T: Yes...(acc) Everything...(ext) Check later...(r) I want you to write these notes (r) then I will ask some questions (ms)

SS: (Copy definitions from the board)

T: (Asks questions with students' books closed) What is relief? (dq)

S: Relief is maps (clar)

T: That's wrong (cinf) Anyone? (n)

S: Relief is land features (clar)

T: Good.... (acc) Write it on the board (r)

S: (The student writes and reads what she has written) Relief is land futures (clar)

T: This is the correct way to write it (i) "Relief is land features" (ext) Right...(m). Say this altogether (n)

SS: (Chorus) Relief is land features (mr)

T: What is a grid? (dq) Anyone to tell us what a grid is?... (n)

S: Numbered squares on a map (clar)

T: In a full sentence (r)

S: Grid is numbered squares on a map (clar)

T: Good (acc) Write it on the board (r)

S: (The student writes) Greed is numbered squares in a map (clar)

T: Wrong spelling. (cinf) Who can spell correctly? (n)Yes...(n) John...(n) Come in front (r)

S: (The student writes) Grid (mr)

T: Good... (acc)

Geography: Post-intervention

Subject: Geography

Total = 62 discourse acts

T = 59. S = 3. (95% : 5%)

Topic: Evaporation

Stage: Post-intervention (C)

T: We want to talk about evaporation (i) What is meant by evaporation? (dq) Evaporation.....(ext) Nobody?... (n)

SS:.....

T: Right (m) Water never gets lost (clar) Clear?... (ch) It means that no matter how you use water it never disappears...(clar) We can't say now there is no more water (ext) Right...(m). It goes in sort of like cycle. (ext) I will explain what we mean (ms) Right (m) We have water in our dams. (clar) Right...(m) Here I have got an example of a sea (exe) Can you see that?... (ch) We have got the sun...(clar) the sun especially on a hot day. (ext) The sun is going to heat the water. (clar) The water is in the sea. (ext) OK...(m) Now what happens when water is heated? (dq) Right...(m) It evaporates (clar) It rises... (ext) It goes up...(ext) and it cools. (ext) Because the higher you go, the cooler it becomes. (clar) It becomes cooler and cooler (ext) Right...(m) If you go up maybe some kilometres...(clar) Let's suppose you had a parachute... (i) You will find that the weather will start to change (clar) It will get cooler. (ext) Right...(m) It gets colder in the sky...(clar) and clouds form (ext). OK? (ch)

SS: (Chorus) Yeeees (mr)

T: And small droplets of water get together. (ext) Right...(m) and then they are going to fall as raindrops (ext) Are we together...? (ch) I would rather first of all explain what happens. (ms) I will ask two people (ms) Right...(m) We are going to heat our water here. (ms) Can I have two people to hold the candles please? (r) Somebody to hold the cup (r) Hope it wont take too long to heat (ext) The water is being heat...(clar). Right (m) When rain falls (clar) it will come back again to the sea...(ext) and the water is heated again (ext) and then it evaporates (ext) and the water vapour condenses...(ext) changes from water vapour to ___? (dq)

SS: (Chorus) Rain (mr)

T: Do you now understand? (ch)

SS: (Chorus) Yeeees (mr)

Subject: Geography

Total = 86 discourse acts

T = 45. S = 41. (52% : 48%)

Topic: People on the Move

Stage: Post-intervention (T1)

T: To which place do most people in our country move? (dq) Rural areas or towns?... (cl) Think of your experiences. (r) Yes... (n) Sandra (n)

S: I think many people leave rural areas... (clar) They flock to towns (ext)

T: Do you agree with what Sandra says? (pq) Why do you think people flock to town? (rq)

- - - - Misheck (n)

S: People are hungry (clar)

T: Uhu... (acc) Go on (p)

S: Schools are far away (clar)

T: So...? (cr)

S: Umm-mm.....walking (clar) Have to walk distances. (clar) You walk long distances (ext) (More hands raised to give answers).

T: I see that you have many reasons. (ev) That's good. (acc) I'll give you more time to think. (ms) Each one must give one reason... (ms) and that must be in good English. (ext) Ask a question (r) when your friend gives a reason (ext) Any question you want... (ext) I am giving you two minutes to write your reason (i) Do it quietly... (r) Is that clear? (ch)

SS: (Chorus) Yees (mr) (Write their answers).

T: (After two minutes) Stop everybody (r) Chafa begin... (r)

S: (Chafa reads out his reason) I herd cattle. (i) I live in rural areas. (ext) My brothers work in town. (ext) One day I will run away, (ext) and go to town (ext)

T: Ask questions (r)

S: You did not tell us why... (cr) Why run away? (rq)

T: (Nods to Chafa to speak)

S: Ah-aaa... I have reasons (i) Herding cattle is difficult (clar) It disturbs my school work (ext) I can't do homework freely... (ext)

T: Interesting. (ev) Next... (n)

S: I am so tired to live in rural areas. (clar) I wake up early... (ext) I went to school... (ext) before I went to school... I mean (clar) I mean in the morning... (ext)

T: Say before I go (cinf)

S: Before I go to school...(clar) I go to take water from the well.(ext) I collect firewood from the forest.
(ext) I will run away to my sisters in town. (ext) They live free things. (ext) They use water taps...(ext)
and electricity stoves. (ext) I will be free ...(ext).

