Non English speaking background learners in the mainstream classroom: A New Zealand case study

Roger Christopher Graham Barnard

Doctor of Philosophy

University of Southampton

University College Chichester

Centre for International Education and Management

Date of submission: May 2000
ABSTRACT

Doctor of Philosophy

NON ENGLISH SPEAKING BACKGROUND LEARNERS IN THE MAINSTREAM CLASSROOM: A NEW ZEALAND CASE STUDY

by Roger Christopher Graham Barnard

This thesis has been completed as a requirement for a higher degree of the University of Southampton

The introductory chapter of this thesis presents the central premise of the study – that classroom learning is constructed through talk – and states the primary aims. These are to provide an ethnographic account of the process of learning in a mainstream classroom, and to apply to this account a specific theoretical framework with a view to refining its central constructs. The thesis proceeds with a discussion of the methodological basis of the investigation – ethnographic case study – and the procedures used for data collection and analysis. This is followed by a discussion of the theoretical orientation of the study, which explains the complexity of the learning context of isolated bilingual schoolchildren and the rationale for a sociocultural approach to explore it. The neo-Vygotskian constructs central to this study - the zone of proximal development, scaffolding and appropriation - are introduced and explained, as are supporting concepts.

Each of the three following chapters of the thesis is divided into three parts. The first examines in detail one of these constructs, and also related concepts, with a view to their potential relevance to the specific context of learning. The second part in each chapter comprises a detailed ethnographic description, microgenetic analysis and interpretation of the context and continuity of the learning discourse. The third part in each chapter comments on the implications for the constructs at issue. These three chapters constitute a narrative of the way that classroom learning is constructed through talk over a school year.

The thesis concludes with a review of the pedagogical and theoretical implications arising from the investigation, and considers the utility of a neo-Vygotskian framework for further research into classroom learning.
## Contents

| Abstract | 2 |
| Acknowledgements | 8 |
| Transcription conventions | 9 |
| Chapter 1  Introduction | 10 |
| Chapter 2  Methodological Orientation | 16 |
| **Overview** | |
| 1. Approach | 17 |
| 1.1 Ethnography - ontological and epistemological bases | |
| 1.2 Ethnographic Case Study - methodological considerations | |
| 1.3 The researcher as insider and outsider | |
| 1.4 Action Research, and why this was not adopted | |
| 1.5 The scope and limitations of case study | |
| 2: Interview | 30 |
| 2.1 Interview - definition and purpose | |
| 2.2 Types of interview | |
| 2.3 The reliability and validity of interviews | |
| 2.4 Interviews in the present study | |
| 3. Classroom Observation | 39 |
| 3.1 Systematic classroom observation: epistemological and methodological bases | |
| 3.2 The reliability and validity of SCO | |
| 3.3 Ethnographic classroom observation: epistemological and methodological bases | |
| 3.4 Procedures used for data collection in the present study | |
| 3.5 How data were analysed in the present study | |
| 4. Position, voice and presentation | 49 |
Chapter 3  Theoretical Orientation

Overview

1. The complex linguistic and cultural context
   1.1 The linguistic complexity of the mainstream classroom
   1.2 The cultural complexity of the classroom - 'Langaculture'
   1.3 The langacultural challenge faced by NESB learners in New Zealand schools

2. Second language acquisition (SLA)
   2.1 Theories and models of second language acquisition
   2.2 A critique of the Socio-Educational Model
   2.3 The limited relevance of SLA theories to this study

3. Sociocultural theory: second language socialisation
   3.1 Socialisation: the individual and the group
   3.2 Language socialisation: in the use of language, and through language
   3.3 The socialisation of cognition through dialogue - ZPD, scaffolding, appropriation
   3.4 Social modes of thinking, and ventriloquation, in the classroom

4. Sociocultural theory applied to second language speakers

Chapter 4  The Zone of Proximal Development

Part 1. Introduction

Overview

1. A sociocultural theory of learning
   1.1 The ontogenesis of learning
   1.2 Activity theory

2. The Zone of Proximal Development (ZPD)
   2.1 Vygotsky's construct of a ZPD
   2.2 ZPDs and NESB learners
   2.3 ZPD as an event
   2.4 ZPD as a process

