

# **Scaffolded Instruction and Interaction in an ESL Classroom**

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**Zeina Abou Chacra**

**Scaffolded Instruction and Interaction in an ESL Classroom**

**Abstract**

This research study uses socio-cultural theories of learning to investigate scaffolded instruction as a pedagogical tool across instructional activities and describe the type of student interaction it creates in the particular context of one ESL classroom in need of ways for improving interaction among students. The three main objectives of the study include an attempt to describe how scaffolding is discursively performed in the two instructional activities of teacher-led whole group lessons and tutorials; a description of student interaction in the classroom when scaffolding is applied; and an investigation of how scaffolding as dialogic interaction contrasts between the two instructional activities.

Participants in this study were all secondary school students attending a remedial English class consisting of no more than ten students at an American international school in Kuwait. Audio recording of the lesson for spoken discourse analysis, alongside observation and interviewing were used to collect data simultaneously for the two instructional activities of teacher-led whole group lessons and tutorials which were both formatted, based on previous literature to include scaffolding elements. For both whole group lessons and tutorials, observations took place as well as a recording and transcription of the lesson for oral discourse analysis followed by interviews with students immediately after the lesson. This was repeated for three whole group teacher-led lessons and three tutorials resulting in a total of 6 data collection events for each of the three research methods were completed.

By providing a linguistic understanding of scaffolded instruction, this study presents scaffolding as a more concrete concept by demonstrating how particular elements of scaffolding create classroom interaction. Additionally, this research provides a relative comparison and contrast of scaffolding as it occurs and creates interaction during two instructional activities thus providing specific recommendations for addressing a pedagogic concern with student motivation in the context of a particular ESL classroom.

## **List of Tables**

TABLE 2.1: SCAFFOLDING FUNCTIONS IDENTIFIED BY WOOD ET AL.(1976)	50
TABLE 2.2: SCAFFOLDING FUNCTIONS IDENTIFIED BY ROGOFF AND GARDNER (1984)	51
TABLE 2.3: SCAFFOLDING ACTIONS IDENTIFIED BY MERCER (1998)	55
TABLE 3.1: PERSONAL CATEGORIZATION OF SCAFFOLDING ELEMENTS BASED ON THE WORK OF WOOD ET AL (1976). ROGOFF AND GARDNER (1984) AND MERCER (1998)	66
TABLE 3.2: OVERVIEW OF DATA COLLECTION AND ANALYSIS PROCEDURES	77
TABLE 3.3: THE THREE PHASE OBSERVATION CYCLE	94
TABLE 4.1: OVERALL FREQUENCY DISTRIBUTION OF MOVES IN LESSON A	117
TABLE 4.2: FREQUENCY DISTRIBUTION OF MOVES IN EACH TRANSACTION FOR STUDENTS AND TEACHER IN LESSON A	127
TABLE 4.3: OVERALL DISTRIBUTION OF SPEECH ACTS IN LESSON A	140
TABLE 4.4: SUMMARY OF FINDINGS FROM WHOLE GROUP LESSONS	158
TABLE 5.1: OVERALL DISTRIBUTION OF MOVES IN TUTORIAL A	168
TABLE 5.2: FREQUENCY DISTRIBUTION OF SPEECH ACTS USED BY TEACHER IN TUTORIAL A	178
TABLE 5.3: SUMMARY OF FINDINGS FROM TUTORIALS	202
TABLE 6.1: COMPARISON AND CONTRAST BETWEEN INSTRUCTIONAL ACTIVITIES	224

## Contents

<b>CHAPTER ONE: INTRODUCTION .....</b>	<b>12</b>
1.1 BACKGROUND AND RATIONALE.....	12
1.2 FOCUS.....	15
<b>CHAPTER TWO: REVIEW OF THE LITERATURE .....</b>	<b>17</b>
2.1 INTRODUCTION.....	17
2.2 CLASSROOM INTERACTION.....	18
2.2.1 <i>OVERVIEW</i> .....	18
2.2.2 <i>THE IRF EXCHANGE</i> .....	20
2.2.3 <i>A REEVALUATION OF THE IRF EXCHANGE</i> .....	21
2.2.4 <i>ALTERNATIVE MODES OF DISCOURSE</i> .....	22
2.3 VYGOTSKIAN SOCIOCULTURAL THEORY .....	24
2.3.1 <i>EMPHASIS ON SOCIAL INTERACTION</i> .....	24
2.3.2 <i>HIGHER MENTAL FUNCTIONS</i> .....	28
2.3.3 <i>DEFICIENCIES IN COMMON INSTRUCTIONAL PRACTICES</i> .....	31
2.3.4 <i>INTERSUBJECTIVITY</i> .....	36
2.3.5 <i>NEED FOR RESEARCH</i> .....	41
2.4 ALTERNATIVE VIEWS TO VYGOTSKIAN THEORY .....	42
2.4.1 <i>PIAGET</i> .....	43
2.4.2 <i>CHOMSKY'S UG MODEL</i> .....	44
2.4.3 <i>KRASHEN</i> .....	46
2.4.4 <i>CURRENT DEBATES ON VYGOTSKIAN THEORY</i> .....	50
2.5 SCAFFOLDED INSTRUCTION.....	51
2.6 DISCOURSE ANALYSIS .....	59
2.6.1 <i>JUSTIFICATION FOR USING DISCOURSE ANALYSIS</i> .....	59

2.6.2 SPOKEN DISCOURSE ANALYSIS.....	61
2.6.3 THE BURTON MODEL.....	62
<b>CHAPTER THREE: METHODOLOGY.....</b>	<b>65</b>
3.1 INTRODUCTION.....	65
3.2 DATA COLLECTION.....	66
3.2.1 GENERAL BACKGROUND ON DATA COLLECTION.....	66
3.2.2 INSTRUCTIONAL ACTIVITIES INVOLVED IN DATA COLLECTION.....	69
3.2.2.1 Whole group lessons.....	69
3.2.2.2 Tutorials.....	73
3.2.2.3 Summary.....	75
3.3 THE INTERPRETIVE PARADIGM.....	79
3.3.1 THE NATURE OF THE RESEARCH QUESTION.....	79
3.3.2 THE RELATION OF THE RESEARCHER TO THE PARTICIPANTS.....	80
3.3.3 THE AIM OF THE RESEARCH.....	81
3.3.4 PARTICULARIZATION.....	83
3.3.5 ROLE CONFLICT IN PRACTITIONER RESEARCH.....	84
3.4 DATA COLLECTION METHODS.....	87
3.4.1 INTERVIEWING.....	87
3.4.1.1 Merits of interviewing.....	87
3.4.1.2 Data collection.....	88
3.4.1.3 Justification for the choice of interview type.....	90
3.4.2 OBSERVATION.....	93
3.4.2.1 Merits of observation.....	93
3.4.2.2 Data collection.....	94
3.4.2.3 Problems encountered.....	101

3.4.3	<i>ORAL DISCOURSE ANALYSIS OF LESSON TRANSCRIPTS</i> .....	102
3.4.3.1	Data Collection .....	102
3.4.3.2	Transcription conventions .....	103
3.4.3.3	Problems encountered .....	104
<b>CHAPTER FOUR: FINDINGS FROM WHOLE GROUP LESSONS</b> .....		<b>106</b>
4.1	INTRODUCTION.....	106
4.2	TASK SIMPLIFICATION .....	114
4.2.1	<i>TASK SIMPLIFICATION: DISCOURSE ANALYSIS</i> .....	114
4.2.1.1	Task simplification: patterns of moves.....	114
4.2.1.2	Task simplification: speech acts .....	118
4.2.2	<i>TASK SIMPLIFICATION: OBSERVATION AND INTERVIEWS</i> .....	121
4.3	RECRUITING INTEREST .....	122
4.3.1	<i>RECRUITING INTEREST: DISCOURSE ANALYSIS</i> .....	122
4.3.1.1	Recruiting interest: patterns of moves .....	122
4.3.1.2	Recruitment of interest: speech acts .....	127
4.3.2	<i>RECRUITMENT OF INTEREST: OBSERVATION AND INTERVIEWS</i> .....	131
4.4	EXPLORATION .....	133
4.4.1	<i>EXPLORATION: DISCOURSE ANALYSIS</i> .....	133
4.4.1.1	Presence of exploration in instruction .....	133
4.4.1.2	Student interaction during exploration .....	140
4.4.2	<i>EXPLORATION: OBSERVATION AND INTERVIEWS</i> .....	144
4.5	TEACHER FEEDBACK TO STUDENT RESPONSE.....	146
4.5.1	<i>EXPLORATORY FEEDBACK: DISCOURSE ANALYSIS</i> .....	146
4.5.1.1	Exploratory feedback to student response.....	147
4.5.1.2	Exploratory feedback and student interaction.....	151

4.5.2 <i>EXPLORATORY FEEDBACK: OBSERVATION AND INTERVIEWS</i> .....	153
4.6 CONCLUSION .....	154
<b>CHAPTER FIVE: FINDINGS FROM TUTORIALS .....</b>	<b>157</b>
5.1 INTRODUCTION.....	157
5.2 TASK SIMPLIFICATION .....	163
5.2.1 <i>TASK SIMPLIFICATION: DISCOURSE ANALYSIS</i> .....	163
5.2.1.1 Task simplification: patterns of moves.....	163
5.2.1.2 Task simplification: speech acts .....	168
5.2.2 <i>OBSERVATION AND INTERVIEWS</i> .....	171
5.3 EXPLORATION .....	173
5.3.1 <i>EXPLORATION: DISCOURSE ANALYSIS</i> .....	173
5.3.1.1 Presence of exploration in instruction.....	173
5.3.1.2 Exploration and student interaction.....	178
5.3.2 <i>EXPLORATION: OBSERVATION AND INTERVIEWS</i> .....	180
5.4 TEACHER FEEDBACK TO STUDENT RESPONSE.....	181
5.4.1 <i>EXPLORATORY FEEDBACK: DISCOURSE ANALYSIS</i> .....	181
5.4.1.1 Exploratory feedback: patterns of moves.....	181
5.4.1.2 Exploratory feedback: speech acts.....	185
5.4.2 <i>EXPLORATORY FEEDBACK: OBSERVATION AND INTERVIEWS</i> .....	188
5.5 REDUNDANCY .....	190
5.5.1 <i>REDUNDANCY: DISCOURSE ANALYSIS</i> .....	190
5.5.1.1 Redundancy in instruction.....	190
5.5.1.2 Redundancy and student interaction.....	193
5.5.2 <i>REDUNDANCY: OBSERVATION AND INTERVIEWS</i> .....	195
5.6 CONCLUSION .....	196

<b>CHAPTER SIX: DISCUSSION .....</b>	<b>199</b>
6.1 INTRODUCTION.....	199
6.2 COGNITIVE CHARACTERISTICS OF INTERACTION ACCOMPANYING SCAFFOLDING.....	200
<i>6.2.1 INTRINSIC MOTIVATION AND MORE RESPONSIBILITY FOR LEARNING</i> .	200
6.2.1.1 Intrinsic motivation: support from current literature.....	200
6.2.1.2 Intrinsic motivation: expansion on the literature.....	202
<i>6.2.2 DEMONSTRATION OF INTERSUBJECTIVE UNDERSTANDING</i> .....	203
6.2.2.1 Intersubjectivity: support from current literature.....	203
6.2.2.2 Intersubjectivity: expansion on the literature.....	205
<i>6.2.3 STIMULATION OF REFLECTION</i> .....	207
6.2.3.1 Stimulation of reflection: support from current literature.....	207
6.2.3.2 Stimulation of reflection: expansion on the literature.....	209
6.3. SOCIAL CHARACTERISTICS OF INTERACTION ACCOMPANYING SCAFFOLDING.....	210
<i>6.3.1 FACILITATION OF STUDENT INTERACTION</i> .....	210
6.3.1.1 Comparison of focused interaction between the two instructional activities	210
6.3.1.2 Contrast of focused interaction between the two instructional activities.....	211
<i>6.3.2 DEMONSTRATION OF COMMUNICATIVE SKILLS</i> .....	213
6.3.2.1 Comparison of communicative skills in the two instructional activities.....	213
6.3.2.2 Contrast in the demonstration of communicative skills between the two instructional activities .....	214
<i>6.3.3 ESTABLISHMENT OF TEACHER ROLE AS PRIMARY FIGURE IN THE DISCOURSE</i> .....	215
6.3.3.1 Comparison and contrast of teacher role in the two instructional activities .	215

6.4 CONCLUSION .....	217
<b>CHAPTER SEVEN: CONCLUSION.....</b>	<b>220</b>
7.1 RETROSPECTIVE VIEW OF THE RESEARCH.....	220
7.1.1 OVERVIEW .....	220
7.1.2 CONTRIBUTIONS TO THE FIELD.....	221
7.2 IMPLICATIONS FOR PRACTICE .....	222
7.3 LIMITATIONS OF PRESENT STUDY .....	225
7.3.1 IMPLICATIONS FOR FURTHER RESEARCH.....	227
<b>APPENDICES .....</b>	<b>229</b>
APPENDIX 1: NEGOTIATION OF ACCESS.....	229
APPENDIX 2: INFORMED CONSENT .....	230
APPENDIX 3A: STRUCTURED INTERVIEW SCHEDULE .....	231
APPENDIX 3B: OPERATIONALIZATION OF TERMS USED IN THE INTERVIEWS .....	233
APPENDIX 4A1: UNSTRUCTURED OBSERVATION SCHEDULE FOR SCAFFOLDING ELEMENTS .....	236
APPENDIX 4A2: CODING USED FOR OBSERVED CHARACTERISTICS OF INSTRUCTION THAT QUALIFY AS ELEMENTS OF SCAFFOLDED INSTRUCTION .....	237
APPENDIX 4B1: STRUCTURED OBSERVATION SCALE FOR RECORDING ELEMENTS OF STUDENT BEHAVIOR DURING INTERACTION .....	239
APPENDIX 5: NOTES ON THE CODING SCHEME USED FOR SPOKEN DISCOURSE ANALYSIS.....	240
<b>REFERENCES.....</b>	<b>241</b>

## **Chapter One: Introduction**

### **1.1 BACKGROUND AND RATIONALE**

The current situation which provided the starting point for this study is centered around a particular socio-cultural context. It takes part in a private American international school located in Kuwait whose expressed philosophy is preparing students for an American university education. All staff members are certified teachers, the majority of whom, are native speakers of English. Although the 1000 plus student population is multinational and multilingual in nature, the majority of students are of Arab origin differing only in terms of Arab nationality. A significant portion are of affluent upper socioeconomic level Kuwaitis.

The study is based on my instruction of a secondary school ESL course designed to provide pupils with assistance in developing basic language skills which include reading, writing, speaking and listening. As an elective course, the class is relatively mixed in terms of student ability and grade level with class size consisting of no more than ten students. Although there are slight differences in terms of student ability and grade level, I have noticed some general patterns related to socio-cultural factors emerge among this group of students. As an educator, such general tendencies related to the socio-cultural context are particularly relevant to contextualizing the study at hand since they raised issues for me which led to the research questions I formulated for this study.

First, the communication style of that group of students is not very direct and explicit. Students may perform an elaborate series of stages before stating the main point. Requesting help from the teacher, for instance, would involve small talk that centers around the main

issue but does not explicitly state it. I also noticed that the communication style of my group of students is very animated and emotional with an open expression of feelings as well as a highly contextualized reliance on gestures, body movements, and other nonverbal elements. Such characteristics may be quite easily misinterpreted as signs of student misbehavior or classroom mismanagement.

In terms of learning style, my students in general seem to prefer verbal expression over written. They also seem to have an overriding need for verification and reinforcement from me as their teacher on any task which is completed or any reply they give. Related to this is a noticeable tendency to ask for help either from the teacher or peers before attempting to complete tasks independently. Further to the point, these students seem to prefer mnemonic strategies of instruction which reflects that learning within this socio-cultural context is viewed as being very memory oriented. Overall, I find that there is a lack of interest in academics and a generally low level of classroom participation and interaction.

Pedagogically, I am currently addressing these general tendencies related to the culture of learning delineated above in several ways. For instance, the highly animated communication style has been catered for by adding active participatory instructional activities to the curriculum such as vocabulary games and classroom discussions as well as cooperative learning opportunities that range from creative group presentations to peer revision of writing. The constant need for reinforcement is met by providing verbal expressions of approval as well as affective support to help build confidence in students and encourage the independent completion of tasks. In addition, the memory oriented nature of this learning culture is addressed by including mnemonic instructional strategies in the curriculum that range from associating words with familiar concepts to summative review activities presented at the end of a lesson.

Even with the implementation of such strategies in my classroom, however, there still remained an overall lack of interest in academics and low levels of student participation and interaction during classroom discussions. This reflection has been reiterated by other subject matter teachers as well. The issue of classroom interaction thus becomes a vital issue that needs to be addressed in language teaching as well as in students' learning and beliefs in this particular context. I needed to investigate ways of improving interaction and participation in the classroom.

It was these pedagogic concerns which provided the bases for the focus of the study undertaken and reported on here. A Vygotskian socio-cultural theoretical framework will be used to investigate cooperation and social interaction among students. More particularly, my intention will be to embark on a first time application of the Vygotskian notion of scaffolding in the particular context of my own ESL classroom to find which specific elements of scaffolded instruction take prominence and how they unfold during instruction. In addition, I will also be interested in discovering the patterns of interaction and participation created by each scaffolding element in that particular context. Based on a linguistic understanding of scaffolded instruction, this investigation will use a discourse analytical framework. The particular characteristics of student interaction which accompany each scaffolding element will be discerned in two types of instructional activities. I will thus attempt to present in the analysis chapters a relative comparison between the two instructional activities of tutorials and teacher-led whole group lessons in terms of the presence of scaffolding elements in instruction and the student interactional style created by each particular element of scaffolding during each of the two instructional activities.

The importance of this research to myself as a teacher and to my students as learners rests on several issues. First, since scaffolded instruction is a pedagogical tool which derives from socio-cultural theory, an investigation of the type of interaction it creates may provide insight

into ways of addressing the low motivational level and lack of interest in academics generally characteristic of the learning culture of my group of students. Hence, this research is in general directly relevant to the fore mentioned need for improving student interaction and participation in the classroom. More specifically, however, this research will allow me as a teacher to realize the type of student interaction that accompanies each specific scaffolding element when viewed in isolation. Moreover, the relative presence of scaffolding elements in the two types of instructional activities will be made clear allowing me as a teacher who is implementing scaffolding for the first time, to realize how scaffolding elements cluster differently across instructional activities.

## **1.2 FOCUS**

This study uses socio-cultural theories of learning to investigate a first time implementation of scaffolded instruction as a pedagogical tool across instructional activities and describe the type of interaction that ensues among secondary students in an ESL classroom. Hence, the study has three main objectives:

- describe how scaffolding is discursively performed in two types of instructional activities; whole group lessons and tutorials.
- describe the type of interaction created by scaffolding among secondary ESL students in the classroom.
- investigate how scaffolding as dialogic interaction contrasts in two types of instructional activities, tutorials and teacher-led whole group lessons.

The next chapter provides a review of the current literature on Vygotskian socio-cultural theory in general and scaffolding in particular. This is accompanied by a discussion of how the analysis of spoken discourse may be used to understand scaffolded instruction student interaction.

## **Chapter Two: Review of the Literature**

### **2.1 INTRODUCTION**

This chapter starts off by providing in the first section an overview of classroom interaction in general moving on to a more specific perspective on interaction embodied in Vygotskian sociocultural theory. Vygotskian theory is discussed in general with a consideration of alternative approaches, and scaffolded instruction is discussed in particular in relation to this study's main concern with patterns of interaction among students. The next section links that literature with the literature on spoken discourse analysis through an overview of why discourse analysis is useful for understanding scaffolded instruction and student interaction. I discuss spoken discourse analysis in general and the Burton (1981) scheme as the main analytical tool in particular.

It should be noted here that although scaffolding is an instructional strategy that is not in any way limited to second language teaching, SLA (second language acquisition) formulates a considerable part of the literature reviewed in this chapter due to the fact that there is quite a substantial amount of research done on Vygotskian theory in the SLA field. Additionally, I found that to be appropriate since the present study takes place in the SL context of my ESL classroom.

## **2.2 CLASSROOM INTERACTION**

### **2.2.1 OVERVIEW**

Since context determines the type of talk which takes place in a particular setting, it may be stated that the talk which occurs in classrooms differs from that occurring in other settings. There are certain institutional factors in a classroom such as power relationships, set objectives, and expectations which to a certain extent determine the type of talk taking place (Van Lier 1996). The centrality of pedagogical interaction or what is commonly known as classroom talk lies, according to Van Lier (1996), in its role as the engine which drives, sustains and extends the learning process. The fact that classroom interaction differs from discourse that occurs in interaction outside the classroom has led to various accounts for describing classroom interaction.

Attempts at describing classroom interaction have varied based on certain criteria. In describing interaction in elementary classrooms for instance, Hatch (1992) identifies four types of classroom interaction. The first and most frequent is one where the teacher interacts with the class as a whole. The second most common type of interaction is one where the teacher meets with a particular group of students in a class. Independent work done by students coupled with the availability for teacher help constitutes the third type of classroom interaction. The fourth type of interaction is based on group work among students with minimal supervision from the teacher.

Some researchers in the field of second language acquisition describe classroom interaction by differentiating among the types of language use (Ellis 1994). For instance, Allwright (1980 cited in Ellis 1994 p.577) presents a 'macro-analysis of language teaching and learning where he differentiates between three elements. The first, samples, are instances of the target language. The second, guidance, involves communication related to

the nature of the target language. Finally, management activities are geared at verifying that the first two elements are occurring in the classroom. Along a similar note, McTear (1975 cited in Ellis 1994 p.577) describes classroom interaction by differentiating between interaction that centers on language code and interaction that focuses on the exchange of meaning. Ellis (1994) describes classroom interaction by distinguishing between the general aim of the interaction or goal, and address which relates to who address whom. In yet another attempt to describe classroom interaction based on types of language use, Van Lier (1988 cited in Ellis 1994 p.575) identifies four types of classroom interaction based on the teacher's control over both the topic and the activity through which the topic is discussed.

Other attempts at describing classroom interaction have focused on the structure of such interaction. For instance, Mehan(1979 cited in Ellis 1994 p.576) identifies three phases in the structure of classroom discourse. The first is an opening phase whereby participants acknowledge that the activity they are involved in is in fact a lesson. Following this is an instructional phase which includes an interchange of knowledge between teacher and students. Finally, the closing phase is meant to reiterate to students the major points covered in the lesson. Perhaps the most known account of classroom discourse is the Sinclair and Coulthard (1975) scheme which is a hierarchy of five components in the structure of a lesson. These include first the Lesson which consists of Transactions which in turn include Exchanges related to certain topics of discourse. Exchanges consist of Moves which formulate individual turns. Finally, Moves are composed of Speech Acts, the smallest units of discourse.

## 2.2.2 THE IRF EXCHANGE

Of these five components contained in the structure of a lesson according to Sinclair and Coulthard (1975), the Exchange is the one that is the most clearly defined becoming well-noted as the IRF exchange based on the three moves it contains. An IRF exchange typically begins with an Initiation whereby the teacher may ask a question. This is followed by a Response from the student to that question ending with Feedback from the teacher as an evaluation of that response.

According to Johnson (1995), the classroom specific nature of the IRF exchange has made it a prototypical example of classroom discourse representing the most basic interactional sequence that has been widely researched in the literature on classroom interaction. Wells (1999) similarly holds that the pervasiveness of the IRF exchange makes it a mode of classroom interaction that most teachers take up by default. Advantages of the IRF exchange vary. Not only does it help maintain order and structure in the classroom, but this form of interaction also guides students in a certain direction encouraging critical thinking capacities (Van Lier 1996). Mercer (1992 cited in Wells 1999 p.167) presents the merits of IRF interaction as a guide and monitor to student learning. Similarly, Newman, Griffin, and Cole (1989) hold that this form of interaction is specifically catered towards achieving the goals of education.

A more critical view of IRF interaction holds that the predetermined structure of this form of interaction may reduce student motivation to participate in the interaction discouraging independent thinking and the formation of conversational skills (Van Lier 1996). Lemke (1990 cited in Wells 1999 p.168) accuses teachers of overusing IRF discourse in classrooms thinking that it actually improves student participation. Along similar lines, Wood (1992 cited in Wells 1999 p.168) holds that the over control associated with IRF interaction reduces the chance for students to take on initiatory roles. According to Wertsch (1998), the

use of IRF interaction is reflective of some important assumptions made by both teacher and students. For instance, it is assumed that the majority of the questions would be posed by the teacher as they serve a pivotal role in instruction. It is also assumed that the teacher-student relationship is essentially asymmetric whereby the teacher asks questions while students answer them. Finally, there is the presupposition inherent in IRF exchanges that knowledge is locked up internally in a student ready to be externally exposed once the teacher asks a question. As a result, a student reply would only be assessed without considering that reply as a point for further discussion (Wertsch 1998).

### 2.2.3 A REEVALUATION OF THE IRF EXCHANGE

Based on such conflicting views in relation to IRF discourse, Wells (1999) argues that IRF interaction should not be viewed as a separate entity judged as being good or bad. Rather, judgment of its value has to take into account the context in which this interaction takes place. Wells (*ibid*) moves on to state that IRF interaction may actually involve collaborative discussion which may in fact eventually lead to a progressive form of discourse.

Similarly, Van Lier (1996) holds that the IRF should not be viewed as being fixed and of a particular type. He proposes that judging this form of interaction should be based on the several dimensions at which it varies including the conduct of initiation, response function and pedagogical orientation. In his reevaluation of IRF interaction based on an examination of the different types of IRF available and a push towards increased participation, Van Lier (*ibid*) highlights the merits of IRF in terms of engaging students and eventually leading to more contingent forms of classroom interaction which he terms conversational teaching. The conclusion reached by Van Lier (*ibid*) is that pedagogy cannot simply involve one mode of

discourse. Rather, he presents an integrated model which includes four levels of pedagogic interaction all used at various times and for diverse purposes. The four levels range from transmission or monologic interaction, to IRF questioning, transaction which is a two-way exchange of information, finally ending with transformation where students and teacher together co-construct information by jointly managing the discourse.

#### 2.2.4 ALTERNATIVE MODES OF DISCOURSE

Alternative modes of discourse to IRF interaction attempt to drift away from the recitation teaching associated with IRF exchanges towards more responsive teaching which relies for instance on more contingent types of questioning rather than evaluation types (Eisner 1991 cited in Van Lier 1996 p. 160). One such type of classroom interaction is Rogoff and Gardner's (1984) idea of prolepsis whereby explanation and demonstration are coupled with an emphasis on the learner taking part in the instructional activity. Proleptic instruction involves first assessing a student's current level of understanding. From there, the student is assisted through dialogic interaction with the teacher into completing a task. Speaking thus allows both the teacher and student to mutually recreate each other's perspectives on the task at hand (Donato and Adair 1992). Prolepsis assumes that competence would not be a necessary prerequisite for performance. Rather, a student may very well be able to perform a task that he or she is not competent at through engaging in discursive activity with the teacher in relation to the task. The various parts of a task would be identified and their value explained to the student as they arise during the problem solving process. Hence comes the value of conversation and learner interaction during explanation rather than having a post explanation discussion activity (Wertsch 1979). Despite the responsive nature of prolepsis, Van Lier (1996) holds that proleptic instruction actually occurs through IRF exchanges.

Another mode of interaction which embodies responsive teaching is Tharp and Gallimore (1988)'s idea of the instructional conversation whereby teaching becomes an attempt to work out the apparent contradiction between instructing and conversing under the supposition that true teaching involves conversing just as a true conversation should involve instruction. Even though the instructional conversation focuses on classroom discourse as being relatively dialogic, Van Lier (1996) holds that instructional conversations actually adopt the format of IRF exchanges despite Tharp and Gallimore's apparent aversion of the recitation associated with IRF interaction.

Other alternatives to recitation teaching include two modes of discourse presented by Barnes (1976/1992 cited in Wells 1999 p. 125). The first is final draft talk which stresses the transmission of knowledge as students present all of what they feel they had understood. The other mode is exploratory talk whereby students' discourse centers not so much on presenting what is known but more on providing a strategy for building knowledge (Barnes 1976/1992 cited in Wells 1999 p. 125).

Palincsar and Brown (1988) present yet another mode of discourse which they refer to as reciprocal teaching. Reciprocal teaching is essentially a group solving procedure which embodies the four thinking strategies of predicting, questioning, summarizing and clarifying. Integrating thinking with reading a text, reciprocal teaching is designed as a small group discussion activity where the teacher acts as both reader and respondent who makes use of the four thinking strategies within the discussion. Palincsar and Brown (ibid) hold that investigations related to reciprocal teaching have largely revealed that this form of teaching not only improves comprehension in general and student ability to summarize, ask questions, clarify and predict; but there was also a transfer of these thinking strategies to other tasks and content areas as well.

Many of such modes of discourse which claim to move away from recitation teaching towards more responsiveness are actually based on concepts derived from Lev Vygotsky's (1978) socio-cultural theory which emphasizes the social dimension of the learning process. The task of socio-cultural theory is actually to explain the relationship between human action and the context in which it occurs (Wertsch 1998). Indeed, irrespective of the mode or modality used to describe classroom interaction, consideration has to be given to the social context in which it occurs. Vygotsky's (1978) theory views knowledge and learning as being mediated through language and discourse in social use. The next section describes this theory.

## **2.3 VYGOTSKIAN SOCIOCULTURAL THEORY**

I found a Vygotskian socio-cultural theoretical framework to be relevant to an investigation of ways of improving participation and interaction in my classroom in several respects. This will be demonstrated in each of the following sections.

### **2.3.1 EMPHASIS ON SOCIAL INTERACTION**

The relevance of a Vygotskian approach to this study is primarily based on the fact that as a socially based approach, it formulates a viable choice for addressing ways of improving classroom interaction because of the stress this approach places on social interaction. Indeed the larger socio-cultural theory to which this approach belongs in general takes the stance that socio-cultural factors and cognition are interdependently tied together in a relationship that is semiotically mediated. Drawing from this, the ontogenetic development of children

does not involve innate capacities that are brought to the surface with time. Rather, the development involves the transformation of these innate capacities once they are linked with socio-cultural mediational means (Lantolf and Pavlenko 1995).

In his theory, Vygotsky particularly specified that speech serves the primary function of mediating social activity and communication. It is this social interactive function that formulates the basis of the secondary function of speech in mediating mental activity which will later occur as the learner achieves intrapsychological functioning (Wertsch 1979). In sum, being semiotically mediated, advanced psychological functions are eventually controlled by the individual. The process is mediated by language as the most potent semiotic system. It is through speech that independent problem solving as intrapsychological functioning may be achieved. Speech for Vygotsky is not only tied to the structure of the language system. Rather, it is an ongoing social interactive activity that encompasses various parts of communication. Indeed, as Foley (1991) warns, the title of Vygotsky's Thought and Language should not be misinterpreted as referring to language per se. Rather, it refers to speech or more specifically, the way language is used during social interaction.

Indeed, studies based on a Vygotskian theoretical framework reflect the emphasis, which this approach places on social interaction through the way they stress the importance of discursive instructional activities. For instance, in stressing the need for interaction and dialogue in the language classroom, Lantolf (ibid) borrows from Di Pietro's (1987, cited in Lantolf 1993 p.220) concept of Strategic Interaction (SI), which centers around a concern with how language helps in the construction of a linguistic self and how SL learners may develop that self in a second language. According to Lantolf (ibid), Di Pietro's legacy takes on a socio-cultural perspective as he advocates that language teachers teach people and not languages. Hence, he insists that teachers should not follow a syllabus based on the

linguistic system as artifact but should rather provide learners with aspects of the linguistic system that give them the freedom to create the utterances they choose.

Along similar lines, Lantolf (1993) advocates dialogic interaction in place of authoritative discourse which, involving a learner's recitation of the language of others as well as such pedagogical features as the imposition of a uniform curriculum, issuing of standardized testing and restricting syllabus; may be dismissed as being highly monologic in nature. For Lantolf (ibid), language learning is accelerated when the curriculum is negotiated and dialogically constructed rather than simply being imposed by authorities. Only through such negotiated interaction can the voice of the linguistic self be constructed as it is based on the utterances one gets from the voice of others and their choice of words. The construction of voice or the linguistically constructed self is quite important for Lantolf (ibid) because it allows for symbolic or linguistically constituted freedom. Since utterances, which formulate the highest level of freedom are embodied in dialogue; an individual can truly achieve symbolic freedom and override grammatical constraints of a language through dialogue.

A number of SL studies have placed particular emphasis on the role of social factors in semiotic mediation. For instance, Ohta (1995) investigated learner-learner collaborative interaction between two students differing in levels of language proficiency. Analysis revealed that cooperative learning opportunities provide a positive environment for L2 acquisition, which is not as evident in traditional teacher-fronted classroom activities. For one thing, peer interaction allows learners to alternate roles as expert and novice depending on their individual contributions to the interaction. The fluidity in roles and the ensuing benefits derived from each role occurs even though the teacher may prior to the task, set up and control the interaction by defining the roles of expert and novice for the learners. Thus, as cooperative work commences, the learners ultimately have to reconstruct their roles through collaboration. Abiding by this, the role of the teacher changes from exerting full

control to simply offering support to learner pairs in need of it. In addition to providing the benefit of fluidity in roles, peer collaboration allows learners to apply any competence acquired through interaction to their own use of the language (Ohta *ibid*).

In a similar manner, McNamee (1987), through her examination of several interactions involving storytelling, demonstrated that the verbal and cognitive processes involved in narrative skills have, borrowing from Vygotskian theory, origins in social interaction. The first aspect of the social origins of narrative skills became apparent upon an observation of story telling in children. It was shown that children learn to narrate stories as a result of adult intervention in the form of a dialogue with the child whereby the adult organizes the conversation in such a way so as to transform the child from dependent to independent functioning. The process does not necessarily involve offering the child less help but also requires a variation in the type of help that is provided. Questions asked by the adult to help the child are internalized by the child becoming a means for the child to know what to ask him or herself in order to complete the task independently. The questions are thus, adhering to Vygotskian theory, not just for eliciting what the child knows but also for helping the child develop the cognitive skills necessary for narration. The second aspect of the social origin of narrative skills in the study became evident upon examining the effect of dramatizing on children's narratives. As with adult intervention, dramatization aided in the development of cognitive skills by providing a means for children to engage in dialogue with others and themselves whereby it served a self-revelatory function-teaching children about themselves (McNamee *ibid*).

Results of such studies emphasizing the role of social interaction are reiterated by Newman et. al. (1989) who present their view of cognitive change as not only being an individual process but a social process involving interactive construction as well. For Newman et. al. (*ibid*), a cognitive task is a social construction in two respects. First, it is a

cognitive task affected by the setting and socio-historical context. The second involves the effect of the experimenter's interaction with the subject. Hence inquiry into SLA processes should not, according to Donato and Adair (1992), simplify formal instruction as either explicit or implicit instruction of the language. Rather, they hold that inquiry needs to assess the social interaction and discourse which occurs during instruction.

### 2.3.2 HIGHER MENTAL FUNCTIONS

Further justification for adopting a Vygotskian socio-cultural perspective in this study is that while the primary purpose of using such a framework is for investigating patterns of classroom interaction, a Vygotskian framework may actually pave the way for understanding the development of higher mental functioning among learners. Indeed, Vygotsky was concerned with the development of higher cognitive functions present in the form of a hierarchy which has consciousness at the highest level. In turn, consciousness is composed of two subcomponents namely affect and intellect. While Vygotsky did not focus much on affect other than in relation to its providing the motivational forces for consciousness, he did most of his research on intellect which embodied such higher mental functions as memory, attention, thinking, and perception (Wertsch 1985). Indeed, Vygotsky extended the definition of consciousness to not only include an individual's awareness of cognitive ability but to also include self-regulation techniques employed by an individual when solving problems, an area referred to as metacognition which incorporates such activities as planning and evaluation for instance (Lantolf and Appel 1994a). The organizational principles of

human consciousness were not viewed as static but involved change. It thus followed that in accounting for the ontogenesis of the intellect as a subcomponent of consciousness, Vygotsky held that the development of consciousness occurs through a change in interrelations among higher mental functions rather than the development of the functions themselves (Wertsch 1985).

According to Vygotsky, the ontogenesis of higher mental functions occurs in what he termed the zone of proximal development (ZPD). He defined the ZPD as “the distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or collaboration with more capable peers” (Vygotsky 1978 p. 86). The ZPD represents the difference between what the novice can carry out independently and what the novice can perform when guided by an expert. Emphasis is thus placed not on performance of a given task during interaction but on the higher cognitive functions that ensue (Lantolf and Appel 1994a). As the area where the transition from interpsychological to intrapsychological functioning occurs, the ZPD, according to Vygotsky, allows one to study “those functions that will mature tomorrow but are currently in an embryonic state. These functions could be termed the ‘buds’ or ‘flowers’ of development rather than the ‘fruits’ of development” (Vygotsky 1978 p.86). Wertsch (1985) summarizes Vygotsky’s account of the dynamics of ontogenesis occurring in the ZPD by stating that development for Vygotsky is seen as a relationship between natural and cultural forces. More specifically, the intelligence of natural development is transformed when it comes in contact with social factors. Vygotsky claimed that all psychological functions are interpsychological in the sense that they arise through social interaction. Thus, the social dimension of all forms of consciousness or metacognition assumes primary importance with the individual aspect only being secondary (Donato and Lantolf 1990).

Hence, implementing scaffolded instruction and guided assistance in this study may not only provide insight into the type of student interaction created, but may also, according to Adair-Hauck and Donato (1994), be a form of discursive interaction in the ZPD which helps in the ontogenesis of higher mental functions by making the transition to intrapsychological functioning occur. This would take place over an extended period of time. According to Wertsch (1979), the transition from other-regulation to self-regulation is not an all of a sudden affair. Rather, it occurs gradually in a series of successive phases. Several stages can be identified in the process of ontogenesis leading to the transition to an intrapsychological plane of higher mental functioning or the achievement of self-regulation. As the earliest stage, object-regulation is when an object or several objects take over a person's cognition with all attention being fixed on that object. The next stage, other-regulation, involves control from another person whereby an individual would be able to perform a task but only through linguistic mediation or dialogue in the presence of a more capable figure. Finally, self-regulation is achieved when an individual can use self-directed speech to control the self and others. For Vygotsky, this reflects mature linguistic ability (Foley 1991). According to Wertsch (1979), the novice achieves complete self-regulation at this level and begins to operate at the intrapsychological plane. At this point, the novice can independently complete the task. The action related to completing the task assumes primary importance at this level while the guided assistance and speech of the expert assumes secondary position (Adair-Hauck and Donato 1994). Lantolf and Appel (1994a) stress the fact that self-regulation is only relative and not absolute. For instance, there is no particular point in ontogenesis when self-regulation is reached. Children of the same age may achieve self-regulation at different points in time. Also, the attainment of self-regulation in one task does not imply that this holds for other tasks and for all time. With its objective of

examining the impact of scaffolding on students' interactional style, this study may thus also lead to insight into the role of scaffolding in achieving self-regulation.

Vygotsky (1986) particularly stresses the importance of grammar instruction to a child's mental development. While a child has a grasp of the grammar of the native language, it is largely unconscious. Instruction in grammar and writing helps the child become more aware of this knowledge and use his or her skills consciously. Instruction in grammar and writing thus helps the child move to a higher level of speech development (Vygotsky *ibid* 1986). This is particularly relevant to this study since the three tutorials and three whole group lessons to which I apply scaffolded instruction are all related to the instruction of writing.