T: Solly has given many reasons (ev) Let's see if you still remember them...(r) Serina...(n)

S: She does not want to fetch water...(clar) umm...that's one of them (ext)

T: Yes...(acc) We say fetch instead of take water (cinf) Say fetch water... (r)

SS: (Chorus) Fetch water (mr)

T: Good (acc) Why does he want to leave? (rq)

S: Does not want to collect firewood (clar)

T: Uhu (cr) - - - -

S: Electricity stove (mr)

T: What about it? (cr) - - - -

S: They use stove...(clar) electricity stove...(ext) They do not use firewood (ext)

T: Yes...(acc) Someone to go on (n)

S: To get a job (mr)

T: Any questions? (ch)...

S: Are you going to stop learning? (pq)... or do you want to look for a job? (pq)

T: You have many good points to share about geography. (ev) We did not hear from everyone...(ext)

Subject: Geography

Topic: Population Explosion

Total = 59 discourse acts

T = 29. S = 30. (49% : 51%)

Stage: Post-intervention (T2)

T: Good morning class (i) Angeline... (n) Can you read what I have written on the board? (r)

S: (Reads) No job (mr)

Hapana basa (Shona) (mr)

Aziko umsebenzo (Ndebele) (mr)

Kuribe njito (Chewa) (mr)

T: Good (acc) If you come across this placard...(i) how would you feel? (rq) - - - -

S: Discouraged (clar) Umm...discouraged (ext) also I feel bored (ext)

T: You feel discouraged... (ev) but does it mean there is no work? (pq) What do you think? (rq)

S: It means the employer wants somebody qualified (clar)

T: Suppose there are qualified people - - - - (cr)

S: Yes... (mr) Maybe no money (clar)

T: Meaning? (cr) - - - -

S: Meaning that the employer does not have enough money (clar) No money to pay them (ext)

T: Suppose he has money? (cr)- - - -

S: He has enough people (clar). Enough for the money he can afford to pay (ext)

T: What causes that?... (dq). You see what I mean?... (ch) when there are no jobs (ext)

S: Overpopulation... (mr) meaning too many people in a small place (clar)

T: Overpopulation... (ev) That's correct. (ev) How does overpopulation cause unemployment? (rq)

S: Simple... (i) jobs are few. (clar) I mean too many people (ext) when there are few jobs (ext)

T: Very interesting. (ev) What are some of the results of overpopulation? (dq)

S: Malnutrition (mr)

T: What do you mean? (cr)- - - -

S: Not much food (clar)

T: (Nods her head for one learner to go on)

S: People look thin. (ext) This is because they do not have enough to eat (ext)

T: Why do you say it is a result of overpopulation? (rq) - - - -Somebody to help (n) Albert...(n)
Tony...(n)

S: There should be enough food for people in a situation (clar) Every time...(ext) and...if there are too many people...(ext) say 100 for one bag of maize...(exe) the population too many for the little food. (ext) Food will not be enough (ext)

T: Excellent. (acc) Any more examples? (ch) We want results of overpopulation (ext)

S: Shortage of food (clar)

T: We shall continue in our groups (ms)

English: Pre-intervention

Subject: English

Total = 79 discourse acts

T = 66. S = 13. (83% : 17%)

Topic: Comprehension "Drought"

Stage: Pre-intervention (C)

T: Writing is the most important skill (i) when learning English. (ext) We are going to do a comprehension lesson. (ms) Comprehension lessons are of different kinds (i) Can someone tell me the noun from the word 'hot' ?(dq) What is the noun from the word hot? (dq)

S: Heat (mr)

T: What noun do we get from the word 'old'? (dq)... Anyone? (n)

S: Age (mr)

T: Wrong (cinf) Someone to give us the correct word? (n)

S: Old age (mr)

T: (Somewhat hesitant) Old age.....(acc) Isn't it? (qt) What about the word 'dry'? (dq)

S: Drought (mr)

T: Good (acc) Someone to tell me...(n) What is the meaning of drought? (dq) I have given out three dictionaries (i) Dictionary people where are you?... (ch) Find the meaning. (r) (The rest sit quietly, while the three search for the meaning). Hurry up (p)

S: (Reads from Dictionary) A period of continuous dry weather (clar)

T: Drought is a period (clar) when there is not enough water. (clar) Our cattle go thirsty... (ext) and rivers become dry (ext) (He writes the definition on the board). Can someone now read the passage (r) Anyone?... (n) Christopher (n)

S: (Reads the passage while others listen).

T: Right (m) Any new words? (ch) The Dictionary people will tell us (ms)

S: What is the meaning of smoulder? (dq)

T: Dictionary people tell us...(r) Where are you? (ch) (There is silence as pupils with Dictionaries try to look up words).

S: (Reads) To burn slowly without flame (clar)

T: To smoulder is to burn slowly. (ext) When a piece of wood does not burn in flames ...(clar) it smoulders (ext) Any other words? (ch).....

S: Token (mr)

T: Dictionary people...where are you? (p) Find out the meaning (r) (While the three pupils are looking up the word, the rest appear to be getting bored and become restless). Are you failing to find out? (ch)

S: (Reads from the Dictionary) A sign or symbol of something (clar)

T: Good... (acc). Read the passage in silence (r) After that...answer this question (r): Why had the red maize cob been sent ? (dq) Write down the answer...(r) I want to find out how you have answered (ms)

SS: (Answer the question in their exercise books)

T: Yes...(m) Anyone? (n)- - -

S: The red maize cob had been sent round ...(clar)

T: Yes...(acc) Come forward (r) Next (n)

S: The red maize cob had been sent round...(mr)

T: (This happens with seven pupils, and all are called to come in front). Listen...(r) Read the first seven words of your answer. (r) I want you to listen (ext) Right...(m) Count 1 to 7 (r) Good...(m) Why had the red maize cob been sent ? (dq) Together (n) Loudly (r)

SS: The red maize cob had been sent...(clar) (Other students laugh).