3. Learning through dialogue: interpsychological speech
   3.1 The role of dialogue in learning
   3.2 Intersubjectivity in classroom dialogue
   3.3 Social modes of thinking in classroom discourse
   3.4 Inner and private speech: intrapsychological speech

Part 2. Ethnograph

1. The context
   1.1 The teacher's aims
   1.2 The first day at school
2. Teacher-class interaction

2.1 The interactional dimension
2.2 The instructional task dimension
2.3 The cognitive dimension

3. Pupil-pupil interaction

3.1 The interactional dimension
3.2 The instructional task dimension
3.3 The cognitive dimension

Part 3. Commentary
Review
1. The nature of problem solving tasks in a ZPD
2. The roles of expert and novice
3. Shared ZPDs
4. The identification of existing and potential ability

Chapter 5 Scaffolding in Responsive Social Contexts

Part 1. Introduction
Overview
1. Support for NESB learners in the mainstream
   1.1 Teaching staff
   1.2 Peer tutors

2. Scaffolding
   2.1 The original metaphor of scaffolding
   2.2 The metaphor elaborated
   2.3 Criteria for scaffolding

3. Responsive social contexts
   3.1 Characteristics of Responsive Social Contexts

4. Summary

Part 2. Ethnograph
Overview
1. Jean
2. Jack
3. John
4. Alina (and Jean)

Part 3. Commentary
Review
1. A comparative summary
2. The role of the teacher
3. Some implications for peer tutoring
4. The relevance of scaffolding in RSCs to classroom learning
Chapter 6  Appropriation
Part 1. Introduction
Overview
1. Interpsychological learning
   1.1 Review: the interpsychological basis of learning
   1.2 Internalisation and appropriation
   1.3 Inner speech and private speech
   1.4 Imitation and ventriloquation within interactional speech

2. The limitations of analysing verbal language

3. The inevitability - and fragility - of inference

Part 2. Ethnograph
Overview
1. Alina
2. Jean
3. John
4. Jack

Part 3. Commentary
Review
1. The interactional dimension
2. The instructional task dimension
3. The cognitive dimension

Chapter 7  Pedagogical and Theoretical Implications
Overview: addressing the research questions
1. How was a culture of learning developed in a mainstream primary classroom?

2. How relevant to this context is the notion of a zone of proximal development?

3. How were the NESB learners in Room 7 helped to participate in the discourse of learning?

4. To what extent can scaffolding be applied to peer assistance for NESB learners?

5. How did the NESB learners appropriate the culture of learning in Room 7?

6. How useful in the notion of appropriation to the context of NESB learners in the mainstream classroom?

7. Conclusion
ACKNOWLEDGEMENTS

The research that this thesis represents could not have been carried out without the help and support of many people.

First and foremost, I should like to thank the members of 'Rosegarden' Intermediate School - especially the teachers and pupils in Room 7, and above all the four students who are at the heart of this study, for allowing me to join their community and investigate their long conversations.

I also wish to acknowledge the considerable help given to me by colleagues in the Department of General and Applied Linguistics at the University of Waikato, and to the many postgraduate students who taught me while themselves being taught. Notable among the latter are Patrick Leem, Olivia Liu, and Taemok Oh - without whose interpreting and translation skills many of the insights which illuminate this study would have been lost.

I owe an enormous debt of gratitude to my supervisors. Mick Randall, after inspiring me with his friendship and collegial support in Oman, encouraged me to embark upon this journey in 1994. Professor Rosamond Mitchell has been an ever-watchful presence as the project has passed through its various metamorphoses. Their support, encouragement and feedback over the years - and across the oceans - has contributed clarity and coherence not merely this thesis but to the research process as a whole.

I am grateful to the University of Waikato for granting me study leave in order to complete the writing of this thesis, and to University College Chichester for awarding me a Visiting Fellowship and the concomitant facilities which enabled the final stages to be completed.