### 2.3.3 DEFICIENCIES IN COMMON INSTRUCTIONAL PRACTICES

Another way in which I found Vygotskian theory to be relevant to this investigation is based on Donato and Adair's (1992) observation that the application of the Vygotskian principle of the ZPD and the realization of the role brought about by the social context has shed light on some underlying deficiencies in certain instructional practices which may largely go unnoticed in second language classrooms. Hence, for the purpose of this study, there may be subtle deficiencies in my instruction during tutorials and whole group lessons, such as the ones to be outlined shortly, which may be addressed through Vygotskian theory.

In one study for instance, Donato and Adair (1992) showed that rhetorical questions on the part of the teacher limit interaction during instruction as they do not require an answer. They thus do not allow the learner to externalize through speech thought processes and test hypotheses. Along similar lines, Douglas Barnes (1976, cited in Edwards and Mercer 1987 p. 29), after researching communication in the classroom, found that it is not only the teacher

which provides a learning environment for children. Rather, there is a dialectical relationship between teacher and pupils which often times allows children to realize differences between their implicit beliefs and those taught by the teacher through dialogue. Children are thus guided through new zones of proximal development through discourse. In the search for classroom talk that incorporates such characteristics, Barnes (ibid) found that much of classroom time is spent as if in a competition where the teacher functions as a question master:

“Much teaching leaves the pupils dependent not on publicly established systems of knowledge (if such exist) but on quite trivial preconceptions set up arbitrarily either on the spur of the moment, or when the teacher planned the lesson during the previous evening. This reduces the part played by the pupils to a kind of guesswork in which they try to home in upon the teacher’s signal about what kind of answer is acceptable” (Barnes 1976 quoted in Edwards and Mercer 1987 p.29)

Ohta (1995) maintains that the classroom context in which SLA occurs differs greatly from the context in which children acquire their L1. It usually occurs through the IRF or initiation, response, and follow-up activity, which differs greatly from conversation that occurs in a natural setting. Ohta (ibid) also points out that the traditional classroom whereby the teacher takes the primary role in directing students may limit the opportunities for language learners to practice using their SL in circumstances that may occur outside the classroom such as in collaboration with others, negotiation of roles, or simply unstructured conversation. As such, Ohta (ibid) maintains that opportunities need to be provided for language learners to use their L2 freely and creatively since strict control of language use may actually hinder the language acquisition process.

Foley (1991) adopts a Vygotskian view when questioning the Formal syllabus approach as harboring a classroom in which object-regulation through excessive drills and other-

regulation by the teacher are dominant. Since teachers who follow this approach focus on errors in the learner's speech and writing, this limits opportunities for self-regulation. Foley (ibid) thus holds that the Formal syllabus approach presents a classroom that is dominated by object- and other-regulation. Rather than presenting language as an activity which aims at achieving self-regulation, the process used for acquiring a second language differs greatly from that a child goes through when acquiring a first language. For Foley (ibid) such instructional strategies provide little reference for the individual learner but are rather based on a number of functions generated through hypothesizing about possible learner needs. Relating this to writing, Roy (1989) holds that since social speech is internalized to produce thought, it follows that writing is internalized speech but in externalized form. From this standpoint, a high level of control and guidance by teacher in writing is not helpful. Rather, the writing process has to be viewed as a problem solving process in the ZPD. Since writing in a second language helps in the continual development of higher mental processes, Roy (ibid) maintains that there should not be over control of the L2 students' writing such as removing errors in which solutions to problems may be found and reverting to drills and formulas to be followed. Hence, one benefit of implementing scaffolded instruction in this study is that it limits over control of students by myself as teacher.

A number of studies have pointed out the need to place more emphasis on the role of social factors in relation to instruction within the ZPD. Chandler (1992) adopts a socio-cultural perspective when examining the relationship of student learning to the planned curriculum. She views the classroom as a unique culture where norms, relationships, and the roles of teacher and pupils are socially constructed over time. With the curriculum thus being constructed through a social interactive process in which students play an active role, the delivered or enacted curricula do not always abide with the planned curricula. As such, Chandler (ibid) maintains that planning the curriculum with the goal of learning is

insufficient without consideration of learning opportunities and the avoidance of constraints on learning.

Bloome (1986) holds that the lack of acknowledgment of social elements inherent in literacy has led to deficiencies in the use of reading and writing activities in the classroom community. For instance, mock participation is a process in which students carry out behavior that make it seem as if they are participating in a discussion when in reality, they are not. Classroom literacy thus no longer presents an instructional method used to expand knowledge but simply a series of events which they are forced to go through. Perhaps more serious is procedural display whereby both the teacher and students interact together with behavior that is appropriate for a discussion without actually getting to the academic bulk of a lesson or becoming cognizant of the value of interaction during a discussion. The teacher and students thus work together repairing any breakdowns that occur in the lesson in order to produce the cultural ritual of the typical classroom lesson. Bloome (ibid) goes on to point that reading and writing in the classroom community should not be practiced for their own sake by giving out handouts, books or worksheets for instance, that accomplish little besides being part of a lesson. Instead, he stresses the use of reading and writing to accomplish other personal or community based goals and activities just as would normally be the case in a work or home setting. Along similar lines, Adair-Hauck and Donato (1994) maintain that the traditional instructional methodology of grammar simply arranges instructional events in degree of complexity. This leads to rote learning which involves little social interaction between teacher and learner. They contrast this with grammar instruction within the ZPD which calls for a rearrangement of activities to involve the learner in the lesson from the start.

In one study, Brooks (1992) investigated the process of acquiring communicative competence defined by Hymes (1972, cited in Brooks 1992 p.219) as the way in which a

language learner adopts knowledge of a language and is able to use a language through social interaction with others from the same social group. The investigation demonstrated that developing communicative competence in the target language through social interaction is constrained by certain features within the formal academic setting. For instance, learning only the linguistic forms of a language such as grammar, syntax and lexicon is not enough for promoting social use of the language. Also, when the foreign language instructor assumes a relatively large portion of conversation management, this hinders students learning to make those decisions in a normal social setting. In the study, for example, the teacher preselected discussion topics specifying that those chosen were of primary importance as well as acted as the primary agent responsible for initiating and ending conversations. For Brooks (ibid), even though such procedures support student participation in discussions, save time, and maintain approval on the part of students; these two methods of formal instruction actually limited the potential of what students may learn by constraining the students' role of independent acting and decision making the target language.

Through a study that compared the discourse of two ESL groups, which included adult native speakers and native children speakers, Frawley and Lantolf (1985) claim that the general stance taken by orthodox second language research towards errors in SL production needs reassessment. Generally speaking, errors have been viewed as representing linguistic incompetence brought about by such factors as over-generalization, transfer from the first language, simplification, or a learner's avoidance of learning. The Vygotskian concept of continuous access, however, sheds new light on understanding the difficulty associated with the production and the often disorderly problematic structure of discourse in a second language. These inadequacies in SL discourse are simply due to the principle of continuous access whereby errors represent a producer's attempt at gaining control and self-regulation

by reverting to previous knowing strategies involving other- or object-regulation. Errors may thus actually be useful strategies that are functional for the speaker in gaining control and achieving self-regulation through language. Hence, development is not static or linear.

#### 2.3.4 INTERSUBJECTIVITY

Yet another way in which Vygotskian theory was found to be relevant to my study centers around the fact that as an instructional strategy which promotes learning in the ZPD, scaffolding may play a role in the creation of intersubjectivity which according to Wertsch (1985) is a state that occurs when both people interacting in a situation share some part of the situation definition after being at variance in terms of that definition. Hence, intersubjectivity, though not necessarily present at first, is actually created through instruction. Newman et al (1989) stress with regard to the ZPD that participation of a novice in an activity can take place even when the understandings of the expert and novice differ with regard to the task. It is actually this vagueness about the concept at hand that allows for learning or cognitive change to occur. Hence, what is needed for a learning activity to be successful is for the teacher and learner to act as if the learner was in another place with the other place being a vision of where the learner would actually be upon appropriation, a process in which the teacher takes up and makes use of a learner's actions into a wider system. This may seem quite paradoxical because "for a lesson to be needed, in say, division, it must be presumed that the children cannot do division; but, for the lesson to

work, the presumption is that whatever the children are doing can become a way of doing division” (Newman et. al. *ibid* p. 64). Several studies have highlighted the importance of creating intersubjectivity.

In exploring the use of language by humans when they deal with one another, Bruner (1987) recognizes that transactions are based on a mutual sharing of understanding. The means through which such mutual sharing of assumptions occurs is through transactional calibration in language. Such calibration thus becomes the means to understand the minds of others as well as the possible worlds within which these minds exist. According to Bruner (*ibid*) such processes are necessary to effect a transaction.

In one study for instance, Jarvis and Robinson (1997) described various forms of teacher response to pupils in primary –level EFL lessons in relation to the impact of such responses on the creation of shared meaning in the classroom. They found that adopting a Vygotskian view of interactive learning offers an understanding of the functions and patterns of classroom discourse. In particular, Jarvis and Robinson (*ibid*) stress how such responsive discourse results in children’s appropriation of meaning within the classroom.

Along similar lines, DiCamilla and Anton (1997) investigated how repetition of both L1 and L2 utterances during collaborative interaction of L2 learners engaged in an L2 writing task serves as a form of semiotic mediation. Viewed from the framework of Vygotskian theory, they showed that repetition not only serves the socio-cognitive function of constructing and distributing scaffolded help during an activity, but more importantly establishes and maintains intersubjectivity or a shared perspective of the task at hand. This formulates a necessary element for successful collaboration within the ZPD (DiCamilla and Anton *ibid*).

For Edwards and Mercer (1987), “the process of education, insofar as it succeeds, is largely the establishment of these shared mental ‘contexts’, joint understandings between teacher and children, which enable them to engage together in educational discourse” (p. 69). Even though contexts range in type from linguistic to non-linguistic, context is neither of the two for Edwards and Mercer (ibid) who view it as being a mental characteristic of the shared understandings created between people communicating. In turn, context contributes to the development of continuity whereby contexts of shared understanding grow over time. In lessons that were recorded, Edwards and Mercer (ibid) found that the continuity of shared knowledge was made the most explicit at the start of a lesson whereby links to what had been taught previously were made by the teacher. Appeals to continuities of shared knowledge were also made at points where there seemed to be disagreements or incongruities between the participants’ understandings. At such points, it was the adult who most often made these appeals by directly discussing mental processes involved or discussing the conversation itself. Edwards and Mercer (ibid) go on to identify several constraints on the process of creating joint understandings in the classroom. These include the teacher’s assumption that academic failure is due to innate factors relating to individual ability; the assumption that education is a process of self-actualization involving inductive and experiential learning which makes use of practical activity; the function of socialization in education whereby the teacher assumes a high degree of control; the distancing of formal education from context and learning which occurs outside of school; and the implicit basis on which many activities and discourse in the classroom are built. Viewing this from a broader context, Edwards and Mercer (ibid) maintain that the underlying belief is that education itself is about the development of a shared understanding and common perspective which involves the handover of competence to children. They thus call for a progressive educational approach which moves away from the imposition of the teacher’s knowledge on

students towards allowing for the negotiation of curriculum goals between teachers and students.

Bruner (1996) defines intersubjectivity as the process through which people come to know what others are thinking of and how they adjust to this. He claims that Western pedagogy does not pay enough attention to the role of intersubjectivity in transmitting culture. In that respect, the ZPD which presents the capability to go beyond native endowment has vital educational implications for Bruner (ibid); it shows that education has as one of its primary functions transmitting to individuals the tools which their culture has developed for them to reach beyond their native endowment. Even constraints set forth by language can be reduced by linguistic awareness or consciousness, what Roman Jakobson (1981, cited in Bruner 1996 p. 19), a notable linguist of the century referred to as a metalinguistic gift available for everybody. Indeed, Bruner (ibid) admits that:

“Since the limits of our inherent mental predispositions can be transcended by having recourse to more powerful symbolic systems, one function of education is to equip human beings with the needed symbolic systems for doing so. And if the limits imposed by the languages we use are expanded by increasing our ‘linguistic awareness’, then another function of pedagogy is to cultivate such awareness.” (p. 19)

For Bruner (ibid), metacognition is a primary aspect of any educational system. He holds that the learning of skills and knowledge is not enough. Rather, according to Bruner (ibid), the child should also be presented with a theory of mind or mental functioning in order to help the child become as much aware of thinking and learning processes as the material being studied. It may thus be possible in the study at hand to investigate the extent to which scaffolded instruction may harbor metacognitive activity on the part of students.

Edwards and Mercer (1987) expand on the need for intersubjectivity by providing an in depth discussion of how failures in the achievement of shared understandings between teachers and students are not just related to areas of curriculum content. Rather, they identify as being more profound misunderstandings in what may be referred to as educational ground-rules which are defined by Edwards and Mercer (1981, cited in Edwards and Mercer 1987 p.47) as implicit rules of educational talk and interpretation related to the context of the classroom. Researchers engaged in analyzing communication in the classroom often pay little attention to such misunderstandings being more concerned with searching for regularities and particular features of an interaction. According to Edwards and Mercer (1987), this failure in establishing mutual understanding of discourse between teacher and students may result in problems. For one thing, pupils who do not share the cultural background of the classroom in relation to such implicit rules may be labeled as slow or unintelligent. Further, a danger lies in what may on the surface appear to be an engagement in classroom discourse would only be participation in a superficial sense. Although engaged in classroom discourse, teacher and students would not, in such cases, be achieving a shared understanding or ground-rule. Edwards and Mercer (ibid), hold that this deficiency is actually related to the prolonged problem in education of handing over control from teacher to students.

### 2.3.5 NEED FOR RESEARCH

Finally, I opted for a Vygotskian theoretical framework in this study because it represents an area with potential for further research. According to Lantolf and Pavlenko (1995), while socio-cultural theory has been applied to various fields of educational research, much still needs to be done in terms of SLA research. Donato (1994) holds that the recent interest in the role which conscious linguistic knowledge plays in SL development reveals the need to reexamine the part played by the social context in SLA. More specifically, there is a need to study how this conscious knowledge results jointly from social interaction between teacher and learner during formal instruction (Donato and Adair 1992). For Adair-Hauck and Donato (1994), there has been little research done on actual discursive communicative strategies which a teacher employs in the ZPD. Hence, there is a need to identify semiotic strategies and discourse methods used to transfer responsibility from the teacher as expert to the learner as novice (Adair-Hauck and Donato *ibid*).

Along similar lines, Schinke-Llano (1993) state that Vygotskian psycholinguistic theory has not been used as an explanatory framework to its fullest potential. Although admitting that Vygotskian psycholinguistic theory cannot provide an explanation to all questions generating from the field of SLA, Schinke-Llano (*ibid*) holds that it is relatively applicable to the field and has not been used as an explanatory framework in its fullest potential. She maintains that certain concepts in Vygotskian psycholinguistics are very relevant and compatible with current second language acquisition theory. For instance, Vygotsky's view of thought and language as being intertwined together in a developmental process starting at the age of two fits well with the bilingual education proponents' position which holds that if education in the native language is suddenly replaced by education in the second language, the child's cognitive development may be affected (Skutnab-Kangas and Toukomaa 1976,

cited in Schinke-Llano 1993 p.122). This also fits well with results of immersion programs that report success in both second language and content skills development (Genesse 1987, cited in Schinke-Llano 1993 p. 123). Another Vygotskian psycholinguistic concept outlined by Schinke-Llano as relating to the field of SLA has to do with the developmental framework Vygotsky adopts in explanation whereby the focus is on change rather than end results. This is compatible with SLA research where there has currently been more of a focus on the processes related to the development of language acquisition rather than the final results. Finally, the Vygotskian emphasis on cognitive development and language acquisition as being social processes that result from social interaction and joint problem-solving processes has parallels with the current emphasis in SLA theory on viewing the learner as part of an interaction rather than an independent entity taken in isolation (Schinke-Llano *ibid*).

## **2.4 ALTERNATIVE VIEWS TO VYGOTSKIAN THEORY**

A discussion of Vygotskian sociocultural theory would not be exhaustive without a consideration of alternative approaches to this theory. This section contrasts Vygotskian sociocultural theory as a relativist approach with the more generativist nativist approaches of Piaget, Chomsky, and Krashen each of which will be discussed in a section ending with a discussion of current debates surrounding Vygotskian theory. Invoking such a contrast may discern possible limitations inherent in Vygotskian theory thus providing a more comprehensive view of the sociocultural theory upon which this study is based.

#### 2.4.1 PIAGET

Vygotskian theory stands in sharp juxtaposition to Piaget's nativist theory. While Vygotsky gave priority to social forces in development, Piaget gave more priority to individual functioning (Wertsch 1985). Piaget's theory establishes that the development of a child's thinking derives only from consciousness without any consideration given to social factors which are a mere external force for the child. Socialization thus becomes an outside factor which only takes place after a child's egocentrism has been overridden (Vygotsky 1986). In general, while both theoreticians were interested in cognitive development holding that language and thought have separate origins, Vygotsky, unlike Piaget, held that language and thought actually come together to create a tool for cognitive development (Edwards and Mercer 1987).

Vygotsky (1986) was in fact himself quite critical of Piaget's theory of thought and language claiming to have developed a theoretical position in an opposite direction. In that respect, several points of divergence may be discerned between the two. The first has to do with the role of egocentric speech in child development. While Piaget viewed egocentric speech as having no particular function being simply a stage in ontogenesis whereby the transition is made from individual to social speech, Vygotsky held that egocentric speech plays a vital function in realistic thinking whereby it works on regulating action (Wertsch 1985). Furthermore, while Piaget maintained that egocentric speech disappears later on, Vygotsky claimed that it remains but goes underground as inner speech which slowly with time comes to differ in structure from social speech becoming more condense, less complete, and less understandable (Donato and Lantolf 1991).

Vygotsky varied from the Piagetian mode in another respect. While Piaget postulated that an individual reaches the last stage of cognitive development at the age of seven forgetting all previous mental strategies, Vygotsky claimed that the adult is not an autonomous finalized knower. Rather, he introduced the concept of continuous access which, briefly stated, observes that an adult, though capable of self-regulation linguistically, has access at any time to object- and other-regulation in the face of challenging tasks. Thus, when faced with a difficult task, the adult may revert to child-like other-regulation through language utilizing previous strategies in order to have self-regulation and control over a task (Frawley and Lantolf 1985). Finally, while Piaget's theory on speech and thought claims that the two follow similar paths with social speech following egocentric speech, Vygotsky reverses this sequence of development. He starts off with speech whose primary function is social. Later, it becomes divided into egocentric speech and communicative speech. In time, egocentric speech eventually leads to inner speech. Thus, the development of thinking is not from individual to social but from social to individual (Vygotsky 1986).

#### 2.4.2 CHOMSKY'S UG MODEL

While Piaget may be considered a nativist in more general terms related to his inquiry into how language may be learned through the operation of general cognitive learning mechanisms which are innate but not specific to language, Chomsky, as a generative grammarian, may be considered more of a linguistic nativist. In that respect, he holds that humans are born with an innate capacity for learning language which is specific to the language faculty. As such, Chomsky and his Universal Grammar (UG) model provide

another alternative approach to socio-cultural theory. The Universal Grammar approach is based on the theory that language is a set of abstract principles which characterize the grammar of all natural languages. UG is an innate language capacity which limits variation among languages. Thus, it limits possible grammar formation of any language (Gass and Selinker 1994). As Chomsky (1975, qtd. in Gass and Selinker 1994, p.123) observes, UG is the “system of principles, conditions, and rules that are elements or properties of all human languages.”

Schwartz (1999), herself a generative grammarian, states that the goal of linguists working within generative grammar is in general concerned with understanding how language is represented in the mind. The goal of generative grammarians specified by Schwartz (*ibid*) carries with it three ideas. First, language for generative grammarians is knowledge. Also, the source of language as knowledge is the mind. Finally, language is represented in a special compartment designed for it in the mind because it contains properties such as phonology, syntax and semantics which are not part of other cognitive areas. Chomsky, for instance, referred to this compartment as a Language Acquisition Device and later named it the Language Faculty. For Chomsky, Universal Grammar is part of the Language Faculty. When a child is born, part of its mind before any experience consists of UG. UG is general enough to include the diversity evident in all human languages yet specifically includes details of each specific human language. Through maturation, linguistic interaction allows UG, as a blueprint for language, to become the grammar of a particular language (Schwartz 1999).

It is established that there is a need for this innate language faculty according to proponents of this approach because children are unable to learn adult grammar based on linguistic input alone. It is the inadequacy of this input which necessitates the presence of this innate language faculty (Gass and Selinker 1994). Indeed, Pinker (1994) reiterates this

nativist view by arguing that language is not a cultural artifact that shapes our thoughts. Rather, he sees it as an instinct, a biological adaptation to communicate information claiming that his argument derives from the work of the famous linguist, Noam Chomsky. Pinker (ibid) holds that Chomsky introduced two facts about language. First, since every uttered sentence is unique, language cannot be a response. Rather, the brain must be equipped with an unlimited number of words in a program within the brain referred to as a mental grammar. Also, since children develop this grammar without formal instruction, they must possess Universal Grammar, an innate capacity common to grammars of all languages (Pinker ibid).

A recent trend for generativists which runs counter to Vygotskian is the modular theory of the mind. Schwartz (1999) defends the hypothesis that the mind is made of modules with each module being innate, domain specific, and informationally encapsulated. She makes a definite statement that among the modules in our mind, there exists a module exclusively for language. While conceptions of a language module vary, Schwartz (ibid) taking Chomsky and Fodor's differing conceptions of a language module argues that the two views presented by Chomsky and Fodor are not incompatible in relation to the structure of the mind.

### 2.4.3 KRASHEN

A glance at alternative approaches which run counter to socio-cultural theory would not be complete without a brief overview of Krashen's theoretical position which has been greatly influenced by Chomskyan nativism. Krashen's Monitor Model includes several hypotheses relevant to second language literature. The Learning-Acquisition Hypothesis, for instance, differentiates between two ways of developing knowledge of a second language: learning, which includes the conscious knowledge of the language such as structure and

grammar, and acquisition, a more unconscious process which focuses on meaning rather than the form and structure actually used to produce the language.

Krashen's Natural Order Hypothesis questions the actual value of grammar instruction by stating that any rules related to language structure are acquired in a certain order whether or not instruction of those rules actually occurs. The Monitor Hypothesis presents the Monitor as linking the acquired and learned systems whenever language is being used. While the acquired system initiates speech, the learned system functions as the Monitor changing the output of the acquired system. Krashen's Input Hypothesis states that a second language is acquired upon receiving comprehensible input or that bit of language that is slightly ahead of a learner's current state of knowledge. This input works by activating a Language Acquisition Device, an innate structure which works for both first and second language acquisition.

Finally, the Affective Filter Hypothesis accounts for variations in second language acquisition in terms of the strength of the Affective Filter which includes such areas as motivation and attitude. If the filter is up, the input is prevented from passing through thereby limiting acquisition whereas if the filter is down, it is easier for acquisition to take place. The Affective Filter is also used to explain differences between second language acquisition and child language acquisition in terms of children not using the Affective Filter (Gass and Selinker 1994).

Donato and Lantolf (1990) admit that although there has been an attempt on the part of SL researchers to integrate Vygotsky's notion of the ZPD and Krashen's  $i+1$  construct which holds that for language acquisition to occur, input must have  $i$  which stands for the learner's current competence and  $1$  which represents the input or next rule to be acquired. Dunn and Lantolf (1998), claim that Krashen and Vygotsky's constructs are not comparable or complementary. They view such an attempt at integration as being futile and misguided

because the two constructs are incommensurable in terms of meaning. Their meaning-commensurability or “the impossibility of translating from the language of one specific theory or conceptual framework into the language of another rival theory or framework” (Pearce 1987, qtd. in Dunn and Lantolf 1998 p.413) lies in profound differences embedded in the theoretical framework within which each construct lies.

Dunn and Lantolf (ibid) go on to outline these differences. First, while an individual’s linguistic future for Vygotsky is very open and uncertain being dependent on the interactional context, the future for Krashen is more certain whereby acquisition occurs through stages of linguistic competence in a stable predictable manner unaffected by social forces. This difference in terms of the role played by social forces is yet another factor which makes the Vygotskian theoretical framework more appropriate to the research at hand, which considers scaffolding to be a social factor, than would be other theories such as that of Krashen for instance. Another point of difference relates to the dialectic unity Vygotsky establishes between language and development whereby learning paves the way for development which in turn results in further learning. This contrasts with Krashen’s separatist view which holds that learning and development are independent of each other.

Dunn and Lantolf (ibid) go on to state that the theoretical frameworks within which the two constructs lie are when viewed overall themselves incommensurable. For one thing, the two theories differ in their view of the learner and the learning process. Unlike Vygotsky, Krashen does not hold that social interaction is necessary for second language acquisition to occur. Rather, all the learner needs is a Language Acquisition Device which receives comprehensible input containing  $i+1$  features. Thus, for Krashen, it is “theoretically possible to acquire language without ever talking”(Krashen 1982, qtd. in Dunn and Lantolf 1998 p. 423).

Another difference that may be outlined is related to the fact that Krashen's general theoretical framework is based on the information-processing model of language which views the mind as a container which is filled with meaning by the speaker then emptied out to incorporate meaning into the mind. For Vygotsky, on the other hand, "specifically human forms of mental activity are not processes that occur invisibly inside someone's head but are instead the activity of socio-historically constituted people engaged in the historically situated activity of living" (Dunn and Lantolf *ibid* p. 427). Hence, Krashen's view of the learning process is essentially monologic when compared to that of Vygotsky.

Finally, the Vygotskian view of linguistic errors and failures as not being signs of poor learning but of ways for learners to gain self-regulation through linguistic means is different from the view of language aspired by Krashen's input hypothesis. In investigating the impact of scaffolding on student learning style, this research will examine the extent to which errors made by students may be attempts at self-regulation.

At the other extreme, Donato and Lantolf (1990) hold that although criticisms over the last decade regarding Krashen's Monitor Theory question its validity, one of its aspects, the Monitor Hypothesis which states that learners edit their linguistic output using rules of linguistic structure which they have consciously learned, may be worth considering. They view monitoring as a form of metacognition that serves an orientation function helping learners orient themselves to a linguistic task by making use of linguistic schema from their interlanguage grammars. Through revealing the orientation processes that second language speakers use in monitoring utterances in their second language, Donato and Lantolf (*ibid*) claim that L2 monitoring, as a form of metacognition with an orientational function, has dialogic origins. They present an example of this through instances of metatalk as representing private speech whose ontogenesis can be traced back to the social speech that develops between an expert and a novice as in the case between a child and a parent.

#### 2.4.4 CURRENT DEBATES ON VYGOTSKIAN THEORY

In an on-going re-evaluation of Vygotsky's writings and the questioning of some of his proposals, Wells (1998) introduces recent developments in Vygotskian theory that are based on an understanding of the current debates surrounding them. The first has to do with the ZPD. While Vygotsky suggests that the ZPD is relatively fixed, Wells (ibid) claims that it is not fixed for the learner but rather represents a potential for learning that is a product of social interaction. It is an opportunity for learning that equally applies to all those participating, not just to those that are not competent. Also, although Wells (ibid) recognizes an upper limit related to what could be learned from an interaction, this limit is indefinite and not known because it depends largely on the social interaction process. Next, Wells (ibid) warns that the metaphor of scaffolding be only used as Mercer (1995, cited in Wells 1998 p.346) suggests in situations where there is a deliberate intention to hand over control to the learner by a more competent individual taking the role of a teacher. Scaffolding would thus be used to serve a deliberate teaching function and not apply to situations of collaborative work where there is no significant discrepancy in competence and expertise.

Yet another Vygotskian concept that is currently being debated according to Wells (ibid) is related to the sharp dichotomy established between intrapsychological individual functioning and social interpsychological functioning. As Wertsch (1995, cited in Wells 1998 p.347) contends, action is always both social and psychological with the emphasis to a certain area being dependent on the situation. Thus, higher mental functioning is not purely cognitive but relatively dependent on social factors. This makes it inappropriate to discuss

movement from an inner plane to an outer plane of learning using terms such as internalization and externalization.

Wells (ibid) is also skeptical with regard to the sharp distinction Vygotsky creates between private and social speech. He contends that all utterances have both interpsychological and intrapsychological functions with one being more predominant than the other depending on the occasion. Thus for instance, speech intended as social may also function to direct a person's understanding of the topic. Along similar lines, private speech that is directed inward for the self may also affect the interaction by informing the other participant. In relation to the role of intersubjectivity, Wells (ibid) claims that the necessity actually lies not so much in achieving a state of intersubjectivity as much as the presence of an attempt to achieve it. This attempt at intersubjectivity involves both psychological and social dimensions of participation.

Finally, Wells (ibid) presents qualifications with respect to claims regarding the role of interaction in the first language while solving tasks in the second language. He maintains that the use of the first language does not contribute to second language acquisition in all collaborative tasks. It thus follows that the nature of the collaborative task in which the use of the first language is beneficial should be specified. Also, the relative weight attributed to interaction in the first and second language needs to be considered.

## **2.5 SCAFFOLDED INSTRUCTION**

Following this brief overview of Vygotskian sociocultural theory and the demonstration of its relevance to this study, comes a discussion of scaffolding which a number of studies

investigating language learning in the ZPD have largely concentrated on. Such studies in the field of second language acquisition are based on an approach to understanding language and discourse as a scaffolding device which serves a psychological function in its role as a mediator for the development of all higher mental functions. Foley (1991) holds that scaffolding a learning task allows the novice to internalize outside knowledge thus gaining conscious control over a certain function or concept so that it may become a tool of conscious control. Essentially, scaffolding instructional tasks fits in well with Edwards and Mercer (1987) concept of successful education as one that involves the handover of competence from teacher to learner so that the learner acquires not only knowledge but also the capacity for self-regulation. For DiCamilla and Anton (1997), scaffolding, as a form of semiotic mediation leads to development in the ZPD. The particular understanding of scaffolding that I make use of in this study comes from the work of three main scholars each of which will be discussed separately. Each is followed by a table that summarizes the various functions of scaffolding they present through their understanding of scaffolded instruction.

In their investigation of the tutorial process during which 3 to 5 year olds were tutored in constructing a pyramid from blocks, Wood et. al. (1976) examine the implications of the interactive relationship inherent in the tutoring process on the development of problem solving and the acquisition of skills. From there, they identify several scaffolding functions present in the tutoring process with a consideration of how such findings relate to a theory of instruction. To them, “scaffolding consists essentially of the adult ‘controlling’ those elements of the task that are initially beyond the learner’s capacity, thus permitting him to concentrate upon and complete only those elements that are within his range of competence” (Wood et. al. *ibid* p. 90). The process of scaffolding actually triggers the development of

competence in relation to the completion of a task at a rate that exceeds that present when a learner's efforts are not assisted.

Wood et. al. (ibid) identify six scaffolding functions present in tutoring instruction which will be used in this study for describing the scaffolding that occurs in my own instruction. The first characteristic of scaffolded help involves recruiting interest in a task in which the tutor gets the learner to become interested in and adhere to the requirements of a task. This is followed by simplifying the task into subparts through what Wood et al (ibid) refer to as a reduction in degrees of freedom. The third involves maintaining direction and focus in order to achieve an instructional objective by avoiding digression to other areas as well as making the process of taking another step worthwhile for the learner. Scaffolded help also involves having the expert note critical features of a task which are particularly relevant as well as discrepancies between what should be produced and what is actually produced. The fifth feature is related to controlling frustration and stress during the process in a way that the presence of a tutor would make the completion of a task less stressful. Finally comes modeling or demonstrating how the task is ideally performed with the expectation that the learner would imitate it back in a similar form (Wood et. al. ibid). These functions are summarized in Table 2.1.

TABLE 2.1: SCAFFOLDING FUNCTIONS IDENTIFIED BY WOOD ET AL (1976)

Wood et al (1976)
Recruitment
Reduction in degrees of freedom
Direction maintenance
Marking critical features
Frustration control
Demonstration

Rogoff and Gardner (1984) are another pair of scholars who presented their work on scaffolding. They claim that although it is generally recognized that individuals are able to generalize the knowledge and skills they have acquired and apply them to new situations, what is known about how this transfer of knowledge occurs is very minimal. Insight into how this cognitive process occurs may be gained by observing how children are guided by adults when attempting to carry out a novel task. In their study of adult guidance of children's cognitive activities, Rogoff and Gardner (ibid) consider the everyday context of mothers helping children prepare for a memory test on categorizing objects. In attempting to solve a problem, children are not given explicit conscious direction. Indeed, Rogoff and Gardner (ibid) claim that, "much of parent-child interaction may be subtly structured in ways that promote the child's development of social and cognitive skills, without the explicit aim of instruction foremost in the adult's mind" (p. 107). Hence, the adult and child interact together negotiating the transfer of information in order to complete a task. For Rogoff and Gardner (ibid), just as this mechanism in ontogenetic development results in extending a child's understanding through participation in solving the problem, so it may also be made of use when learning how to complete a task or solve a problem over shorter periods of time. In such cases, the scaffolded help characteristic of the help offered by an adult to a child is used by an expert teaching a novice. Rogoff and Gardner (ibid) view scaffolding as a subtle process involving successive attempts by the expert to transfer responsibility of the joint task to the novice based on the level of the novice's readiness for this increased responsibility. The scaffold for the learner is constantly adjusted to a level slightly higher than that which the novice is capable of performing.

Although not explicitly delineating scaffolding functions as with Wood et al (1976) a summary of the functions inherent in the scaffolding process as identified by Rogoff and Gardner (1984)) includes an expert providing for the novice mnemonic strategies to facilitate

recall as a task is being performed or a problem is being solved. In addition, the expert is to provide redundancy through a repetition of information on referents and intentions. Such redundancy should then slowly be reduced to allow for the subtle testing of understanding by reducing the level of scaffolding whereby the learner comes to participate more in the problem solving process. The reappearance of redundancy would take place upon the occurrence of any error on the part of the learner (Rogoff and Gardner *ibid*). Table 2.2 below summarizes these functions.

TABLE 2.2: SCAFFOLDING FUNCTIONS IDENTIFIED BY ROGOFF AND GARDNER (1984).

Rogoff and Gardner 1984
<ul style="list-style-type: none"> <li>• Mnemonic strategies</li> <li>• Redundancy</li> <li>• Reduction of redundancy</li> <li>• Reappearance of redundancy upon error</li> </ul>

These functions of scaffolding are actually embodied in Wertsch's (1979) investigation of interaction between middle-class children and their mothers during a puzzle-making task. He demonstrated how mothers, in an attempt to regulate the child's performance, employed scaffolding through using strategic statements with directives that require the child to utilize a level of knowledge beyond the child's current level. Wertsch (*ibid*) noted that directives only became more referential when the child failed to understand a particular directive.

In their study, Rogoff and Gardner (1984) proceed to actually describe a certain instructional strategy, referred to as prolepsis, which actually embodies scaffolding. Proleptic instruction involves first assessing a student's current level of understanding. From there, the student is assisted through dialogic interaction with the teacher into completing a task. Speaking thus allows both the teacher and student to mutually recreate each other's perspectives on the task at hand (Donato and Adair 1992). Prolepsis assumes that

competence would not be a necessary prerequisite for performance. Rather, a student may very well be able to perform a task that he/she is not competent at through engaging in discursive activity with the teacher in relation to the task. The various parts of a task would be identified and their value explained to the student as they arise during the actual problem solving process. Hence comes the value of conversation and learner interaction during explanation rather than having a post explanation discussion activity (Wertsch 1979).

In his study of scaffolding, Mercer (1998) uses a synthesis of various research findings to present a socio-cultural conception of intellectual development viewing cognitive development as a dialogic socially interactive process which is scaffolded through discursive language strategies. Through video-recordings of classroom events, Mercer's (ibid) uses a qualitative discourse analysis of the observational data in order to identify interactional techniques of instruction thus generating a quantitative analysis that compares the teaching of "High/Scope" teachers who enact a more interactive scaffolded form of instruction with that of less successful "Official" teachers who enacted a more didactic pedagogic techniques which involved less interaction. Mercer (ibid) identifies six dimensions for distinguishing the two approaches to teaching, the more formal didactic type of instruction in contrast with the more interactive and scaffolded approach. Each of these dimensions includes various actions or teaching techniques the relative presence of which would place a teaching approach closer to the scaffolding interactive end of each dimension.

The first dimension has to do with the degree to which learning is viewed as an individual verses a social process. Examples of actions within this dimension include the use of other students to support learning as well as the setting up activities that involve joint interaction among students. The second dimension is related to the extent to which knowledge is viewed as something to be discovered by students after it is transmitted by a teacher as opposed to being jointly constructed by the teacher and students. This dimension includes

such actions as reformulations and recaps. Also included in this dimension are spiral IRF exchanges whereby the teacher asks some questions or initiations that are then followed by responses from the students finally ending with feedback from the teacher in the form of an evaluative remark. Such questions would not be a way of assessing students' learning. Rather, the teacher asks questions in spiral IRF's in order to find out what a student has done and the reasons why this has been done as well as to make the student start thinking about how to complete the task at hand. The third dimension relates to the learning objectives as being either those related to acquiring facts verses those related to acquiring problem solving skills. Teacher actions that would place instruction closer to the scaffolding end of this dimension, include making students accountable for their answers by asking "why" questions as well as eliciting from students strategies for solving problems. The fourth dimension is the extent to which more priority is given for the completion of a task verses priority being given to the learning process. Actions that would place a teacher closer to the scaffolding end of this dimension include making the meaning of a task explicit as well as interrupting activities to review student progress. The fifth dimension is related to placing the responsibility of learning more on the learner verses being more the responsibility of the teacher. Scaffolding actions in this dimension include modeling the task, using "retreat and rebuild" sequences where mistakes are used to go back and reteach a part of a lesson, and reducing the amount of freedom in carrying out a task in order to focus on particular areas. Finally, the last dimension has to do with specific competencies in subject areas of the curriculum. On one end of this dimension, these competencies are assumed present while the other end more explicitly promotes such competencies. Hence, in the area of literacy for instance, an action that would place instruction on the more scaffolding end of this dimension would be instructing students on particular strategies useful for reading

comprehension Mercer (1998). Table 2.3 below summarizes these scaffolding actions located within each dimension.

TABLE 2.3: SCAFFOLDING ACTIONS IDENTIFIED BY MERCER (1998)

Mercer 1998
<ul style="list-style-type: none"><li>• Using other students to support learning</li><li>• Using activities that involve joint interaction</li><li>• Using reformulations and recaps</li><li>• Using spiral IIRF exchanges</li><li>• Asking "why" questions</li><li>• Eliciting problem solving strategies from students</li><li>• Explaining the meaning of a task to students</li><li>• Stopping activities to review student progress</li><li>• Modeling a task</li><li>• Using "retreat and rebuild" sequences</li><li>• Reducing freedom on a task</li><li>• Teaching specific strategies for particular subject areas</li></ul>

## **2.6 DISCOURSE ANALYSIS**

Alongside this discussion of Vygotskian socio-cultural theory in general and scaffolding in particular comes an overview of the literature on discourse analysis as the method used to describe the performance of scaffolding and classroom interaction. I start by linking the two literatures together through providing justification as to why discourse analysis was opted for in the study of scaffolded instruction. This is followed by an overview of discourse analysis in general and the particular scheme I used for analysis in particular.

### **2.6.1 JUSTIFICATION FOR USING DISCOURSE ANALYSIS**

I found the analysis of spoken discourse to be helpful in understanding scaffolding and describing classroom interaction in several ways. Indeed it is the Vygotskian view of conducting research that originally led me to focus on discourse analysis to investigate scaffolding. Vygotsky stressed that any research on cognition has to take into account linguistic signs in the form of speech as the basic unit of analysis (Lantolf and Appel 1994a). Since this entails a focus on language, research into this area requires the collection of spoken language data in the form of transcripts. Such transcripts of spoken discourse formulate the text of student-teacher interaction taking place during a lesson. Indeed, the context of an SL class makes this particularly difficult for analyzing discourse because the second language is not only the academic text but is also the medium used to learn that text (Brooks 1992).