T: You have enjoyed it (ev) Isn't it? (qt) That is Ascot School choir (ext)

SS: (The four students in front are bored and respond thus) A-a-ah-a-h (mr)

T: This is what we must not do (i) Go back to your seats (r) (The four pupils walk back appearing discouraged). When answering comprehension questions...(clar) you must not repeat the words given in the question (ext).

Subject: English

Topic: Describing words

Total = 126 discourse acts

T = 102. S = 24. (81% : 19%)

Stage: Pre-intervention (T1)

T: We were using describing words...(i) Isn't it? (qt) We were using describing words (ext)

SS: (in chorus) We were using describing words (mr)

T: Which may be described as adjectives (i) *Handiti?* (Isn't it?) (qt) I will ask a question. (ms)
Give me an example of a describing word?.....(rq)

S: Walk (mr)

T: Walk is a doing word (cinf) If I say ...stand up (clar) (children stand). Sit down (ext) (children sit). Now you are involved in an action (i). If I say...Elvis is a short boy...(clar) I am describing Elvis...(ext) How does he look like? (dq) Elvis is a short boy. (clar) How does he look like? (dq)

S: He is short (mr)

T: OK...(m) the word short there is describing who? (dq)

SS: (in chorus) Elvis (mr)

T: What type of person he is...(ext) Isn't it? (qt) That is an adjective...(ext) Isn't it? (qt)

SS: (in chorus) Ye-e-es (mr)

T: *Tawirirana?* (Are we agreed?) (ch)

SS: (in chorus) e-eee-e (Ye-ees) (mr)

T: Yes...(acc). Give me some more examples (r)

S: Good (mr)

T: Yes (acc)

S: Tall (mr)

T: Yes (acc)

S: Like (mr)

T: Come again (l)

S: Like (mr)

T: Like...? (ch) Is it an adjective? (pq) Like what? (cr) Is it a describing word...(pq) like... (ext)
Yes (n)

S: Fat (mr)

T: Now... (m) I would like you to use a describing word in a sentence.....(ms) Do you get me?
(ch) Use the word in a sentence...(r)

S: That boy is too fat (clar)

T: OK...(acc) Yes (n)

S: I am thin (clar)

T: I will describe an object...(i) whether it is an animal or a person... (ext) Right...(m) and you will guess from what I will have said. (ext) Listen (r) I am thinking of someone (i) He is wearing a khaki uniform. (ext) He is putting on a green tie. (ext) He is wearing some shoes. (ext) He is fat. (ext) Who is he? (dq) Look around (cl) Yes (n)

S: Elvis (mr)

T: I am using some describing words (clar) How does he look like? (dq) Let's move outside this classroom...(r) It is a very big animal. (i) It feeds on leaves and twigs. (ext) It has some tusks. (ext) It is found in a game park. (ext) The skin is used to make some shoes. (ext) It is also used to make handbags. (ext) Many other things are also made (ext). What is that animal? (dq) Yes (n)

S: Elephant (mr)

T: Yes ...(acc) It is an elephant. (ext) I want you to try...(r) Can you try? (p) I would like you...to try (p) maybe working in your groups (i) You have to remain where you are (r) Talk to your friend...(r) describing an animal...(ext) You have to use adjectives (ext) Isn't it?... (pq) or describe an object...(clar) You can describe even human being...(ext) Whatever it is. (ext) You got what I said? (ch) Right (m) Let's start. ..(r) *Pana vamwe venyu vasina kumbotaura* (There are some of you who have not said a word (ev). *Kuramba makanyarara so* (Remaining quiet like that?) (cu) *Muchanhuhwa mukanwa* (You will develop a foul smell) (ext). *Taurai mweya unonhuhwa ubude* (Talk in order to expel the foul smell) (r)

SS: (Work in pairs and write their ideas on a piece of paper)

T: Someone to read what they have written (r) Yes (n)

S: Gladys is light... tall and fat in complexion. (clar) She puts on black shoes...(ext) She puts on white socks...(ext) and wears a blue jersey. (ext) Her teeth are white (ext) She has got short hair...(ext) Her ears are big ...(ext) and she has small eyes. (ext)

T: That's good...(ev) but let's hear the first sentence. (r) Read the first sentence (r)

S: Gladys is light...tall and fat in complexion (clar)

T: Gladys is light...tall and fat in what? (cr)

S: Complexion (mr)

T: Right ...(m) I am not sure...(cinf) Here does it make sense?... (pq). When you are talking of complexion you are talking of colour...(clar) Is it? (qt) Now you say Gladys is light...tall and fat in complexion. (ext) That's wrong (cinf) Isn't it? (qt) But your sense is quite right (ev)

Subject: English

Total = 75 discourse acts

T = 51. S = 24. (68% : 32%)

Topic: Class discussion – True friendship

Stage: Pre-intervention (T2)

T: Susan...(n)Who is your friend? (dq)

S: Shuvai (mr)

T: She in this class? (pq)

S: No (mr)

T: Can anyone tell me what true friendship is?... (rq) Anyone? (n) Shepherd (n)

S: When we plays together...(clar) and shares secrets (ext)

T: Use your tenses correctly...(r) Shepherd...(n) Play together...(cinf) share secrets (ext) Good (acc) Anyone else?.....(n) We move on...(r) I will write a situation on the board (ms) You think about it...(r) then we want to hear what everyone thinks. (ms) (Teacher writes the following situation on the board)

You have a new friend. The one who was your friend in primary school cannot stand this new friend of yours. The two argue and quarrel whenever they are together. Which of the following would you do:

- a. drop the new friend and stick to the old one*
- b. negotiate a truce between them*
- c. speak to them separately*

SS: (Read while the teacher is writing)

T: Let's begin (r) What would you do? (rq)

SS: (Very keen to contribute. Raise their hands) Me teacher...(b) Me teacher (b)

T: Remember to use correct English... (r) and express your ideas in full sentences (r) (After saying this...the number of hands raised is reduced). Yes...(n) Annah (n)

S: Me would drop the new friend (i)

S: Nyangwe...(No) (cinf) *handingadaro* (I would not do that) (ext) Listen... (r) (Using gestures)

T: John...(n). Speak in English (r)

S: Yes...(mr) Let me try...() No...(mr) I do not do that (i) (still using gestures).