Finally, without the constant love and support of my wife and children over many years I could not have started, sustained and completed this work, and I therefore dedicate the thesis to them.
Transcription conventions

The following conventions were used in the ethnographs in Chapters Four, Five and Six

T = teacher

RB = Roger Barnard, the researcher

P = unidentified (or unidentifiable) pupil

Ps = some or all pupils

Na = initial two letters of a named pupil - in this case, Nathan

... = short pause in the speech

xxx = unintelligible word or phrase

[?] = a guess at a word or phrase not clearly heard

*italics* = utterances spoken in pupil’s first language (Korean or Mandarin)

CAPS = words spelt aloud by teacher or pupils

> = overlapping speech

( ) = explanation of accompanying action relevant to the speech

NB pseudonyms for schools, teachers and pupils (and matters such as addresses) have been used to ensure that the confidentiality of all participants in this investigation has been respected throughout.
Chapter One
Introduction

The central premise of this study is that classroom learning is constructed through talk – interaction between the teacher and the class and among the pupils – and that thereby “education proceeds by the development of shared understanding” (Mercer 1994a: 90). The thesis seeks to explore the extent to which this is true by the application of a theoretical framework of learning to a specific educational context – a mainstream primary classroom in New Zealand. In doing so, it is hoped to make an original contribution to academic knowledge in two ways. Firstly, it is intended to illuminate - through a detailed description and analysis of the interaction in one classroom - how some children may be perceived to learn. The grounded analysis required for this investigation provides the basis for the second – and more important – contribution – that of ‘theory elaboration’ (Vaughan 1992). By this term is meant the application of existing theory to a specific context and its further development through what Vaughan calls ‘qualitative case analysis’. In the present investigation, a neo-Vygotskian theoretical framework of learning is applied to a specific type of learner – the isolated bilingual in the mainstream primary classroom – with the intention of evaluating and refining the theory in the light of the analysed data. The specific research questions which drive the elaboration of theory in this study are set out at the end of this introductory chapter.

The 'topical issue' (Stake 1994: 239) of the investigation is how an intermediate (upper primary) school in New Zealand might effectively cater for those of its learners whose first language is neither English nor Maori. The advice of the Ministry of Education (1996a: 11) with regard to these students is that limited periods of withdrawal for specific English language tuition, either one-on-one, or in small groups, should be judiciously blended with planned immersion experiences in the mainstream classes. However, data obtained from interview with teachers during 1997 suggest that the 'foreshadowed problem' (Malinowski 1984: 9) of this study is that it is not entirely clear to the teachers concerned how these learners
actually develop their linguistic and academic competence within the mainstream classroom. This makes it difficult to plan their experience there, or indeed language or other support that they need. Therefore, the 'issue under development' (Stake 1994: 239) is a detailed study of some of these learners in their mainstream class in an attempt to illuminate and clarify what, how, and from whom they learn.

The pupils with whom this study is centrally concerned are referred to as NESB (Non-English Speaking Background) learners, although other acronyms are commonly in use in New Zealand as elsewhere. For the sake of consistency, the acronyms NESB will be used to refer to these learners and ESOL to the programmes of focussed English language tuition, as these are the official designations used by the Ministry of Education. In New Zealand, as in the United Kingdom and Australia, many of these pupils are children in large and well-established linguistic minority groups and they may constitute a collective ethnic presence and identity in a school. However, the students who are at the heart of this study come from ethnic communities – Taiwanese and Korean – which are relatively small and only recently established in New Zealand. They are therefore isolated in the sense that there are few, if any, speakers of their first language in the classroom – or in the school as a whole. A matter which further complicates the integration of such isolated NESB learners into the mainstream classroom is that they often arrive at school at different times after the start of the school year. By the time they do so, interpersonal relationships have been established, pedagogical procedures understood, and important areas of the curriculum already covered.

Full details of the national and local context of this study are provided in Appendices A and B. Information about the school, 'Rosegarden', may be found in Appendix C. (The names of the school, teachers and pupils are pseudonyms.)

In order to explore the context of learning in depth, a decision was made to work within the qualitative research paradigm, and specifically in terms of ethnographic case study. Chapter Two explains the epistemological and methodological basis of case study then discusses the role played by the ethnographic researcher within a specific culture. The implications of action research are discussed and reasons for
not using this approach in the present case are briefly explained. The scope and limitations of case study as a research paradigm are discussed with reference to theory elaboration. The two principal means of investigation applied in this study – interview and classroom observation – are each fully considered. Firstly, different types of interview are reviewed, as well as their validity and reliability, before attention is turned to how interviews were used in the present study. Following this is a discussion of systematic and ethnographic approaches to classroom observation. The chapter concludes with an explanation of the means by which observational data was collected and analysed in the present investigation, which took place over a four-year period.