Additionally, in order to better understand scaffolding and describe student interaction, I felt that I needed to be able to describe the discourse which occurred during the process. This is because it is this language or discourse that is used which acts as the actual scaffolding device during scaffolded instruction. Through this, the individual unit of data

researched would be the spoken discourse or the relationships that occur between sentences during classroom interaction. The analysis of discourse is a process that places importance on the use of language or discourse by individuals in interaction with one another. Indeed, one of the benefits of coding the discourse is that it forces me to make my criteria precise, explicit, and systematic in my treatment of data. In itself, the process of applying a coding scheme would most likely derive insights into the nature of the data building on my understanding of the scaffolded instruction and the ensuing classroom interaction.

More importantly, the decision to use spoken discourse analysis as a research method rested on a pilot study I conducted on one of my secondary ESL classrooms which revealed considerable findings in relation to the research foci at hand. In the pilot study, I researched a relative comparison between a more traditional monologic mode of instruction and a more scaffolded type of instruction. Using the analysis of spoken discourse in that study revealed considerable differences in outcomes. For instance, the research found that the pedagogical benefits derived from scaffolded instruction go beyond Vygotsky's widely recognized emphasis on the development of metacognition and the increase in participation to other benefits such as the social function which scaffolded interaction brings forth including the reenactment of gender identities, the maintenance of group solidarity, and the development of interpersonal relationships. In addition, the discourse analysis in that study revealed that scaffolded interaction allows for the internalization of cultural knowledge including contextualization cues related to a second language. Another finding was that there appeared to be a pedagogical need for the SL teacher to be more receptive to short incomplete responses from L2 students. Similar to responses from actual native speakers, such responses would eventually pave the way for longer extended responses in the future (Brown and Yule 1983). Finally, discourse analysis in the pilot study found that the benefits

reaped from scaffolded instruction might extend to allow SL learners to enact scaffolded collaboration amongst themselves even in the absence of the teacher.

## 2.6.2 SPOKEN DISCOURSE ANALYSIS

According to Connor (1990), discourse analysis in education has in recent years become multidisciplinary in that it draws on various fields ranging from linguistics to educational psychology. Crookes (1990) holds that discourse analysis has become an acceptable methodology in the field of second language research. It involves first identifying in the spoken text individual units, in the form of utterances or phrases for instance, related to the purpose of the research being carried out. From there, different analytic approaches can be applied to these units (Crookes *ibid*). Approaches to the analysis of spoken discourse vary ranging from the ethnomethodological, sociolinguistic, logico-philosophic, social-semiotic to structural-functional approaches. Of these, I make use of the Birmingham School, characterized as a structuralist-functionalist approach. The Birmingham School was a pioneer in establishing discourse as a level of language that is different from the levels of phonology and grammar (Eggins and Slade 1997). It was first established by Sinclair and Coulthard (1975) whose model of classroom discourse follows the pattern of Initiation, whereby a teacher may initiate a question for instance; followed by a Response from the student to that question; then Feedback from the teacher as a way of evaluating the student's response. Since the Initiation and Feedback moves are typically limited to the teacher in a pedagogic exchange, this model works better with more traditional teacher guided classroom discourse. Due to such limitations, the model has been extended by various theorists to apply to discourse outside that of the classroom (Eggins and Slade 1997). These include the work of Coulthard and Brazil (1979) who added a Re-Initiation move after Initiation for responses

to an Initiation which perform an additional function of eliciting responses; Burton (1981) which will be discussed shortly as the concern of the present study, and the more recent work of Tsui (1992) who developed Elicitation as a category used by Sinclair and Coulthard (1975) to describe any utterance in the classroom which elicits a verbal response, by dividing it into several subcategories.

### 2.6.3 THE BURTON MODEL

In this study, I made use of Burton's (1981) model for analyzing spoken discourse. I found the model to be suitable for several reasons. First, since its directly derived from the Sinclair and Coulthard model, Burton's model does not present a significant shift from the former. Hence, it has the same added benefits as those found in the Sinclair and Coulthard model which is specifically tailored to apply to the context of the classroom with the boundaries that this context imposes on discourse events. For instance, as with Sinclair and Coulthard (1975), the scheme set forth by Burton (1981) for coding spoken discourse in classrooms is essentially hierarchical whereby Lessons are considered the largest units of discourse. In turn, Lessons consist of Transactions which embody Exchanges related to certain topics of discourse. Exchanges consist of Moves which formulate individual turns. Finally, Moves are composed of Speech Acts, the smallest units of discourse. It is particularly at the level of Speech Acts that Burton's scheme represents few modifications of the Sinclair and Coulthard scheme. Indeed she holds that, "Wherever it was possible, I tried to restrict my coding at act rank to the 22 acts listed in Sinclair and Coulthard, 1975 p.40-4" (Burton 1981 p. 65). Of those 22 acts, the ones that I have used for coding Speech Acts in this study are dealt with in Chapters 4 and 5 which present an analysis of the research findings.

The Burton model, however, has some added benefits. First, although the Burton model is specifically formulated for casual conversation (Eggins and Slade 1997), the model is still general enough to apply to other types of discourse. In that respect, Burton (1981) claims that the modifications she offers to the work of Sinclair and Coulthard (1975) are based on the principle that “data should be analyzed according to a model sufficiently general and powerful to handle all types of talk. And it is the analysis which should be compared to see whether or not they display similar stylistic choices from the underlying linguistic structural options available for all talk” (Burton 1981 p. 63.) Hence, the analysis of discourse during the scaffolding process would not be imposed by a coding system that will impose on it the structure of a classroom context.

Another added benefit that the Burton model has is at the level of Moves. Burton expands on the original Initiation, Response, and Feedback pattern to include Opening, Challenging, Supporting, Bound-Opening, Re-Opening, Framing and Focusing moves. Briefly stated, Opening moves carry topics which are in essence new in relation to the preceding discourse; Challenging moves hold the progress of a topic; and Supporting moves help facilitate the topic of discourse by keeping the interaction focused. While Bound-Opening moves reintroduce the topic after a Supporting move, Re-Opening moves reintroduce the topic after a Challenging move. Finally, Focusing and Framing moves serve to mark the boundaries of transaction by occurring before a topic and acting to capture attention.

Given the three research objectives formulating the focus of this study which include a description of how scaffolding is discursively performed, an examination of student interactional style, and a comparison of scaffolding in two instructional activities; qualitative methodology offers the most appropriate research paradigm for the study at hand. The next chapter specifically describes the research methods I used for this study.

## **Chapter Three: Methodology**

### **3.1 INTRODUCTION**

This chapter discusses the methodology I used to investigate the three research objectives. The first is concerned with describing elements of scaffolded instruction in two types of instructional activities, whole group teacher-led lessons and tutorials. The second objective is related to describing the type of student interaction that took place upon the implementation of scaffolded instruction. The final objective is concerned with how scaffolding as a kind of dialogic interaction differs across the two instructional activities of tutorials and teacher-led whole group lessons.

I provide in section 3.2 a general overview of data collection. The next section, 3.3, provides an account of why an interpretive methodology in general was found to be appropriate for investigating these research questions. Justification for this is provided in relation to the nature of the research question, the relation of the researcher to the participants, the general aim of the research, and the issue of particularization. The final section, 3.4, more specifically discusses the actual research methods which I used, namely interviewing, observation and the analysis of spoken discourse taken from transcripts made of different instructional activities. It describes how data was collected and analyzed using each of the three interpretive research methods ending with a discussion of problems I encountered in the process.

## **3.2 DATA COLLECTION**

### **3.2.1 GENERAL BACKGROUND ON DATA COLLECTION**

Prior to the actual collection of data for all three research methods, I had to deal with ethical considerations. First, negotiation of access was obtained by having the secondary school director sign a letter a sample of which is provided in Appendix 1. Informed consent of the students involved in the study, which according to Fontana and Frey (1994) involves the consent obtained from the participants involved in the research after being informed of a research study was another ethical consideration that had to be taken into account. This was obtained by having participants sign a letter, a sample of which is provided in Appendix 2, explaining the objectives of the research at hand as well as any activities this may involve.

The participants involved in the research were all secondary school students attending a remedial English class at an American international school located in Kuwait. Each class consisted of no more than ten students of differing grade and ability level. A description of the socio-cultural context within which this study took place was provided in the first chapter.

Prior to data collection, I attempted as a teacher to move from the relatively monologic type of instruction which my students were previously accustomed to during instruction on writing whether involving a large group of students or done on a one to one basis. A more in depth description of the lesson plans used prior to the implementation of scaffolding for both whole group lessons and tutorials will be presented in section 3.2.2. Previous instruction carried out during both large-group lessons on writing and tutorials which involve meeting with students on a one-to-one basis to revise writing in terms of structure and content had mostly been of the monologic type highly regulated by myself as the teacher, explicit, and direct. I would explain how to carry out a task provide rules, then carry it out through a

demonstration. With relatively few opportunities for verbal interaction, students would not be involved in the task until after instruction and only as a form of assessment.

In my quest to improve student participation and interaction based on a Vygotskian theoretical framework, I attempted to make my teaching more interactive by implementing scaffolded instruction during both teacher led large-group lessons and tutorials where I would instruct students on a one-to-one basis. A more in depth description of the lesson plans used for both whole group lessons and tutorials that included scaffolding will be presented in section 3.2.2.

I borrowed scaffolding functions from the work of the three scholars, Wood et al (1976), Rogoff and Gardner (1984) and Mercer (1998), whose definitions of scaffolding were described in Chapter two. In reviewing the various elements of scaffolding provided by each scholar, I found various points of congruence. Hence, I personally found it useful to categorize the various functions of scaffolding by grouping related ones together under general headings. This merger made it easier for me to implement scaffolded instruction with the intent to include most of the functions described by all three scholars. In addition, it allowed me to realize that regardless of the various terms used by the different scholars to identify an aspect of scaffolding, many of the functions remain essentially similar.

I was able to identify four general headings under which the functions of scaffolding identified by all three scholars would fit. The first one, task simplification, was used to categorize Wood et al's (1976) scaffolded function of reduction in degrees of freedom which I found to have no close matching functions in the work of the two other scholars. I decided to group all those functions of scaffolding which serve to recruit student interest in the second category. Since many scaffolding functions presented by the three scholars are related to repetition, I decided to create a third category for all those functions which involve redundancy. Finally, I added a fourth category for all those functions of scaffolded

instruction whereby the teacher prompts the learner into the learning how to complete a task by gradually reducing the scaffold and allowing the learner to take greater part in the learning process. It is this categorization which I present in Table 3.1 below.

TABLE 3.1: PERSONAL CATEGORIZATION OF SCAFFOLDING ELEMENTS BASED ON THE WORK OF WOOD ET AL (1976), ROGOFF AND GARDNER (1984) AND MERCER (1998).

<i>Category</i>	<i>Scaffolding functions</i>
<b>Task simplification</b>	<ul style="list-style-type: none"> <li>• Reducing task into subparts (Wood et al 1976)</li> </ul>
<b>Enhancement of interest in a task</b>	<ul style="list-style-type: none"> <li>• Direction maintenance (Wood et al 1976)</li> <li>• Explaining the function of a task (Mercer 1998)</li> <li>• Recruitment of interest (Wood et al 1976)</li> <li>• Stress control (Wood et al 1976)</li> <li>• Using other pupils to support learning (Mercer 1998)</li> <li>• Classroom activities that involve joint interaction (Mercer 1998)</li> </ul>
<b>Redundancy</b>	<ul style="list-style-type: none"> <li>• Redundancy (Rogoff and Gardner 1984)</li> <li>• Demonstration (Wood et al 1976)</li> <li>• Mnemonic strategies (Rogoff and Gardner 1984)</li> <li>• Marking critical features of a task (Wood et al 1976)</li> <li>• Reformulations and recaps (Mercer 1998)</li> <li>• Stopping activities to review progress (Mercer 1998)</li> <li>• Modeling a task (Mercer 1998)</li> <li>• Retreat and rebuild sequences (Mercer 1998)</li> <li>• Reappearance of redundancy upon error (Rogoff and Gardner 1984)</li> </ul>
<b>Exploration through prompting</b>	<ul style="list-style-type: none"> <li>• Spiral IRF exchanges (Mercer 1998)</li> <li>• Eliciting problem solving strategies from students (Mercer 1998)</li> <li>• Reduction of redundancy (Rogoff and Gardner 1984)</li> <li>• Asking "why" questions (Mercer 1998)</li> <li>• Reducing freedom on a task (Mercer 1998)</li> </ul>

### 3.2.2 INSTRUCTIONAL ACTIVITIES INVOLVED IN DATA COLLECTION

#### 3.2.2.1 *Whole group lessons*

Data collection using the three methods of observation, interviewing, and the analysis of discourse from lesson transcripts was conducted on two kinds of classroom activities related to the instruction of writing that attempted to embody scaffolded instruction. The first of these was whole group lessons. Lesson plans for whole group lessons both prior to the implementation of scaffolding and with the application of scaffolding were similar in terms of instructional orientation. For one thing, both whole group lessons were essentially teacher-led classroom instructional activities whereby as the teacher, I presented a 15 minute lesson on writing. Such short lessons on writing abide by Atwell's (1987) idea of a mini-lesson presented at the beginning of a lesson on writing with the intent for students to apply the lesson to their writing during the remaining part of the lesson. Also, similar audiovisual aids including the board and overhead projector were used to achieve identical instructional objectives.

Despite these similarities, whole group lessons taught prior to scaffolding and those which applied scaffolding differed in the way these instructional aims were met through the activities and roles involved. To demonstrate this, I will use as an example one lesson on essays of comparison and contrast which I later also discuss in the analysis chapters. The lesson, previously taught to one group of students prior to the application of scaffolding, was also taught with the implementation of scaffolding for this research. In both cases, the instructional objectives for the lesson were identical. Students were to:

- Understand the difference between comparison and contrast.

- Recognize that essays of comparison and contrast which lack a purpose in the thesis statement will leave the reader perplexed with the ‘so-what’ problem.
- Avoid the ‘so-what’ problem in an essay of comparison and contrast by selecting one of three purposes in their thesis statement: show how two seemingly similar things are actually different; show how two seemingly different things are actually similar; or show that one thing is better than the other.

In the lesson which did not embody scaffolding, instruction was very direct and explicit highly regulated by me as the teacher. The lesson was essentially broken down into the three objectives above so that I first started by explaining the difference between comparison and contrast then giving an example. Next, I explained the importance of having a thesis statement with a certain purpose for comparison and contrast. I presented students with examples of essays that lacked such a purpose and leave the reader with the question of ‘so-what’. Finally, I explained each of the three purposes that could be part of the thesis statement of a comparison and contrast essay. Examples of three different thesis statements each having one of the three purposes were given. Following this lesson, students were to then apply what they had been taught by beginning the task of writing a comparison and contrast essay which included one of the three purposes as thesis statement. Throughout this process, instruction was highly monologic with even questions which I asked being mainly rhetorical. Students did not interact in the lesson other than taking notes. This was done so as to keep the lesson short giving students time to apply what they have learned during the 15 minutes to their writing during the rest of the class period during which they could also ask any individual questions they may have on their own specific essays. Hence, any interaction on the part of students whether in the form of questions or comments took place

following the lesson as they were applying what they had been taught to their own individual essays.

The main pretext behind the use of this highly teacher regulated instructional technique was related to its relatively predictable and stable nature in withstanding the test of time as well as the somewhat satisfactory outcomes previously achieved in terms of the language development of pupils. More importantly, I had felt that it was less time consuming given that students also needed time during the lesson to apply what they have learned and demonstrate understanding. Using this monologic approach allowed additional time for further explanation or reteaching a concept which a student may be facing difficulty with understanding.

The lesson which embodied scaffolding as part of this research had the same identical instructional objectives. However, it surpassed all the boundaries of the previous lesson by conforming less to a traditional mode of direct instruction towards a more scaffolded approach based on my application of the scaffolding functions outlined in Table 3.1. As such, instruction was less explicit and more interactive in nature because students were involved in the discourse during the explanation of the lesson through their comments, questions, or responses to my questions. An in depth description of how this scaffolding took place in terms of the most prominent scaffolding functions in the lesson will not be given here as it formulates one of the objectives of this research and is such to be discussed in depth in Chapter 4. Needless to say, this scaffolded lesson was simplified into the following four parts each of which was explored with the students using a dialogic approach:

1. *Introduction.* This involved focusing the students in on the lesson by identifying the definition of comparison and contrast as well as how the two processes differ.

2. *Problem.* From there, the relation to writing essays was made by having students recognize the ‘so-what’ problem associated with not having an explicit purpose when writing comparison and contrast essays.
3. *Solution.* Ways of avoiding the problem were then discussed in terms of making part of the thesis statement one of various purposes which may be used to convert a list of comparisons and contrasts into an essay.
4. *Presentation of teacher rules.* After the three purposes were realized as being part of the thesis statement, they were then checked against rules presented to students by means of an overhead projector, which included a summary of the lesson in terms of the three purposes inherent in the thesis statement of comparison and contrast essays.

By adopting this more exploratory approach of scaffolding, the relative stability and predictability associated with the traditional mode of instruction was placed at risk. My first fear concerning this was related to the apparent time-consuming nature of scaffolded instruction. Also, I was concerned about not being able to apply all the scaffolding functions outlined in my categorization of scaffolding in Table 3.1. In the case of the whole group lessons especially, I speculated that scaffolding would result in less time to get through the lesson and allow students to apply what they have been taught. Furthermore, the thought of my giving up turns as a teacher to allow for interaction on the part of students during explanation carried with it fears of confusion and disorder among students. The low level of motivation and the generally low interest in academics apparent among this group of students added to the skepticism associated with trying out scaffolding as an instructional strategy.

### *3.2.2.2 Tutorials*

Tutorials formulated the other instructional activity on which data was collected. Lesson plans for tutorials both prior to the implementation of scaffolding and with the application of scaffolding were similar in terms of the general instructional aim. In both cases, I was to meet individually with a student for 10 to 15 minutes in order to revise a written essay in the area of either content or structure concentrating on only one revision per tutorial. More specific objectives of both types of tutorials included:

- Identifying the problem in the written essay.
- Relating that problem to a previous lesson which explained how to avoid it.
- Correcting that problem in the essay.

Despite these similar objectives, tutorials given prior to scaffolding and those which applied scaffolding differed in the way these instructional aims were met through the activities and roles involved. To demonstrate this, I will use an example of one tutorial which was given prior to the scaffolding process then follow that with an example of a tutorial that had been formatted to include scaffolding for this research.

In the tutorial given prior to the implementation of scaffolding, the revision to be made was in the area of structure whereby the student had included several different ideas in each paragraph. He was thus to focus on only one main idea per paragraph. I started the tutorial by explicitly telling him about the problem with having more than one main idea per paragraph. I followed this by reminding him of a previous lesson which explained this. Finally, I demonstrated how to correct the problem for one paragraph in his essay by referring back to the main idea he had specified in his graphic organizer for each of the essay paragraphs. This whole explanation process was monologic whereby I directly offered the explanation with the student simply listening to what I had to say and occasionally taking

notes on what I said. There was no interaction on the part of the student until the end when I asked him if he had any comments or questions on the instruction.

As was the case for whole group lessons, the main pretext behind this monologic instructional strategy was that it saved time. This seemed to be especially important in the case of tutorials with students where I had to conduct several tutorials meeting with more than one student during a single class period. Once the tutorial was over, the student would think over and try to apply what I had explained. If they faced problems doing that, they could interrupt a tutorial I was having with another student to ask questions.

The tutorial which implemented scaffolded instruction was also concerned with a revision in the structure of writing. In this case, the student was to include a topic sentence in body paragraphs referring back to the original thesis statement of the essay. To that extent, I attempted to include the scaffolding functions outlined in Table 3.1. in an attempt to make instruction more exploratory and less explicit involving the student during the tutorial through questions, comments, or responses to my questions rather than limiting interaction to when the explanation was over as was the case with the previous tutorial. An in depth description of how this scaffolding took place in terms of the most prominent scaffolding functions in the lesson will not be given here as it formulates one of the objectives of this research and is such to be discussed in depth in Chapter 5. Needless to say, this scaffolded tutorial was simplified into the following three parts each of which was explored with the students using a dialogic approach:

1. *Problem identification.* This involved identifying the revision to be made in writing by having the student achieve a similar definition of the writing problem. In this case, the student was to realize that each of the body paragraphs in her comparison and contrast essay should include a topic sentence which refers back to the thesis statement.

2. *Relation to previous learning.* The student was to then achieve a more general perspective of this revision by relating it to previous learning. More specifically, the student was to recall a prior lesson on thesis statements which explained how body paragraphs should refer back to the thesis statement of an essay.
3. *Correction.* Finally, the student was shown how to make the revision for one of the body paragraphs in an effort to apply the revision to the rest of the essay.

The implementation of scaffolding in tutorials carried with it certain fears. For one thing, tutorials that included scaffolding took longer than earlier ones since they had interaction with the student. As a result, I felt especially apprehensive about not having enough time to conduct tutorials with all students during a single class period. Also, I feared that during each tutorial, scaffolding may limit me to revising no more than one aspect of the writing process in cases where other problems in writing became apparent and just needed slight mentioning. Furthermore, spending a longer period of time with each student during a single tutorial meant that I had less time to make sure other students were on task during the writing process.

### 3.2.2.3 Summary

Following is a summary of how data collection occurred for the two instructional activities of whole group lessons and tutorials. In terms of whole group lessons, the first phase of data collection involved formatting three mini-lessons to include scaffolding

elements delineated by the three scholars previously discussed. With this focus, the techniques I used to collect data on these three lessons included audio-taping and transcribing the discourse of the entire lesson; carrying out interviews with students immediately following the lesson; observing student interaction during the lesson, and the observation of instruction during the lesson. A more detailed discussion of these three data collection methods is provided in section 3.4.

The topics chosen for the three mini-lessons on writing included an introduction to essays of comparison and contrast; adding details to comparison and contrast writing, and the proper use of commas in writing. The choice of topics for each of the three writing lessons on which data was collected followed some of the working principles presented by Newman et al (1989). Namely, the topics chosen for the writing lessons were ones that had not been previously explained to students. This helped limit the effect of prior exposure to the lesson on the student interaction which was being researched. Also, the topics chosen for each of the three writing lessons were unobtrusive being ordinarily taught to students and seen as being educationally important. This was important from a methodological point of view because it helped limit the effects of the data collection instruments on student behavior allowing student to view the three writing lessons during which data was collected as familiar and common to other writing lessons that are not part of the research.

The second phase of the research involved the analysis of the data collected from the three teacher-led whole group lessons. The first focus of data analysis during this phase was on describing in the data collected elements of scaffolded instruction as well as characteristics of student interaction during the lessons. From there, the second focus of data analysis during this phase was on searching for patterns to identify the type of student interaction which accompanied each particular scaffolding element. I made use of both

quantitative and qualitative analysis of data obtained from spoken discourse, interviews, and observations during the three lessons to address the two foci.

In the case of tutorials, the first phase of data collection involved formatting three tutorials to include scaffolding elements delineated by the three scholars previously discussed. With this focus, I used the following three methods of data collection: audio-taping and transcribing the discourse of the entire tutorial, carrying out an interview with the student immediately following the tutorial, and observing both the instruction during the tutorial as well as the student's style of interaction. A more detailed description of these three data collection methods is provided in section 3.4.

As with the whole group lessons, the second phase of research involved the analysis of data obtained from the three tutorials. In relation to the first focus of data analysis, I attempted to describe elements of scaffolding in the instruction of the three tutorials and patterns of the student's interactional style during the tutorial. The second focus of data analysis during this phase was on searching for patterns to examine the type of interaction which accompanied each particular scaffolding element. Once again, I relied on the quantitative and qualitative analysis of data obtained using the three data collection methods to achieve the two foci.

In sum, all three research methods were used to collect data simultaneously for both instructional activities. Hence, for both whole group lessons and tutorials, observations took place as well as a recording and transcription of the lesson for oral discourse analysis followed by interviews with students immediately after the lesson. This was repeated for three large group teacher-led lessons and three tutorials. Thus, a total of 6 data collection events for each of the three research methods were completed resulting in a total of 30 data gathering activities for all three methods put together. The following table provides an

overview of the data collection and data analysis procedures used and described in more detail in the following section.

TABLE 3.2: OVERVIEW OF DATA COLLECTION AND ANALYSIS PROCEDURES

Duration	Focus	Techniques
<p>PHASE 1:</p> <p>Jan.-Feb. 2001</p>	<p>DATA COLLECTION</p> <ul style="list-style-type: none"> <li>• format 3 whole group lessons to include elements of scaffolding.</li> <li>• format 3 tutorials to include elements of scaffolding</li> </ul>	<ul style="list-style-type: none"> <li>• audio-tape and transcribe discourse of entire lesson.</li> <li>• observation of student interaction during lesson.</li> <li>• observation of instruction during the lesson.</li> </ul>
<p>PHASE 2:</p> <p>March-April 2001</p>	<p>DATA ANALYSIS</p> <ul style="list-style-type: none"> <li>• identify in collected data:               <ol style="list-style-type: none"> <li>1. elements of scaffolded instruction</li> <li>2. characteristics of student interaction during the lesson.</li> </ol> </li> <li>• search for patterns to identify the type of student interaction that accompanied each scaffolding element</li> </ul>	<ul style="list-style-type: none"> <li>• interviews with students.</li> <li>• quantitative and qualitative analysis of spoken discourse during lessons:               <ol style="list-style-type: none"> <li>1. determine exchange and transaction boundaries in the discourse.</li> <li>2. frequency count of turns, moves, and acts in the discourse to identify recurring patterns.</li> <li>3. provide possible explanation for patterns identified in the discourse.</li> </ol> </li> <li>• quantitative and qualitative analysis of data obtained from interviews and observations to back up findings arrived at through discourse analysis.</li> <li>• relate findings to current literature.</li> </ul>

### 3.3 THE INTERPRETIVE PARADIGM

#### 3.3.1 THE NATURE OF THE RESEARCH QUESTION

The choice of research methods which I used in this study was influenced by an interpretive qualitative approach. This choice stemmed from several factors related first to the nature of the research objectives. The themes covered in this study are such that research

needed to involve holistic inquiry which is characteristic of the interpretive paradigm. The overall aim of this inquiry was to gain an all-encompassing perspective in relation to the questions being researched. For instance, the two research questions of identifying elements of scaffolding and the type of interaction created were linked together in an attempt to identify the type of student interaction which accompanied each particular scaffolding element.

In relation to the setting where the study was carried out, data was collected in the natural setting of my own classroom, a setting that is more interpretivist in nature than that of a controlled laboratory setting where random samples of individuals and variables may be taken to increase the generalizability of findings as would be the case in a more positivist paradigm. I decided on carrying out the study within the setting of my own classroom because the data generated would be more contextual directly relating to the particular context of my own classroom and thus more valuable and relevant to me as a teacher and to my students. This method is a form of action research which allows me to use research to reflect on my work as a practitioner. Qualitative work allows me to investigate and understand the meanings my students and I bring to the learning context and understand the role of interaction in that process.

### 3.3.2 THE RELATION OF THE RESEARCHER TO THE PARTICIPANTS

An interpretivist research paradigm also proved more appropriate for the research at hand when investigating the relation between the students participating in the inquiry and myself as the researcher. The interpretivist paradigm involves interaction between the researcher and the participants whereby the researcher plays a role in the research process. In this study, I have interacted as a researcher with the participants through my role as also being the teacher

who is implementing scaffolding. Hence, my attempts as a researcher to identify elements of scaffolding within the instructional activities as well as to examine the accompanying student interaction both involved interaction with the students during the lessons as part of the research through interviewing the students for instance. For Blumer, such interaction is vital. He contends:

"to try to catch the interpretive process by remaining aloof as a so-called 'objective' observer and refusing to take the role of the acting unit is to risk the worst kind of subjectivism- the objective observer is likely to fill in the process of interpretation with his own surmises in place of catching the process as it occurs in the experience of the acting unit which uses it." (Blumer in Sherman and Webb p.125)

The interaction I had with students went beyond that of my role as a teacher and theirs as students. Rather, they were active participants in a study I was conducting as a researcher whereby they influenced results and played a role in interpreting outcomes. As such, they were given voice through interviewing to express any concerns which they had. Such an investigation of the students' accounts and justification for their behavior is characteristic of the interpretivist research paradigm which contrasts with a positivist design where participants' views are not accounted for to such an extent (Cohen and Manion 1994).

### 3.3.3 THE AIM OF THE RESEARCH

Justification for the use of interpretive methodology for this study may also be provided through a look at the general aim of this research. Broadly, this study generated findings that emerged from a specific context unique to the socio-cultural context of my particular classroom with the hope that such findings may later be validated by noting their consistency in different contexts and across various time periods (Cohen and Manion 1994).

In that respect, the aim of this research was not to simply refute or support an existing educational stance as would be the case in a more positivist paradigm (Jaeger 1988). Rather, it involved generating grounded theory which may later be used to develop patterns of activities or views and values among participants. Qualitative research often considers theory to be grounded in the data whereby it follows rather than precedes data collection (Hammersley and Atkinson 1995). Wolcott 1994 p. 397) reflects on this as "using data rather than getting data is the more critical and more difficult task in qualitative research". Such was the case in this particular research where I attempted to collect data on scaffolded instruction with the hope of understanding how scaffolding elements may be applied to a lesson as well as developing a pattern for the type of student interaction that occurs in conjunction with particular elements of scaffolding in the classroom during two different instructional activities. Kuhn (1970 cited in Sherman and Webb 1990 p. 123) considers grounded theory to be "paradigm transcending." Stern et al (1982 qtd. in Sherman and Webb p. 123 describe it as : "Heretical and iconoclastic, such research goes beyond existent theories and preconceived frameworks in search of new understandings of social processes in natural settings."

Hence, as a researcher in this study, I did not attempt to seek causal linkages or explanations for observed effects as would be done in positivist research designs. For instance, I did not in any way hold that scaffolding was the cause of the particular style of student interaction I observed during the two instructional activities. If I were to abide by a positivist paradigm simply collecting data in support of a general theory without allowing participants any voice, I would risk falling into the trap of interpreting behaviors as support for that theory while being oblivious to any action that may place the theory in question (Thomas 1998). Rather, abiding by a more interpretive approach that makes use of grounded theory entailed a more molecular structure whereby I attempted through data analysis to

understand meanings by observing patterns of scaffolding elements and student interaction present in the collected data (Sherman and Webb 1990).

#### 3.3.4 PARTICULARIZATION

An interpretive paradigm also proved appropriate for this research methodology because this study is concerned with particularization, the general aim of interpretivist paradigms. Hence, the findings of this study relate to the particular situation of my classroom rather than generalizing to other contexts. As such, an interpretive paradigm was used to produce systematic and rigorous data.

Overall, it was felt that a concern over collecting data which was systematic and rigorous was more important than a concern with issues of reliability so characteristic of positivist paradigms. Simply stated, reliability indicates consistency of measurement whereby similar findings are reached on various occasions. Hence, a positivist research methodology would yield findings that would be largely generalizable with any variation in the findings only indicating a change in the variable being studied. In the case of this particular research, there was little concern with reliability because the generation of findings which are generalizable was not that important. It should be taken into account that such a small scale study is limited in terms of the generalizability of its findings. For instance, examining the interactional style that accompanied scaffolded instruction yielded findings that more appropriately applied to the particular socio-cultural context of my classroom and hence not particularly applicable to an alternative context.

Reliability formulates a precondition for validity, the other component present to a large degree among positivist research methods. Validity is related to the accuracy of the data, the research, and the methods in measuring what the research purports to measure. While

internal validity relates to the context of a study in which any extraneous variables could, if unacknowledged, invalidate findings; external validity is related to the extent to which the sample taken for research is representative of the majority of the population. Hence, results need to generalize to the larger population or setting (Sammons 1989). As was the case for reliability, validity was not an issue at stake in this study. The findings derived from this study were verifiable. For instance, in examining scaffolded instruction and student interactional style, the students being researched as part of the socio-cultural context of my particular classroom, did not represent the larger population of students as a whole. Also, certain extraneous outside variables have inadvertently affected the findings of the study. For instance, the subjective moods and predispositions of students as well as the role they play in the study as participants who demonstrate voice, have formulated a threat to validity.

### 3.3.5 ROLE CONFLICT IN PRACTITIONER RESEARCH

One of perhaps the most obvious factors which threatened the validity of this study is related to the issue of my conflicting roles as both practitioner and researcher. According to Bell (1993), the role of a practitioner as researcher is not really new as it formulates an issue which has been previously discussed in the literature at length. Some action researchers actually stress this involvement of practitioners in research viewing this as an application of democratic values in research (Colin1993). Nevertheless, my role as both teacher and researcher in this study slightly interfered with achieving validity in that it made it difficult to achieve an objective perspective since according to Lomax (1994 qtd. in Hutchinson 1998 p.158), “the researcher becomes both the subject and the object of the research, driving the action which provides the data of the inquiry.” This makes it quite difficult, according to

Somekh (1995), to differentiate between data collected as part of the research and data gathered through my practice as teacher just as the analysis of data is affected by any intuitive knowledge I possess in relation to my role as teacher.

Given this account of role conflict in practitioner research, measures had to be taken in this study to deal with this issue. Generating a certain extent of trustworthiness required triangulation, a multiple method approach that verifies findings by examining them from different perspectives. Triangulation can be achieved through having more than one instrument for collecting data; having more than one researcher taking part in the study; replicating the research in different settings or at different times; or replicating the study at different time periods (Cohen and Manion 1994). In this study, my attempt at triangulation involved using three research methods namely observation, interviews, and the analysis of spoken discourse from transcripts. In addition, data was collected at different times during various instructional activities. Finally, in the case of observation, more than one observer took part in collecting data just as key respondents, which according to Hopkins (1993) review the research with the researcher, were used in the case of spoken discourse analysis. Two other teachers from school acted as key respondents by looking over my coding of the discourse in the transcripts. In that respect, their role was to be critical of the coding I applied to the discourse of the lessons and tutorials.

Another measure taken to establish validity relates to what Patton (1980, cited in Hopkins 1993 p. 155) refers to as the search for negative cases or instances which do not fit in with a particular pattern that has been identified. In this research, I attempted throughout the analysis of the data to search for instances during the instruction of the lessons and tutorials when scaffolding elements were not applied as well as instances when aspects of scaffolding were not particularly effective.

Needless to say, the subjective element characteristic of interpretivism, which entailed me as the researcher to rely on intuitive knowledge related to my role as practitioner, actually emerged as a "shining epistemological sword" (Thomas 1998 p.151). Such a reliance on intuition proved quite fruitful for this study. For instance, in attempting to implement scaffolded instruction, I relied on a certain amount of intuitive knowledge in order to personally categorize scaffolding elements presented by the work of several scholars in a way that would fit my teaching situation. Such intuitive knowledge related to my role as teacher was also useful later on as I attempted to describe how scaffolding elements and characteristics of student interaction were linguistically realized at the level of speech moves and acts. Garratt (1998 p.222) refers to such unanticipated findings as "serendipitous moments" holding that such moments would be quite beneficial to a researcher. In that regard, he notes in a personal account:

"In a serendipitous moment I was able to bring together a new theoretical perspective within a collection of tacit understandings about a school with which I was extremely familiar. In essence then, the serendipitous moment was neither inspired by literature to which I had been previously exposed, nor did it emerge from the systematic recording and analysis of observed events. Instead, the 'dramatic metaphor' simply sprang from the coming together of new literature with tacit knowledge" (Garratt 1998 p.222).

### 3.4 DATA COLLECTION METHODS

#### 3.4.1 INTERVIEWING

##### *3.4.1.1 Merits of interviewing*

Briefly, interviewing may be defined as, "a two-person conversation initiated by the interviewer for the specific purpose of obtaining research-relevant information, and focused by him on content specified by research objectives of systematic description, prediction, and explanation" (Cannell and Kahn 1968 qtd. in Cohen and Manion 1994 p.271). Within the field of applied linguistics, the oral interview has been widely used in research (Nunan 1992).

My choice of carrying out oral interviews with students receiving a scaffolded form of instruction as one of the three research methods in this study was based on several factors. For one thing, in classroom research, the interview is not only useful for deriving general diagnostic information and improving the overall climate of the classroom, but also for more specifically focusing on a certain aspect of instruction (Hopkins 1993). In this case, that aspect of instruction directly related to scaffolding and student interaction. Perhaps the main advantage of using interviewing as one of the research methods in this study rested on the fact that a satisfactory rate of return with data gathered from all interviewees was guaranteed. In addition, as the interviewer, I had the chance to probe and inquire into responses in order to clear up or add to information that had been gathered as part of my ongoing studies. Since I made use of oral interviews in this study in convergence with two other research methods, this in essence provided added accuracy of the data and method in actually measuring what the research purports to measure and hence data which was more verifiable. Indeed, according to Cohen and Manion (1994), the oral interview, used along with other research

methods, can supplement data, validate other research methods, and allow for the chance of probing deeper into responses.

#### *3.4.1.2 Data collection*

As not only teacher but also researcher, I personally conducted all interviews. It was felt that this would be more effective because students would be more familiar with me as their teacher and would thus feel less intimidated and more at ease during the interview. This would contribute to more elaborate responses and data gathered from the interview. Hopkins (1993) adds that having the teacher interview students saves time because the teacher would more directly probe into responses without any potential for bias on the part of the researcher. In addition, this would enable me to immediately follow up on issues if the need arose.

Five interviews in English were carried out with students directly following each of the three teacher-led whole group lessons. The five students were chosen at random from class. One interview was carried out with the student involved in each of the three tutorials that embodied scaffolding thus resulting in a total of 18 interviews for the study. The aims of interview questions were twofold asking students about both which elements of scaffolding were especially prominent during the lesson as well as asking them about classroom interaction.

Before the start of each interview, I spent time as the interviewer familiarizing the student interviewees with scaffolded instruction describing each of the characteristics on the interview schedule in order to ensure that they had a clear understanding of these elements. A sample of what I provided them appears in Appendix 3b in the form of examples provided for each term on a scale in an attempt at the clarification and operationalization of scaffolding. During all interviews, I started off with some introductory comments as a warm-

up activity and ended the interview with some closing comments to resolve any tension that may have mounted during the interview. Since the interview schedule was structured in form, I was limited as the interviewer to a scale which included a number of items to be responded to in terms of degrees of agreement or disagreement. Following each choice for response, student interviewees were given a chance to freely provide any additional comments they may have for each question. Appendix 3A presents the structured interview schedule used for the two research objectives. I also tried as the interviewer to establish more wait time between questions so that interviewees have time to reflect and respond to questions. It seems that in interviews conducted following both whole group lessons and tutorials, the students were able to give a much more detailed account in the form of additional comments following each response on characteristics of student interaction during the lesson than they were able to provide on characteristics of instruction. In that sense, the interviews with students were more valuable in providing data on interactional style of students than they were on scaffolded instruction.

In order to ensure that interviewing was effective as a research method, I more or less abided by several guidelines during data collection. First, an attempt at what Fontana and Frey (1994) refer to as balanced rapport was made whereby I attempted as the interviewer to balance between being both friendly and open on the one hand while also remaining detached enough to ensure that my personal views did not affect the interview. Overall, I managed to create an appropriate ambiance for data collection by being an attentive listener, reacting neutrally to responses without presenting opinions, remaining at ease, and providing reassurance and support for interviewees with regard to their opinions or beliefs (Walker and Adelman 1975 cited in Hopkins 1993 p.125). Also, I tried to ensure that no improvising of questions or possible answer categories was done and that there were no disruptions of the interview by outside sources.

In terms of framing the interview questions, effectiveness was maintained by including questions on the interview that were clear, unambiguous, contained only a single idea, and were neutral. As shown in Appendix 3A, each question directly asked either about the degree of presence of a scaffolding element which student interviewees had been previously familiarized with or the degree of presence of student behavioral characteristics that reflected patterns of interaction. Students were additionally given the chance to freely comment on each choice for response. To ensure further effectiveness of the interview as a research method, I avoided certain questions. These included long questions, leading questions that involve some form of supposition, double barreled questions, and questions that contain dichotomous responses because they limit the interviewee with the choices for responses.