S: (Another student volunteers to speak) I talk to them separately....(i)

T: Who gave you permission to speak?... (cu). Ephraim? (n)

S: Sorry (mr)

T: Right (m) Anyone?..... (n) Siphon...(n) Why not negotiate a truce between them? (rq)

S: Yes...truth (mr)

T: Who said truth? (ev) Everybody say truce (r)

SS: (in chorus) Truce (mr)

T: Good (acc) Suppose your old friend always fights the new one for no reason (cr)

S: Sir... (n) if she always fight I change my mind (i)

T: It is better to negotiate a truce with them (clar) because the consequences of fighting are bad (clar) It is much better to do that (ext) I would feel empathy for the friend. (ext) Do you understand?(ch)

SS: (Pupils make inaudible sounds and show confusion before shouting in chorus)Ye-e-s (mr)

T: Excellent (acc) Now listen...(r) take out your exercise books (r) and write a good composition (r). The title is : True Friendship (i)

S: Sir...(n) what is the date today? (dq)

T: Please wait (r) I have not finished (ext) We want full sentences...(ms) and good punctuation. (ms) There must be one idea per paragraph. (ext) Any questions? (ch)

SS: (in chorus) No-oo (mr)

T: Let's begin. (r)

English: Post-intervention

Subject: English

Total = 78 discourse acts

T = 65. S = 13. (83% : 17%)

Topic: Comprehension

Stage: Post-intervention (C)

T: Can you tell me names of rivers that you know?... (r) Even in towns or rural areas (ext)

S: Kukurakurerwa (mr)

T: Is that a river? (pq) I didn't know (ext). Where is it?... (dq) There are some animals found in rivers...(i) Can you tell me their names? (dq)

S: Crocodile (mr)

T: What else? (dq) You are leaving something that is dangerous...(cl) Heh... (p) What is that thing? (dq)

S: Eagle (mr)

T: What else? (dq) There is something you are leaving out...(ext) The word begins with "s"... (cl) not snake of course...(ext)

S: A stork (mr)

T: No (cinf) It's a small thing (cl) A dangerous thing (cl) It causes a certain disease ... (cl) and you end up passing out bloodstained urine (ext)

S: Snail (mr)

T: Today we are going to read about a snail (ms) Can you get your textbooks (r) Turn to page 24- - - (r) Listen before you read on your own (r) I want you to go through the words (i) so that you

won't have any problem (ext) when you read on your own (ext) Right...(m) Somebody to read these words (r)

S: Investigate (mr)

T: Right (acc) Class together (n)

SS: (in chorus) Investigate (mr)

T: Then here...(r)

S: Crash (mr)

T: Class (n)

SS: (in chorus) Crash (mr)

T: And then there...(r)

S: Upstream (mr)

T: Good (acc) Class (n)

SS: (in chorus) Upstream (mr)

T: And then there...(r)

S: Downstream (mr)

T: Class (n)

SS: (in chorus) Downstream (mr)

T: So.. you can read (ev). I will not explain these words now (i) *Handiti?* (Isn't it?) (qt) Read... (r) I'm sure you can pick up the meanings. (ext) You can tell that this word means this...(ext) According to this sentence it means...(ext) I'm sure the meaning of the word is.....(ext) You know the importance of a Dictionary...(i) A Dictionary helps...(clar) gives meanings of words...(ext) but you can't just say this word investigate means this. (clar) This word investigate means this (ext) *Handiti?* (Isn't it?) (qt) So you should find out the meaning from the what ___? (dq) from the passage...(clar) because a Dictionary will give you different meanings...(clar) So I won't explain those words now (ext) I will explain after you have read the passage (ms). Now... (m) Can you open page 45 (r). Right (m) You read in silence. (r) Suppose there are any words you are not quite sure of...(i) write them in your notebook (r) *Handiti?* (Isn't it?) (qt) I will read aloud one paragraph (ext)

Subject: English

Total = 119 discourse acts

T = 63. S = 56. (53% : 47%)

Topic: Dialogues

Stage: Post-intervention (T1)

T: Today ...Today (m) I want you to tell the class what you think each picture is about. (ms) Use your own words (r) and do not be ashamed to make mistakes (p) We all make mistakes...(ext) and that's the best way to learn. (ext) What can you see in picture 1? (dq) Kadoma...(n)

S: Somebody selling in a shop...(clar) and somebody buying (ext)
T: OK (acc) What do you call somebody who buys? (dq) Yes...(n) Peggy (n)
S: A customer (mr)
T: What do you think they are doing? (rq)- - - -
S: Talking about a table and chairs.(clar)
T: Good (acc) What about Picture 2? (cr)- - - -
S: I can see a doctor and a sick person (clar)
T: What word do we use for a sick person?- - - - (dq)
S: Patient (mr)
T: Yes (acc) So...what do you think is happening?- - - (rq)
S: I think the doctor wants to know how the patient is feeling (clar) He is concerned (ext)
T: And in the third picture?..... (cr) Chipu (n)
S: I think someone has been robbed...(clar) and I think is unhappy...(ext) and the police are here (ext)
T: Right ...(m) Listen carefully. (r) I want you to work in groups. (ms) We shall have six groups (ms) Two groups will work with Picture 1. (ms) Two groups with Picture 2 (ext) and two groups with Picture 3. (ext) Write down what the people are saying to each other. (r) Give them names...(r) Think of what happens in real life...(r) or what you have experienced yourself (ext) Think of the best words to use (r) I shall ask you to give us your dialogue (ms) Are there any questions? (ch)
S: What is a dialogue? (cr)
T: Good question (ev) A dialogue is when people are exchanging ideas about something (clar) Is that clear? (ch)
S: Yes (mr)
T: Any other question? (ch) Let's now work in our groups (r)
SS: (work in their groups and allocate each other roles to play)
T: Your time is up. (i) I said ten minutes. (ext) Let's listen to Group One. (r)
Customer: How much does the table cost? (rq)
Shopkeeper: Three thousand dollars (clar) Only three thousand dollars (ext). This is very cheap (clar)
Customer: It is not cheap (cinf)...(i) How about deposit? (rq)
Shopkeeper: Deposit... (i) You pay one thousand per month (clar) So you pay for three months only. (ext) Are you interested in buying? (pq)
Customer: It is too expensive (cinf) Can't you reduce the price? (pq)
Shopkeeper: This is cheap. (clar) I have already reduced (clar) It is now low...low (ext)
Customer: Let me buy it (r)
T: Clap hands for them (r). Good (acc) Here is a question...(i) What is a deposit? (cr)

S: Money you pay first (clar)

T: That's correct (acc) That is the money you pay down (clar) then you agree how much you will pay monthly. (ext) What do you call the balance? (dq) - - - - Anybody? (n) Begins with I... (cl)

S:Interest(mr)

T: No... (cinf) Ins__(cl)

S: I think it's instalment (clar)

T: That's good (acc) Group 3 (n)

Doctor: Good morning Tafadzwa (i)

Patient: Good morning Doctor (mr)

Doctor: How are you feeling today? (rq)

Patient: Today I am feeling worse (clar). Yesterday I was better (ext)

Doctor: What are you suffering from? (rq)

Patient: My head (mr)

Doctor: Ah...I see(ev) I think it will be better (ext)

T: That's good (acc) Hands for them. (r) When your head is troubling you ... (i) you say I have a ___? (dq)

S: Headache (mr)

T: Good (acc) Group 5 (n)

S1: May I have your address (r)

S2: My pens are stolen (ext)

(The police come)

S1: But who stole your things? (dq)

S2: I am telling the truth (clar) They have been stolen (ext)

S1: No one stole them (cinf) They are in your pocket (ext)

S2: Sir... (n) Someone has stolen my pen (i)

Pol: Who do you think it is? (rq)

S2: This guy (clar)

Pol: Let's go to the scene (r) and I will investigate...(ext) You are under arrest (i)

T: Clap hands for them (r). These were excellent dialogues...(ev) in good English (ev) I want you to choose any one of the pictures (r) and write a dialogue of not more than 15 lines (r).

Subject: English

Total = 44 discourse acts

T = 34. S = 10. (77% : 23%)

Topic: Using phrases

Stage: Post-intervention (T2)

T: I will just give you one of the phrases...(ms) The phrase is *as though* (i) Some of you have used the word *as though* (ext) What did we say?.....(dq) We said the teacher walks as though she is?__(dq)

SS: (in chorus) sick (mr)

T: Right...(m) another one was a phrase as __? (dq)

S: *as if* (mr)

T: Someone to use it in a sentence (r)

S: He looks as if he is a policeman (clar)

T: Today... (m) we are going to look at two words (ms) We will be looking at reasons. (ms) For whatever you do...there is a reason (clar) There are some words that go with that . (i) For example? - - - (rq) If I ask why you did not come to school yesterday...(i) how would you respond here? (rq) Why did you not come to school yesterday? (rq)

S: Because I was sick (clar)

T: There is a reason why he didn't come to school (ev) because he was sick (acc) There is another word you can use when giving a reason (i)- - - What is the word? (dq) You can use that word instead of because (cl) Heh?... (p) Try...(p)

S: Since (mr)

T: I did not come to school since __?(rq)

SS: Since it was raining (clar)

T Fine (acc) Use *because* and *since* (r) to answer this question: (ext) Why did Maud faint yesterday? (rq)

S: Because she ran three rounds (clar)

T: Good (acc) Another one (r)

S: Since she ran three rounds (clar)

T: Use past tense (r)

S: Since she ran three rounds (clar)

T: We can also use another phrase to give a reason...(ms) The phrase is *as it was* (ext) Why did she not come to school yesterday? (rq)

S: As it was raining (clar)

T: Good (acc).