I managed to record the interviews on paper. I was able to write down verbatim any additional responses or open comments provided by the interviewees that were not part of the scale during the interview. Data analysis involved simple tallying of results to note frequencies of elements as well as relationships between them.

#### *3.4.1.3 Justification for the choice of interview type*

In collecting data, I decided on conducting individual interviews carried out with the students over group interviews, a form of interviewing which has recently gained popularity among social scientists. Basically involving asking several students questions systematically, group interviews have the advantage of being flexible, inexpensive, stimulating for respondents, providing considerable data, and aiding in recall (Fontana and Frey 1994). However, given the research objectives of this study, several factors made the choice of individual interviews carried out with students to investigate elements of scaffolding present in instruction and student interaction a more viable alternative. The first is related to the socio-cultural context of the students involved in the study. Predominantly

of Arab origin and living in an Arab culture, students are bounded by the impositions of this culture which generally encourages females to be more quiet and demure. As such, given the choice of group interviews, female students may feel intimidated by their male peers and contribute less to the discussion. Equally important, group dynamics and hierarchies present within the sociocultural context of this particular group of students may also affect responses to interview questions (Robson 1993). Lewis (1992) notes that pupils, although generally being more at ease while speaking in a group situation, may not contribute many responses to the interview if they feel intimidated by others in the group. The choice of group over individual interviews for the research objectives at hand may have resulted in data that was more reflective of consensus beliefs with less chance for personal opinions to emerge. Since scaffolded instruction may be viewed differently by individual students, it became quite vital for personal opinions to be given voice.

Additionally, the option of individual as opposed to group interviews rested on a few practicality issues. First, individual interviews were less time-consuming because according to Lewis (1992), there is more potential for the discussion during group interviews to digress away from the main focus. The potential for digression during any discussion is particularly prominent within the socio-cultural context of this particular group of students involved in this study as previously identified in a previous pilot study. Another practicality issue rested on the fact that as a researcher, I was not faced with a dilemma faced during group interviews of deciding on the most productive way to group interviewees. Finally, in addition to being easier to manage, individual interviews were also easier to analyze since only one interviewee's responses were dealt with at a time (Cohen and Manion 1989).

All the interviews conducted were of the structured type. While structured interviews consist of a more or less predetermined set of questions with standard responses on a schedule, interviews that are less structured are more informal involving a conversation that

develops around a general area of interest held by the researcher (Cohen and Manion 1989). According to McDonough and McDonough (1997), the degrees of structured and unstructured are not mutually exclusive; with the possibility of both being part of the same interview schedule. For instance, a question that starts off as being open may lead to more structured questions later on. Hence, the semi-structured interview, which according to Nunan (1992) has become popular among researchers, is midway between the two. With the interviewer still remaining in control of the interview, semi-structured interviews allow for more flexibility in areas as reordering questions or allowing for more in depth follow up of responses.

While the different interview schedules have their merits and drawbacks, I felt that the structured interview schedule would be more effective for the research objectives involved in this study than would be another schedule. This decision was based on a pilot study I previously conducted on a group of students in a similar socio-cultural context with the purpose of comparing structured and unstructured interviews used to ask students about the presence of scaffolding in instruction and characteristics of student interactional style. The study found that the structured interview was more effective for the two research objectives of identifying elements of scaffolded instruction as well as describing classroom interaction among a sample of students who were of a similar socio-cultural context as those involved in this study. Data analysis of this pilot study found structured interviews to not only yield a larger quantity of data, but also data that was more specific in terms of quality. In terms of the participation of interviewees in the interview, while more data was provided by the interview in relation to the latter research question related to student interactional style, the structured interview was by far able to yield more participation from the interviewees. Finally, analysis of practicality issues in the study found the structured interview to be more practical as a method for investigating scaffolded instruction and classroom interaction.

### 3.4.2 OBSERVATION

#### *3.4.2.1 Merits of observation*

Defined as "the act of noting a phenomenon, often with instruments, and recording it for scientific or other purposes" (Morris 1973 qtd in Adler and Adler 1994 p.378), observation is considered perhaps the most primary and basic of all research methods. In addition, it is the most likely of all methods to be implemented with other research techniques such as interviewing (Adler and Adler 1994). Indeed, Johnson (1994 p.52) holds that observation in social research may not only be "employed as a primary method of data collection to provide an accurate description of a situation" but also "to gather supplementary data which may qualify or help interpret other sources of data."

Even as a research method in itself, observation qualified as being appropriate for the two research objectives at hand for several reasons. First, the data collected by the observer allowed me as a researcher to not only investigate behavior as it occurs but to also make use of contextual information such as nonverbal behavior to make sense of the data (Bailey 1978 cited in Cohen and Manion 1994 p.110). This was especially appropriate for this study in relation to the second research objective which investigated student interaction.

Another advantage of employing observation had to do with its directness as a method. Data collected from observations was actually used to supplement or qualify that derived from interviewing because the directness associated with observation allowed less discrepancy between what respondents stated and how they actually acted or were planning to act (Robson 1993). Additionally, in what Adler and Adler (1994) point out as noninterventionalism, another advantage of using observation was that it involved little manipulation of the participants in the research as would ordinarily be the case with

interviewing for instance. Hence, I opted for observation in the study because it had the least potential for observer effects unlike the other methods to be used. Practicality also came to play in the decision to use observation as I felt that it would be relatively easy to gain entry into the field and collect data as this simply involved having an observer observe a lesson that was already in progress (Adler and Adler *ibid*). Adler and Adler (*ibid*) also hold that observation allows for the potential of creativity as observers are able to make amendments to research questions freely and with flexibility.

#### *3.4.2.2 Data collection*

I first decided that the recording of observations would not be mechanical by means of audio or video tape. I felt that this form of recording would not be necessary since transcription of the discourse was already in place for discourse analysis. Moreover, the use of video recording may cause discomfort among students. All observations followed Hopkins' (1993) three phase observation cycle discussed in more detail in the following sections. Table 3.3 provides a general overview of those phases in relation to the research at hand.

TABLE 3.3: THE THREE PHASE OBSERVATION CYCLE.

<b>Phase 1</b>	<ul style="list-style-type: none"> <li>• pre-observation meeting with observers for planning observations</li> </ul>
<b>Phase 2</b>	<ul style="list-style-type: none"> <li>• structured observation of student interaction in whole group lessons</li> <li>• unstructured observation of student interaction in tutorials</li> <li>• unstructured observation of instruction for both tutorials and whole group lessons</li> </ul>
<b>Phase 3</b>	<ul style="list-style-type: none"> <li>• feedback debriefing session: review with observers on data collected.</li> </ul>

1. Phase 1:

The first phase involved a meeting between the observers and I to plan for the observation discussing issues of date and time of the observations, the lessons to be observed, and the observation schedule to be used. The observers were three teachers from the same school. Since all the teachers teach at the elementary and middle school divisions, students were not familiar with them thus limiting the effect of any existing relations they may have with the students in the study. According to McDonough and McDonough (1997), teachers are considered privileged observers. They have the advantage in that even if not actively participating in the observation, they would still be participants through simply being part of the educational context. In addition, being part of the pedagogical scene made teachers more effective at comprehending the research objectives of this study and being more adept at observing classrooms.

I decided that the role of the observer would be that of nonparticipant. The role taken by the observer during observation usually ranges from that of being a complete member

researcher where the observer investigates the scene they are members of; to active member researcher where the observer would be involved in the activities of participants being observed without commitment to group values; to peripheral member researcher where the observer does not participate in the activities of those participants being observed (Adler and Adler 1994). In that respect, participant observation involves the observer actually taking part in the activities that are being observed (Cohen and Manion 1994). The fact that the field of educational research is structured very subjectively makes participant observation suitable for investigating many fields in that area (Cohen and Manion *ibid*).

However, several factors made nonparticipant observation whereby the observer maintains a distance from activities being investigated, a better option for this research study. First, participant observation risks providing valid data. In terms of internal validity, the involvement of the observer in class as part of the lesson may threaten internal validity because the effect that the observer has on the group will interfere with the characteristics of student interaction to be recorded. Furthermore, the subjectivity associated with participant observation will threaten external validity because this will jeopardize results of the study applying to other situations (Cohen and Manion *ibid*). Indeed, Robson (1993) associates participant observation with more qualitative approaches that are not very structured and quite informal in terms of collecting and recording data. This was not appropriate for this study since the collection of observation data took place in a classroom setting which is relatively formal and structured would not have made such informal unstructured observation possible. Given the cultural background of my students discussed in a previous chapter, any form of participation on the part of the observer may have risked disrupting the lesson and students' understanding. Additionally, in the interests of practicality, I found nonparticipant observation a better option for this research because it is less time-consuming than participant observation which would ultimately require some training for the observer.

## 2. Phase 2:

The next phase was the actual observation process. At that stage, a decision had to be made about the degree of structure which the observation schedule would have. Structured observation, whereby the observer is not only knowledgeable about the study but has also made the decision of what to observe ahead of time, revolves around the presence, absence, or intensity of behavior to be recorded (Cohen and Manion 1989). Relatively easy to conduct and requiring little observer training, structured observations produce a descriptive factual record which is easily analyzed through simple frequency counting (McDonough and McDonough 1997). Unstructured observation, on the other hand, is more open. It involves having the observer record a lesson on a blank sheet with the aim of reconstructing the lesson (Hopkins 1993).

Both types have their advantages and disadvantages. For instance, problems of structured observation are usually associated with reliability issues, a difficulty in relating a behavior to a certain concept and the possibility of an observer's values affecting perception. On the other hand, although resulting in relatively rich data, unstructured observation risks the accuracy of that data as the openness of this type risks having certain events go unnoticed or limiting the length of an observation. Additionally, this type is not only time consuming but not very appropriate for recording behavior that is regular and predictable (Cohen and Manion 1989). Hopkins (1993) adds that hasty judgments could result from this approach because it is not very focused.

Given the relative strengths and weaknesses of both approaches, I made the decision of which type to use based on a pilot study I conducted on students from a similar socio-cultural context. The purpose of the pilot study was to compare structured and unstructured

observation schedules for identifying elements of scaffolded instruction as well as noting accompanying characteristics of student interaction. The study found that for the research question pertaining to identifying elements of scaffolding in a lesson, unstructured observation schedule was more effective in terms of yielding data than was the case with the structured observation schedule. Not only was the unstructured interview able to provide additional data that resulted in a more inclusive all-encompassing view of instruction, but the observer in the case of the unstructured observation was not limited by the time factor inherent in the scanning that is part of structured observation. Finally, it was found that the unstructured observation schedule was more effective in yielding data that more useful than that yielded by the structured schedule. This was due in part to the fact that for that particular research question, as a researcher, I was in a more strategic position to decide on the coding of instructional strategies, as was the case with unstructured observation. The observer in the structured observation schedule found the task to be a little overwhelming and quite ambiguous.

On the other hand, it was found for the research question pertaining to characteristics of student interaction during scaffolded instruction, that the structured observation schedule was more effective than the unstructured observation schedule in terms of revealing the most data for the whole group lessons. More specifically, structured observation yielded data that was more detailed, descriptive, and useful than that obtained through unstructured observation. Furthermore, structured observation indicated patterns and relations among data and was overall more practical to implement for the research question at hand. Since there was only one student involved in each tutorial, structured observation whereby the observer would tally behavior was not as useful in the case of tutorials as it was for whole group lessons. Hence, unstructured observation for student behavior was used in the case of the three tutorials.

During this second stage of the observation cycle the presence of two observers simultaneously recording data was needed for each of the observations conducted. One observer used an unstructured observation schedule to record data on identifying elements of scaffolding in the lesson. A variation of open observation was used for this purpose. Presented by Hopkins (1993), this involved the observer recording events that fit under general categories rather than attempting to record the whole lesson as is usually done in unstructured observations. A sample of this schedule appears in Appendix 4A1. The use of such a schedule meant that I would be involved as the researcher in making the decision of coding such recorded characteristics in relation to scaffolded instruction. For that purpose, I relied on the coding presented in Appendix 4A2 which includes examples of instructional characteristics that would fit under each code.

The second observer, on the other hand, in the case of the whole group lessons used a structured observation schedule to record characteristics of student behavior during the same lesson. The observer was provided with an observation scale that specified categories of behavior to be observed, examples of what would be considered an act of behavior, and the codes used to classify behavior. A sample of this scale appears in Appendix 4B. Prior to the observation of student behavior, I conducted a meeting with the observer to clarify the scale to be used for the structured observation and answer any questions which arose. The observer was also equipped with a diagram of the classroom used to record data for each student. In the case of the three tutorials, this second observer was also familiarized in a similar meeting which included a briefing on some of the characteristics to be observed. However, the observer was to make use of unstructured observation schedule. Hence a total of 12 observations were conducted for the six lessons comprised of three whole group lessons and three tutorials.

### 3. Phase 3:

Following Robson (1993) the attempt was made to review data collected within 24 hours of the observation. This was done as a check to insure data was complete and correct. The final phase of the observation cycle was in the form of a feedback session which involved my meeting the observers to review data collected. This involved what Lincoln and Guba (cited in Davis 1995 p.437) refer to as member checking or the referral of data back to the original source for verification and correction. This also involved peer debriefing whereby a discussion was done on the data collected and other concerns of the study.

Overall, in order to ensure for the increased effectiveness of observation as a research method in this study, I made an attempt to make sure that all observations abided by five criteria identified by Hopkins (1993) as being characteristics of effective observation. First, there was joint planning where I met with the observer in order to establish familiarity, discuss the two objectives of the observation and plan for details related to the observation such as ground rules and the time and place of the observation. The foci of the observation were as specific as possible pertaining to a specific classroom activity or a certain instructional strategy used in class. This eliminated the danger of the observer being subjective in interpreting the observation had the focus been broad. Joint planning also involved generating and negotiating criteria for the observation necessary for later on evaluating the observation in terms of pre-established standards.

For Hopkins (ibid), feedback in general has to be provided within 24 hours of the observation in order to minimize the effect of time factors. From there, the interpretation of data would be based on the agreed upon criteria. It is more effective for the primary interpretation to come from the teacher to be followed by a discussion with the observer leading to generating methods of expanding on the findings. Finally, Hopkins (ibid) outlines certain observation skills that help insure effectiveness. These include technical skills

required for the design of observation schedules. In addition, the observer has to have interpersonal skills necessary for creating a non-threatening environment for the teacher and pupils being observed while avoiding any tendencies on the part of the observer to make hasty judgments.

Along a similar note, Robson (1993) provides some observational biases to be avoided. These were taken into account for the following study in order to insure added effectiveness. The first bias avoided relates to selective attention whereby the focus of the observer may interfere with efforts to evenly distribute attention during an observation. Selective encoding is another bias that was avoided. It involves having observer factors affect the encoding and interpretation of data. In addition, selective memory may affect the narrative account of field notes if the writing is not done immediately following observation. Robson (ibid), in an attempt to minimize observer effect, recommends minimal interaction with those being observed to the extent that even eye contact is avoided. Also, habituation, whereby the group being observed gets used to the presence of the observer may also help. As much as possible all these guidelines of effective interviewing were taken into account in this study.

#### *3.4.2.3 Problems encountered*

During data collection and analysis, there were slight problems encountered in terms of the data provided during whole group lessons from the structured observation of student interactional style. This data was obtained in relation to this focus proved to be quite redundant because it mainly coincided with that obtained from the interviews with students. Besides this issue of redundancy, it seems that for the research objective relating to student interaction, the other two research methods namely discourse analysis and interviews provided more detailed explicit data. For instance, in terms of the amount of student participation during the whole group lessons, it seems that the analysis of spoken discourse

provided data that was more accurate through a frequency count of the number of turns made by each student during the lesson. All in all, perhaps the only area where the structured observation of student interaction during the whole group lessons proved useful was in revealing the relative progression of student behavior by delineating when student behavioral characteristics such as off-task behavior and asking questions appeared in the sequence of student behavior during the lesson.

### 3.4.3 ORAL DISCOURSE ANALYSIS OF LESSON TRANSCRIPTS

#### *3.4.3.1 Data Collection*

A discussion of oral discourse analysis was made in the previous chapter with a particular focus on the justification for using discourse analysis in general and the choice of the Burton (1981) discourse model in particular. This section focuses on the collection of the spoken discourse data.

Data collection involved audio recording of the six activities, three whole group lessons and three tutorials, which made use of scaffolded instruction. Audio equipment was opted for because it seemed to be less imposing on the classroom setting than would be techniques such as video recording. With that, transcription of those lessons was made following which the analysis of data took place. A theory based approach was used in relation to the implementation of this scheme. Such an approach entailed that the lesson be viewed as a whole with moves coded first followed by the individual speech acts. I felt that this would be more effective than a data driven approach because the discourse to be analyzed was

already confined to the boundaries of a lesson in class on a certain topic involving interaction among the students and myself as a teacher. Given these boundaries, it henceforth became easier to code the moves than code the speech acts. All data rather than just selected passages was coded. Although more time-consuming, this helped rule out the possibility of any bias.

#### 3.4.3.2 *Transcription conventions*

The scheme used for coding the discourse in all six lessons abides by Burton's (1981) model. I first started by coding the individual speech acts according to the labels provided in the Burton (1981) model. I then marked in transaction boundaries which coincide with the overall purpose of the discourse. These boundaries were mainly used to mark the progression of scaffolding elements in the discourse. This was followed by marking in exchange boundaries which coincide with a change of topic although in this case, due to the context of the lesson, they abided more with a change of sub-topic than topic per say. These boundaries helped with the last level of analysis which involved marking in moves.

Coinciding with speech turns, seven different move types were identified. *Framing* and *focusing moves* were mostly used to mark exchange boundaries. *Opening moves* were marked at the beginning of an exchange consisting of an *informative*, *elicit*, or *directive*. Moves that supported the previous moves set up initially were labeled as *supporting moves* while moves that obstructed the progress of a topic were labeled as *challenging moves*. Finally, moves labeled as *bound opening* were those that re-introduced a topic after a *supporting move*. Likewise, those moves which reintroduced a topic after a *challenging move* were labeled as *re-opening moves*.

Notes on the scheme used for coding the discourse for each of the six lessons are provided in Appendix 5. The numbers in the left hand column identify speech turns with speakers identified by their initials. The third column from the left represents the speech moves, and

the fourth column identifies speech acts. Each turn consists of one or more speech acts. In cases where there are two or more speech acts in a turn, each act is separated by a slash (/). Each speech act appears on a new line, and unless a line ends with a slash, the next line is part of the same speech act. A sequence of three dots (...) in a turn indicates an incomplete utterance. A dotted line between turns is used to mark exchange boundaries while a solid bold line is used to mark transaction boundaries.

#### *3.4.3.3 Problems encountered*

The analysis of discourse I attempted through this research study quickly brought to my attention a potential problem which may be encountered. This is related to the fact that the coding of the discourse would have to be done by more than one individual for comparison. Additionally, one of those individuals would have to be the teacher or anyone else playing a major participatory role in the discourse. This is because spoken discourse is so rich in terms of context relying much on contextual clues so that unless the person coding actually participated in the interaction, coding would be quite problematic and difficult. This especially helps eliminate or lessen practical difficulties associated with audio-taping which, in comparison to video recording, provides little record of nonverbal language and an accurate identification of a speaker.

Another practical difficulty encountered through the analysis of discourse was related to the identification of exchange boundaries. This involved some negotiation between myself and another colleague who acted as the second coder until agreement was reached. Such negotiation also extended to the coding of the individual speech acts. At times it seemed that more than one label could fit a speech act. In such cases, a more detailed look at the context of the act by examining the preceding and following speech acts was taken into consideration when a particular code was being decided upon.

The next two chapters outline the findings derived from the research. Chapter four discusses the findings obtained from whole group lessons while Chapter five discusses findings from tutorials.

## **Chapter four: Findings from whole group lessons**

### **4.1 INTRODUCTION**

This chapter focuses on the findings obtained from large group teacher-led lessons. It is useful to note here that the focus of data collected from whole group lessons was more on how the actual scaffolding process was being implemented in each lesson and what interactional style was exhibited by students as a result, than it was on the extent to which students had achieved competence in completing a task.

As discussed in Chapter three, for all three whole group lessons, I attempted through instruction to implement scaffolding elements outlined in the previous chapter. In the absence of an explicitly stated guideline for how such elements progress in lessons, the attempt at incorporating the various elements of scaffolding to my instruction was based on my categorization of the elements in the literature discussed earlier. As a result of this, I felt a need to ascertain and verify the presence of scaffolding. The first focus of this research was thus related to considering the extent to which instruction in the context of my own teaching situation contains elements of scaffolding. I start by identifying the most prominent characteristics in the instruction of the three lessons. I then consider how each characteristic may be considered an element of scaffolding by examining how those elements in the lesson fit with the literature on scaffolding. From there, I turn to the second focus of the research which is related to describing the type of interaction which each scaffolding element created. These findings from whole group lessons will pave the way for a similar analysis to be done for tutorials in Chapter 5. Findings from both chapters will

then be used in Chapter 6 to compare the two instructional activities of whole group lessons and tutorials in terms of elements of scaffolding and the interactional style which ensued.

I found four major elements related to the literature on scaffolding elements, which I categorized in the previous chapter, to be the most prominent being present to a considerable extent in all three lessons. Each of these elements will be referred to later on in this chapter. In the discussion of findings, I have chosen to present the transcript of only one whole group lesson which I labeled as lesson A, since I found it to be the most illuminating of all three lessons. I found this to be useful since it allows for a richer more contextualized description of the development of the lesson whereby longer excerpts of discourse may be used to provide a clearer illustration of the scaffolding and the interaction taking place in the lesson. I present the complete transcript coded according to the Burton (1981) model of spoken discourse here. It is part of a 20 minute lesson, to be discussed more fully later on in the chapter, where I prepare students for the task of writing comparison and contrast essays following which they were supposed to engage in the actual writing process. Throughout this chapter, excerpts will be extracted from this transcript to discuss findings. The notes on the coding scheme for this transcript appear in Appendix 5.

Transcript A : Mini-lesson A (Jan.16, 2001)

Teacher: T

Students: HY, TA, MU, SM, SK, N, R, S, M, B, SS, MO, HL, D

---

**I. INTRODUCTION**

---

1. T FO ms I'm going to start with a question./  
O s My question is/  
el when was the last time you were asked were you had to find similarities and differences between two things?
2. S C rep Where?
3. T S i Anywhere.
4. HL S rep Last year
5. T S acct Last year/  
p What was ....?
6. HL S rep In English for my project./  
i I had to compare two cartoons.
7. T BO el To find similarities or differences?
8. HL S rep Yeah both.
- D S rep I had to find similarities and differences.
10. T C i In?
11. D S rep Psychology.
12. T S acct OK./  
C i I can't hear you (D mumbles something which can't be heard).
13. D S rep Two psychologists.
14. T S ack OK./  
m Now/  
BO s when you compared two psychologists/  
el did you find similarities or differences?
15. D S rep I found them both.
16. T S acct Both, OK.
17. S S rep I had to compare two cars.
18. T S acct OK.
19. S S i To see which one I wanted to buy.

20. T S ack OK./  
BO el What do you call it when you compare two things?
21. S C rep I don't understand.
22. T RO p What do you call it when you find similarities?
23. ALL S rep Comparison.
24. T S acct Comparison./  
p and when you find differences?
25. ALL S rep (mumbling; not clear.)
26. T C p What was that again?
27. S S rep Contrast.
28. T S acct Contrast.?

---

## II. PROBLEM

---

- O m Now./  
s these are two things we do every day whether we realize it or not./  
el but when it comes to writing, if you were asked to make a  
comparison or a contrast between two subjects, two  
comics or two people, what's going to happen?
29. SS S rep You find similarities and differences.
30. T S acct OK./  
p but what if you take any topic; take the topic you had last  
year which was comparing....
31. HL S rep Two cartoons.
32. T S acct Two cartoons./  
m OK./  
BO el if you had to find similarities and differences between  
those two, what was the point of your essay?
33. HL S rep Which one is more true or false.
34. T S acct OK./  
el What about your two cars?/  
p If you were writing an essay about that, would you start it  
with one's red and one's black?
35. S S rep Negative and positive points.
36. T S acct OK./  
C p but what's the point of it?
37. ALL S rep To see which one's better.
38. T S acct To see which is better./  
m OK/  
p so what would you be getting at?

39. SM S rep Decision to see which is better.

40. T S acct Decision as to which is better./

---

### III. SOLUTION

---

O m Now/  
s one reason why we compare and contrast in writing is to  
el choose one thing that's better./  
Why else would you do it?

41. N S rep To make (unclear).

42. T C p Make friends?

43. N S rep Make a choice.

44. T S acct Make a choice./  
m OK/  
con choose one over the other/  
BO el or why else would you do it?/  
p Think about it: if you're showing that two things are  
similar, why would that be important?/  
p Why would that be something you'd want to do?

45. S S rep To see which is better.

46. T S acct To see which is better.

47. SM S rep To see in what way they are different.

48. T S acct Yeah./  
s Two things that everybody thinks are similar, you've got  
to show are different./

---

O el What else could we do then?/  
p You either find which is better or....?

49. SS S rep Differences.

50. T C p Which what? In what case... you are proving that they're different.

51. SS S rep What are the bad points.

52. T S m Well/  
i that's related to the first point./  
ms I'll put this down./  
s You can have one of three purposes. One would be which is better./  
m OK/  
el 2 would be what?

53. S S rep Worse.

54. T S I Same thing, which is better and worse./  
p What else?

55. S S rep You're making a choice.

56. T S I Same thing./  
com You're making a choice; deciding which is better or worse./  
p What else can you do?  
sum Sara/  
p you said it a minute ago.
57. SM C rep Me?
58. T S acct Yes.
59. SM S rep Um, find the differences; in what way they are different.
60. T S acct OK./  
p You can find the differences but....
61. S S rep They're similar
62. T S acct They're the same./  
con So, if you have two things that are similar you try to show  
el that they're different./  
Take two twins for instance.
63. SM S rep They're the same.
64. T S acct OK. They're the same./  
C p But...
65. S S rep There are some ways that they're alike but they're also different
66. T S acct They're also different./  
BO el Obviously, what would #3 be?/  
p If #2 is we are choosing two things that are similar and  
we are trying to find differences, what would #3 be?/
67. ALL S rep Similar.
68. T C p Two things that are different....
69. HL S rep Find out how they are similar.
70. T S el Can you give me an example?
71. S S rep Cars.
72. T C i No./  
p Give me an example of two topics that you might have in  
writing that everybody thinks are different and you prove  
are similar.
73. D S rep Fragments and run-ons.
74. T S acct Fragments and run-ons. OK./  
con Everybody thinks they're different problems and you try  
to prove that they're similar./  
m So/  
el What are we getting at here?
75. HL S rep You have to have a point.
76. T S acct You have to have a point to prove./

el So comparison and contrast in itself is what?  
 i If we're just comparing and contrasting, it's pointless so  
 we would have to do something./  
 com Either make a choice or else prove that 2 things thought  
 similar are different or 2 things thought different are  
 similar./  
 FO con Otherwise, you are going to run into a problem and the  
 reader wouldn't know./  
 el Do you see the point of what I'm saying/?

77. S S rep Yeah.

78. T O m Now/  
 el Where would that purpose come in your essay?

79. HL S rep Where you are describing.

80. B S rep In the introduction.

81. T S acct OK/  
 el Where in the introduction?

82. B S rep In the thesis.

83. T S acct OK/  
 i You would have one clear cut purpose./

---

#### IV. PRESENTATION OF TEACHER RULES

---

FO m Now/  
 ms Let me put this up/  
 O i which is a review of what we said./  
 d You don't have to copy it all down; copy only what is relevant./  
 i The first part talks a little bit....

84. SS C el Do we copy this down?

85. T S rep No./  
 d copy down only what is relevant./  
 ms Lets go over it./  
 d Can somebody read the first part?

86. HL S rea (reads)

87. T S ms Lets stop here./  
 con This kind of gives you a review of what comparison and contrast are.  
 el What's the challenge?

88. H S rea (continues reading).

89. T S i We talked about how to avoid this./  
 ms I have the three ways for that written down here./  
 i This will become part of the thesis statement in your essay.

90. SM C el Do we write this?

91. T S rep Take notes on whatever you feel is important./

el Any questions on this?

.....

O m Now  
s When I ask you to choose a topic and the thesis statement  
that comes along with it, you have to demonstrate one of  
these three purposes.  
el Otherwise, what will happen?/  
p If you simply compare and contrast....

92. N S rep It would be too long./  
i There are many things.

93. T S ack It would be pointless./  
el Right?

94. N S rep Yeah.

Each of the following sections is concerned with an element of scaffolded instruction. I start each section by using Burton's (1981) model of spoken discourse to both identify prominent aspects of instruction and describe how they fit with the literature on scaffolding, thus attempting to use the Burton model to show how the scaffolded elements may be realized linguistically. The analysis of discourse according to Burton's (1981) model is also used to describe the interaction created by each aspect of instruction. For the two purposes of both identifying elements of scaffolding as well as describing the student interaction created, discourse analysis is done both at the level of moves and speech acts. Later on in the section, I draw on the observations of the lessons and the interviews with students to back up findings. 4.2 identifies how task simplification as present in the lessons may be considered an element of scaffolding. I will argue that the presence of task simplification actually works towards facilitating student interaction. 4.3 discusses how the presence of recruiting interest in the lessons fits with the literature on scaffolding. I will demonstrate that this element results in relatively focused interaction with an elaboration of expression and less off-task behavior. 4.4 is devoted to how the exploratory style of instruction during all

three lessons made them relatively scaffolded in nature. I will argue that such exploration created classroom interaction that is relatively dialogic in nature with students demonstrating communicative skills while I retain the leadership role as the teacher. 4.5 demonstrates how the feedback I gave as a teacher in all three lessons fits with the literature on scaffolding. I will prove that such scaffolded feedback allows students to become participants in classroom interaction, creates some intrinsic motivation for them to take part in the interaction, and allows them to achieve the teacher's perspective of the lesson. Finally, 4.6 concludes the chapter by summarizing the main points in the form of a matrix.

## **4.2 TASK SIMPLIFICATION**

### **4.2.1 TASK SIMPLIFICATION: DISCOURSE ANALYSIS**

#### *4.2.1.1 Task simplification: patterns of moves*

One of the most prominent elements of instruction found to be present in all three lessons relates to simplifying the lesson by reducing it into sub-parts. Prior to discussing how the lesson was simplified, it is necessary to note that such an attempt at simplifying the lesson by breaking it up into sub-parts fits in with the literature on scaffolding as presented by Wood et al (1976). In their study of assisted scaffolded performance during the tutorial process, Wood et al. (1976) delineate six specific actions of the tutor which serve a scaffolding function, one of which is referred to as reduction in degrees of freedom. Stated simply, this function involves reducing a task into a number of different acts necessary to reach a solution.

The analysis of discourse for all three writing lessons revealed that this element of scaffolding was found to occur in all three whole group lessons. More specifically, it was found to permeate the whole lesson being present throughout as each lesson could actually be broken down into four sub-parts or transactions. According to Burton's (1981) model of spoken discourse, a transaction, consisting of several exchanges or topics, relates to the overall purpose of the discourse. Marking in the transaction boundaries for lesson A, for instance, clearly reveals how this element is present throughout the lesson as shown through the division of that lesson into four transactions which have been separated by double bold lines on the actual transcript. A more in depth description of each of these four transactions including the speech turns contained in each on the transcript follows:

- I. *Introduction* (turns 1-28). This involved focusing the students in on the lesson by identifying the definition of comparison and contrast as well as how the two processes differ.
- II. *Problem* (turns 29-40). From there, the relation to writing essays was made by having students recognize the 'so-what' problem associated with not having an explicit purpose when writing comparison and contrast essays.
- III. *Solution* (turns 41-83). Ways of avoiding the problem were then discussed in terms of making part of the thesis statement one of various purposes which may be used to convert a list of comparisons and contrasts into an essay.
- IV. *Presentation of teacher rules* (turns 84-94). After the three purposes were realized as being part of the thesis statement, they were then checked against rules presented to students by means of an overhead projector, which included a summary of the lesson in terms of the three purposes inherent in the thesis statement of comparison and contrast essays.

The analysis of spoken discourse at the level of moves acted to verify the reduction of the lesson into sub-parts thus revealing some attempt at simplifying the lesson. This was revealed mainly through *focusing moves*. Identified by Burton (1981) as pre-topic items for getting attention, the presence of *focusing moves* indicates the sub-division of a lesson into sub-parts because the main function of this move type is to reinforce the various sub-divisions within the lesson. For instance, in lesson A, I use a *focusing move* at (76) to indicate to students that the task of coming up with a solution for the writing problem is now complete. At (83), I once again rely on a *focusing move* to show students that a new sub-task is in place whereby they would be checking rules they have generated against ones I have prepared.

In one of the three whole group lessons, *focusing moves* actually came to represent an average of around 8% of all seven move types in the discourse. However, as can be seen in Table 4.1 below which shows the frequency distribution of moves in lesson A, *focusing moves* were not as frequent in lesson A.

TABLE 4.1: OVERALL FREQUENCY DISTRIBUTION OF MOVES IN LESSON A

	TOTAL NUMBER	PERCENT OF TOTAL
FRAMING MOVES		
FOCUSING MOVES	3	3%
OPENING MOVES	7	6%
BOUND-OPENING	6	5%
RE-OPENING	1	0.9%
SUPPORTING	78	72%
CHALLENGING	14	13%
TOTAL	109	

From a critical stance, this may be interpreted as a lapse in terms of the application of scaffolding in lesson A. It carries that lesson A could perhaps have involved more scaffolding by including more *focusing moves* on my part in an effort to simplify instruction as an element of scaffolding as was the case with the other lessons.

It seems that task simplification created an interactional style which, at the level of moves, resulted in a relatively low occurrence of *challenging moves* on the part of students whereby they verbally express a problem in understanding or following the lesson. In all three lessons, the number of *challenging moves* made by students did not exceed 5 from an average total of around 50 student moves per lesson. Since *challenging moves*, according to Burton (1981) represent interruptions whereby the speaker asks for clarification or repetition, these patterns indicate that the students faced little difficulties in following the progress of the lesson. In lesson A, for example, there were only five instances of challenging moves made by students (2; 21; 57; 84; 90). For instance, at (2) on the original transcript shown at

the beginning of this chapter, student (S) replies to the question posed at the start of the lesson about instances when they were asked to engage in comparison and contrast with a *challenging move* that seeks to pinpoint where those instances occurred. Similarly, at (21) on the original transcript, student (S) interrupts the discourse with a *challenging move* which overtly signals a lack of understanding. It thus seems that reducing the lesson into sub-tasks in a way facilitated interaction during the lesson by reducing the number of challenging moves which express a difficulty in understanding and thus work to impede the progress of the discourse in the lesson.

#### 4.2.1.2 Task simplification: speech acts

The analysis of discourse at the level of speech acts also revealed a certain attempt at simplifying the task on my part and the ensuing effect this had on the facilitation of student interaction. This is clearly shown through Excerpt 1 below which is taken from the last transaction of lesson A where the attempt is made to check the rules generated about writing comparison and contrast essays with those prepared by me on the overhead projector.

#### Excerpt 1:

- |        |    |     |  |
|--------|----|-----|--|
| 83. T  | FO | m   | Now/   |
|        |    | ms  | Let me put this up/  |
|        | O  | i   | which is a review of what we said./                                  |
|        |    | d   | You don't have to copy it all down; copy only what is relevant./     |
|        |    | i   | The first part talks a little bit...                                 |
| 84. SS | C  | el  | Do we copy this down?  |
| 85. T  | S  | rep | No./   |
|        |    | d   | copy down only what is relevant./                                    |
|        |    | ms  | Lets go over it./  |
|        |    | d   | Can somebody read the first part?                                    |
| 86. HL | S  | rea | (reads)  |
| 87. T  | S  | ms  | Lets stop here./   |
|        |    | con | This kind of gives you a review of what comparison and contrast are. |
|        |    | el  | What's the challenge?  |
| 88. H  | S  | rea | (continues reading).   |
| 89. T  | S  | i   | We talked about how to avoid this./                                  |

		ms i	I have the three ways for that written down here./ This will become part of the thesis statement in your essay.
90.SM	C	el	Do we write this?
91.T	S	rep el	Take notes on whatever you feel is important./ Any questions on this?
.....			
	O	m s el p	Now When I ask you to choose a topic and the thesis statement that comes along with it, you have to demonstrate one of these three purposes./ Otherwise, what will happen?/ If you simply compare and contrast....
92.N	S	rep i	It would be too long./ There are many things.
93.T	S	ack el	It would be pointless./ Right?
94.N	S	rep	Yeah.

In this excerpt, it seems that even though the lesson was at its concluding stage whereby the writing rules generated by students were being checked against my summary of the whole lesson presented on the overhead projector, there was nevertheless still an attempt on my part to simplify the task. More specifically, I seemed to rely on *s* at (83; 85; 87; 89) to prospectively indicate to students the next task that was to follow. According to Burton (1981), *s* mainly function to clarify the structure of the discourse to follow. They thus act to accentuate the division of the lesson into sub-parts. This attempt at task simplification was further reinforced by the *conclusion* at (87) whose main function according to Burton (1981) is to clarify the structure of the preceding discourse. As such, it served the scaffolding function of task simplification by reinforcing the division of a preceding sub-topic. Finally, the *marker* was another speech act whose use revealed an attempt at task simplification in the above excerpt. Burton (1981) identifies the function of the marker as marking divisions in the discourse and indicating when a speaker has a

topic to introduce. In this particular excerpt, 'now' was used twice as a *marker*. At (83), it was used to indicate to students that the rules generated were now to be checked against those already summarized by the teacher; while at (91), 'now' was used to signal the start of new exchange where the students were asked to choose a thesis statement for a comparison and contrast essay that embodies one of the three purposes summarized in the lesson. As a matter of fact, *markers* in all three lessons came to formulate an average of 3.5 % of all the total speech acts being mainly used to reinforce the divisions between the various parts of a lesson thus simplifying the task for students.

The above excerpt which clearly indicates an attempt at task simplification seems to indicate that, my use of a *conclusion*, *s*, and *markers* as speech acts which emphasize boundaries between sub-acts in an attempt to simplify the lesson into sub-parts, helped in facilitating student interaction making the discourse easier for students to follow as was the case at the level of moves. This facilitation of interaction is shown through *elicits*, speech acts which according to Burton (1981) are realized by a question. The *elicits* made by students in the above excerpt are of a relatively simple type requesting clarification that is not so substantial as to indicate complete misunderstanding or major problems in comprehending the lesson. In fact, students at (84; 90) simply ask whether they need to copy down the notes presented to them on the overhead. The fact that these student *elicits* are taken from the end of the lesson is indicative of relative comprehension of what had taken place in the lesson.

From a critical stance, it may be held that scaffolding could have been applied more effectively had there been the inclusion of more than one *conclusion* as a speech acts on my part as teacher in the above excerpt. This may have further facilitated student interaction since according to Rogoff and Gardner (1984), *conclusions* serve the scaffolding function of

making an explanation redundant so that if a learner does not understand one form of it, other forms are available.

#### 4.2.2 TASK SIMPLIFICATION: OBSERVATION AND INTERVIEWS

Data obtained from the observations of the three lessons generally confirms the presence of task simplification during instruction and the ensuing student interactional style characterized by a facilitation of interaction with less interruptions whereby students verbalize difficulties in understanding. One observer noted the following in relation to one lesson:

(1) You reduced the task of the lesson into sub-tasks. This was seen the most in normative checks which were used continuously before moving on to new objectives. These checks helped create boundaries between the different objectives. At the end when you asked, "Any questions on this?", there were none.