APPENDIX B – TABLES

Table 1: The nine teachers forming core sample (Zimbabwe)

Group	Maths	English	Geography
Experimental	2	2	2
Control	1	1	1

Table 2: The six teachers forming the Malawi sample

Group	Maths	English	Geography
Experimental	1	1	1
Control	1	1	1

Table 3 Rating of skills (pre-intervention stage)

Skills	Control Group				Experimental Group			
	Teachers N = 23		Learners N = 118		Teachers N = 20		Learners N = 242	
	Count	%	Count	%	Count	%	Count	%
Listening	12	52	39	33	10	50	75	31
Talking	3	13	6	5	2	10	15	6
Reading	1	4	6	5	1	5	10	4
Writing	7	31	67	57	7	35	142	59
Total	23	100	118	100	20	100	242	100

Table 4 Rating of skills (post-intervention stage)

Skills	Control Group				Experimental Group			
	Teachers N = 23		Learners N = 118		Teachers N = 20		Learners N = 242	
	Count	%	Count	%	Count	%	Count	%
Listening	12	52	40	34	5	25	68	28
Talking	2	9	7	6	6	30	58	24
Reading	1	4	7	6	2	10	19	8
Writing	8	35	64	54	7	35	97	40
Total	23	100	118	100	20	100	242	100

Table 5 Which negotiation type do teachers focus on most?

Negotiation type	Pre-intervention				Post-intervention			
	Control N = 23		Experimental N = 20		Control N = 23		Experimental N = 20	
	Count	%	Count	%	Count	%	Count	%
Content	15	65	13	65	15	65	8	40
Form	5	22	4	20	5	22	7	35
Meaning	3	13	3	15	3	13	5	25
Total	23	100	20	100	23	100	20	100

Table 6 Dominance measures (control group)

Teacher	Pre-intervention				Post-intervention			
	Teachers		Students		Teachers		Students	
	Count	%	Count	%	Count	%	Count	%
English C	66	83	13	17	65	83	13	17
Geography C	86	84	16	16	59	95	3	5
Mathematics C	82	79	22	21	50	81	12	19
Total	234		51		174		28	

Table 7 Dominance measures (experimental group)

Teacher	Pre-intervention				Post-intervention			
	Teachers		Students		Teachers		Students	
	Count	%	Count	%	Count	%	Count	%
English T1	102	81	24	19	63	53	56	47
English T2	51	68	24	32	34	77	10	23
Geography T1	81	89	10	11	45	52	41	48
Geography T2	73	76	23	24	29	49	30	51
Mathematics T1	46	64	26	36	71	67	34	33
Mathematics T2	39	83	8	17	81	66	41	34
Total	392		115		323		212	

Table 8 Effectiveness measures : control group (teachers)

Subject	English pretest	English posttest	Geo. Pretest	Geo. posttest	Maths pretest	Maths posttest
Total acts	66	65	86	59	82	50
Clarification requests	0	0	1	0	0	0
Referential questions	0	0	4	0	0	0
Evaluation	0	1	1	0	3	3
Prompts	2	1	1	0	1	2
Clues	0	5	0	0	0	0
Silent stress	1	1	1	0	3	2
Total effective acts	3	8	18	0	7	7
Other acts	63	57	78	59	75	43
% of effective acts	5	12	9	0	9	14

Table 9 Effectiveness measures: experimental group (teachers)

Subject	English				Geography				Mathematics			
	T1 pre test	T1 post Test	T2 pre test	T2 Post test	T1 Pre test	T1 Post test	T2 Pre test	T2 Post test	T1 Pre test	T1 Post test	T2 Pre test	T2 Post test
Total acts	10 2	63	51	34	81	45	73	29	46	71	39	81
Clarifica- tion requests	2	3	1	0	0	3	1	4	0	1	0	2
Refere- ntial questio- ns	1	2	3	6	3	2	0	4	0	6	0	2
Evalua- tions	3	3	1	1	0	3	2	4	0	1	0	5
Prompts	1	1	0	1	0	3	1	2	1	2	2	2
Clues	2	2	0	1	3	2	2	0	0	3	0	1
Silent stress	0	5	0	2	0	2	1	6	0	10	0	3
Total effective acts	10	16	5	11	6	15	7	20	1	23	2	15
Other acts	92	47	46	23	75	30	66	9	45	48	37	66
% of effective acts	10	25	10	32	7	33	10	69	2	32	5	19

Table 10 Initiative measures: control group (learners)

Subject	English Pretest	English posttest	Geo. pretest	Geo. posttest	Maths pretest	Maths posttest
Total acts	13	13	16	3	22	12
Clarifications	3	0	5	0	2	4
Counter informs	0	0	0	0	0	0
Extensions	0	0	0	0	1	0
Self- selections	0	0	0	0	0	0
Bids	0	0	0	0	0	0
Total effective acts	3	0	5	0	3	4
Total other acts	10	13	11	3	19	8
% of initiative acts	23	0	31	0	14	33

Table 11 Initiative measures: experimental group (learners)

	English				Geography				Mathematics			
	T1 Pre test	T1 Post test	T2 Pre test	T2 post test	T1 pre test	T1 post test	T2 pre test	T2 post test	T1 pre test	T1 post test	T2 pre test	T2 post test
Total acts	24	56	24	10	10	41	23	30	26	34	8	41
Clarifications	4	15	1	7	0	11	11	10	7	14	3	10
Counter-informs	0	4	1	0	0	0	0	0	0	4	0	1
Extension	7	13	4	0	0	20	2	11	7	9	1	21
Self-selections	0	0	2	0	0	1	1	0	0	1	0	2
Bids	0	0	0	0	0	0	0	0	0	0	0	0
Total initiative	11	32	8	7	0	32	14	21	14	28	4	34
Other acts	13	24	17	2	10	9	9	9	12	6	4	7
% initiative acts	46	57	33	70	0	78	61	70	54	82	50	83

APPENDIX C

QUESTIONNAIRE 1 – ACTIVITY PREFERRED MOST (TEACHERS)

When teaching, which activity do you prefer learners to do most of the time? Rate the activities by putting 1 against the one you prefer most, 2 against your second preference, 3 against your third preference, and 4 against your fourth preference.