The data obtained from the interviews with students confirmed these findings. For one thing, there seemed to be a general consensus that the lesson was simplified to steps. Also, when I asked students about their perspective of whether there seemed to be a need to ask questions for understanding the lesson, only two of the 15 students interviewed indicated that the number of student questions in the form of seeking help did not change. The rest indicated that there was a decrease in the number of questions for clarification. Only one student indicated an increase in requests for help done on the part of students. Some additional comments in relation to task simplification as a scaffolding element and the type of student interaction created follow.

1. It was really simple. There were steps that were explained and that was what made it easier.
2. The task was very clear and easier to understand.
3. It was clear and simple. You gave us directions so it was easy to understand.

### **4.3 RECRUITING INTEREST**

#### **4.3.1 RECRUITING INTEREST: DISCOURSE ANALYSIS**

##### *4.3.1.1 Recruiting interest: patterns of moves*

Another aspect of instruction found to be present to a considerable extent in all three lessons relates to the recruitment of student interest in the lessons. Before discussing how this aspect occurred in the lessons, it needs to be noted that the presence of such an attempt at recruiting interest in the three lessons may actually be considered an element of scaffolding since it formulates one of six scaffolding functions identified by Wood et al (1976) as being present in an interactive tutorial process which makes use of scaffolded guidance and assisted performance. For Wood et al (1976), recruitment is initially a process of task induction involving eliciting interest in a task so that the novice would be more likely to become interested in taking part as well as the control of frustration and stress during the actual process of task completion.

The analysis of discourse at the level of moves in all three lessons revealed the recruitment of interest to be present throughout all three lessons. As will be shown in the following section, this element, though present throughout, seemed to be the most prominent at the start of each lesson specifically in the first transaction which involved an introduction to the lesson. It thus follows that in addition to introducing the lesson by explaining the key

terms, one of the subliminal objectives inherent in the first transaction of all three lessons was for the most part related to interesting students in the lesson to follow. In that sense, task simplification seems to have acted as a scaffolding element which, by dividing each lesson into four sub-parts or transactions, helped in pinpointing where another element of scaffolding, the recruitment of interest, was to cluster the most.

Given the apparent clustering of interest recruitment in the lessons, I decided to make use of excerpts taken from the start of lesson A to demonstrate the attempt to keep students interested in the lesson and describe student interaction at the level of moves and speech acts. Excerpt 2 below is taken from the first transaction of lesson A where an attempt was being made to introduce comparison and contrast essays to students by having them understand the difference between the two processes.

*Excerpt 2:*

- |       |         |               |  |
|-------|---------|---------------|--|
| 1. T  | FO<br>O | ms<br>s<br>el | I'm going to start with a question./<br>My question is/<br>when was the last time you were asked were you had to find similarities and differences between two things? |
| 2. S  | C       | rep           | Where?   |
| 3. T  | S       | i             | Anywhere.  |
| 4. HL | S       | rep           | Last year  |
| 5. T  | S       | acct<br>p     | Last year/<br>What was ....?   |
| 6. HL | S       | rep<br>i      | In English for my project./<br>I had to compare two cartoons.  |
| 7. T  | BO      | el            | To find similarities or differences?   |
| 8. HL | S       | rep           | Yeah both.   |
| 9. D  | S       | rep           | I had to find similarities and differences.  |
| 10. T | C       | i             | In?  |
| 11. D | S       | rep           | Psychology.  |

12.	T	S	acct	OK./
		C	i	I can't hear you (D mumbles something which can't be heard).
13.	D	S	rep	Two psychologists.
14.	T	S	ack	OK./
			m	Now/
		BO	s	when you compared two psychologists/
			el	did you find similarities or differences?
15.	D	S	rep	I found them both.
16.	T	S	acct	Both, OK.
17.	S	S	rep	I had to compare two cars.
18.	T	S	acct	OK.
19.	S	S	i	To see which one I wanted to buy.
20.	T	S	ack	OK./
		BO	el	What do you call it when you compare two things?

In this excerpt, I attempted to introduce the lesson by starting with a question at (1) about examples where students had to find similarities and differences between two things. The question was meant to spark interest by eliciting from students past experiences in order to understand the definition of comparison and contrast. Since such an open question may lead to digression away from the topic, it seems that I relied on *bound-opening moves* to maintain interest in the topic at hand. Identified by Burton (1981) as moves that reintroduce a topic after a supporting move, bound-opening moves demonstrate the teacher's attempt to keep pupils on task by persisting with the initial topic of an exchange. *Bound-opening moves* on my part as teacher seem to also cluster in the first transaction of the other whole group lessons as well, where I also start the introduction of each lesson with an open question. Hence, I attempted in this excerpt at (7; 14; 20), to associate the examples elicited from students with comparison and contrast, the initial topic to be defined in that transaction.

The attempt to recruit interest in the task continued during the remainder of the first transaction in Lesson A. This can be seen through Excerpt 3 below.

*Excerpt 3:*

21. S C rep I don't understand.
23. T RO p What do you call it when you find similarities?
- 23.ALL S rep Comparison.
24. T S acct Comparison/  
p and when you find differences?
- 25.ALL S rep (mumbling; not clear.)
27. T C p What was that again?
28. S S rep Contrast.
29. T S acct Contrast. ?

In this excerpt, I also made an association with the original topic of the lesson in a *re-opening move* at (22) in response to a *challenging move* made by student (S). According to Burton (1981), *re-opening moves* also represent an attempt to reintroduce the topic but after a *challenging move*. The presence of this *re-opening move* in the first transaction of the lesson thus represents my attempt to reinstate the initial topic of the transaction after it had been challenged by a student. From a critical stance, in my attempt to implement scaffolding, I could have made more *re-opening moves* in the first transaction of lesson A to further recruit interest at the start of the lesson.

This attempt on my part to recruit interest by keeping pupils on task in all three whole group lessons created an interactional style which, at the level of moves, seemed to be relatively focused in nature and less likely to digress into alternative topics of discourse. In Excerpt 3 for instance, two turns (23; 25) from a total of 14 student turns in that first transaction were taken unanimously by students when they all responded together. Such a unanimous provision of one reply indicates a certain level of affiliation and solidarity among

students. Indeed, Eggins and Slade (1997) classify this as a social function in which social identities and interpersonal relationships are enacted.

Additionally, 12 of the 14 student-made moves in Excerpts 2 and 3 were *supporting moves* which according to Burton (1981) help facilitate interaction keeping it focused on the topic of discourse. This is clearly displayed in Table 4.2 below which shows the frequency distribution of moves in the first transaction for both students and myself as teacher in lesson A.

A. THE BIRTH OF CONTACT MATHS

TABLE 4.2\*: FREQUENCY DISTRIBUTION OF MOVES IN THE FIRST TRANSACTION FOR STUDENTS AND TEACHER IN LESSON A.

TRANSACTION 1

	S	T
FR		
FO		1
O		1
BO		3
RO		1
S	12	9
C	2	3
TOTAL	14	18

\*key:

S=students                      FR=framing moves      O=opening moves      BO=bound-opening moves  
T=teacher                      RO=re-opening moves    S=supporting moves    C=challenging moves  
FO=focusing moves

---

As seen in Table 4.2 above, students still made *challenging moves*. However, a closer examination of each of the two *challenging moves* made by students in Excerpts 2 and 3 reveals that they do not so much represent a digression away from the topic of discourse as

much as they reflect a need for clarifying information directly related to the discussion at hand. In Excerpt 2, for instance, the *challenging move* made by student (S) at (2) is in the form of a relevant question meant to make more specific the general question I start the lesson with. When (S) at (21) makes another *challenging move* in Excerpt 3, he verbalizes a lack of understanding being unable to answer my question. The *re-opening move* I made at (22) by rewording the initial question quickly brings him back on task so that by turn (27), he utters the correct answer.

In the two other whole group lessons, there appeared to be several instances of students themselves making *re-opening moves* during the first transaction of those two lessons. Since according to Burton (1981) *re-opening moves* represent an attempt to reinstate the topic after it has been challenged, this acts to further verify the fact that the interaction of students was quite focused in nature with every attempt made to keep it focused within the bounds of the lesson. From a critical stance, it follows that the attempt at recruiting interest didn't work very effectively in the first transaction of Lesson A since student interaction could have been more focused had *re-opening moves* on the part of students been present.

#### 4.3.1.2 Recruitment of interest: speech acts

The analysis of discourse at the level of speech acts also revealed interesting findings in relation to recruitment of interest as a scaffolding element present in the three writing lessons. As with the analysis at the level of moves, this scaffolding element was found to be the most prominent in the first transaction of all three lessons. Excerpt 4 below will be used to demonstrate the presence of this element at the level of speech acts.

#### Excerpt 4:

1.T	FO	ms	I'm going to start with a question./
	O	s	My question is/

el when was the last time you were asked were you had to find similarities and differences between two things?

2. S	C	rep	Where?
3. T	S	i	Anywhere.
4. HL	S	rep	Last year
5. T	S	acct p	Last year/ What was ....?
6. HL	S	rep i	In English for my project/ I had to compare two cartoons.
7. T	BO	el	To find similarities or differences?
8. HL	S	rep	Yeah both.
9. D	S	rep	I had to find similarities and differences.
10. T	C	i	In?
11. D	S	rep	Psychology.
12. T	S C	acct i	OK./ I can't hear you (D mumbles something which can't be heard).
13. D	S	rep	Two psychologists.
14. T	S  BO	ack m s el	OK./ Now/ when you compared two psychologists/ did you find similarities or differences?
15. D	S	rep	I found them both.
16. T	S	acct	Both, OK.
17. S	S	rep	I had to compare two cars.
18. T	S	acct	OK.
19. S	S	i	To see which one I wanted to buy.
20. T	S BO	ack el	OK./ What do you call it when you compare two things?
21. S	C	rep	I don't understand.

In this excerpt, as I was initially involved in task induction at the start of the lesson, I made use of two *starters*, which according to Burton (1981) are speech acts which function to

direct attention to an area prior to a following initiation. At turns (1) and (14), I use a *starter* directly before two of the questions I ask students in order to maintain their involvement and keep them on task so that they would be more able to respond to the coming initiation. From a critical standpoint, scaffolding could have been applied more effectively here by including more *starters* in this transaction. This would have helped in recruiting more interest at the start of the lesson.

The presence of *starters* as speech acts implemented to recruit interest in a task seemed in all three lessons to create student interaction that mirrors the one established at the level of moves. Thus, the use of the *starter* seemed to keep the interaction of students more focused reducing any possible digression which may be part of a student reply that follows the *elicitation* which had been introduced by the *starter*. An examination of the replies made by students in Excerpt 4 for instance, reflects the focused nature of the discourse. First, the majority of *elicitations* and *prompts* which I made were followed by replies from students, a finding that reflects the focused nature of the discourse. In fact, the *reply*, mostly initiated by students, was the speech act highest in frequency representing 10 from a total of 12 speech acts made by students in Excerpt 4. Second, a closer examination of all 10 *replies* in this excerpt shows that they mostly related directly to an *elicitation* I made to bring them about. In fact, in the first transaction of all three lessons, it was rare for a student *reply* not to relate directly to an *elicitation*. A further indication of the focused nature of the interaction which occurred in this excerpt is the absence of *summons* as speech acts which according to Burton (1981) involve the use of a participant's name to gain their attention. It seems that the interaction which was taking place was relatively focused since I rarely needed to call on a student's name to gain their attention bringing them back to the focus of the lesson. In fact, *summons* in all three lessons represent no more than 1% of all speech acts.

Two other closely related speech acts found in this excerpt seem to indicate a certain attempt by me to recruit interest and keep students involved in the lesson by encouraging them. The first of these two acts is the *accept*, which according to Burton (1981) functions to indicate the compliance of a speaker to a previous utterance. In this excerpt, *accepts* had the highest frequency of occurrence among the speech acts that I make. Moreover, they seemed to largely coincide with student *replies* whereby 4 of the 10 *replies* made by students were followed by *accepts* on my part attempting to keep pupils on task by accepting their *replies*. At two points when I was about to make a new *elicitation*, my use of *accept* following student utterances was replaced by an *acknowledge*, a speech act which according to Burton (1981) functions to reveal an understanding and appreciation of a previous informative. As with the *accept*, the *acknowledge* in those two turns seemed to encourage students by indicating to them that their utterances have been accepted while at the same time signaling to them a coming *elicitation*. Hence, at (14), I make use of 'OK' as an *acknowledge* to encourage student (D) by indicating that I had understood her *reply* but was waiting for a more elaborated *reply* following my next *elicitation*. Similarly, at (20), I use 'OK' once again to indicate that I have understood student (S)'s *informative* which indicated his purpose for comparing the two cars but was about to make an *elicitation* that would lead to a definition of comparison and contrast

A glance at Excerpt 4 shows that the type of student interaction created by use of the *accept* and *acknowledge* relates to more elaboration of expression on the part of students. This is indicated through the fact that other than the *reply*, the only other speech act used by students in this excerpt was the *informative*, a speech act which according to Burton (1981) provides information. At (6), (HL) elaborates on her reply to my question by specifying that her project involved comparing cartoons. Similarly, at (19), after I had accepted a response

he gave in turn (17), (S) elaborates on the reason why he had to compare two cars.

#### 4.3.2 RECRUITMENT OF INTEREST: OBSERVATION AND INTERVIEWS

Data obtained from the observations confirms the presence of recruitment of interest as a prominent characteristic of the instruction for all three lessons. The following comment presented by one observer relates to the methods which I used for task induction.

- (1) Starting with a question to elicit student responses really helped gain the attention of students. The questions related to their daily life and linked the lesson to something personal.

Observations went on to reveal that even after the initial process of task induction, the attempt on my part to maintain student involvement and interest continued throughout the lesson keeping students focused in their interaction as the following observations show.

- (2) You tried to keep pupils on task the whole time. You even used praise to motivate them after they participated in the lesson. The students themselves showed a lot of interest by continuously participating, adding their own input, etc. In general, they remained on task and asked questions whenever they needed to.
- (3) You brought in the students' previous experiences and made references to previous class discussions. This seemed to be a way for getting the students interested in the lesson.

The structured observation of student behavior confirmed the fact that students were mostly focused in their interaction during the lesson by indicating only two cases of off-task

behavior in the three lessons. Such sparse cases of off-task behavior may be interpreted as instances when scaffolding was not implemented effectively enough in a way to keep students focused during the whole lesson. However, upon the examination of the progression of student behavior during each lesson, the supposition can be made that both cases of off-task behavior occurred towards the end of the lesson. In support of the finding that student interaction was mostly focused on the task at hand in all three lessons, the incidence of this off-task behavior towards the end of a lesson may be accounted for by the fact that students may at those two instances have lost interest in the lesson because they have achieved comprehension achieving the teacher's perspective of the task. As a result, there may have no longer been any motivation or incentive for them to remain focused.

The interviews with students confirmed these findings as indicated in the following replies during the interview.

- (1) You made the lesson interesting because you showed us how it was something we didn't know. I paid close attention the whole time.
- (2) The many examples used in the lesson made it interesting. Everybody worked most of the time.
- (3) You tried to encourage us all the time, even if we gave a wrong answer.
- (4) The only way this lesson could be more interesting is if you cracked a joke or said something funny.
- (5) We were encouraged the whole time with lots of interesting examples. I liked how you asked us a lot of questions.

## **4.4 EXPLORATION**

### **4.4.1 EXPLORATION: DISCOURSE ANALYSIS**

#### *4.4.1.1 Presence of exploration in instruction*

What appears to be perhaps the most prominent characteristic evident throughout all three lessons is the overall exploratory nature of instruction. Prior to discussing how this exploration took place in the lessons, it should be noted that the presence of such exploration in the three writing lessons fits in terms of the literature as one of the most essential elements of scaffolding. For instance, Rogoff and Gardner (1984) identify exploration as essentially involving the subtle transfer of responsibility for solving a joint problem or completing a task from the expert to the novice in a series of attempts based on the novice's readiness to take on increased responsibility. They add that the expert, rather than providing explicit instruction on how to solve a problem, prompts the novice into arriving at a solution by gradually reducing the level of scaffolding to a level slightly beyond that which can be independently accomplished. Along a similar note, Mercer (1998) presents exploratory talk as discourse which is used to jointly construct and challenge ideas, thus becoming a tool for reasoning.

As with task simplification, exploration formulated an element of scaffolding which extended throughout all three lessons without specifically being prominent at one particular part of the lesson as was the case with the recruitment of interest which clustered the most in the first transaction of all three lessons. It seems that the presence of some recruitment of interest was necessary for exploration to take place as a scaffolding element. The attempt to capture student interest and involve them in the topic seemed to pave the way for an open exploration of that topic. Furthermore, task simplification seems to have been another

scaffolding element which had an impact on the exploratory process inherent in the scaffolding of the lessons. This is because dividing up each of the lessons into four sub-parts or transactions in a way created boundaries for the exploratory process taking place with pupils making this exploration less open and ambiguous. In that sense, I relied on discursive interaction throughout each of the lessons by leading students through a process of guided support to perform the task of first identifying a problem in writing. In all three lessons, the problem was related to an element of either structure or mechanics. After students were led to identify the problem, the lesson was simplified to involve another transaction where students were prompted to explore solutions for the problem before they had achieved any competence at the task. In that way, through an exploratory process which was to a certain extent confined within the boundaries of four sub-tasks, students devised their own set of rules about a writing topic then checked these rules against the rules I had already prepared. Through this process, they were able to understand the reasoning behind the way in which those rules were arrived at. It is interesting to note here that the importance of the role of task simplification in the exploratory process of instruction seemed to center mainly on the fact that since students were not accustomed to the exploratory process inherent in scaffolding, proceeding with open exploration without any bounds may have created confusion for them. As a matter of fact, as mentioned in a previous chapter, one of the original concerns I had prior to implementing scaffolding was that such an open exploration may risk the relative stability and predictability of a lesson. It thus follows that upon repeated implementation of scaffolded instruction, there may be less of a need to emphasize the boundaries created by the four transactions in the attempt to divide the lesson into sub-tasks. In that sense, exploration may in the future be applied more effectively as it assumes more of an open nature when students get more accustomed to scaffolded instruction.

Once again, an example will be used from lesson A to demonstrate how this exploratory process took place. This is shown through Excerpt 5 below taken from the third transaction of the lesson.

*Excerpt 5:*

- |     |    |     |   |
|-----|----|-----|---|
| 40. | O  | m   | Now/  |
|     |    | s   | one reason why we compare and contrast in writing is to |
|     |    |     | choose one thing that's better./                        |
|     |    | el  | Why else would you do it?                               |
| 41. | N  | S   | rep   |
|     |    |     | To make (unclear).                                      |
| 42. | T  | C   | p   |
|     |    |     | Make friends?   |
| 43. | N  | S   | rep   |
|     |    |     | Make a choice.  |
| 44. | T  | S   | acct  |
|     |    |     | Make a choice./   |
|     |    |     | m   |
|     |    |     | OK/   |
|     |    | con | choose one over the other/                              |
|     |    | el  | or why else would you do it?/                           |
|     | BO |     |   |
|     |    | p   | Think about it: if you're showing that two things are   |
|     |    |     | similar, why would that be important?/                  |
|     |    | p   | Why would that be something you'd want to do?           |
| 45. | S  | S   | rep   |
|     |    |     | To see which is better.                                 |

This excerpt is taken directly following the second transaction in lesson A after students had just identified a lack of a certain writing purpose as a problem in comparison and contrast essays. In this excerpt, I attempt to explore with them a possible solution to this problem in the form of having one of three purposes in the thesis statement of a comparison and contrast essay by either showing that one thing is shown to be better than the other; the two things are shown to be different even if thought to be similar; or two things are shown as similar even if thought to be different. To try to make the students arrive at these purposes, I engaged in a series of *elicits*, which according to Burton (1981) function to request a linguistic response, and *prompts* which act to reinforce previous *elicits*. I did this more

frequently than I used *informatives* and *comments*, whose only function according to Burton (1981) is to provide information. For instance, following the *elicit* I made at turn (40) about one reason for writing comparison and contrast essays, I prompt students until by turn (45), student (S) identifies that first purpose. This prompting process seems to have been laden with cues that I provide to students such as the clue I provide in the first prompt of turn (44) where I directly ask students to think about the importance of comparing two things. Indeed, Edwards and Mercer (1987) identify this as a process of cued elicitation whereby the teacher, while asking questions, gives clues for the required response.

Excerpt 6 below shows how this exploratory process continued in that same transaction of Lesson A.

*Excerpt 6:*

- |       |    |   |                              |   |
|-------|----|---|------------------------------|---|
| 47.   | SM | S | rep                          | To see in what way they are different.  |
| 48.   | T  | S | acct<br>s                    | Yeah./<br>Two things that everybody thinks are similar, you've got to show are different./  |
| ..... |    |   |                              |   |
|       |    | O | el<br>p                      | What else could we do then?/<br>You either find which is better or...?  |
| 49.   | SS | S | rep                          | Differences.  |
| 50.   | T  | C | p                            | Which what? In what case...you are proving that they're different.  |
| 51.   | SS | S | rep                          | What are the bad points.  |
| 52.   | T  | S | m<br>i<br>ms<br>s<br>m<br>el | Well/<br>that's related to the first point./<br>I'll put this down./<br>You can have one of three purposes. One would be which is better./<br>OK/<br>2 would be what? |
| 53.   | S  | S | rep                          | Worse.  |
| 54.   | T  | S | I<br>p                       | Same thing, which is better and worse./<br>What else?   |
| 55.   | S  | S | rep                          | You're making a choice.   |

56. T	S	I	Same thing./
		com	You're making a choice; deciding which is better or worse./
		p	What else can you do?
		sum	Sara/
		p	you said it a minute ago.
57. SM	C	rep	Me?
58. T	S	acct	Yes.
59 SM	S	rep	Um, find the differences; in what way they are different.

In this excerpt, I made an *elicit* at turn (48) to have students arrive at the second purpose for writing comparison and contrast essays which student (SM) arrives at in turn (59). Once again, the prompting process included a series of clues for students such as the one I made at turn (50) where I include in the *prompt* a clue in the form of a reminder to students that they are proving two things different. I include another clue in the second *prompt* at turn (56) whereby I directly *summon* student (S) to view the discourse in retrospect as a prompt for arriving at the second purpose. Unlike the exploration used to arrive at the first writing purpose, the prompting process used to arrive at the second purpose in this excerpt seems to include three *informatives* as speech acts on my part. At first glance, the use of such *informatives* may be interpreted as a threat to the exploratory process since they represent instances where I was simply disseminating knowledge by providing explicit information to students rather than trying to negotiate that knowledge with them. Closer scrutiny, however, reveals that the three *informatives* I made between turns (48) and (59) did not provide students with new information about the writing purpose they were exploring. Rather, they provided information that referred to the discourse retrospectively. At turn (52), for instance, the *informative* I made showed student (SS) that her reply at (51) related to a point already discussed. Similarly, at turns (54) and (56) I used two *informatives* that reminded student (S) that his reply related to the writing purpose already discussed.

Excerpt 7 below demonstrates how I further used exploration to help the students arrive at the third purpose for writing comparison and contrast essays.

*Excerpt 7:*

66.	T	S	acct	They're also different./
		BO	el	Obviously, what would #3 be?/
			p	If #2 is we are choosing two things that are similar and we are trying to find differences, what would #3 be?/
67.	ALL	S	rep	Similar.
68.	T	C	p	Two things that are different....
69.	HL	S	rep	Find out how they are similar.

In this excerpt, I made an *elicit* at turn (66) following which I prompted students to arrive at the third writing purpose which student (HL) arrives at shortly afterwards at turn (69).

Here, although shorter than the prompting used to arrive at the two previous purposes, I still gave students clues such as the one embedded in the *prompt* at turn (66) where I restate the second writing purpose in an effort to cue students on arriving at the third purpose.

The high incidence of *elicits* and *prompts* over *informatives* and *comments* as speech acts used on my part as teacher in Excerpts 5-7 is representative of the whole of lesson A, a pattern which is mirrored in the three other lessons as well. This is clearly shown in Table 4.3 below which presents the overall distribution of speech acts in lesson A.

TABLE 4.3\*: OVERALL DISTRIBUTION OF SPEECH ACTS IN LESSON A

SPEECH ACT	NUMBER OF ACTS	% OF TOTAL SPEECH ACTS
accn		
ex		
pr		
m	12	7%
sum	1	0.6%
s	7	4%
ms	6	3.5%
l	15	9%
el	24	14%
d	2	1%
rea	2	1%
con	5	3%
ack	3	2%
P	21	13%
acct	24	14%
rep	45	27%
com	2	1%
TOTAL	169	

\*key: see Appendix 5 for a list of the various speech acts used in the lessons.

The table above clearly shows that *prompts* and *elicits*, given that they were mostly made by myself as teacher, together represented about 30% of the total speech acts whereas the *informatives* and *comments* I made were a mere 10%. The only other speech act that seemed to have a higher frequency of occurrence was the *reply*, representing 27% of the total speech acts in lesson A. Needless to say, however, that the *reply* was a speech act made predominantly by students and thus in no way threatens the high rate of *elicits* and *prompts* I made during the lesson.

#### 4.4.1.2 Student interaction during exploration

It seems that such exploration in instruction created student interaction which was quite dialogic in nature in the sense that it contained to a certain extent elements of a typical social conversational exchange. This will be demonstrated through Excerpt 8 below.

#### Excerpt 8:

40.	T	S	acct	Decision as to which is better./
.....				
		O	m	Now/
			s	one reason why we compare and contrast in writing is to
				choose one thing that's better./
			el	Why else would you do it?
41.	N	S	rep	To make (unclear).
42.	T	C	p	Make friends?
43.	N	S	rep	Make a choice.
44.	T	S	acct	Make a choice./
			m	OK/
			con	choose one over the other/
		BO	el	or why else would you do it?/
			p	Think about it: if you're showing that two things are
				similar, why would that be important?/
			p	Why would that be something you'd want to do?
45.	S	S	rep	To see which is better.
46.	T	S	acct	To see which is better.
47.	SM	S	rep	To see in what way they are different.
48.	T	S	acct	Yeah./
			s	Two things that everybody thinks are similar, you've got
				to show are different./
.....				
		O	el	What else could we do then?/
			p	You either find which is better or...?
49.	SS	S	rep	Differences.
50.	T	C	p	Which what? In what case... you are proving that they're different.
51.	SS	S	rep	What are the bad points.
52.	T	S	m	Well/
			i	that's related to the first point./

ms I'll put this down./  
s You can have one of three purposes. One would be which is better./  
m OK/  
el 2 would be what?

54. S S rep Worse.

54. T S I Same thing, which is better and worse./  
p What else?

55. S S rep You're making a choice.

56. T S I Same thing./  
com You're making a choice; deciding which is better or worse./  
p What else can you do?  
sum Sara/  
p you said it a minute ago.

58. SM C rep Me?

59. T S acct Yes.

59. SM S rep Um, find the differences; in what way they are different.

61. T S acct OK./  
p You can find the differences but....

61. S S rep They're similar  
s You can have one of three purposes. One would be which is better./  
m OK/  
el 2 would be what?

62. T S acct OK./  
p You can find the differences but....

63. T S acct They're the same./  
con So, if you have two things that are similar you try to show  
el that they're different./  
Take two twins for instance.

63. SM S rep They're the same.

64. T S acct OK. They're the same./  
C p But...

65. S S rep There are some ways that they're alike but they're also different

66. T S acct They're also different./  
BO el Obviously, what would #3 be?/  
p If #2 is we are choosing two things that are similar and  
we are trying to find differences, what would #3 be?/

A look at this excerpt shows that turns made by students and myself as teacher were relatively short and even. On my part, turns were short because it seems that the

prompting inherent in the exploratory process meant that my turns would have to be in the form of short prompts rather than longer turns where I would explicitly give out information. On the part of students, it seems that such prompts brought about frequent replies from students hence resulting in more even turn taking between students and teacher. Indeed, Excerpt 8 provides a good case in point of such even turn taking because it may pose as an exception to such short even turn taking since it contains one of the longest turns in lesson A at (52) with a total of six speech acts made by myself as teacher. A glance at this turn, however, shows that its longevity can be accounted for by the fact that I attempted, at this turn, to summarize the lesson thus far before moving on to exploring the second purpose associated with writing comparison and contrast essays. This came in the form of the I made at (52) where I established more firmly the first writing purpose arrived at thus far by writing it down.

Another pattern in the discourse found at the level of moves in this excerpt relates to the fact that turns taken by the same student seem to cluster together and are less spread out. For instance, with the exception of a few interspersed replies at (45), (47), and (61) by students (S) and (SM); the discourse from turn (40) to (66) seems to be manipulated by a series of students whose turns cluster together starting with (N) at turn (41) followed by (SS) at (49), then (S) at (53), and finally (SM) from (57) to (65). This again speaks to the conversational dialogic nature of the interaction in the lesson because it shows that even though I had been prompting students with different questions, replies to each question were not made by different students as would be the case in a typical lesson. Rather, as with any ordinary conversational exchange, it seems that a single conversational partner, in this case a student, manipulated a series of turns in relation to an initiation.

Another aspect which speaks to the dialogic nature of this interaction relates to the fact that exchanges, which according to Burton (1981) coincide with a change of topic, are quite

short in relation to the discussion of topics that usually occurs during a lesson. Indeed in all three lessons, each of which had a total of around 90 turns, the number of turns per exchange averaged about 10. This frequency in change of topic within each transaction mirrors that which would normally occur in any conversational dialogic interaction whose open exploration would not be bound by a set of pre-planned topics which are to be covered under the objectives set for each transaction. Again, Excerpt 8 provides a good case in point since turns (49-69) in this excerpt are part of a transaction in lesson A which includes the longest exchange found in all three lessons. The length of this exchange derives not so much from the fact that I was as a teacher limiting students to one topic and exhausting that topic till it had been comprehended by students. Rather, its longevity seems to derive more from the exploratory process which in this case required relatively more prompting and hence more turns in the exchange until comprehension was reached. Hence, this particular exchange was longer than other typical exchanges in the lesson because the exploration had to be extended through much prompting until students arrived at the three purposes associated with writing comparison and contrast essays.

Such student interaction which is relatively dialogic in nature may in a way later help students acquire interpersonal communication skills needed for effective interaction. Hymes' (1972 cited in Brookes 1992 p.219) refers to this as the development of communicative competence, the skills necessary for the effective use of language in a social context.

In a previous chapter, I had addressed one concern I had prior to implementing scaffolding in that the thought of giving up turns as teacher to allow for more student interaction may risk disorder and confusion in the classroom. In relation to this, analysis of the discourse revealed that regardless of the extent to which student interaction had become conversational in all three lessons, the function question-answer sequences largely

guarantees even turn-taking between students and teacher. Hence, as teacher, I was still able to retain a leadership role in managing the discourse. For one thing, in all three lessons, the total number of turns taken by all students as a group during a lesson never surpassed the total number of turns which I made as teacher. They averaged out to be roughly even with myself making as many turns in each lesson as the total number of turns made by all the students. At the level of moves, the fact that I made almost all the *opening moves* with only two exceptions in three lessons indicates that I retained the leadership role in initiating the discourse with students mostly taking a responding role through *supporting moves* and occasionally a few *challenging moves*. Furthermore, the fact that I was the only one making *focusing moves*, reflects my maintaining the primary role in managing the discourse. From a critical stance, this may be interpreted as reflecting a setback to my attempt at applying scaffolding during the lessons, a limitation that would clearly have to be taken into consideration upon repeated implementation of scaffolding.

#### 4.4.2 EXPLORATION: OBSERVATION AND INTERVIEWS

The observations made on the general characteristics of instruction largely confirm the presence of exploration as an element of scaffolded instruction. One observer noted the following:

- (1) There were plenty of open-ended questions for student understanding of a concept. You used techniques such as prompting questions and suggesting. The question would be re-asked several times in a variety of ways until the answer needed was gotten.

For another observer, my role as a teacher role centered mainly on providing guidance and support rather than being a disseminator of explicit knowledge:

- (2) You were really more of a facilitator in the lesson. You used the inductive method to elicit responses from the students in order to arrive at a desired goal. You used various strategies for communication including questioning, prompting and suggesting. As the lesson went along, there was a decrease in repetition.

The structured observation of student interaction in general supported the finding mentioned earlier that the exploratory instructional process created elaboration and open expression of response thus helping in the development of dialogic skills among students. More precisely, structured observation revealed a recurring pattern in the relative progression of student interaction during instruction. It seems that while students participated by replying to my questions at the commencement of the lesson, they moved to participating through expressing their opinion and commenting on a topic as the lesson progressed.

The interviews with students with regard to the instruction of the lesson revealed that the students themselves also sensed some element of exploration as instruction of the lesson was taking place. This may be seen through the following comments given by two students during the interview.

- (1) When we understand something, you move to new things. There wasn't an easier way of presenting the lesson. As we understood, there was less suggesting. You gave us less hints and suggestions for how to do things.

- (2) There were more questions asked in order to understand. The questions were interesting because they got us to understand. It was friendly and not really like a lesson because you allow us to comment on what is being taught. You allow us to ask questions whenever we don't understand.
- (3) We were quite interested in the lesson because of all the questions. We felt like we had to share our thoughts.

## **4.5 TEACHER FEEDBACK TO STUDENT RESPONSE**

### **4.5.1 EXPLORATORY FEEDBACK: DISCOURSE ANALYSIS**

The analysis of discourse in all three lessons revealed that the exploration discussed in the previous section was an element of scaffolded instruction which was present throughout each of the lessons. More specifically, exploration seemed to not only involve prompting and guided assistance at the stage of eliciting responses from students, but extended as well to the type of feedback which I provided in relation to student response. As such, rather than including the discussion of feedback which was of an exploratory nature under the section headed 'exploration', I decided, for the sake of clarity, to devote a separate section for the discussion of how my feedback to student response assumed a relatively exploratory nature. It should be noted, however, that despite devoting a separate section for discussing feedback, it still remains a function which fits under the exploration category I included in Table 3.1 of my categorization of scaffolding elements.

Prior to discussing how my feedback to student response assumed an exploratory nature, it should be noted that Rogoff and Gardner (1984) consider the provision of feedback on the part of the expert during scaffolded instruction to be a very subtle process because it appears as the appropriate level of scaffolding is being established in order to ensure the novice is

taking responsibility for the completion of a task. Also in relation to the feedback which the expert provides during the scaffolding process, Wood et al (1976) hold that intervention on the part of the expert only takes place upon the detection of difficulty on the part of the novice. Hence, a teacher would only interfere when the need arises.

#### 4.5.1.1 Exploratory feedback to student response

Excerpt 9 taken from lesson A will be used to demonstrate how my feedback to student response assumed an exploratory nature and how this in turn impacted student interaction throughout all three lessons.

#### Excerpt 9:

- |        |   |  |  |
|--------|---|--|--|
| 44. T  | S | acct<br>m<br>con<br>el<br>BO<br>p<br>p | Make a choice./<br>OK/<br>choose one over the other/<br>or why else would you do it?/<br>Think about it: if you're showing that two things are similar, why would that be important?/<br>Why would that be something you'd want to do? |
| 45. S  | S | rep                                    | To see which is better.  |
| 46. T  | S | acct                                   | To see which is better.  |
| 47. SM | S | rep                                    | To see in what way they are different.   |
| 48. T  | S | acct<br>s                              | Yeah./<br>Two things that everybody thinks are similar, you've got to show are different./   |
| .....  |   |  |  |
|        | O | el<br>p                                | What else could we do then?/<br>You either find which is better or....?  |
| 49. SS | S | rep                                    | Differences.   |
| 50. T  | C | p                                      | Which what? In what case... you are proving that they're different.  |
| 51. SS | S | rep                                    | What are the bad points.   |
| 52. T  | S | m                                      | Well/  |

		i	that's related to the first point./	
		ms	I'll put this down./	
		s	You can have one of three purposes. One would be which is better./	
		m	OK/	
		el	2 would be what?	
53.	S	S	rep	Worse.
54.	T	S	I p	Same thing, which is better and worse./ What else?
55.	S	S	rep	You're making a choice.
56.	T	S	I com p sum p	Same thing./ You're making a choice; deciding which is better or worse./ What else can you do? Sara/ you said it a minute ago.
57.	SM	C	rep	Me?
58.	T	S	acct	Yes.
59.	SM	S	rep	Um, find the differences; in what way they are different.
60.	T	S	acct p	OK./ You can find the differences but....
61.	S	S	rep	They're similar
62.	T	S	acct con el	They're the same./ So, if you have two things that are similar you try to show that they're different./ Take two twins for instance.
63.	SM	S	rep	They're the same.
64.	T	S C	acct p	OK. They're the same./ But...
65.	S	S	rep	There are some ways that they're alike but they're also different
66.	T	S BO	acct el p	They're also different./ Obviously, what would #3 be?/ If #2 is we are choosing two things that are similar and we are trying to find differences, what would #3 be?/

A glance at my feedback to student replies in the excerpt above actually fits in with what Edwards and Mercer (1987) refer to as reconstructive recaps which involve paraphrasing student response in order to confirm that response by making it more explicit. For instance, at the level of speech acts, Excerpt 9 shows that my use of *accepts* as a speech acts which

according to Burton (1981) function to indicate that the speaker had understood a previous utterance, often reconstructed a student response making it more acceptable in form. At turns (44, 46, 64, and 66), this reconstruction was in the form of simply repeating the exact student response to make it more explicit. At turn (48), however, my *accept* was followed by a paraphrase which established student (SM)'s reply as the second purpose inherent in comparison and contrast essays. That paraphrase appeared in the form of a *starter*, a speech act which according to Burton (1981) introduces an initiation. Similarly, at (62), my use of *accept* paraphrased the student's reply establishing it more firmly as one of the purposes of comparison and contrast essays

In general, my feedback to student responses was more a way of guiding and shaping their learning rather than evaluating or assessing it. It appeared that my use of *accept* as a speech act was mostly followed by a *prompt* or *elicitation*. Of the 8 cases of *accept* I used in the excerpt, only 2 cases appeared where an *accept* was not followed by an *elicit* or *prompt*. This relates to what Mercer (1998) identified as spiral IRF exchanges whereby the teacher's feedback to student responses is more a way of revealing the students' line of thought that led to a response and allowing students to reflect on the learning at hand more than it is a method for assessment. More specifically, Mercer (1998) identifies feedback in a spiral IRF as having two functions. The first relates to discovering what a student has done and the reason why it was done. This function is most clearly shown in the *elicits* and *prompts* that followed the *accepts* I made at turns (44), (60) and (64) of the excerpt. At (44), I accept student (N)'s reply that one reason that comparison is done is to make a choice. I followed this *accept* with an *elicit* and two *prompts*, however, that probed into the reply to find out why the student thinks that making a choice is important. Similarly, at turns (60) and (64), I followed my acceptance of (SM)'s replies with *accepts* followed in both cases by *prompts* that start with 'but' as a way of probing to find out more about the reply.

The other function of feedback in spiral IRFs identified by Mercer (1998) relates to making the student ponder about the problem at hand. Once again, this function is reflected in turn (48) where I first accept the reply made by student (SM), then use a *starter* to establish the first purpose for writing comparison and contrast essays, finally ending the turn with an *elicit* and *prompt* which made the student think about what the second purpose of comparison and contrast essays may be. Similarly, at turn (66), I accept student (SM)'s reply then add an *elicit* and *prompt* to foster thought about the third purpose inherent in comparison and contrast essays.

Even when students gave an incorrect or incomplete response, my feedback was still exploratory in the sense that I persisted with not evaluating that answer. Instead, I offered a review of what had previously been discussed so as to prompt the student into a more complete response. For instance, at turn (64) in Excerpt 9, the *prompt* I use in the form of an open-ended 'but' was meant to elicit from students the third purpose inherent in comparison and contrast essays. When student (SM)'s reply at (65) simply restated the second purpose for such essays, my feedback came in the form of a *bound-opening move* which according to Burton (1981) functions to reintroduce a topic after a *supporting move*. Hence, rather than attempting to evaluate the answer, my feedback at (66) was exploratory in that it contained a *bound-opening move* which reviewed the second writing purpose then prompted students through the original *elicit* about the third purpose for writing the essays. Mercer (1998) identifies the presence of such scaffolding in a teacher's feedback as retreat and rebuild sequences where errors are used to review and reformulate previous learning.

A similar case appeared after I attempted at (60) to prompt students to arrive at the second writing purpose only to have student (S) give an incomplete reply at (61) which simply completed my *prompt*. My feedback to this at (62) included a *conclusion*, a speech act which according to Burton (1981) clarifies preceding discourse. Hence, I seemed to draw on

the repetition of previous knowledge upon detection of difficulty in learning. To Rogoff and Gardner (1984), reintroducing previous learning upon the presence of error represents a reappearance in redundancy during the scaffolding process.

#### 4.5.1.2 Exploratory feedback and student interaction

It seems that such exploratory feedback gave students a certain view of their role in the interaction. This is displayed through the graphic below, which shows how in the third transaction from which Excerpt 9 was taken, exploratory feedback allowed 3 students to expand on their original reply:

<b>Student N</b>	<b>Student SS</b>	<b>Student SM</b>
(41) To make (unclear)	(49) Differences.	(63) They're the same.
⇓	⇓	⇓
(43) Make a choice.	(51) What are the bad points.	(65) There are some ways they're alike but they're also different.

The graphic above shows that rather than subsuming their role to that of being passive receivers of input from the teacher, such feedback purported the students to view themselves as participants in the interactional process. Thus, they seem to have not viewed their involvement in the discourse as a contribution in the form of a reply that simply ended after I assessed it through feedback. Instead, feedback that was of a prompting exploratory nature made them elaborate and expand on that reply through further involvement.

Indeed, despite the brevity of the third transaction shown in the original transcript of Lesson A, there was a relatively high participation of different students whereby 7 of the 14 students in class participated in the discourse, a pattern that is echoed in most of the transactions of all three lessons. The assumption can be made that when students view themselves as participants in the discourse, this may create more intrinsic motivation to listen

because each student would feel more obligated to participate. This according to Sacks et al (1974) may increase the potential for turn-taking.

By propelling students to view themselves as participants in the discourse, such exploratory feedback may help in the creation of a shared understanding between the teacher and students whereby students come to achieve the teacher's perspective of a lesson in what may lead to intersubjective understanding. Excerpt 10 below will be used to show how there were few student elicitation requests that requested a clarification of understanding in the third transaction of Lesson A.

*Excerpt 10:*

- |       |         |                   |   |
|-------|---------|-------------------|---|
| 60.T  | S       | acct<br>p         | OK./<br>You can find the differences but...   |
| 61.S  | S       | rep               | They're similar   |
| 62.T  | S       | acct<br>con<br>el | They're the same./<br>So, if you have two things that are similar you try to show that they're different./<br>Take two twins for instance.                                  |
| 63.SM | S       | rep               | They're the same.   |
| 64.T  | S<br>C  | acct<br>p         | OK. They're the same./<br>But...  |
| 65.S  | S       | rep               | There are some ways that they're alike but they're also different   |
| 66.T  | S<br>BO | acct<br>el<br>p   | They're also different./<br>Obviously, what would #3 be?/<br>If #2 is we are choosing two things that are similar and we are trying to find differences, what would #3 be?/ |

In this excerpt, it seems that the fact that incomplete replies were followed by prompting on my part did not give students the chance to realize on the spot that their reply needed amendment. Rather, the prompting allowed them after a few turns to notice how their reply had been incomplete, but only after they had arrived at a more complete reply. At turn (61), for example, when student (S) gave an incomplete reply, my feedback at turn (62) did not directly inform him that it was not complete. As a result, he probably did not feel the need to make *elicits* in order to ask me questions. In the process, however, he was introduced to a

more complete reply arrived by student (SM) at (65) after I reviewed previous learning through the *conclusion* I made at (62) and prompting at (64). Indeed, Donato and Adair (1992) hold that rather than simply reporting the answer, scaffolding involves learners in searching for the answer. This process helps pupils achieve the teacher's perspective of a task.

#### 4.5.2 EXPLORATORY FEEDBACK: OBSERVATION AND INTERVIEWS

The observations confirmed to a certain extent the presence of this characteristic of scaffolded instruction by maintaining that my feedback to student responses in general was of a more probing than evaluative capacity. Such feedback was aimed at making students achieve learning and knowledge independently. This is clearly reflected in the following notes made by two different observers.

(1) You responded to students in a way that made them think for themselves. You never once told them this is right or this is wrong. It was always left for the students to find that out for themselves independently. In this case, it was the students who were in charge of learning and understanding the lesson being taught to them.

(2) It seems that you were trying to maintain a peripheral role as much as possible. The students never got a direct response to their questions. They would be questioned until they arrived at the answer alone. Even in cases where students asked for specifics, they were told to decide for themselves.

The students themselves were cognizant of this characteristic being present in the feedback which I gave. They directly expressed that there seemed to be repetition and

redundancy of previous information only upon the appearance of errors or simply difficulties in learning. The following comments uttered by students in the course of the interviews reveal how such feedback was accompanied by more student participation and shared understanding of my perspective as the teacher.

- (1) You repeat the topic when we don't understand. If somebody doesn't understand, you would keep giving examples and asking them questions until they understand.
- (2) As we understood, you moved on and repeated less. But if we made a mistake, you would keep suggesting again. Sometimes, everything would be repeated 2 or 3 times. It was very interesting and the task seems easier now.
- (3) I felt it was a lot better and interesting than normal. More or less all of us participated than normal.

#### **4.6 CONCLUSION**

This section summarizes the chapter by presenting the findings I arrived at on the three whole group lessons in the form of a matrix. The first column in the matrix represents the characteristics of instruction which were found to be the most prominent in the particular case of the three lessons in which I attempted to implement scaffolding. Column 2 describes how each of the four most prominent elements of instruction fits as an element of scaffolding according to the literature. Column 3 and 4 show how each scaffolding element may be realized linguistically according to the Burton model both at the level of moves and speech acts. Column 5 describes student interaction in the particular context of my three lessons. Finally, columns 6 and 7 shows how such characteristics of student interaction may be

realized linguistically according to the Burton model both at the level of moves and speech acts.

It is important to note that columns 3, 4, 6, and 7, which develop the interface between my research objectives and the use of the Burton model have been added to accentuate the linguistic element associated with the research methodology used in this study. That is realized through the fact that the major form of data collection which I used in this study is the analysis of spoken discourse with observation and interviews used mainly to back up findings.

TABLE 4.4: SUMMARY OF FINDINGS FROM WHOLE GROUP LESSONS

MOST PROMINENT CHARACTERISTIC OF INSTRUCTION	HOW IT FITS AS A SCAFFOLDING ELEMENT	SCAFFOLDING ELEMENT REALIZED LINGUISTICALLY AT THE LEVEL OF MOVES	SCAFFOLDING ELEMENT REALIZED LINGUISTICALLY AT THE LEVEL OF SPEECH ACTS	CHARACTERISTICS OF STUDENT INTERACTION	STUDENT INTERACTION REALIZED LINGUISTICALLY AT THE LEVEL OF MOVES	STUDENT INTERACTION REALIZED LINGUISTICALLY AT THE LEVEL OF SPEECH ACTS
Task simplification	- Reduction in degrees of freedom (Wood et al 1976).	- Focusing moves by teacher	- Metastatements by teacher - Conclusions by teacher - Markers by teacher	- Facilitation of student interaction	- Less challenging moves by students	- Student elicitations request simple clarification
Recruitment of interest	- Task induction (Wood et al 1976). - Frustration control (Wood et al 1976).	- Bound-opening moves by teacher - Re-opening moves by teacher	- Starters by teacher - Accepts by teacher - Acknowledge by teacher	- More focused interaction. - More elaboration of expression. - Less off-task behavior.	- Supporting moves by students - Student challenging moves request clarification more than they are digressions - Re-opening moves by student - Few turns taken unanimately by students	- Student replies following elicitations and prompts by teacher - Student replies relate directly to teacher elicitations - Low incidence of summons by teacher - Informatives by students
Exploration	- Prompting by reducing level of scaffolding (Rogoff and Gardner 1984). - Cued elicitation (Edwards and Mercer 1987). - Transfer of responsibility to learner (Rogoff and Gardner 1984). - Exploratory talk (Mercer 1998).		- Elicitations and prompts appear more often by teacher than informatives and comments	- Interaction is more dialogic in nature. - Students demonstrate communicative dialogic skills.	- Short exchanges with frequent change of topic - Turns are short and even within an exchange - Turns taken by the same student cluster together	
Feedback as a form of guidance rather than evaluation	- Spiral IRF exchanges (Mercer 1998). - Reconstructive recaps (Edwards and Mercer 1987). - Retreat and rebuild sequences (Mercer 1998). - Reappearance of redundancy (Rogoff and Gardner 1984).	- Bound-opening moves by teacher in the face of student incomplete responses	- Teacher use of conclusion in the face of incomplete student responses - Teacher use of accepts is followed by prompts or elicitations	- Students view themselves as participants in the interaction; not passive. - Intersubjective understanding: students come to achieve the teacher's perspective of lesson. - More intrinsic motivation for students to participate.	- Relatively high participation of different students in the discourse.	- Decrease in student elicitations that request a clarification of understanding

## **Chapter Five: Findings from tutorials**

### **5.1 INTRODUCTION**

This chapter focuses on the findings obtained from the three tutorials made with students. All tutorials were done on a one to one basis with a student and specifically related to writing. The aim was the revision of a student's written essay dealing with one major revision per tutorial either in the area of content or structure. I attempted in each tutorial to implement scaffolding elements previously outlined in Chapter three. As in the case of the three whole group lessons, the implementation of scaffolding in tutorials was based on my categorization of scaffolding elements based on the literature previously discussed. This led to a need to verify the extent to which scaffolding was present.

The first focus of the research on tutorials was hence related to considering the extent to which my instruction during each tutorial contained elements of scaffolding. I begin by delineating the most prominent characteristics of instruction found in the three tutorials. Then, I consider how each characteristic may be considered an element of scaffolding through examining how those elements in the tutorials fit with the literature on scaffolding. I do this by making use of the Burton model to describe how scaffolding elements may be realized linguistically. Henceforth, I turn to the second focus of the research related to describing the type of interaction created when scaffolding elements are applied, again demonstrating how such characteristics of interaction may be realized linguistically according to the Burton model . These findings from tutorials will complete the cycle of data collection and analysis previously begun with whole group lessons in Chapter 4. From

there, the findings from both chapters will be used to compare the two instructional activities of whole group lessons and tutorials in terms of scaffolded elements of instruction and the student interactional style created.

I found four major elements related to the literature on scaffolding elements which I categorized previously in Chapter three to be the most noticeable and prominent in my instruction during the three tutorials. All four elements will be discussed later on in the chapter. In the discussion of findings, I have chosen to present the transcript of only one tutorial which I labeled as Tutorial A, since I found it to be the most illuminating of the three tutorials. I found this to be useful since it allows for a richer more contextualized description of the development of one tutorial whereby longer excerpts of discourse may be used to provide a clearer illustration of the scaffolding and the interaction taking place in the tutorial. I present the complete transcript coded according to the Burton (1981) model of spoken discourse here. It is part of a 15 minute tutorial, to be discussed more fully later on in this chapter, where I attempt to revise one student's essay in terms of structure. The tutorial concentrates on a specific revision related to including at the beginning of each body paragraph, a topic sentence which refers back to the thesis statement present in the introductory paragraph of a comparison and contrast essay. Throughout this chapter, excerpts will be extracted from this transcript to discuss findings. The notes on the coding scheme for this transcript appear in Appendix 5.

Transcript A: Tutorial A (March 14, 2001)

T= teacher  
G= student

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**I. PROBLEM IDENTIFICATION**

---

1. T O s el Just looking at the structure of this essay/  
do you notice any problems with it?
2. G S rep Yeah./  
I Probably because its my first draft./  
com so it would have a lot of problems in it/  
com but as we go through, probably it will improve.
3. T S acct OK./  
BO s If you look at the body paragraphs/  
el can you tell what each paragraph is talking about?
4. G S rep Yeah.
5. T BO p Is it easy to tell?
6. G S rep Yeah./  
I Its easy to tell cause its showing like that this paragraph is talking about a  
specific and the other one is talking about another thing.
- T S acct OK./  
p How do you know that?
8. G S rep Um, choosing words and how we explain them; how we try to explain the  
paragraphs so and relating it to the topic./  
I so when you explain it, um, you just use small words to write your main  
point and explain it.
9. T S acct OK./  
BO el Can you just by reading the paragraph figure out what the main idea is?
10. G S rep Yes.
11. T BO p Or is there something you can do to make that a little easier?
12. G S rep Um, yeah./  
I You can make that a little easier by like adding words.
13. T S acct Yeah./  
p What kind of words?
14. G S rep Specific words/  
ms like if I was talking for example about like here (refers to  
essay) I'm talking about living, I'd go ahead and talk  
about money, talk about like people and friends./  
I You know, just talk about stuff that ties to the main point of the paragraph.
- .....

15. T O el So what is the main topic of this paragraph for instance (refers to the 1st body paragraph in essay)?
16. G S rep Um, this topic talks about like from a senior perspective how they see the difference between school and university.
17. T BO p In terms of?
18. G S rep In terms of how you live, how its the education.
19. T S acct Umhm./  
BO p So, well in terms of freedom?
20. G S rep Yeah.
21. T S acct OK./  
BO el Would it help if you actually state that at the beginning of the paragraph?
22. G S rep Yeah, it would.
23. T S acct OK./  
BO el So do you see why that's a problem?
24. G S rep Umhm.

---

.....

*II. RELATION TO PREVIOUS LEARNING*

---

25. T O m OK./  
el What is that related to?
26. G C rep Um.  
^ (hesitates)
27. T RO s From the stuff that we talked about in class and the lessons we had,  
p having a sentence at the beginning is?
28. G C rep That relates to  
^ (hesitates.)
29. T RO p That tells you what the paragraph is about.
30. G S ms Im not sure about it/  
rep but like I remember what we did with the circles.
31. T BO p The Venn diagram?
32. G S rep Yeah, the Venn diagram./  
I You take some ideas and then you fill them in and like you may end up with a paragraph you can write.
33. T BO s And so when we talked about the thesis statements,  
el was it enough to just put it at the end of the introduction?
34. G S rep No.  
I You have to also put it in the conclusion.
35. T S acct OK./  
BO el What else can you do with the thesis statement in the essay?

36. G C rep Um.  
^ (hesitates.)
37. T RO p You can use it to do what in the paragraphs?/  
p You've stated your thesis and?
38. G S rep Yeah.
39. T BO p And the reader know what to expect?
40. G S rep Umhm.
41. T BO el So what would be a good idea to do in the rest of the paragraphs?
42. G S rep To explain them more.
43. T S acct Yes, state them.
44. G S ack Yeah, state them.
45. T FO con So if by having the thesis statement what you do then is refer to each part of  
your thesis at the beginning of a paragraph.

.....

- O el What's that called?  
P What do you call the sentence that you put at the beginning of a paragraph  
or somewhere else that tells you what the whole paragraph is about?

46. G C rep Um  
^ (hesitates.)
47. T RO p Topic sentence maybe?
48. G S rep Yeah, topic sentence.

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*III. CORRECTION*

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49. T O m Now,/  
el do you know what you have to do now?
50. G S rep Yeah.
51. T C p What?
52. G S rep Like to add the topic sentence in every paragraph.
53. T S acct Yeah.
54. G S I To make it more clear and to add the thesis statement in the conclusion.
55. T S ack Yeah.
56. G S I To remind the reader what the thesis is.
57. T S ack OK./

.....

- |       |         |                  |  |
|-------|---------|------------------|--|
|       | FO<br>O | ms<br>el         | Lets try doing the first paragraph./<br>What topic sentence can you add to it?   |
| 58. G | S       | rep<br>I         | Um, I can just go ahead and start with the word freedom./<br>Then explain freedom.   |
| 59. T | S<br>FO | ack<br>con<br>el | OK./<br>So you'd say one of the ways in which they differ is in terms of freedom./<br>Then do you go ahead and develop it? |
| 60. G | S       | rep              | Yeah.  |
| ..... |         |                  |  |
| 61. T | O       | el               | Can you do the other one?  |
| 62. G | S       | rep<br>con       | Um, the other one is type of education./<br>So I would go type of education and then develop it.                           |
| 63. T | S<br>BO | acct<br>el       | OK, good./<br>Do you get this/   |
| 64. G | S       | rep              | Yeah.  |
| 65. T | S       | acct             | Great.   |

Each of the following sections discusses an element of scaffolded instruction found to be present in the tutorials. Burton's (1981) model of spoken discourse is used at the beginning of each section to both identify prominent aspects of instruction and describe how they relate to the literature on scaffolding. I also make use of Burton's (1981) model for discourse analysis to describe the type of student interaction during the tutorials. For both purposes, discourse analysis is done both at the level of moves and speech acts. Later on in the section, I draw on observations of the tutorials as well as the interviews I conducted with the students involved in the tutorial to back up findings. 5.2. describes how task simplification as was found present in the tutorials may be considered an element of scaffolding. I will demonstrate that the simplification of the task in a tutorial helped facilitate the student's interaction and the establishment of the teacher's role as the primary figure in managing the discourse and taking an initiatory role. 5.3 identifies how the exploratory style of instruction in the tutorials represents scaffolding. I will argue that such exploration contributed to the

student's taking a more active participatory role in discourse as well as demonstrating dialogic communicative skills. 5.4 discusses how the feedback I gave as a teacher actually fits with the literature on scaffolding. I will demonstrate that scaffolded feedback in a tutorial resulted in more focused interaction as well as the creation of a shared understanding between student and teacher. 5.5 demonstrates how my use of redundancy in the tutorials may be considered an element of scaffolding. I will show that such redundancy resulted in more hesitation on the part of the student where mental processing is more or less being carried out as well as the stimulation of reflection on the part of the student. Finally, 5.6 concludes the chapter by summarizing the main findings in the form of a matrix.

## **5.2 TASK SIMPLIFICATION**

### **5.2.1 TASK SIMPLIFICATION: DISCOURSE ANALYSIS**

#### *5.2.1.1 Task simplification: patterns of moves*

One quite noticeable element of instruction found in all three tutorials relates to simplifying the revision of writing task by reducing it into sub-steps. Prior to discussing the presence of this element in the tutorials, it should be noted that spoken discourse analysis of all three tutorials showed that task simplification permeated the whole tutorial being present throughout. As such, I will start my discussion of this scaffolding element by making use of the whole transcript of Tutorial A rather than selecting certain excerpts from it to demonstrate how each tutorial could actually be reduced to three sub-parts. In her model of spoken discourse, Burton (1981) referred to a sub-part as a transaction. Each transaction according to Burton's (1981) model of spoken discourse consists of several exchanges or

topics thus relating to the overall purpose of the discourse. Marking in the transaction boundaries for Tutorial A, for instance, clearly reveals how this element was present throughout the tutorial as shown through the division of that tutorial into three transactions which have been separated by double bold lines on the actual transcript. A more in depth description of each of these three transactions including the speech turns contained in each on the transcript follows:

- I. *Problem identification* (turns 1-24). This involved identifying the revision to be made in writing by having the student achieve a similar definition of the writing problem. In this case, the student was to realize that each of the body paragraphs in her comparison and contrast essay should include a topic sentence which refers back to the thesis statement.
- II. *Relation to previous learning* (turns 25-48). The student was to then achieve a more general perspective of this revision by relating it to previous learning. More specifically, the student was to recall a prior lesson on thesis statements which explained how body paragraphs should refer back to the thesis statement of an essay.
- III. *Correction* (turns 49-65). Finally, the student was shown how to make the revision for one of the body paragraphs in an effort to apply the revision to the rest of the essay.

The analysis of spoken discourse at the level of moves confirms the reduction of each tutorial into these three sub-parts hence demonstrating an attempt on my part as tutor to simplify the revision task within a tutorial. This was most obviously shown after marking in the *opening moves* which come at the beginning of each of the three transactions in all three tutorials. For instance, at turn (1), I used an *opening move* which directly asks the student to identify a problem with the structure of her essay. I then marked the start of the second transaction with another *opening move* at turn (25) which specifically asks the student to

relate the problem with previous learning. Finally, the start of the third transaction and hence the third sub-task as such, was marked by an *opening move* at (49) which indicated to the student that she was now about to make the revision to the structure of her essay. According to Burton (1981), *opening moves* carry topics which are in essence new in relation to the preceding discourse. Marking *opening moves* not only helped in establishing transaction boundaries but also further helped establish exchange boundaries where within a transaction, a change of topic was occurring. For instance, at turn (15), I used an *opening move* to mark in the start of a new exchange within the first transaction where, after a general attempt to make the student identify the revision to be made, I directed her attention to a specific paragraph in her essay. Similarly, at (45), I used an *opening move* to mark the start of a new exchange in the second transaction. In this case, the student had related the revision to a previous lesson on thesis statements, the next task inherent in the second exchange was to recall topic sentences of body paragraphs.

As a matter of fact, my use of *opening moves* in Tutorial A in an effort to simplify the revision task by reducing it into sub-parts came to formulate roughly 5% of all seven move types in the discourse. This is clearly displayed in Table 5.1 below which shows the distribution of moves in Tutorial A.

TABLE 5.1: OVERALL DISTRIBUTION OF MOVES IN TUTORIAL A.

MOVES	TOTAL NUMBER	PERCENT OF TOTAL
FRAMING		
FOCUSING	4	5%
OPENING	4	5%
BOUND-OPENING	14	17%
RE-OPENING	4	5%
SUPPORTING	47	58%
CHALLENGING	6	7%
TOTAL	81	

My attempt at simplifying the task of revision by reducing it into sub-tasks fits it with the literature on scaffolding as presented by Wood et al (1976). In a study of assisted scaffolding during a tutorial, Wood et al (1976) delineated several scaffolding functions present in the tutorial process. One of these, referred to by Wood et al (1976) as reduction in degrees of freedom, may be directly related to the task simplification in the three tutorials at hand since it involves reducing a task into sub-tasks in order to reach a solution. Further to the point, since the three transactions which I previously outlined increase in terms of complexity with the progression of each tutorial, they formulate a hierarchy similar to the one outlined by Wood et al (1976) where the tutor helps the tutee make use of existing skills to progressively meet new more challenging requirements of a task. Wood et al (1976) compare this to reading whereby the deciphering of words is needed for the deciphering of sentences and so on. In the case of the three tutorials, I attempted to make use of separate skills associated with previous writing lessons to make success with revising a larger writing problem possible.

At the level of moves, task simplification during tutorials was accompanied by student interaction that was relatively facilitated. This is evidenced by the low occurrence of *challenging moves* on the part of the student in all three tutorials. Referring back to the original transcript for Tutorial A, for instance, reveals that the *challenging moves* made by the student averaged to be only 4 from a total of around 30 student-made moves. All four *challenging moves* occurred in the second transaction of Tutorial A where the student was attempting to recall a previous lesson. Hence, at turns (26, 28, 36, and 46), the student makes challenging moves in the form of hesitating to reply to an elicitation. According to Burton (1981), *challenging moves* may appear in the form of interruptions where a speaker asks for repetition or clarification. Their relatively low occurrence on the part of the student in this tutorial indicates that the student did not verbalize any difficulties or obstacles in understanding with the exception of the second transaction where the student seemed to face difficulties in relating the revision to previous learning. Hence, it may be inferred that my simplifying the revision task into sub-tasks during the tutorials helped facilitate the student's understanding and hence interaction during the tutorial. A caveat is in order here since it may seem from a critical standpoint that the relatively minimal number of *challenging moves* is not a valid indicator of the facilitation of student understanding in cases where the student does not verbalize a request for clarification or repetition. However, the point can be made that in the other two tutorials, as in Tutorial A, *challenging moves* on the part of a student were found to cluster in the second transaction where students apparently found it difficult to relate the writing problem to previous learning. This pattern, found in all three tutorials, is indicative of the fact that upon instances when the students faced difficulties they were sure to verbalize this in the form of *challenging moves*. This finding is also indicative of a lapse in my application of scaffolding as it seems that task simplification was an aspect of

scaffolding which did not work well in the second transaction of the tutorials where the relation to previous learning was made as well as it did in the other parts of the tutorials.

In my attempt at task simplification by breaking up the tutorial into sub-parts labeled as transactions, I relied on several *opening moves* mentioned previously to signal the start of a new transaction and hence new task involved in the tutorial. As such, this resulted in an interactional style which established my role as the primary figure in managing the discourse. This extended to the other two tutorials as well where I was the only one initiating *opening moves*. Hence, it seems that in all the tutorials, the students did not attempt to take an initiatory role. From a critical stance, it may be stated that task simplification during the tutorials did not encourage students to take part in managing the discourse as I remained the major figure who managed the discourse during tutorials.

#### 5.2.1.2 Task simplification: speech acts

The analysis of discourse at the level of speech acts also revealed a certain attempt at simplifying the task of revising writing and a relatively facilitated type of student interaction. This is clearly shown through Excerpt 11 taken from the second transaction of Tutorial A.

#### Excerpt 11:

- |       |    |          |  |
|-------|----|----------|--|
| 25. T | O  | m<br>el  | OK./<br>What is that related to?   |
| 26. G | C  | rep<br>^ | Um<br>(hesitates)  |
| 27. T | RO | s<br>p   | From the stuff that we talked about in class and the lessons we had,<br>having a sentence at the beginning is? |
| 28. G | C  | rep<br>^ | That relates to<br>(hesitates.)  |

- 29.T RO p That tells you what the paragraph is about.
- 30.G S ms rep Im not sure about it/  
but like I remember what we did with the circles.
- 31.T BO p The Venn diagram?
- 32.G S rep Yeah, the Venn diagram./  
I You take some ideas and then you fill them in and like you may end up with  
a paragraph you can write.
33. T BO s el And so when we talked about the thesis statements,  
was it enough to just put it at the end of the introduction?
34. G S rep No.  
I You have to also put it in the conclusion.
35. T S acct OK./  
BO el What else can you do with the thesis statement in the essay?
36. G C rep Um.  
^ (hesitates.)
37. T RO p You can use it to do what in the paragraphs?/  
p You've stated your thesis and?
38. G S rep Yeah.
39. T BO p And the reader know what to expect?
40. G S rep Umhm.
41. T BO el So what would be a good idea to do in the rest of the paragraphs?
42. G S rep To explain them more.
43. T S acct Yes, state them.
44. G S ack Yeah, state them.
45. T FO con So if by having the thesis statement what you do then is refer to each part of  
your thesis at the beginning of a paragraph.
- .....
- O el What's that called?  
P What do you call the sentence that you put at the beginning of a paragraph or  
somewhere else that tells you what the whole paragraph is about?

After the student had identified the problem with not having a topic sentence in body paragraphs of a comparison and contrast essay, I embark in this excerpt on the second sub-task involved in the tutorial where the student has to relate the writing revision to a previous lesson on thesis statements. To that extent, I rely on a *marker* at turn (25) to mark in the start

of this new sub-task and introduce the coming elicitation. According to Burton (1981), the *marker* acts to mark divisions in the discourse indicating when a speaker has a topic to introduce. In all three tutorials, it seems that with each transaction, I progressively made more use of *markers* to mark boundaries in the discourse thus reinforcing the various sub-parts of the task. Later on in this excerpt, after the student had recalled a previous lesson on thesis statements, I attempt, within the same sub-task of making the relation to previous learning, to move on to another topic that marks the start of a new exchange. In this new exchange within the transaction, I try to elicit from her the specific name given to a sentence in body paragraphs which refers back to the thesis statement. To mark this new exchange, I rely on a *conclusion* at turn (45) which summarizes the discourse that previously went on by stating that body paragraphs in an essay should refer back to the thesis statement. According to Burton (1981), a *conclusion* acts to clarify the structure of the preceding discourse. Hence, it serves the scaffolding function of task simplification by reinforcing the division between two sub-topics. With the *conclusion* at (45) thus established, I move on to a new exchange marked by a dotted line which includes the last elicitation necessary to make the relation of the revision task to previous learning possible.

As with the case at the level of moves, task simplification was accompanied by an interactional style at the level of speech acts which was relatively facilitated. In Excerpt 11, there were only three cases when the student hesitated at turns (26,28, and 36) in response to an elicitation. All three instances of hesitation, however, were resolved later on in the discourse so that there seemed to be no need for the student to make any *elicits*, speech acts which according to Burton (1981) are realized by a question. As a matter of fact, an examination of student-made *elicits* in all three tutorials reveals that they are quantitatively few in number formulating less than 2% of all the total speech acts made by each student during a tutorial.

### 5.2.2 OBSERVATION AND INTERVIEWS

Data obtained from the observation of the three tutorials acted to confirm the presence of task simplification during each attempt to revise writing. Two observers clearly noted the presence of that element in the instructional process:

- (1) You simplified the whole process of revision by focusing on one aspect of the writing at a time. You made the student focus on specifics by directing her attention to a particular paragraph. Taken step by step, everything was divided into parts.
  
- (2) Throughout the tutorial, you led the student step-by-step with your prompts. In the second stage, you moved from discussing generalized steps that the student had learned during class time to a step-by-step appraisal of the student's own paper. Your questions here guided the student through the process of breaking down a paragraph into its components in order to examine each sentence. You instructed the student to first focus on the first paragraph and asked the student to tell you what the focus of the paragraph was. In that case, the focus was on rhythm. Then, you asked the student to examine the first sentence. You proceeded sentence by sentence, encouraging the student to focus on the subject of each sentence. As a result, the student was able to realize that a number of sentences she had included in the first paragraph on rhythm are topically irrelevant at that point and did not belong in the first paragraph.

Interviews conducted with the students following the tutorials also seemed to indicate a certain attempt on my part to simplify the revision task during the tutorials which helped them understand the writing revision more easily hence facilitating student interaction during each tutorial. This viewpoint is reflected in some of their comments below:

1. This was different because when we usually revise, you ask me to do the stuff, but here you showed me how to do it step by step. You stated why it was important and why it was not and why you have to use it.
2. There was definitely different tasks that were divided so I knew what I had to do. It was a good way to learn with all the steps. You explained the problem then gave examples from old lessons and then asked me to apply all that to my writing. Moreover, you went step by step because we concentrated on one paragraph only. This made me understand better than before more than I thought I did. Your instructions were clear because you went over the problems I had one at a time. There was a question which I at first I didn't understand, but later with your explanation I did understand.

One student even specifically noted the fact that my reliance on dividing the revision task into sub-tasks helped establish my role as the primary figure in the management of the discourse during the tutorial. This is revealed through her comment below:

3. When you went from one step to another, I was trying to follow your ideas. You were the leader, and I was trying to move from one part with you to the other.

## 5.3 EXPLORATION

### 5.3.1 EXPLORATION: DISCOURSE ANALYSIS

#### 5.3.1.1 Presence of exploration in instruction

One of the most salient elements present in the instructional process I employed during the tutorials relates to exploration. I used exploration in place of more traditional explicit explanation to help the student identify the writing problem, relate it to previous learning then apply that revision to the writing. Hence, I made use of discursive interaction allowing the student to independently arrive at the revision to be made in writing intervening only when I detected a need to do so. Although this element of scaffolding was present throughout each of the three tutorials, it was particularly prominent in the first transaction of each tutorial where the attempt was being made to try to get the student to identify the revision to be made. As such, Excerpt 12 below was chosen from the first transaction of Tutorial A to demonstrate how this exploratory process took place.

#### *Excerpt 12:*

- |    |   |    |      |   |
|----|---|----|------|---|
| 3. | T | S  | acct | OK./  |
|    |   | BO | s    | If you look at the body paragraphs,/  |
|    |   |    | el   | can you tell what each paragraph is talking about?  |
| 4. | G | S  | rep  | Yeah.   |
| 5. | T | BO | p    | Is it easy to tell?   |
| 6. | G | S  | rep  | Yeah./  |
|    |   | I  |      | Its easy to tell cause its showing like that this paragraph is talking about a specific and the other one is talking about another thing. |
| 7. | T | S  | acct | OK./  |
|    |   |    | p    | How do you know that?   |
| 8. | G | S  | rep  | Um, choosing words and how we explain them; how we try to explain the paragraphs so and relating it to the topic./                        |

- I           so when you explain it, um, you just use small words to write your main point and explain it.
9. T     S       acct    OK./  
      BO    el       Can you just by reading the paragraph figure out what the main idea is?
10. G    S       rep     Yes.
11. T    BO     p       Or is there something you can do to make that a little easier?
12. G    S       rep     Um, yeah./  
      I       I       You can make that a little easier by like adding words.
13. T    S       acct    Yeah./  
      p       p       What kind of words?
14. G    S       rep     Specific words/  
      ms     ms     like if I was talking for example about like here (refers to  
          essay) I'm talking about living, I'd go ahead and talk  
          about money, talk about like people and friends./
- I           You know, just talk about stuff that ties to the main point of the paragraph.

In this excerpt, I start out the tutorial by trying to get the student to identify the structural problem with not including a topic sentence in body paragraphs. To that extent, I do not directly spell out the problem to the student explicitly through *informatives* or *comments*, two speech acts which according to Burton (1981) function to provide information directly. Rather, I rely on *elicits*, which according to Burton (1981) function to request a linguistic response and *prompts* which act to reinforce previous *elicits*. For instance, I start with an *elicit* at turn (3) which asks the student if the topic of each paragraph is clear. When the student fails at turn (4) to realize that the topic is not clear, I proceed to prompt her at turns (5) and (7) until at turn (8), she realizes that the main idea of the body paragraphs is not clear. Later on at turn (9), I make another *elicit* that attempts to make the student realize that this lack of clarity is related to not including a sentence in each paragraph that states the main idea. To that extent, I continue with *prompts* at turns (11) and (13) until the student at turn (14) realizes that there has to be “specific words” which state the main idea in a paragraph. By not providing the student with explicit information, my use of such *elicits* and

*prompts* thus work to place the responsibility for learning during the tutorial on the part of the student.

The high incidence of *elicits* and *prompts* over *informatives* and *comments* as speech acts used on my part as teacher in Excerpt 12 is representative of the whole of Tutorial A, a pattern which is mirrored in the three other tutorials as well. This is clearly shown in Table 5.2 below which presents the frequency distribution of speech acts on my part as teacher in Tutorial A.

TABLE 5.2\*: FREQUENCY DISTRIBUTION OF SPEECH ACTS USED BY TEACHER  
IN TUTORIAL A

SPEECH ACT	TOTAL NUMBER OF ACTS
m	2
sum	
s	4
ms	1
i	
el	16
d	
rea	
con	2
ack	2
P	15
acct	13
rep	
com	2
^	
ex	
accn	
pr	

\*key: see Appendix 5 for a list of the various speech acts used in the lessons.

Excerpt 12 also shows an absence of *s* on my part. Identified by Burton (1981) as speech acts which function to clarify the structure of the discourse to follow, *metastatments* are indicative of a highly structured pre-planned tutorial. Hence, their absence in Tutorial A in general and low occurrence in the other two tutorials on my part as the teacher reflects the exploratory nature of instruction as they are not needed since in this exploratory process, my perspective emerges as the instruction progresses. Hence, I did not need to verbalize the

lesson structure to students as much. Also absent in Excerpt 12 are *directives* which according to Burton (1981) function to request non-linguistic responses. As such, *directives* formulate speech acts which on the part of the teacher are more representative of traditional instruction related to highly explicit structured explanations. Their absence in all three tutorials is thus indicative of the exploratory nature of instruction which I employed. In addition, since *directives* stress the authority associated to my role as a teacher in a tutorial, they may come to impede the exploratory process of instruction by highlighting the unequal status of associated with my role and that of the student during a tutorial.

From a critical standpoint, this exploratory process of instruction was a scaffolding element which seemed to be inhibited to a certain extent by the attempt at task simplification discussed in the previous section. In other words, my attempt at simplifying the revision task by breaking it up into three sub-parts in the form of transactions limited the amount of exploration that could take place. Thus, no matter how much exploration took place in a transaction, it was still within the boundaries set forth by the objectives inherent in that transaction. For instance, In Excerpt 12, the exploratory process always remained within the bounds of identifying the revision to be made in writing, the objective of that transaction. In that sense, task simplification could be said to have limited the effectiveness of exploration as a scaffolding element.

The prominence of an exploratory style of instruction in all three tutorials formulates one of the most conspicuous elements of scaffolded instruction according to the literature on scaffolding. For instance, Wood et al (1976) recognize such exploration as a primary element of the scaffolding process in tutoring holding that a student is first induced into tasks that result in recognizable solutions. With that, the tutor shows the student differences. Finally, the tutor simply takes on a role of confirmation until the student is able to independently complete a task. Along a similar note, Rogoff and Gardner (1984) associate

such prompting used in the exploratory style of instruction which I employed as a characteristic of scaffolding. They hold that the expert in the prompting process does not explicitly explain how to complete a task but instead employs prompting to progressively reduce the scaffolding to a level slightly beyond what the student can complete independently. For Edwards and Mercer (1987), this prompting process is referred to as cued elicitation whereby the teacher asks questions containing clues for the required student response. Overall, support for the fact that the exploratory process I attempted in all three tutorials may be considered an element of scaffolding comes from the work of Rogoff and Gardner (1984) who identified exploration as a scaffolding element because it involves a more or less subtle transfer of responsibility for completing a joint task from the tutor to the student through successive attempts based on the student's level of readiness in adopting more responsibility for the task.

### 5.3.1.2 Exploration and student interaction

Excerpt 12 below will be used again to describe the type of student interaction which took place during the exploratory process of instruction.

#### *Excerpt 12:*

3.T	S	acct	OK./
	BO	s	If you look at the body paragraphs/
		el	can you tell what each paragraph is talking about?
4.G	S	rep	Yeah.
5.T	BO	p	Is it easy to tell?
6. G	S	rep	Yeah./
		I	Its easy to tell cause its showing like that this paragraph is talking about a specific and the other one is talking about another thing.
7. T	S	acct	OK./
		p	How do you know that?

- |       |    |      |   |
|-------|----|------|---|
| 8. G  | S  | rep  | Um, choosing words and how we explain them; how we try to explain the paragraphs so and relating it to the topic./  |
|       |    | I    | so when you explain it, um, you just use small words to write your main point and explain it.   |
| 9. T  | S  | acct | OK./  |
|       | BO | el   | Can you just by reading the paragraph figure out what the main idea is?   |
| 10. G | S  | rep  | Yes.  |
| 11. T | BO | p    | Or is there something you can do to make that a little easier?  |
| 12. G | S  | rep  | Um, yeah./  |
|       |    | I    | You can make that a little easier by like adding words.   |
| 13. T | S  | acct | Yeah./  |
|       |    | p    | What kind of words?   |
| 14. G | S  | rep  | Specific words/   |
|       |    | ms   | like if I was talking for example about like here (refers to essay) I'm talking about living, I'd go ahead and talk about money, talk about like people and friends./ |
|       |    | I    | You know, just talk about stuff that ties to the main point of the paragraph.   |

A second glance at this excerpt from the point of view of student interaction shows the demonstration of dialogic skills by the student where she takes an active participatory role in the tutorial. For one thing, her *replies*, speech acts which according to Burton (1981) function to provide a linguistic response to an *elicit*, to my *prompts* and *elicits* are not short responses. Rather, they are quite elaborate and long comprising of more than one speech act. For instance, at turns (4) and (10), the student provided two short *replies* in response to the two *elicits* I made at (3) and (9). However, once I supplement the two *elicits* with *prompts* at (5), (7), (11) and (13), the student elaborates on her *replies* with an *informative* at (6), (8), (12), and (14). Another characteristic of student interaction demonstrated through Excerpt 12 is the taking up of responsibility for the learning process. This is clearly shown through the the student makes at turn (14) where she reflects on her writing by supposing and if-then reasoning. This indicates that the student has taken on responsibility for her writing as she feels obligated to elaborate on a topic after presenting it as the main idea of a paragraph.