Activity	My preference
Listening	
Talking	
Reading	
Writing	

QUESTIONNAIRE 2 – NEGOTIATION TYPE PREFERRED MOST (TEACHERS)

Which negotiation type do you prefer most when teaching? Rate the types by putting 1 against the one you prefer most, 2 against your second preference, and 3 against your third preference.

Negotiation type	My preference
Content	
Meaning	
Form	

QUESTIONNAIRE 3 – ACTIVITIES PREFERRED MOST (LEARNERS)

When learning, which activity do you prefer to do most of the time? Rate the activities by putting 1 against the one you prefer most, 2 against your second preference, 3 against your third preference, and 4 against your fourth preference.

Activity	My preference
Listening	
Talking	
Reading	
Writing	

Appendix D

Four Interim test lessons by English (T1)

Subject : English (Taught after study of Module 1 – Learning from Traditional Education)

Total = 46 discourse acts

T = 19. S = 27. (41% : 59%)

Topic: Proverbs

T: We are going outside...(ms) and sit in a big circle (ms). Peter is going to be our grandfather (ms). He will give us some proverbs (ms), and you should explain (ms). You should also give a typical situation where the proverb can be used (ms). The five proverbs have been written on the board....(ext) and I will give you ten minutes to read them quietly...(ms) and to think about each one (ms).

(The class reads the proverbs before going outside. They sit in a circle before the dialogue begins).

T: Yes...(n) Peter ...(n). You can start (r).

P: The first proverb is: "a bird in the hand is worth two in the bush" (i). What do you think it means?... (rq) Esnath (n) What do you think? (rq)

S1: It's better to stick to what you know...(clar) umm... mm

T: What do you mean?... (cr)

S1: You should not be after too many things...(clar) umm for example wanting this or that (exe)

S2: What about two in the bush? (cr)

S3: me...me sir (b)

T: Yes...(n)

S3: Better to have one thing (clar) than dream of many things (ext)

T: That's good (eval)

P: How do we apply the proverb? (rq) I mean in real life situations (ext)

S4: I have an example (clar). If you have a job...(exe) don't leave it (exe) before you get another one (exe)

T: Meaning?... (cr)

S4: I mean... do not leave the job (clar) thinking there are many jobs to choose from (clar). You can fail to get another one (ext). The jobs you don't have are birds in the bush(ext).

T; A good explanation (eval). Give us the next proverb (r)

P: Listen to the proverb...(r) Birds of the same feathers flock together (i). What do you think this means? (rq)

T: Anybody? (n)

S5: Umm... the same people (clar)

T: Make that clear (cr)

S5: I mean people who are the same (clar). People who do the same things (ext).

T: That's a good point (eval)

Subject : English (Taught after studying Module 2 – Reading)

Total = 44 discourse acts

T =23 S = 21 (52% : 48%)

Topic: Interpreting a passage

T: Read the following passage (r). After reading the passage (ms)...we are going to discuss some ideas from it (ms).

Once upon a time there was a young gallant. This young man was exceedingly handsome in physical proportions and face so that every mother of the village desired him to court her daughter. He was also very industrious and showed great respect and deference to elders. Unfortunately he suffered from one great lapse in traditional behaviour. He refused to believe that there were things and places that one should also show respect and reverence towards. He just laughed off these beliefs as superstitions held by villagers.

T: Stop reading (r). How did you find the passage? (rq) - - - -

S1: Interesting (clar)... but difficult (ext)

S2: The story is incomplete (clar)

T: Lettie (n)...Why do you say it is interesting? (cr)...

S1: Because many mothers want the young man to marry their daughters (clar).

SS: (They all laugh)

T: Why is that interesting? (rq)- - - -Anyone? (n)

S3: I think...er rr you should not marry someone because he is handsome (clar)

T: Do you agree? (pq) - - - - Faina (n)

S4: Yes (mr)...A person can be handsome (clar) but have bad manners (ext)

S5: Like in the passage the boy does not show respect for our tradition (ext)

S6: What does exceedingly mean? (cr)

T: Look at the ay it is used (cl). Which word does it come before? (dq)

S6: handsome (mr)

T: Replace it with another word (r)...so that it keeps its meaning (ext) - - - -

S7: umm.mm... Very (mr)

T: Correct (acc). In this case 'exceedingly' means the same as 'very' (ext)

S8: What about industrious? (cr). Anything to do with industry? (cr)
 T: Class (n)...What do you think? (rq)
 S9: To do with work... I think...(clar)
 T: Which means? (cr)
 S9: maybe ah... he works hard(clar)
 T: Correct (acc). But what was the problem with the young man? (dq)
 S10: He did not show respect for elders (clar)
 S9: I do not think it's elders (cinf)...sir...(n)
 T: What is it? (cr)
 S11: things and places (clar). That is in the passage (ext)
 T: You are right (eval)

Subject : English (Taught after studying Module 3 – Not Just Playing Around)

Total = 55 discourse acts

T = 17 S = 38 (31% : 69%)

Topic: Role playing

T: Today ... we are going to do a role play (i). Read the following situation quietly (r).

Situation

A father and mother have two children, Lucas and Jacob. They want to start a vegetable garden.