### 5.3.2 EXPLORATION: OBSERVATION AND INTERVIEWS

The observations made on the general characteristics of instruction during the three tutorials in general verify the presence of this exploratory style of instruction characterized by much prompting and independent task completion on the part of the student. As one observer noted:

- (1) You asked a lot of questions to get the student to understand the revision task. All the questions put together would help the student arrive at a way of understanding because they were prompting questions. You even asked the student about alternatives to approaching the task: "Is there something you can do to make it easier?"

Another observer not only confirmed the presence of such exploration but also the findings arrived at through analysis of discourse in relation to how such exploration was accompanied by the student's taking on a more active role in the discussion by provided more full and elaborate responses.

- (2) A lot of prompting was used. When the student responded tentatively, unsure of herself with a look of puzzlement on her face, you rephrased the questions twice. It was clear that you were looking for an answer but were unwilling to tell the student outright. In other words, you were attempting to lead the student to produce a specific response which in this case was reference to the class produced graphic organizer. The student in turn seemed to respond more fully and authentically to this. She needed very little prompting in providing information or offering an opinion.

Along a similar note, during the interviews, most students expressed that the presence of prompting as a characteristic of an exploratory style of instruction helped them take a more

active participatory role in the tutorial as well making them more likely to elaborate on responses to my questions. This may be seen through the following replies made by two of the students being interviewed.

- (1) I remember how at the beginning you helped me with my mistakes. Later, you kept asking me and asking me over and over again to see if I understood. You even asked me with demonstration. I think this helped me feel less nervous in a way than I did when we first started. I felt that I wasn't too shy at the end to answer your questions and also state my opinion.
- (2) You kept asking me a lot of questions until I gave the right answer. I realized that I tried to only say a few words at the beginning. Maybe I wasn't comfortable. I usually don't talk much. But all those questions made me talk more.

## **5.4 TEACHER FEEDBACK TO STUDENT RESPONSE**

### **5.4.1 EXPLORATORY FEEDBACK: DISCOURSE ANALYSIS**

#### *5.4.1.1 Exploratory feedback: patterns of moves*

As discussed in the previous section, the exploratory process of instruction, though most prominent in the first transaction of each tutorial, formulated an aspect of scaffolding which extended throughout each of the tutorials. In fact, exploration involved not only prompting and guided assistance at the stage of eliciting responses, but extended as well to the type of feedback I provided to student response. As a result, rather than including the discussion of feedback which was of an exploratory nature under the section headed 'exploration', for the sake of clarity, I decided to devote a separate section for the discussion of how my feedback

to student response during tutorials assumed a relatively exploratory nature. It should be noted, however, that despite devoting a separate section for discussing feedback, it still remains a function which fits under the exploration category I included in Table 3.1 of my categorization of scaffolding elements.

Excerpt 13 below taken from the second transaction of Tutorial A will be used to demonstrate, at the level of moves, how my feedback to student response assumed an exploratory nature and what type of interaction was created in the process.

*Excerpt 13:*

- |       |    |      |  |
|-------|----|------|--|
| 35. T | S  | acct | OK./   |
|       | BO | el   | What else can you do with the thesis statement in the essay?   |
| 36. G | C  | rep  | Um.  |
|       |    | ^    | (hesitates.)   |
| 37. T | RO | p    | You can use it to do what in the paragraphs?/  |
|       |    | p    | You've stated your thesis and?   |
| 38. G | S  | rep  | Yeah.  |
| 39. T | BO | p    | And the reader know what to expect?  |
| 40. G | S  | rep  | Umhm.  |
| 41. T | BO | el   | So what would be a good idea to do in the rest of the paragraphs?  |
| 42. G | S  | rep  | To explain them more.  |
| 43. T | S  | acct | Yes, state them.   |
| 44. G | S  | ack  | Yeah, state them.  |
| 45. T | FO | con  | So if by having the thesis statement what you do then is refer to each part of your thesis at the beginning of a paragraph.                    |
| ..... |    |      |  |
|       | O  | el   | What's that called?  |
|       | P  |      | What do you call the sentence that you put at the beginning of a paragraph or somewhere else that tells you what the whole paragraph is about? |
| 46. G | C  | rep  | Um   |
|       |    | ^    | (hesitates.)   |
| 47. T | RO | p    | Topic sentence maybe?  |
| 48. G | S  | rep  | Yeah, topic sentence.  |

In this excerpt, I attempt to make the student relate the revision to be made in writing to previous learning by recalling an earlier lesson on thesis statements which demonstrated how body paragraphs in an essay should include topic sentences that refer back to the thesis statement of an essay. My initial elicitation at (35) in relation to the use of the thesis statement throughout an essay is thus meant to get the student to respond that a thesis statement should be referred to in each of the body paragraphs. When the student hesitates with a *challenging move* at turn (36), I do not assess or evaluate that response. Instead, I adopt a more exploratory style of feedback whereby make use of a *re-opening move* at (37) which includes prompting in the form of rewording the initial elicitation. According to Burton (1981), *re-opening moves* reintroduce the topic after a *challenging move*. Similarly, at turn (46), when the student hesitates after I attempted to elicit from her the term ‘topic sentence’ as the specific name given for a reference to the thesis statement in an essay, I use a *re-opening move* at (47) which prompts her to come up with that term. Thus, by re-introducing the topic in this way, the probing nature of my feedback was used to prompt the student with a *re-opening move* upon hesitation.

The picture changes in cases when the student’s reply, though not including hesitation, was still incomplete. In such cases, I made use of *bound-opening moves*, which according to Burton (1981) re-introduce the topic after a *supporting move*, in place of *re-opening moves* as a form of feedback. For instance, at turn (38), the student, rather than answering my prompts at (37), simply responds with acknowledgment. My feedback to this incomplete reply does not in any way assess it. Rather, I make use of a *bound-opening move* at (39) which prompts the student to expand on her response. When the student continues to provide another incomplete response at turn (40), I once again refrain from evaluating that response in any way or indicating to the student that it is not complete. Rather, I proceed to

guide the student into a more appropriate response through the *bound-opening move* at (41) which rewords the initial elicitation.

In sum, I seemed to have relied more on *re-opening moves* in the face of student hesitation and *bound-opening moves* when the student's response was not complete. In that respect, the student's response at any given point determined the type of feedback I gave in relation to whether the student was ready for the next level of learning or not. From the view point of student interaction, Excerpt 13 shows that after a series of *re-opening* and *bound-opening moves*, the student was guided into a more complete response so that by turn (42), she was able to recall from a previous lesson that the body paragraphs in her essay need more explanation in terms of clarity. Later on at turn (48), she is able to recall the term 'topic sentence' as the term given for the sentence that explains body paragraphs. Throughout this process, the student seems to demonstrate a relative understanding since there were only two incidents where the student demonstrated a lack of understanding by making *challenging moves* in the form of hesitation. These two cases of hesitation previously discussed actually represent 2 from a total of only 4 *challenging moves* made by the student in Tutorial A. Hence, student interaction which accompanied such exploratory feedback may be described as representing a relatively shared understanding between the student and myself as teacher whereby the student was able to share my perspective on the task of relating the revision to previous learning without much difficulty as evidenced by the sparse number of *challenging moves* on her part.

This exploratory characteristic of the feedback I used in all three tutorials relates to the discussion of scaffolding found in the literature. Edwards and Mercer (1987) identify such paraphrastic interpretations of a pupil's response as being part of scaffolded instruction. More specifically, they refer to such feedback as reconstructive recaps whereby the teacher reconstructs a pupil's reply by recapping it in a more explicit way. Along a similar note,

Mercer (1998) notes that in the scaffolding process, the teacher's feedback to a student's replies is more probing and prompting than it is evaluative. As such, it formulates part of what Mercer (1998) identifies as spiral IRF exchanges in which the teacher reacts to student responses by attempting to make the student think about the task at hand guiding and shaping the learning process instead of inquiring as a way of assessing student learning.

#### 5.4.1.2 Exploratory feedback: speech acts

The analysis of discourse at the level of speech acts displays a similar pattern in terms of the exploratory nature of my feedback to student responses during the tutorials. Excerpt 14 below taken from the last transaction of Tutorial A will be used to demonstrate my use of exploratory feedback and the type of interaction which accompanied it at the level of speech acts.

#### *Excerpt 14:*

- |       |   |    |          |  |
|-------|---|----|----------|--|
| 51.   | T | C  | p        | What?  |
| 52.   | G | S  | rep      | Like to add the topic sentence in every paragraph.                                 |
| 53.   | T | S  | acct     | Yeah.  |
| 54.   | G | S  | I        | To make it more clear and to add the thesis statement in the conclusion.           |
| 55.   | T | S  | ack      | Yeah.  |
| 56.   | G | S  | I        | To remind the reader what the thesis is.   |
| 57.   | T | S  | ack      | OK./   |
| ..... |   |    |          |  |
|       |   | FO | ms       | Lets try doing the first paragraph./   |
|       |   | O  | el       | What topic sentence can you add to it?   |
| 58.   | G | S  | rep<br>I | Um, I can just go ahead and start with the word freedom./<br>Then explain freedom. |
| 59.   | T | S  | ack      | OK./   |
|       |   | FO | con      | So you'd say one of the ways in which they differ is in terms of freedom./         |

- |       |         |            |  |
|-------|---------|------------|--|
|       |         | el         | Then do you go ahead and develop it?   |
| 60. G | S       | rep        | Yeah.  |
| ..... |         |            |  |
| 61. T | O       | el         | Can you do the other one?  |
| 62. G | S       | rep<br>con | Um, the other one is type of education./<br>So I would go type of education and then develop it. |
| 63. T | S<br>BO | acct<br>el | OK, good./<br>Do you get this/   |
| 64. G | S       | rep        | Yeah.  |
| 65. T | S       | acct       | Great.   |

In this excerpt, I attempt to get the student to realize how the revision may be applied to her essay. The student's *reply* at turn (52) indicates that she is aware that the revision to be made involves adding a topic sentence to each body paragraph. The feedback I give at turn (53) to this reply is in the form of an *accept*, a speech act which according to Burton (1981) functions to show that I am compliant to that *reply*. However, as the speech acts used by the student in her response change at turns (51), (56), and (58) to include *informatives*, I avoided the *accept* since it may come to indicate some evaluation and assessment on my part when it follows an *informative*. In its place, I used at turns (55), (57), and (59) the *acknowledge*, a speech act which according to Burton (1981) acts to indicate that I have understood an *informative*. Thus, the nature of my feedback changed in terms of the type of speech acts used in order to avoid an evaluation of student responses.

A glance at turns (63) and (65) shows that they are two cases when I resumed to use the *accept* rather than the *acknowledge* at the very final part of the tutorial. From a critical stance, this indicates two cases when exploratory feedback was not applied very effectively as a scaffolding element. Although I was able to maintain a relatively stable stance in making my feedback to student response exploratory throughout the tutorial, it seems that I felt an urge at the end to offer the student some form of evaluation thus reverting to a more traditional instructional approach. The point can thus be made that providing exploratory

feedback to student response is an aspect of scaffolding which may be particularly difficult for the teacher to apply at the end of a tutorial where a need is felt to offer the student some assessment on the task just completed.

A glance at Excerpt 14 from the viewpoint of student interaction shows that, as at the level of moves, student interaction may be described as involving a relatively shared understanding between the student and myself as teacher. Even though turn (52) in this excerpt appears at the beginning of the third transaction where the student is still to identify the revision to be made then apply it to her essay, the student, through her *reply* at this turn, reveals an awareness of how she is to revise her essay by adding a topic sentence to each body paragraph. At turns (54) and (56), she demonstrates further understanding with two *informatives* she uses to elaborate on the importance of making that revision. When I made a new *elicit* at turn (57) which signaled a start of a new exchange where the student was to apply the revision to the first paragraph of her essay, she is able at turn (58) to identify the main idea of that paragraph as 'freedom'. She goes on in that same turn to provide an *informative* that elaborates on how she will explain that main idea. Similarly, at turn (61), I use an *elicit* to mark the start of a new exchange where the same revision is to be applied to yet another paragraph. Here again, the student demonstrates understanding by identifying the topic of that paragraph as 'type of education' in her *reply* at (62) which she also elaborates on with a *conclusion*.

With the student thus sharing my understanding and arriving at my perspective of the revision task, there seemed to be no need for prompting on my part towards the end of the tutorial. As a result, the four *elicits* I previously discussed were not followed by any *prompts* on my part because the student was easily able to arrive at an understanding of how the revision is to apply to her essay. As a matter of fact, I do not use any *prompts* in the whole last transaction from which Excerpt 14 was extracted.

#### 5.4.2 EXPLORATORY FEEDBACK: OBSERVATION AND INTERVIEWS

In all the interviews, students confirmed the scaffolded nature of my feedback to their responses during the three tutorials. From the students' viewpoint, the fact that my reaction to their feedback was more probing than evaluative in nature was quite a salient characteristic of the tutorial instruction. One student noted that such feedback was accompanied by an interactional style similar to the shared understanding between the student and myself revealed through the analysis of discourse. Her words below show how the probing nature of my feedback during the tutorial helped in what she felt created a comforting atmosphere during the tutorial thus contributing to the achievement of a better understanding of the revision task.

(1) In the beginning, I was a little bit nervous, but the way you responded to what I was saying made me feel more comfortable. It wasn't like you were testing me to see if my answer was wrong or right. You just kept asking me questions to help me understand more even if I said something wrong. This made me understand more. As I said before, I felt better, and I was encouraged by the way you asked me questions. The tone of your voice and your eye contact made me feel better because you were talking to me with enthusiasm not like you were testing me. I remember when there was a questions I didn't understand at first, but later I did because you asked me why, and you helped me to know the right answer. You gave me clues which led me to know the right answer. At the beginning when I didn't understand the question, I felt scared because I was afraid I wouldn't be able to answer the rest of the questions. But when you asked me a lot of other questions, I felt relieved because now I understood them.

The contribution which such prompting feedback gave to a better understanding of the revision task arrived at through the analysis of discourse was also noted by one of the

students during an interview. Interestingly enough, the student provided a justification for shared perspective on the revision task; she held that the progressive series of questions associated with prompting actually create less wait time for her to answer. As a result, she had to stay focused and provide a quick answer before I initiated another question as part of the probing nature of my feedback. She expressed this viewpoint during the interview through the following.

(2) I was answering with confidence and wasn't wandering off. You gave me one question after another. I felt there wasn't enough time to answer the questions so I had to answer them quickly. Moreover, I felt you were going to ask me a lot of questions, about 20 maybe. But at least I paid attention and didn't wander off.

The observations also confirmed the finding that my reliance on prompting and probing as part of the feedback to student responses during the tutorial helped harbor increased understanding on the part of the student. This is clearly reflected in the following notes made by two observers.

(1) Its very obvious that you relied on much prompting during this tutorial questioning the student over and over again until you achieved the objective you had in mind. This reflected on the student positively because the student was on task 100%. With all those questions, there was little opportunity for digression. Not only that, but the student demonstrated understanding at the end. She explained her plan for revision to show that she understood what needed to be done and verified what she had already done.

(2) When the student was not able to answer one of your questions, you offered a prompt after a few moments asking a more direct question to get the student thinking about the editing task: "Does the paragraph make sense?" You allowed for a long pause, remaining silent until the student responded. At that point, you simply validated the student's response by saying, "OK, good." When the student got stuck, you prompted her gently. Whenever there was pause in the student's responses, you nodded encouragingly maintaining

eye contact and coaxing answers from the student. The student was given support from you on a number of different occasions but not because she showed signs of distraction or work-avoidance. She was clearly involved in the task and seemed not to evade any question. At the end, the student seemed to respond affirmatively to being able to apply the process to the rest of her essay displaying confidence not shown earlier in the tutorial.

## **5.5 REDUNDANCY**

### **5.5.1 REDUNDANCY: DISCOURSE ANALYSIS**

#### *5.5.1.1 Redundancy in instruction*

Yet another characteristic of instruction found to be present to a considerable extent in all three tutorials relates to redundancy. Prior to demonstrating the presence of redundancy, it should be noted that although the attempt at redundancy was present throughout each of the three tutorials, redundancy seemed to be the most prominent in the second transaction since this transaction was specifically devoted to the purpose of relating the revision to be made in writing to previous writing lessons. This makes redundancy an aspect of instruction which is actually part of task simplification, the scaffolding element discussed in a previous section as breaking each tutorial into 3 sub-parts the second of which represented redundancy through its objective of relating the revision to previous lessons. Hence, I have chosen Excerpt 15 from the second transaction of Tutorial A to demonstrate my attempt at redundancy.

*Excerpt 15:*

25. T O m el OK./  
What is that related to?
26. G C rep ^ Um  
(hesitates)
27. T RO s p From the stuff that we talked about in class and the lessons we had/  
having a sentence at the beginning is?
28. G C rep ^ That relates to  
(hesitates.)
29. T RO p That tells you what the paragraph is about.
30. G S ms rep I'm not sure about it/  
but like I remember what we did with the circles.
31. T BO p The Venn diagram?
32. G S rep I Yeah, the Venn diagram./  
You take some ideas and then you fill them in and like you may end up with  
a paragraph you can write.
33. T BO s el And so when we talked about the thesis statements/  
was it enough to just put it at the end of the introduction?
34. G S rep I No.  
You have to also put it in the conclusion.

My objective in this excerpt was to allow the student to independently make the link between the identification of the revision to be made in writing and a previous lesson on thesis statements as a way of preparing her for the revision to take place in the third and final transaction. To that extent, I start with an elicitation at turn (25) which directly asks the student to relate the revision she had identified earlier to previous lessons. When the student hesitates at turns (26) and (28) to make that link, I proceed with *re-opening moves* at (27) and (29) which gives the student cues to help her recall earlier lessons. The student is then able to provide a response at (30) and (32), but that is still not very accurate. As a result, I make use of *bound-opening moves* at (31) and (33) to again prompt the student by reminding her of an earlier lesson on thesis statements. Since *bound-opening* and *re-opening moves*

according to Burton (1981) function to re-introduce a topic, their presence is an indication of redundancy in my instruction.

Indeed, in the whole of Tutorial A, *bound-opening* and *re-opening moves* represent around 40% of all total number of moves I made as a teacher. Such repetition in learning, demonstrated through the exploratory process which makes use of a series of *re-opening* and *bound-opening moves*, makes redundancy an element of scaffolding which is actually part of exploration, the scaffolding element discussed in a previous section. As such, the exploratory process itself can be said to involve redundancy.

Excerpt 16 below demonstrates how redundancy continued in that same transaction of Tutorial A.

*Excerpt 16:*

- |     |   |    |      |   |
|-----|---|----|------|---|
| 35. | T | S  | acct | OK./  |
|     |   | BO | el   | What else can you do with the thesis statement in the essay?  |
| 36. | G | C  | rep  | Um.   |
|     |   |    | ^    | (hesitates.)  |
| 37. | T | RO | p    | You can use it to do what in the paragraphs?//  |
|     |   |    | p    | You've stated your thesis and?  |
| 38. | G | S  | rep  | Yeah.   |
| 39. | T | BO | p    | And the reader knows what to expect?  |
| 40. | G | S  | rep  | Umhm.   |
| 41. | T | BO | el   | So what would be a good idea to do in the rest of the paragraphs?   |
| 42. | G | S  | rep  | To explain them more.   |
| 43. | T | S  | acct | Yes, state them.  |
| 44. | G | S  | ack  | Yeah, state them.   |
| 45. | T | FO | con  | So if by having the thesis statement what you do then is refer to each part of your thesis at the beginning of a paragraph. |

This excerpt continues with a *re-opening move* I made at (37) when the student hesitates at turn (36) to respond to my elicitation which required her to remember from a previous lesson the purpose of a thesis statement in an essay. This prompts her to respond but with incomplete *replies* at (38) and (40), in which case I make use of *bound-opening moves* at (39) and (41) to provide cues reminding her of the earlier lesson so she could expand on her response. The excerpt ends with a *focusing move* I made at turn (45) which contains a *conclusion*, a speech act I used to summarize the earlier lesson on thesis statements related to the revision. The association of this *focusing move* with a *conclusion* actually formulates a mnemonic strategy since it reveals an attempt on my part to provide a quick review or summary of the discourse.

The presence of such an attempt at redundancy as a characteristic of my instruction during the three tutorials may actually be considered an element of scaffolding as identified by Rogoff and Gardner (1984). For Rogoff and Gardner (1984), scaffolding involves redundancy which is slowly reduced with the progression of instruction only to reappear upon the presence of error on the part of the student. More specifically, they identify any mnemonic strategy used to aid in recall such as my attempt to relate the revision during a tutorial with previous writing lessons as a scaffolding element. Along similar lines, the redundancy associated with my modeling the revision task in the tutorials by providing an example for the student to imitate then apply to the rest of the writing is identified by Wood et al (1976) as demonstration, one of six scaffolding functions involved in tutorials.

#### *5.5.1.2 Redundancy and student interaction*

A particular style of student interaction accompanied the redundancy present during the three tutorials. Excerpt 17, taken again from the second transaction of Tutorial A were

redundancy was the most prominent, will be used below to describe student interaction upon the implementation of redundancy.

*Excerpt 17:*

- |     |   |    |           |  |
|-----|---|----|-----------|--|
| 25. | T | O  | m<br>el   | OK./<br>What is that related to?   |
| 26. | G | C  | rep<br>^  | Um<br>(hesitates)  |
| 27. | T | RO | s<br>p    | From the stuff that we talked about in class and the lessons we had/<br>having a sentence at the beginning is?                       |
| 28. | G | C  | rep<br>^  | That relates to<br>(hesitates.)  |
| 29. | T | RO | p         | That tells you what the paragraph is about.  |
| 30. | G | S  | ms<br>rep | I'm not sure about it/<br>but like I remember what we did with the circles.  |
| 31. | T | BO | p         | The Venn diagram?  |
| 32. | G | S  | rep<br>I  | Yeah, the Venn diagram./<br>You take some ideas and then you fill them in and like you may end up with<br>a paragraph you can write. |

This excerpt, part of Excerpt 15 previously discussed in relation to redundancy in instruction, displays two instances of student hesitation in the form of *challenging moves* at turns (26) and (28) where the student was unable to respond to my initial request at turn (25) to relate the revision to prior lessons. Since in all three tutorials, the highest number of *challenging moves* on the part of the student clustered in the second transaction where they had to relate the revision task to previous learning, this may indicate that the students found redundancy associated with the task of recalling previous learning to be the most difficult and challenging task of the tutorial. Such *challenging moves* which according to Burton (1981) act to hold the progress of a topic, however, were not once related to off-task behavior, a refusal on the part of the student to pay attention, or a verbalization of a lack of understanding. Rather, as shown through turns (26) and (28), they were largely in the form

of hesitation, a sign of potential for a response to my initial *elicitation* at turn (25). I stress this potential because such hesitation on the part of students as they related the revision task to previous learning is not to be seen as a sign of lack of involvement. Rather, what may on the surface appear to be an inability to respond is actually a necessary condition to creating the link between the revision to be made and previous learning. Indeed, Goldman-Eisler (1968 qtd. in Donato and Lantolf 1990 p. 89) concluded that SL learners' "pauses, filled and unfilled, do not necessarily signal inactivity on the part of speaker, but instead may represent points at which mental processing is carried out *sub rosa*."

Following some prompting on my part at turns (27) and (29), the student, by turn (30), is able to utter a *reply* when she remembers a previous lesson on Venn Diagrams. This reply at turn (30) is preceded by a where the student reflects on her own understanding and thinking by indicating that she wasn't very sure of the lesson she had just recalled. This reveals some stimulation of reflection on the part of the student.

### 5.5.2 REDUNDANCY: OBSERVATION AND INTERVIEWS

The observations clearly indicate that some attempt at redundancy formulated part of my instruction during the three tutorials. The observers were quick to note how such repetition was accompanied by a stimulation of student thinking processes. This is indicated in the following comments taken from two observations.

- (1) You encouraged the student to remember previous lessons and used a variety of ways to get them to remember. You really tried to make them remember the Venn Diagram. Also, you had the student summarize her plan for editing. This made the student use all previously learned information about the thesis statement and topic sentence to explain to you what she saw missing. I think she was very effectively able to remember previous learning and apply it to the new writing through revising.

(2) After the student's response to the first question, you immediately referred to previous work that the student had carried out in class by asking, "How does this relate to what we've been doing in class?" Also, you seemed to summarize the discussion during the tutorial for the student explaining the importance of each point. The student in turn appeared to be contemplate each response carefully. If a question was difficult to answer, the student would hesitate a little then ask for clarification.

From the students' standpoint, repetition was not only present throughout the tutorials but also helped them in the learning process. This stance is clearly reflected in some of the following replies given during the interviews.

(1) Yes, you did repeat a lot. I remember going over the sentences that you chose a examples. Later, we went to another sentence as another example. So there was repetition. You even asked me how this is going to help me later on. You made me realize more than before the importance of the graphic organizer. You even asked me what can I do next time to help me improve my writing. All this made it stick in my head.

(2) The things that made me remember was that the examples that you gave me are from my own writing which really helped. If the examples weren't from my own writing, I wouldn't have understood as much as I did. Also, I got reminded for the errors I did. I understood because when I made a mistake, we went over the mistake. This made me learn from my mistakes but there was no useless repetition. You only repeated when I didn't understand.

## **5.6 CONCLUSION**

This section summarizes the chapter by presenting the findings I arrived at through the three tutorials in the form of a matrix. The first column in the matrix represents the characteristics of instruction which were found to be the most prominent in the particular

case of the three tutorials in which I attempted to implement scaffolding. Column 2 describes how each of the four most prominent elements of instruction fits as an element of scaffolding according to the literature. Column 3 and 4 show how each scaffolding element may be realized linguistically according to the Burton model both at the level of moves and speech acts. Column 5 describes student interaction in the particular context of my three tutorials. Finally, columns 6 and 7 show how this type of student interaction may be realized linguistically according to the Burton model both at the level of moves and speech acts.

It is important to note that columns 3, 4, 6, and 7, which develop the interface between my research objectives and the use of the Burton model have been added to accentuate the linguistic element associated with the research methodology used in this study. That is realized through the fact that the major form of data collection which I used in this study is the analysis of spoken discourse with observation and interviews used mainly to back up findings.

TABLE 5.3: SUMMARY OF FINDINGS FROM TUTORIALS

MOST PROMINENT CHARACTERISTIC OF INSTRUCTION	HOW IT FITS AS A SCAFFOLDING ELEMENT	SCAFFOLDING ELEMENT REALIZED LINGUISTICALLY AT THE LEVEL OF MOVES	SCAFFOLDING ELEMENT REALIZED LINGUISTICALLY AT THE LEVEL OF SPEECH ACTS	CHARACTERISTICS OF STUDENT INTERACTION	STUDENT INTERACTION REALIZED LINGUISTICALLY AT THE LEVEL OF MOVES	STUDENT INTERACTION REALIZED LINGUISTICALLY AT THE LEVEL OF SPEECH ACTS
Task simplification	<ul style="list-style-type: none"> <li>- Reduction in degrees of freedom (Wood et al 1976).</li> <li>- Hierarchy of more complex requirements of the task (Wood et al 1976).</li> </ul>	<ul style="list-style-type: none"> <li>- Opening moves by teacher</li> </ul>	<ul style="list-style-type: none"> <li>- Conclusions by teacher</li> <li>- Markers by teacher</li> </ul>	<ul style="list-style-type: none"> <li>- Facilitation of student interaction.</li> <li>- Establishment of the teacher's role as primary discourse figure.</li> </ul>	<ul style="list-style-type: none"> <li>- Low occurrence of challenging moves by student</li> </ul>	<ul style="list-style-type: none"> <li>- Few student elicitations</li> <li>- Student elicitations did not signify a major lack of understanding</li> </ul>
Exploration	<ul style="list-style-type: none"> <li>- Task induction followed by interpretation of discrepancies rather than independent task completion (Wood et al 1976).</li> <li>- Prompting by reducing level of scaffolding (Rogoff and Gardner 1984).</li> <li>- Cued elicitation (Edwards and Mercer 1987).</li> <li>- Transfer of responsibility to learner (Rogoff and Gardner 1984).</li> </ul>		<ul style="list-style-type: none"> <li>- Few informatives and comments by teacher</li> <li>- Elicits and prompts by teacher</li> <li>- Few metastatements by teacher</li> <li>- Absence of directives by teacher</li> </ul>	<ul style="list-style-type: none"> <li>- Student holds more responsibility for learning.</li> <li>- Demonstration of dialogic communicative skills through a more active participatory role in the discourse.</li> </ul>		<ul style="list-style-type: none"> <li>- Longer more elaborate student replies supplemented by informatives</li> <li>- Metastatements by student.</li> </ul>
Feedback as a form of guidance rather than evaluation	<ul style="list-style-type: none"> <li>- Paraphrastic interpretation of pupil's contributions (Edwards and Mercer 1987).</li> <li>- Reconstructive recaps (Edwards and Mercer 1987).</li> <li>- Spiral IRF exchanges (Mercer 1998).</li> </ul>	<ul style="list-style-type: none"> <li>- Teacher's use of bound-opening upon incomplete responses.</li> <li>- Teacher's use of re-opening moves upon student hesitation.</li> </ul>	<ul style="list-style-type: none"> <li>- More use of acknowledge than accept by teacher as tutorial progresses</li> </ul>	<ul style="list-style-type: none"> <li>- Shared understanding between student and teacher.</li> </ul>	<ul style="list-style-type: none"> <li>- Few challenging moves by the student.</li> </ul>	<ul style="list-style-type: none"> <li>- Less prompting as tutorial progresses.</li> <li>- Student elaborates on replies.</li> </ul>
Redundancy	<ul style="list-style-type: none"> <li>- Demonstration (Wood et al 1976).</li> <li>- Redundancy and reappearance of redundancy upon error (Rogoff and Gardner 1984).</li> </ul>	<ul style="list-style-type: none"> <li>- Re-opening and bound-opening moves by teacher</li> <li>- Focusing moves by teacher</li> </ul>	<ul style="list-style-type: none"> <li>- Conclusion by teacher</li> </ul>	<ul style="list-style-type: none"> <li>- Hesitation when replying as mental processing is being carried out.</li> <li>- The stimulation of reflection.</li> </ul>	<ul style="list-style-type: none"> <li>- Challenging moves by student in the form of hesitation</li> </ul>	<ul style="list-style-type: none"> <li>- Metastatement by student</li> </ul>

## **Chapter Six: Discussion**

### **6.1 INTRODUCTION**

In chapters 4 and 5, the analysis I have attempted dealt with the first focus of this research in that it delineated the most prominent characteristics of instruction found in both whole group lessons and tutorials describing how each characteristic relates to elements of scaffolding. From there, the characteristics of student interaction which accompanied each scaffolding element were considered as the second focus of this research.

In this chapter, I wish to compare and contrast the two instructional activities of whole group lessons and tutorials in terms of elements of scaffolded instruction and student interactional style thus addressing the third focus of this study. In doing so, I will demonstrate how the findings of this research expand on the literature discussed in Chapter 2 in relation to Vygotskian sociocultural theory and scaffolded instruction, while maintaining a perspective on how my findings support and substantiate that literature.

The focus of this chapter is on how student interactional style compares in the two instructional activities during the implementation of scaffolding. That is, I take findings on the similarities and differences in characteristics of student interaction during the two instructional activities to discuss each of the six reported effects separately. In order to achieve this, I have found it helpful to achieve a certain element of structure by grouping related characteristics of interaction together by using the literature to hypothesize whether each characteristic is more cognitively or more socially based. Hence, in 6.2, I discuss the three characteristics of student interaction which I categorized as being more cognitively

based. These include the students' demonstration of intrinsic motivation by taking on more responsibility for learning, their demonstration of some intersubjective understanding, and the stimulation of reflection in the form of metacognitive activity. In 6.3, I discuss the three characteristics of interaction which I categorized as being more social in nature than the previous three effects. These include the facilitation of what may be considered relatively focused classroom interaction, the demonstration of students' dialogic communicative skills, and the establishment of my teacher role as the primary figure in initiating and managing the discourse. 6.4 concludes the chapter by summarizing the main points.

## **6.2 COGNITIVE CHARACTERISTICS OF INTERACTION ACCOMPANYING SCAFFOLDING**

### **6.2.1 INTRINSIC MOTIVATION AND MORE RESPONSIBILITY FOR LEARNING**

One of the characteristics of student interactional style identified in this study during the implementation of scaffolding was the demonstration of intrinsic motivation on the part of students whereby they appear to take up more responsibility for learning. As shown in Chapters 4 and 5, their role in the discourse appeared to be less passive than it was an active participatory role in the interaction. This characteristic of interaction was found to appear in both the whole group lessons and tutorials.

#### *6.2.1.1 Intrinsic motivation: support from current literature*

In that sense, this finding relates to the current literature on sociocultural theory which largely upholds the importance of students being given a chance to actively participate in the

learning process. For instance, Brooks and Donato (1994) concluded in one study that activities that center around learning a language should be perceived as cognitive activities whereby learners are given an opportunity to take control over structuring tasks and establishing goals. It is only with such full engagement in a task on the part of learners that tasks acquire authenticity and meaningfulness.

Along a similar note, Chandler (1992) adopts a sociocultural perspective when examining the relation of student learning to the planned curriculum. She upholds the importance of constructing the curriculum through a social interactive process in which students play an active role even if this means that the delivered or enacted curricula does not always abide with the planned curricula.

Lantolf (1993) stresses the need for interaction and dialogue in the language classroom whereby instruction should give learners the freedom to create the utterances they choose from aspects of the linguistic system rather than following a syllabus based on the linguistic system as artifact. For Lantolf (1993), taking up a more participatory role in the learning process is related to Di Pietro's (1987, cited in Lantolf 1993 p. 220) concept of strategic interaction which centers around a concern with how language helps in the construction of a linguistic self and how SL learners may develop that self in a second language by taking up more responsibility for learning.

In his study of French L2 learners, Donato (1994) expands on scaffolding as an instructional strategy to present collective scaffolding among learners themselves which involves them in actively participating in the collective construction of knowledge. Donato (ibid) concludes in his study that such active collaboration and collective scaffolding among learners is valuable in bringing about linguistic change and development.

#### 6.2.1.2 Intrinsic motivation: expansion on the literature

The finding that scaffolded instruction was accompanied by a more or less demonstration of learners' active participation expands on the literature by revealing that this characteristic of student interaction, although present in both instructional activities of this study, actually occurs differently in light of scaffolding elements within the two instructional activities. More specifically, in the case of whole group lessons, the demonstration of students' active participation in learning was found to appear largely during my provision of feedback which was of a more guiding capacity than an evaluative one. However, in tutorials, this characteristic of student interaction accompanied my use of exploration as a scaffolding element.

An attempt to explain this pattern may be that the larger number of students in group lessons defeats the purpose of exploration in actively involving them in the lesson and allowing the students to take up more responsibility for learning. What appears more to involve them in the learning process are instances when I attempt to guide them rather than evaluate them through my feedback to their replies perhaps because this is more individualized with regard to a single student's discourse.

In tutorials, on the other hand, where instruction is done on a one to one basis, exploration appears to have succeeded more in actively involving the student in the learning process. This may be the reason why *informatives* as speech acts used mainly by myself as the teacher in whole group lessons are in tutorials made mostly by the student thus demonstrating an attempt to take up responsibility for learning on the part of the student. Also, with the progression of a tutorial, *informatives* on the part of the student come less to follow *replies* as an elaboration of those *replies* and more to formulate the entire speech move or turn. This is further indication of the fact that the student in a tutorial appears to take on an increasingly active role in the discourse while maintaining responsibility for learning rather than being

subsumed to simply responding. Yet another indication of the fact that students in tutorials appear to be more active and participatory in the learning process comes from data that shows students took part in a wider variety of speech acts than they did in group lessons where speech acts they used were mostly restricted to the *reply*, *informative* and *elicit*.

## 6.2.2 DEMONSTRATION OF INTERSUBJECTIVE UNDERSTANDING

The demonstration of intersubjective understanding, a characteristic of interaction which I categorized according to the literature as being more cognitively based, was also demonstrated upon the implementation of scaffolding in this study. This was embodied in cases when the students appeared to come closer to achieving my perspective as a teacher on the task involved in the instruction. This characteristic of interaction was found to appear in both whole group lessons and tutorials.

### *6.2.2.1 Intersubjectivity: support from current literature*

The literature in the field of sociocultural theory is replete with studies that stress the role which intersubjectivity plays in the learning process. Wertsch (1985) for instance, identifies the main problem apparent in the transition from interpsychological to intrapsychological functioning as being related to achieving a state of intersubjectivity which occurs when both individuals interacting in a situation share some part of the situation definition after being at variance in terms of that definition. He relates the need to create coherence between the expert's regulative speech and his or her actions to progression through the ZPD which is in essence a step towards intersubjectivity, a condition which has to be created because the novice will not at first understand the expert's definition of a task situation (Wertsch 1979).

Along a similar note, Donato (1994) holds that studies of L2 interaction should go beyond an examination of speaker output to include an examination of internalization a process similar to intersubjectivity in that it revolves around the way in which the learner, through social interaction with a more competent individual or expert, extends his or her competence by internalizing the expert's strategic processes for problem solving. For Vygotsky, internalization is not simply a process of copying external activity as a product of social interaction to a preexisting internal plane. Rather, it involves the actual formation of an internal plane of consciousness through the mastery of external sign forms (Wertsch 1985). Hence, what becomes important is being able to internalize the problem solving processes by achieving the expert's perspective on a task in order to carry out that task on an internal plane.

After defining intersubjectivity as a process through which people come to know what others are thinking of and how they adjust to this, Bruner (1996) similarly stresses the need for Western pedagogy to pay more attention to the role which intersubjectivity plays in transmitting culture. Frawley and Lantolf (1985) hold that the expert's main purpose in any form of instruction is not to have the novice complete a given task. Rather, it revolves around helping the novice through dialogic interaction know how the task may be solved strategically by guiding the child to adopt a definition of the situation that mirrors that of an adult. Foley (1991) specifically contends that the scaffolding of a learning task allows the novice to internalize outside knowledge thus gaining conscious control over a certain function or concept so that it may become a tool of conscious control.

For Edwards and Mercer, (1987). "the process of education, insofar as it succeeds, is largely the establishment of these shared mental 'contexts', joint understandings between teacher and children, which enable them to engage together in educational discourse" (p. 69). They maintain that the underlying belief is that education itself is about the development of

shared understanding and common perspective which involves the handover of competence to children. As a matter of fact, Edwards and Mercer (ibid) identify failures in the achievement of shared understandings between teachers and students as a deficiency in common educational practices which is not only related to areas of curriculum content. Rather, they identify as being more profound misunderstandings in what may be referred to as educational ground rules which Edwards and Mercer (1981, cited in Edwards and Mercer 1987 p.47) define as implicit rules of educational talk and interpretation related to the classroom context. They hold that failure in establishing mutual understanding of discourse between teacher and students may result in problems. For instance, what may on the surface appear to be an engagement in classroom discourse would only be participation in a superficial sense when although engaged in discourse, the teacher and students would not, in such cases, be achieving a shared understanding or ground rule (Edwards and Mercer ibid).

#### *6.2.2.2 Intersubjectivity: expansion on the literature*

The finding that students in this study appeared to demonstrate intersubjective understanding during scaffolded instruction expands on the literature in the field of sociocultural theory by revealing that in the case of both instructional activities of whole group lessons and tutorials, intersubjectivity was demonstrated in the study during the implementation of the same element of scaffolding, namely teacher feedback that was of a more guiding capacity than an evaluative one.