T: Are we through? (ch). Right (m). In groups of four assign each other a role (r) and each one should say what you think should be discussed (ms). Ok? (ch). We are going to ask each group to come in front (ms) and give us a short play (ms). Are we together? (ch)

SS: Ye-e-es (mr)

(The learners worked in groups, and the following is one of the recorded role-plays)

F: We are spending a lot of money buying vegetables (i). Don't you think we must start our own garden? (pq)

L: What about water? (cr) Water is expensive (ext)

M: Not really (cinf). It is not water (clar)...Space is the problem (ext). Our yard is too small (ext)

L: I have an idea (i). Let's remove the lawn in front (ext)

J: Remove the lawn? (ev) You are crazy (ext). Where will I practise my cricket? (rq)

F: Wait...(r) Wait (r). There is another site (i). I am thinking of the space behind the garage (ext).

M: But we can only fit two beds (cinf). Is that economical? (cr)

F: They say better half a loaf than no bread (clar)

J: Agreed (acc). Then our water bill will not be much (ext). I like that idea (ev)
 F: One more question (i). Who is going to dig the ground? (rq)
 M: You need strength (clar) You boys should do that (ext). Isn't it? (qt)
 L and J: Ye-e-e-s (mr)
 F: I will buy the seed (i). What type do you want? (rq)
 J; Spinach (mr)
 M: I will water the garden (i) when the boys are at school (ext)
 T: Clap hands for them (r). How do you like their discussion? (rq) Loice (n)
 Lo: I think Lucas is rude (clar). He calls Jacob crazy (ext).
 T: Space for the garden (i). What do you think (rq). Simba (n)
 S: Father's idea is good (clar). They wont have to dig the lawn (clar).
 T: Good reasoning (ev).

Subject : English (Taught after studying Module 4 – Varieties of Text)

Total = 54 discourse acts

T = 25 S = 29 (46% : 54%)

Lesson: Specialist Vocabulary

T: I have written three sentences on the board (i). We are going to look at each sentence (ms).
 After that we are going to discuss each one separately (ms).

(The learners read the sentences quietly)

1. *Contours prevent soil erosion and silting of rivers.*
2. *During the era of Shaka Zulu there were many ethnic wars.*
3. *When running a business, you must calculate income and expenditure.*

T: Now (m)...Which school subject does each sentence remind you of (dq). Say whether it is History, Science, or any other subject (r).

SS: Sir...Sir.. (b) (some clicking their fingers)

T: Tamuka (n)

S1: The first sentence is from Agriculture (clar)

S2: No (cinf)...It's from Geography (clar)

T: Why do you say Geography? (rq)

S2: Because we did that in Physical Geography (clar). So it's Geography (ext)

S1: But we also did it in Agriculture (cinf)

T: Are there special words that make you say that? (dq). Words from the sentences (ext)

S3: In Business Studies we do not talk of 'contours' or 'silting' (clar), so they are from Geography (ext)

S4: Even 'erosion' (exe)... You don't talk about it in History (ext)
T: Your answers are correct (ev). The first sentence is from either Agriculture or geography (acc).
I want you to look at the context (r) and give the meanings of each word (r). Tony (n)...
S5: Erosion is the washing away of top soil (clar)
T: So? (cr)...
S5: When the soil fill rivers (clar)...that is an example of silting (exe)
T: What about contours? (rq)
S6: Umm...contours are kind of ditches (clar)...I mean drains (ext) used to prevent erosion (ext)
T: That is a very good example (ev). What about the second sentence? (rq). From which subject?
(dq)
S7: That's from History (clar). We study about Shaka in History (ext)
S8: Agreed (acc). The word 'era' is about History (clar).
T: And what does it mean? (rq)
S8: I am not sure (mr) but it has to do with a period (clar)
T: A period when something happens (ext). Good (acc). What about the swecond sentence? (rq)
Say from which subject (r)
S9: History...I think (clar)
T: Why... (rq)
S9: Shaka lived long ago (clar)
S10: Also ethnic wars (clar). They fought wars (ext).
T: That's correct (acc)

APPENDIX E

STATISTICAL RESULTS

(Source: *Vassarstats: Web site for statistical computation at <http://faculty.vassar.edu/lowry/VassarStats.html>*)

Statistical Result 1

Teacher dominance hypothesis (H1): control group

	Pretest	Posttest	Total
Teacher acts	234	174	408
Learner acts	51	28	79
Total	285	202	487

Chi-square value: 1.13 $p = 0.2878$ (1df) (Not significant)

Statistical Result 2

Teacher dominance hypothesis (H1): experimental group

	Pretest	Posttest	Total
Teacher acts	392	323	715
Learner acts	115	212	327
Total	507	535	1042

Chi-square value: 33.92 $p < 0.0001$ (1df) (Significant)

Statistical Result 3

Teacher effectiveness hypothesis (H2): control group

	Pretest	Posttest	Total
Teacher effective acts	16	15	31
Teacher other acts	218	159	377
Total	234	174	408

Chi-square value: 0.23 $p = 0.6315$ (1df) (Not significant)

Statistical Result 4

Teacher effectiveness hypothesis (H2): experimental group

	Pretest	Posttest	Total
Teacher effective acts	30	100	130
Teacher other acts	362	223	585
Total	392	323	715

Chi-square value: 1.13 $p < 0.0001$ (1df) (Significant)

Statistical Result 5

Learner initiative hypothesis (H3): control group

	Pretest	Posttest	Total
Learner initiative acts	11	4	15
Learner other acts	40	24	64
Total	51	28	79

Chi-square value: 0.24 $p = 0.6242$ (1df) (Not significant)

Statistical Result 6

Learner initiative hypothesis (H3): experimental group

	Pretest	Posttest	Total
Learner initiative acts	48	150	198
Learner other acts	67	62	129
Total	115	212	327

Chi-square value: 25.08 $p < 0.0001$ (1df) (Significant)