Other research in the field, however, has demonstrated intersubjectivity to occur as a result of instructional practices that are not particularly related to the type of feedback provided by the teacher. Rather, they have come to link the achievement of an intersubjective state of understanding to alternative forms of instruction. For instance, in their discussion of an instructional method which embodies scaffolding, Rogoff and Gardner

(1984) present prolepsis as instruction which employs dialogic interaction with the teacher in order to assist a student through the completion of a task. According to Donato and Adair (1992), the speaking involved in this instructional process allows both the teacher and student to mutually recreate each other's perspectives on the task at hand. Hence, they come closer to achieving a state of intersubjective understanding.

In another study, DiCamilla and Anton (1997) investigated repetition from the framework of Vygotskian theory. They demonstrated that repetition not only serves the sociocognitive function of constructing and distributing scaffolded help during an activity but more importantly establishes and maintains intersubjectivity or a shared perspective of the task at hand. Along a similar note, Edwards and Mercer (1987) found in lessons which were recorded that the continuity of shared knowledge was made the most explicit at the start of a lesson whereby links to what had been previously taught were made by the teacher. They also found appeals to continuities of shared knowledge were also made at points where there seemed to be disagreements or incongruities between the participants' understandings.

The literature in the field thus attributes the demonstration of intersubjectivity to various instructional strategies which range from prolepsis to repetition to lesson introductions, and finally to points of disagreement in the discourse. In the case of this study, however, intersubjectivity in both instructional activities appeared largely in conjunction with my use of feedback that performed more of a guiding function than that of assessment. A possible explanation for this could be that the particularized nature of this study resulted in findings that are relevant to the particular context of my own teaching situation.

### 6.2.3 STIMULATION OF REFLECTION

Another characteristic of student interactional style demonstrated during scaffolded instruction related to the stimulation of reflection among students occasionally in the form of metacognitive activity whereby students came to utter s. At certain instances when replying, hesitation on the part of a student displayed more of a link to learning than a sign of uninvolvement. More specifically, such instances of student hesitation appeared to represent points when mental processing was being carried out.

#### *6.2.3.1 Stimulation of reflection: support from current literature*

The concept of metacognition as a mental function was emphasized by Vygotsky himself who, according to Lantolf and Appel (1994a), extended the definition of consciousness to include not only an individual's awareness of cognitive activity but also include self-regulation techniques employed by an individual when solving problems, an area he referred to as metacognition and which incorporates activities such as planning and evaluation. In fact, the finding from this research that the social interactive processes involved in scaffolding appeared to stimulate reflection in the form of metacognitive activity substantiates the Vygotskian notion that all forms of consciousness or metacognition are interpsychological in the sense that they arise through a transformation when they come in contact with social factors. Hence, social interaction comes to assume primary importance with the individual dimension only being secondary (Donato and Lantolf 1990). Furthermore, according to Vygotsky (1986), any form of grammar or writing instruction as was implemented in the present study, helps the child become more aware of his or her unconscious knowledge of the language in order to consciously use language skills.

Instruction in grammar and writing thus helps the child move to a higher level of mental development (Vygotsky *ibid*).

In this study, the linguistic representation of metacognitive activity as a characteristic of student interactional style in the form of *s* at the level of speech acts also substantiates the literature. This comes through the fact that current literature has dealt with how forms of metalanguage may be reflection of metacognitive processes. For instance, Brooks and Donato (1994) give the instance of metatalk as a form of object-regulation by participants in a task. They claim that although discouraged in L2 classrooms because it usually occurs in the L1, metatalk actually promotes discourse and is essentially one form of metacognition. Indeed, Roman Jakobson (1981, cited in Bruner 1996 p.19), a notable linguist of the century, refers to a metalinguistic gift available to everyone with Bruner (*ibid*) admitting that:

"since the limits of our inherent mental predispositions can be transcended by having recourse to more powerful symbolic systems, one function of education is to equip human beings with the needed symbolic systems for doing so. And if the limits imposed by the languages we use are expanded by increasing our 'linguistic awareness,' then another function of pedagogy is to cultivate such awareness." (p.19).

Finally, in holding how Vygotskian psycholinguistics offer a dynamic model of discourse which does away with the tradition that discriminates between correct and incorrect forms of the language, Frawley and Lantolf (1985) elaborate on how hesitation when replying may represent a point when mental processing is being carried out rather than simply an inability to reply. Based on this, Frawley and Lantolf (*ibid*) hold that all verbal forms including affective markers, hesitation phenomena, and language structure are revelatory in the sense that they indicate a speaker's cognitive stage during the completion of a task.

### *6.2.3.2 Stimulation of reflection: expansion on the literature*

Interestingly enough, the stimulation of reflection in the form of metacognitive activity among students appears to be present in the case of scaffolding during tutorials only and not when scaffolding was implemented in the case of whole group lessons. It thus appears that the type of instructional activity in place played a role in whether reflection was stimulated or not. Furthermore, it appears that the stimulation of metacognitive activity among students in the case of tutorials seemed to coincide specifically with the presence of redundancy where the provision of redundant information was considered one characteristic of scaffolded instruction.

A possible explanation for these patterns could be that the one to one nature of a tutorial allows the redundancy part of scaffolding as a form of guided interaction to be applied more effectively than in whole group lessons hence resulting in the demonstration of what appears to be more reflection and metacognitive activity on the part of students than there was in whole group lessons. For instance, I seemed in tutorials to be more supportive upon student hesitation providing the student with repetition and redundancy of learning than in the case of student hesitation in whole group lessons presumably because there were no other students in the tutorial to fill in the gap created by the hesitation of the student. Consequently, this study showed that there were less *s* on my part as a teacher during tutorials than there were *s* on the part of the students with the opposite being true for the whole group lessons.

## 6.3. SOCIAL CHARACTERISTICS OF INTERACTION ACCOMPANYING SCAFFOLDING

### 6.3.1 FACILITATION OF STUDENT INTERACTION

One of what I, according to the literature, considered a relatively socially based characteristic of student interactional style demonstrated during scaffolding was related to the facilitation of interaction in general whereby it appeared to flow with ease during the instructional process. As such, the interaction was relatively focused with few interruptions and little digression. Additionally, students appeared to be mostly on task whereby off task behavior was kept to a minimum and there were few interruptions during both instructional activities was realized linguistically through such aspects as the absence of *summons*, speech acts used on my part to get a student's attention. Also at the level of speech acts, student *elicitations* were fairly simple not signifying a major lack of understanding. This characteristic of student interaction was found to appear in both instructional activities of whole group lessons and tutorials.

#### *6.3.1.1 Comparison of focused interaction between the two instructional activities*

In the case of both instructional activities, the facilitation of student interaction appeared to coincide with my attempt as a teacher to simplify the learning task as one characteristic of scaffolded instruction. Hence, my dividing the task into several transactions whereby each dealt with a different purpose helped in keeping the interaction relatively focused on the topic at hand during both tutorials and whole group lessons. Needless to say, the writing revision task in place in tutorials required the instruction to include no more than three transactions whereas the whole group lessons required four transactions with more turn taking than in the case of tutorials. Also, the number of turns per transaction in tutorials

varied among transactions whereas there was less variation between transactions in the case of the whole group lessons.

#### *6.3.1.2 Contrast of focused interaction between the two instructional activities*

Although facilitated interaction coincided with the presence of an attempt at task simplification in both forms of instruction, there were also points of difference. First, it was only in the case of tutorials that this characteristic of interaction also appeared during instances when I provided feedback as a teacher that did not evaluate a student's reply but instead helped guide the student into learning. This substantiates literature on the role which the type of feedback provided by a teacher plays in the learning process. For instance, Ikeda (1998) observed scaffolding in his study when mistakes were not brought to the attention of the learner because the understanding established between learners allows them to construct ideas together in order to learn and expand their knowledge. As such Ikeda, (ibid) holds that scaffolding presents itself as a deep level of interaction. Frawley and Lantolf (1985) justify the use of teacher feedback which does not have an evaluative assessment function by claiming that errors should not be viewed as representing linguistic incompetence. Instead, errors may actually represent a speaker's attempt at gaining control by reverting to previous learning strategies. They may thus be useful strategies that are functional for a speaker in gaining control and achieving self-regulation through language.

One possible explanation for this observed pattern whereby teacher feedback in tutorials was accompanied by more focused facilitated student interaction than it did in large group lesson is related to the individualized nature of a tutorial. According to one student in a tutorial, the series of prompting questions which I enacted in tutorials following student replies allows less chance for a student to become off task or digress into other topics, and

with the one to one nature of a tutorial, the student would feel more liable and obligated to respond following such feedback because there are no other students present to do that.

Another point of contrast in terms of focused interaction between the two instructional activities is related to the fact that in whole group lessons, this characteristic also occurred in conjunction with my attempt as a teacher to recruit interest in the lesson, an attempt that is one of several elements that make up scaffolded instruction. This was not found to occur as much in the case of tutorials.

An explanation for this may be that the recruitment of interest in a task is in fact absent as an element of scaffolding in the case of tutorials. Apparently, there seemed to be less need for me to recruit interest in the case of tutorials because the one on one nature of a tutorial and its particularized objective of dealing with the revision of an individual student's writing allows the student to be more involved and focused to begin with. Hence, in tutorials, *starters* as speech acts which I used to focus the student on the lesson were only used in the first two transactions where they functioned to maintain student involvement by directing attention to an area prior to a following initiation with no *starters* at all used in the last transaction. This may be taken as an indication that the student was focused and involved in the tutorial to the point where I didn't need to direct attention anymore. Also, in the case of tutorials, it appears that the *accepts* and *acknowledges* I used in the first transaction were less supporting in nature than they were in whole group lessons possibly because the student was focused enough to not need any recruitment to become more involved in the task. It was only towards the end of the last transaction in the case of tutorials that I seemed to provide more affective support by using such words as "great" and "good". It seems that in the case of tutorials, the student needs affective support mostly at the end as he or she is ready to now independently carry out the revision they learned through scaffolding.

### 6.3.2 DEMONSTRATION OF COMMUNICATIVE SKILLS

Yet another of what I considered relatively social characteristics of student interaction associated with the scaffolded instruction implemented in this research was the demonstration of dialogic communicative skills among students. In that sense, the classroom interaction seemed to become more conversational in nature with students providing longer more elaborate replies as they demonstrated communicative skills. This characteristic was found in both the whole group lessons and the tutorials.

#### *6.3.2.1 Comparison of communicative skills in the two instructional activities*

In both the whole group lessons and tutorials, the demonstration of dialogic skills among students appeared largely in conjunction with the exploratory process of instruction implemented as one of the elements of scaffolding. The demonstration of such communicative skills finds support in current literature which largely emphasizes the importance of such skills to the language learner. For instance, in one study, Brooks (1992) discussed the process of acquiring communicative competence defined by Hymes (1972, cited in Brooks 1992 p.219) as the way in which a language learner adopts knowledge of a language and is able to use a language through social interaction with others from the same social group. His investigation demonstrated the importance of developing communicative competence in the target language through social interaction without constraints by certain features within the formal academic setting. A few studies have highlighted the fact that the communicative skills associated with speaking actually help mediate cognitive activity. For instance, Appel and Lantolf (1994) demonstrated that when L1 and L2 speakers were asked to orally recall narrative and expository English texts, speech especially in the form of

private speech, served to mediate the cognitive activity of reading and orally recalling the texts.

#### *6.3.2.2 Contrast in the demonstration of communicative skills between the two instructional activities*

Although appearing in conjunction with exploration in both instructional activities, the demonstration of communicative skills in the case of whole group lessons also appeared when there was an attempt at the recruitment of interest in the lesson, one of several elements characterizing scaffolded instruction. A direct explanation for this contrast is simply the fact that the recruitment of interest was not an element that was implemented in the scaffolded instruction of tutorials. Had it been present in the case of tutorials, then it may have been accompanied by the demonstration of dialogic skills as was the case in whole group lessons.

Another point of difference in terms of the demonstration of communicative skills between the two activities is related to the fact that in tutorials, the discourse appeared to be slightly more dialogic and conversational than it was in the case of whole group lessons. For instance, student *replies* in tutorials appeared to be more informal including slang terms than they were in whole group lessons. Similarly, my discourse as a teacher in tutorials was more fragmented during the tutorials, especially in the case of prompting, mirroring the type of communication that would occur in a typical conversational exchange more than the interaction that would occur during a lesson. This point substantiates the literature which is best summed by Lantolf and Ahmed (1989 p.106) who hold that "as intersubjectivity is negotiated and a common situation definition is freely agreed upon, there is a decreased need for participants in a dialogue to rely on fully syntactic speech." Hence, as speech becomes less syntactic, this may indicate more of a shared definition among those interacting.

One possible explanation for this point of contrast between the two instructional activities may be that the one on one nature of a tutorial which makes it less similar to the context of a classroom lesson than is the case with whole group lessons makes the demonstration of communicative skills more possible. This may simply occur because it would be easier for the two people interacting in the case of tutorials to achieve a shared definition of the situation than is the case in whole group lessons where this shared definition would have to transfer to a larger number of students interacting.

### 6.3.3 ESTABLISHMENT OF TEACHER ROLE AS PRIMARY FIGURE IN THE DISCOURSE

Another characteristic of student interaction which accompanied scaffolding was related to my role as a teacher during instruction. During scaffolding, I seemed to have established my role as the primary figure in taking an initiatory role and managing the discourse.

#### *6.3.3.1 Comparison and contrast of teacher role in the two instructional activities*

Interestingly enough, the establishment of my role as the primary agent in managing the discourse appeared only in the case of tutorials but not during the whole group lessons. The fact that my adoption of an initiatory role in the discourse was not as evident in the whole group lessons as it was in tutorials finds support in the current literature. For instance, Roy (1989) demonstrates how a high level of control and guidance by the teacher especially in the case of writing is not helpful. He maintains that there should not be over control of the L2 students' writing since writing in a second language helps in the continual development of higher mental processes. Indeed, Roy (ibid) advocates that the writing process be viewed as a problem solving process in the ZPD.

Along a similar note, Brooks (1992) holds that when the foreign language instructor assumes a relatively large portion of conversation management, this hinders students learning to make those decisions in a normal social setting. In one study, for instance, the teacher preselected discussion topics specifying that those chosen were of primary importance as well as acted as the primary agent responsible for initiating and ending conversations. For Brooks (ibid), even though such procedures support student participation in discussions, save time and maintain approval on the part of students, such methods actually limit the potential of what students may learn by constraining the students' role of independent acting and decision making in the target language.

Lantolf (1993) takes this stance to a higher level advocating dialogic interaction in the ZPD in place of authoritative discourse which he dismisses as being highly monologic in nature. For him, language learning is actually accelerated when the curriculum is negotiated and dialogically constructed rather than simply being imposed by authorities. Such negotiated interaction allows the voice of the linguistic self to be constructed as it is based on the utterances one gets from the voice of others and their choice of words (Lantolf ibid).

Against this background of literature that discourages the teacher from assuming a primary role in managing the discourse, the reality of the finding remains that I seemed to demonstrate such an initiatory role in the case of tutorials. More specifically, the establishment of my role as the primary agent in the discourse during tutorials appeared mostly in conjunction with my attempt at simplifying the task as one element of scaffolded instruction. Hence, it appears that my attempt at simplifying the task in the case of whole group lessons did not so much impose my role as primary discourse figure whereas that appeared to be the case in the case of tutorials.

A possible explanation for this finding may be related to the nature of the task in each of the two instructional activities. For instance, in the case of the whole group lessons, the task

related to students understanding and applying a writing lesson was simplified without an imposition of my role as a superior figure in the discourse. The more particular task of revising an individual piece of writing in the case of tutorials, on the other hand, appeared to establish my role as primary discourse figure upon simplification of the revision task. More specifically, my attempts at simplifying the revision task in the case of tutorials by dividing it into three transactions which I introduced by *opening moves* seemed to place me at an authoritative position in the discourse hence defeating in a way the objectives behind the imposition of dialogic interaction in scaffolding.

#### **6.4 CONCLUSION**

In this chapter, I have discussed the student interaction as linguistically performed during the implementation of scaffolding. I have taken each of the six reported characteristics of interaction and presented a relative comparison and contrast between these characteristics in whole group lessons and tutorials. In doing so, I have attempted to discuss how these findings both substantiate and expand on current literature in the field of sociocultural theory.

The following section summarizes this comparison and contrast in the form of a matrix. The first column in the matrix represents the characteristic of student interaction. Column 2 compares this characteristic in the two instructional activities of whole group lessons and tutorials. Column 3 contrasts the occurrence of this characteristic in the two activities. Finally, Column 4 provides a possible explanation for that contrast. This summary provides a basis for the recommendations which will be made in chapter 7 on the implementation of scaffolding as an instructional strategy.

TABLE 6.1: COMPARISON AND CONTRAST BETWEEN INSTRUCTIONAL ACTIVITIES

CHARACTERISTIC OF STUDENT INTERACTION	COMPARISON BETWEEN TWO INSTRUCTIONAL ACTIVITIES	CONTRAST BETWEEN TWO ACTIVITIES	POSSIBLE EXPLANATION
DEMONSTRATION OF ACTIVE PARTICIPATION	Characteristic is present in both activities.	<ul style="list-style-type: none"> <li>• Characteristic results from exploration in tutorials.</li> <li>• Characteristic results from guiding teacher feedback in whole group lessons.</li> </ul>	Individualized nature of tutorial allows the exploratory process embedded in scaffolding to make students more active in tutorials.
DEMONSTRATION OF INTERSUBJECTIVE UNDERSTANDING	Characteristic is present in both activities as a result of teacher feedback that is more guiding than evaluative.	None apparent.	This finding seems to be particularized for my own teaching situation because the literature reports on this effect as a result of alternative instructional techniques other than feedback.
STIMULATION OF REFLECTION IN THE FORM OF METACOGNITIVE ACTIVITY	None apparent	Characteristic appears only in tutorials as a result of redundancy and not in whole group lessons	One to one nature of a tutorial allows redundancy to be applied more effectively resulting in more reflection on the part of students in tutorials.
FACILITATION OF STUDENT INTERACTION	Characteristic occurred as a result of task simplification in both activities.	<ul style="list-style-type: none"> <li>• In tutorials, this characteristic also occurred as a result of guiding teacher feedback.</li> <li>• In whole group lessons, it also occurred as a result of recruitment of interest in a task.</li> </ul>	The recruitment of interest was absent in the case of tutorials to begin with possibly because students were more focused than in whole group lessons due to the one to one nature of a tutorial which makes them more obligated to reply when a teacher makes an initiation.
DEMONSTRATION OF COMMUNICATIVE SKILLS	Characteristic occurred in both activities as a result of exploration.	<ul style="list-style-type: none"> <li>• In whole group lessons, this characteristic also occurred as a result of recruitment of interest.</li> <li>• In tutorials, discourse appeared to become less syntactic and more informal with time.</li> </ul>	<ul style="list-style-type: none"> <li>• Recruitment of interest wasn't as apparent in tutorials.</li> <li>• Literature holds that as interaction is created, speech becomes less syntactic.</li> </ul>
ESTABLISHMENT OF TEACHER ROLE AS PRIMARY DISCOURSE FIGURE	None apparent	Characteristic only evident in tutorials in conjunction with task simplification.	Nature of task in tutorials would place teacher at a primary position in discourse upon an attempt to simplify it.

## **Chapter Seven: Conclusion**

### **7.1 RETROSPECTIVE VIEW OF THE RESEARCH**

#### **7.1.1 OVERVIEW**

At the outset of this study, I identified a problematic situation related to the particular socio-cultural context of my own ESL classroom whereby students demonstrate an overall lack of interest in academics and a generally low motivational level as evidenced by poor interaction and low levels of student participation in the classroom. I discussed the various strategies I use to cater for this situation ranging from participatory instructional activities including games and peer work to the provision of affective support and the inclusion of mnemonic instructional strategies in the curriculum.

Since such strategies have been of minor value in catering for this situation, I based the present research on the need to investigate ways of improving interaction and participation among students. To that extent, I introduced socio-cultural theories of learning to investigate a first time application of scaffolded instruction as a pedagogical tool which may provide insight into ways of improving student interaction. More specifically, I tried to describe how individual elements part of my scaffolded instruction are linguistically delivered, in order to describe the type of interaction which accompanies each individual element. I then went on to investigate how scaffolded instruction is created in two types of instructional activities I commonly implement in class; group lessons on writing and tutorials for the revision of writing. Through that, I was able to demonstrate a relative comparison and contrast between

the two activities in terms of how scaffolded instruction occurs and the interactional style that is created.

### 7.1.2 CONTRIBUTIONS TO THE FIELD

I am forced to frankly admit that prior to carrying out the research, I had my doubts about the value that a particularized study such as this which is very much related to the particular socio-cultural context of my own classroom would have in terms of contributing to the field of socio-cultural theory in particular and psycholinguistics in general. Although a caveat is still in order as to the generalizability of my findings, I feel that this research has not only substantiated the literature as was demonstrated in Chapter 6, but these findings have also contributed to the field in several respects which I will proceed to discuss before moving on to the next section, 7.2, where I present the more specific implications of this research on my practice as a teacher.

One of the main contributions of this study to the field of socio-cultural theory is related to the fact that the current literature on scaffolding, as a concept derived from Vygotskian theory, appears through the review presented in Chapter 2 to be quite general in reporting on the effects of scaffolding on student learning and interaction. Hence, most studies appear to discuss scaffolding as a general concept without delineating the type of interaction which accompanies its specific elements. This research, however, has demonstrated the characteristics of student interaction which appeared with each particular element of scaffolding, located and identified as being part of instruction. Such findings are clearly presented in the two matrices which appear in the conclusions of Chapters 4 and 5. In that respect, this research has added to the growing number of studies which present scaffolded instruction as a more concrete concept.

Another contribution which this research has made in the field of socio-cultural theory is related to the process of comparing and contrasting scaffolding between different instructional activities. It is true that the literature on scaffolding as presented in Chapter 2 includes studies that discuss scaffolding in different forms of instruction ranging from an interaction between mother and child to that between tutor and tutee and finally collective scaffolding amongst learners themselves. However, to my modest knowledge, no studies appear to present such a comparison and contrast of the implementation of scaffolded instruction among instructional activities as was done in the present research between group lessons and tutorials.

One way in which this study has contributed to the field of applied linguistics is related to the choice of research methodology. With the analysis of spoken discourse as the main research method, this study has attempted to link scaffolded instruction and student interaction to applied linguistics. This is clearly shown in the conclusion of both Chapters 4 and 5 where the matrices include columns created for realizing how each element of scaffolding as well as characteristics of student interaction may be realized linguistically. With the connection made to applied linguistics, this study has thus stressed the contribution which a psycholinguistic research methodology such as spoken discourse analysis can provide. Indeed, Vygotsky stressed that any research on cognition has to take into account linguistic signs in the form of speech as the basic unit of analysis (Lantolf and Appel 1994a).

## **7.2 IMPLICATIONS FOR PRACTICE**

Viewed in general, the main implication of this research on my own practice is that it has revealed to me, as a teacher perplexed by a situation of low student motivation and

interaction in the classroom, the type of student interaction which accompanies individual elements of scaffolded instruction in my classroom. This was shown for two customary classroom activities which formulate the main types of instruction I use when teaching writing. More specifically, the implications of this study on my practice come in the form of recommendations I have directly derived from the matrix in Chapter 6, which provides a more in depth summative view of each characteristic of interaction; a comparison and contrast in terms of its occurrence between the two instructional activities; and a possible explanation for the findings. Each recommendation will be discussed separately in terms of the characteristic of student interaction which triggered its conception.

Taking first the demonstration of active participation as one characteristic of student interaction, the probable explanation presented in Chapter 6 for the contrast in the presence of this element between the two instructional activities was that the individualized nature of tutorials allows the exploration in scaffolding to make students appear to be more active participants in tutorials than they were in whole group lessons. Based on this, the recommendation that can be made in terms of my own teaching practice is that during whole group lessons, I should make more effort in providing students with feedback that is of a more guiding than evaluative nature since it was that feedback that seemed to bring about active participation among students in whole group lessons.

The demonstration of intersubjective understanding as another characteristic of student interaction appeared to occur in the same way in the two instructional activities with no apparent difference whereby in both activities, it occurred in conjunction with guiding teacher feedback. Since the literature identifies intersubjective understanding as resulting from instructional techniques other than teacher feedback, the possible explanation presented for this was that this study is very particularized in nature applying to the unique socio-cultural context of my own classroom. The recommendation that can thus be made is that

further research may help identify whether the type of feedback used by the teacher may result in the demonstration of intersubjective understanding in other teaching contexts as well.

The stimulation of reflection in the form of metacognitive activity formulated another aspect of student interactional style. The explanation presented to account for the finding that this characteristic appeared only in the case of tutorials was related to the one to one nature of a tutorial allowing redundancy as an element of scaffolding to be applied more effectively thus resulting in more reflection on the part of students. The recommendation that can be made in light of this explanation is that the implementation of scaffolding in whole group lessons should perhaps include greater emphasis on redundancy as an element of scaffolding with situations of hesitation on the part of students when replying receiving more support in the form of repetition on my part as teacher.

As another characteristic of interaction that occurred during the scaffolding process, the facilitation of student interaction was present in the two instructional activities in conjunction with largely different scaffolding elements. The probable explanation presented in relation to that was that the recruitment of interest, as a scaffolding element which coincided with the facilitation of interaction in the group lessons, was absent in the case of tutorials to begin with possibly because students were more focused than in whole group lessons due to the one to one nature of a tutorial which makes the student feel more obligated to reply when the teacher initiates a question. The recommendations which can thus be made is that first, students in whole group lessons should be exposed to a chance to appreciate the importance of the lesson to their own writing just as the students in the writing tutorials appreciate the task because its particularized towards their individual piece of writing. Additionally, the teacher in whole group lessons needs to embed each student with a sense of obligation to reply to initiations just as in the case of tutorials where the fact that the student is alone creates

that obligation. This could be done by calling on all students in a way such that following each initiation, there would be the potential that any student could be called on to reply.

Another characteristic of interaction was the demonstration of communicative skills. One of the explanations for the finding that the discourse in tutorials appeared to become less syntactic and more informal with the progression of a tutorial is based on a literature which holds that as more interaction is created, speech becomes less syntactic. Based on this, the recommendation can be made that more emphasis should be placed in group lessons on the interactive process and the creation of a shared definition amongst those interacting so that more communicative skills can be demonstrated.

Finally comes the establishment of my teacher role as a primary figure in initiating and managing the discourse. Since this was only evident in the case of tutorials in conjunction with my attempt to simplify the instructional task, the probable explanation for this was that the nature of the task in tutorials places the teacher at a primary position in the discourse upon any attempt to simplify the task. The recommendation can thus be made that less effort should be spent on simplifying the task in the case of tutorials by emphasizing the divisions between transactions. Instead, the tutorial should be allowed to flow at ease.

### **7.3 LIMITATIONS OF PRESENT STUDY**

Despite the contributions which this research has added to the fields of socio-cultural theory and applied linguistics and the implications it has yielded for my own practice as a teacher, it was not without its limitations. The first is related to the study's contribution to theory. There are certain limitations within such a small scale study in terms of the generalizability of its findings. As a form of action research, the findings of this study are

situational being concerned with the specific context of my own classroom. Therefore the research is meant to address the original problem that brought it about in relation to low levels of student motivation and participation in my specific classroom situation more than it is concerned with generating findings that would generalize to other classroom contexts. Nevertheless, such a study would still according to Nunan (1992) qualify as research as long it serves as a means for professional development by dealing with questions of interest to other practitioners and generating data which is then interpreted. Indeed, this research is not meant to be an end in itself. Rather, as with any action research, it is not meant to be part of a continuous process of research in order to review practice by generating further areas for study (Bell 1993)

There are some other limitations which prove in fact quite constructive because they provide recommendations for improving the overall situation of this study. First, upon reflection on the reporting of research findings, it may appear that scaffolding is responsible for the development of the various effects on student interaction already discussed. However, this study does not assume that functions such as metacognition, intersubjective understanding and communicative skills are absent within student interaction and have thus developed through the implementation of scaffolded instruction. Rather, it is assumed that such functions already exist among students with the attempt made to investigate changes in the relation between these functions and their transformation once they are linked with socio-cultural factors, in this case, the implementation of scaffolding. Indeed, Vygotsky held that the development of consciousness occurs through a change in interrelations among higher mental functions rather than the development of the functions themselves (Wertsch 1985).

Also, the three whole group lessons and three tutorials on which data was collected all represented a first attempt at implementing scaffolded instruction. As such, they were not in any way paradigms of scaffolding. I was implementing scaffolding to find out how its

various aspects take prominence and figure in my instructional activities. The fact remains that not all of the elements that make up scaffolded instruction according to the literature presented in Chapter 2 were present in both instructional activities. This is the reason why the first focus of this study was the description of how scaffolding elements present in instruction are linguistically delivered; it could not, on the basis of an attempt at scaffolding, be taken for granted that all the elements that make up scaffolding would be present. More research into this area would thus require that lessons contain a greater degree of scaffolding elements.

In terms of research methodology, it seemed that observation and interviewing played a very minor role in the research process acting simply as a check to either confirm or challenge findings arrived at through discourse analysis. Observation data, for instance, had little to contribute in terms of describing the interactional style which accompanied scaffolding. Based on this, future attempts at researching scaffolding should perhaps look into ways of allowing observation and interview data to play a greater role in the research process while concurrently making use of the richness of the data yielded from discourse analysis.

### 7.3.1 IMPLICATIONS FOR FURTHER RESEARCH

This study has opened new vistas for further research. For instance, the present study has focused on the type of student interaction which accompanies scaffolding because that was identified as the focus of the concern at hand. However, further research could also investigate how interaction in turn creates a certain type of scaffolding process.

Additionally, one line of research can come in the form of a recommendation presented in section 7.3 based on the finding that the type of feedback given by a teacher affects

intersubjectivity and the creation of a shared definition of the situation. Since the literature discussed in Chapter 2 reveals that the relation between teacher feedback and intersubjectivity has not been investigated to a great extent, more studies can be done to investigate the impact which teacher feedback has on the creation of intersubjectivity.

Since the findings of this research in general point to how the characteristics of student interaction were more prominent upon the implementation of scaffolding in tutorials than was the case in whole group lessons, it would be interesting to investigate how the number of students impacts the effectiveness of scaffolding as an instructional method. More specifically, tutorials could be examined as a precursor or initial step in the implementation of scaffolding. Scaffolding could thus be implemented on an individual basis as in the case of tutorials before being applied to the instruction of larger group lessons in order to determine whether this would facilitate the scaffolding process for implementation in larger settings.

Finally, the discussion chapter has related findings of this study mostly to literature done in the field of socio-cultural theory examining how the results of this study substantiate and challenge that literature. More research may be done, however, to investigate the relation between scaffolding and Vygotskian theory specifically such areas as how scaffolding may be considered a form of semiotic mediation in the zone of proximal development as well as how scaffolding can be explained through the Vygotskian concept of regulation which involves the transition to self-regulation.

## **APPENDICES**

### **APPENDIX 1: NEGOTIATION OF ACCESS**

**To: AIS administration**

**Research Project: Scaffolded interaction as a pedagogic tool**

My classroom is an arena of learning where students and I learn from each other every day. In an effort to facilitate learning and the acquisition of new skills, I am involved in a constant quest for instructional strategies that best fit the needs of my students. Currently, I hope to conduct a research study related to the use of scaffolded interaction as a pedagogic tool.

Objectives of the research include:

- To describe how scaffolding is performed in two types of instructional activities.
- To describe the student interactional style created upon the implementation of scaffolding.
- To investigate how scaffolding contrasts between the two instructional activities.

This will study will entail conducting some interviews with students from my remedial English classes after obtaining their informed consent and informing them about the research at hand.

I would greatly appreciate administrative support by signing this form below indicating consent for conducting this study

## **APPENDIX 2: INFORMED CONSENT**

**To: Student**

### **Research Project: Scaffolded interaction as a pedagogic tool**

This classroom is a place where we all learn from each other every day. I constantly try to experiment with instructional strategies and techniques to make learning easier for you. Currently, I am involved in a research study related to the use of an instructional method called scaffolding.

The objectives of this research are to:

- To describe how scaffolding is performed in two types of instructional activities.
- To describe the student interactional style created upon the implementation of scaffolding.
- To investigate how scaffolding contrasts between the two instructional activities.

I would like to invite you to participate in this research project. This will involve you being asked some questions about scaffolded instruction in an interview. The interview will occur after the lesson and will not last for more than 30 minutes. All interviews will be audio-recorded. Be aware that the information gathered through the interviews may be used in the report of the research study.

If you are willing to participate, please sign the form below.

**APPENDIX 3A: STRUCTURED INTERVIEW SCHEDULE**

- For each element of scaffolding, select from the following to indicate the degree to which it is present in the lesson. Feel free to provide any open comments you may have on each of these elements.

*1. recruiting interest in the task	present	slightly present	absent
2. simplifying the task	present	slightly present	absent
3. maintaining direction	present	slightly present	absent
4. controlling stress	present	slightly present	absent
5. modeling the task	present	slightly present	absent
*6. redundancy	present	slightly present	absent
7. mnemonic strategies	present	slightly present	absent
8. reduction of redundancy	present	slightly present	absent
9. reappearance of redundancy	present	slightly present	absent
*10. asking 'why' questions	present	slightly present	absent
10. explanation of the function of a task	present	slightly present	absent
12. retreat and rebuild sequences	present	slightly present	absent

\* (1-5 adapted from Wood et al 1976; 6-9 adapted from Rogoff and Gardner 1984; 10-12 adapted from Mercer 1998)

- For each of the following, indicate the degree of its presence during scaffolded

instruction: (Feel free to mention any additional comments you may have on each.)

1. asking questions	increase	no change	decrease
2. expressing opinion	increase	no change	decrease
3. answering questions	increase	no change	decrease
4. not answering questions	increase	no change	decrease
5. off-task behavior	increase	no change	decrease

**APPENDIX 3B: OPERATIONALIZATION OF TERMS USED IN THE INTERVIEWS**

*Elements of Scaffolded Instruction*

CODE	FOR EACH TERM	EXAMPLES
A	recruiting interest in a task	*eliciting interest *maintaining involvement
B	simplifying the task	*reducing the task into subparts
C	maintaining direction	*clear instructions *keeping pupils on task *introducing new steps when appropriate
D	controlling stress	*encouragement *praise
E	modeling the task	*demonstrating a task with examples *encouraging learners to imitate
F	redundancy	*repetition *various strategies for communication
G	mnemonic strategies	*techniques presented to aid in recall
H	reduction of redundancy	*decrease in repetition with time *subtle testing of understanding by allowing for more student participation
I	reappearance of redundancy	*prompting

- \*suggesting
- \*reminding upon error
- J asking 'why' questions
  - \*asking 'why' questions following a pupil's response to justify an answer
  - \*finding out the reason for a pupil's response
  - \*getting pupils to reflect on what they've learned
- K explanation of the function
  - \*explaining the meaning of a lesson of a task
  - \*indicating the importance of a lesson
  - \*placing the lesson in context
- L retreat and rebuild sequences
  - \*errors are used to go back and reteach the parts of the lesson.

***Student Behavior***

- J asking questions
  - \*requests for clarifying understanding
  - \*seeking help
- K expressing opinion
  - \*reflections on any aspect of the lesson
  - \*comments on the material being covered
- L not answering questions
  - \*not answering teacher questions
  - \*not answering peer questions

M off-task behavior \*talking not related to task at hand  
\*working on other tasks  
\*daydreaming  
\*other

**APPENDIX 4A1: UNSTRUCTURED OBSERVATION SCHEDULE FOR SCAFFOLDING  
ELEMENTS**

In the space below, record any general characteristics of instruction observed during the lesson.

**APPENDIX 4A2: CODING USED FOR OBSERVED CHARACTERISTICS OF INSTRUCTION  
THAT QUALIFY AS ELEMENTS OF SCAFFOLDED INSTRUCTION**

*Elements of Scaffolded Instruction*

CODE FOR EACH TERM	EXAMPLES
A recruiting interest in a task	<ul style="list-style-type: none"> <li>*eliciting interest</li> <li>*maintaining involvement</li> </ul>
B simplifying the task	<ul style="list-style-type: none"> <li>*reducing the task into subparts</li> </ul>
C maintaining direction	<ul style="list-style-type: none"> <li>*clear instructions</li> <li>*keeping pupils on task</li> <li>*introducing new steps when appropriate</li> </ul>
D controlling stress	<ul style="list-style-type: none"> <li>*encouragement</li> <li>*praise</li> </ul>
E modeling the task	<ul style="list-style-type: none"> <li>*demonstrating a task with examples</li> <li>*encouraging learners to imitate</li> </ul>
F redundancy	<ul style="list-style-type: none"> <li>*repetition</li> <li>*various strategies for communication</li> </ul>
G mnemonic strategies	<ul style="list-style-type: none"> <li>*techniques presented to aid in recall</li> </ul>
H reduction of redundancy	<ul style="list-style-type: none"> <li>*decrease in repetition with time</li> <li>*subtle testing of understanding by allowing for more student participation</li> </ul>
I reappearance of redundancy	<ul style="list-style-type: none"> <li>*prompting</li> </ul>

- \*suggesting
- \*reminding upon error
- J asking 'why' questions
  - \*asking 'why' questions following a pupil's response to justify an answer
  - \*finding out the reason for a pupil's response
  - \*getting pupils to reflect on what they've learned
- K explanation of the function of a task
  - \*explaining the meaning of a lesson
  - \*indicating the importance of a lesson
  - \*placing the lesson in context
- L retreat and rebuild sequences
  - \*errors are used to go back and reteach the parts of the lesson.

**APPENDIX 4B1: STRUCTURED OBSERVATION SCALE FOR RECORDING ELEMENTS OF STUDENT BEHAVIOR DURING INTERACTION**

***Student Behavior***

CODE FOR TERM	EXAMPLES
J asking questions	*requests for clarifying understanding *seeking help
K expressing opinion	*reflections on any aspect of the lesson *comments on the material being covered
L not answering questions	*not answering teacher questions *not answering peer questions
M off-task behavior	*talking not related to task at hand *working on other tasks *daydreaming *other

## APPENDIX 5: NOTES ON THE CODING SCHEME USED FOR SPOKEN DISCOURSE ANALYSIS

### Notes on Coding Scheme

1. Column 1 represents the speech turns.
2. Column 2 represents the speakers involved in the discussion. Speech turns designated as (ALL) indicate that a majority of students in the class took part in the turn.
3. Column 3 represents the Moves using the following labels\*:

<b>FR</b>	<b>Framing</b>	<b>S</b>	<b>Supporting</b>	<b>BO</b>	<b>Bound-opening</b>
<b>FO</b>	<b>Focusing</b>	<b>RO</b>	<b>Re-opening</b>		
<b>O</b>	<b>Opening</b>	<b>C</b>	<b>Challenging</b>		

\*The above labels are taken directly from Burton (1981:69-72).

4. Column 4 represents the Speech Acts using the following labels\*:

<b>m</b>	<b>marker</b>		<b>con</b>	<b>conclusion</b>
<b>sum</b>	<b>summons</b>		<b>accn</b>	<b>accusation</b>
<b>^</b>	<b>silent stress</b>		<b>ack</b>	<b>acknowledge</b>
<b>s</b>	<b>starter</b>		<b>ex</b>	<b>excuse</b>
<b>ms</b>		<b>pr</b>	<b>preface</b>	
<b>i</b>	<b>informative</b>		<b>p</b>	<b>prompt</b>
<b>el</b>	<b>elicitation</b>		<b>acct</b>	<b>accept</b>
<b>d</b>	<b>directive</b>		<b>rep</b>	<b>reply</b>
<b>rea</b>	<b>react</b>		<b>com</b>	<b>comment</b>

\*The above labels are taken directly from Burton (1981:76-78).

5. Speech Acts are separated by slashes.
6. Dotted lines mark exchange boundaries.
7. Double bold lines mark transaction boundaries.

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