In 1997, an initial literature review was undertaken and preliminary fieldwork conducted through language teaching, classroom observation and focussed interviews with teachers and NESB learners in the school. Throughout 1998, a large quantity of observational data was collected in a seventh grade mainstream classroom and audio-recordings transcribed. At the same time, a process of grounded analysis took place whereby the data were collated, compared and contrasted in the light of reflection and more detailed background reading of sociocultural and neo-Vygotskian theory. During 1999, the analysed data was reconsidered in terms of the theoretical framework which had by then emerged, and the process began of writing up a thick description (Geertz 1973:10) of the investigation. During this time, the theoretical implications were constantly under review. The thesis was completed in the early months of 2000.

The summary and transcript of an interview with the classroom teacher is provided, in Appendix D as an example of the interview data collected in 1997. Sample extracts of 1998 observational field notes and lesson transcriptions can be found in Appendices E and F, respectively.

Underlying labels such as NESB is the assumption that these students are in a language deficit situation, and what is required is specific assistance to enable them to acquire English as a second language. Chapter Three discusses the complexity of language used in classrooms, and makes the point that linguistic deficit is only
part of the much broader 'langacultural' (Agar 1994) issue. A review is made of some current theories of second language acquisition, and their lack of direct relevance to the context of isolated NESB learners in the mainstream classroom. Learners such as those in focus in this study need to come to terms with the demands of classroom learning in interactional, instructional task and cognitive dimensions (Richards & Hurley 1988). The key issue, it is argued, is one of second language socialisation, rather than merely second language acquisition. There follows a discussion of the sociocultural theoretical framework which informs the study and an introduction to the key three neo-Vygotskian constructs which are applied to the specific context: the zone of proximal development (ZPD), scaffolding and appropriation. The chapter concludes with a brief review of recent applications of sociocultural theory to second language learners, and recites the research questions of the present study.

Chapter Four is in three parts. The first examines of the construct of a zone of proximal development (Vygotsky 1956: 446), and traces its origins in Vygotsky's assumption that conceptual and cultural learning occurs firstly on the social plane and only then on the individual. He viewed such learning primarily as an interpsychological activity, which may best be brought about through interaction with a more able dialogic partner. To understand the actual processes involved requires both a long-term genetic analysis of interpersonal relationships and also a moment-by-moment microgenetic analysis of interactions. The potential relevance of Vygotsky's thinking to NESB learners is considered in terms of the ZPD as both an event and a process. This part of the chapter concludes with a discussion of learning through dialogue. It introduces notions of intersubjectivity, social modes of thinking (Mercer 1995), and inner and private speech. These notions are developed in this chapter and the following two to illuminate interactions in a mainstream classroom.

In the second part of Chapter Four these theoretical considerations are then brought to bear on a description and microgenetic analysis (which is termed an 'ethnograph') of interactions in 'Room 7'. This explores the way by which the discourse of learning there was constructed through dialogue: firstly dialogues
between the teacher and the class, and secondly those among the pupils
themselves. These dialogues are examined in terms of Richards & Hurley’s (1988)
three dimensions of classroom learning. The third part of Chapter Four is a
commentary of issues arising from the preceding ethnograph, and focusses on the
extent to which the notion of a ZPD can be applied to mainstream classroom
learning.

It is important to note that the culture of learning in Room 7 was created before
any of the four NESB learners in focus arrived at the school. Information about
the room, its teacher and pupils is provided in Appendix G, and details of the four
NESB learners who arrived in the classroom at various times during the school
year may be found in Appendix H.

Chapter Five examines how the learning of NESB pupils might be promoted by
more able classroom peers. This chapter, too, is in three parts. The introduction
reviews the NESB learners’ need for assistance, and who might help them. It then
turns to a discussion of two models of assistance: scaffolding (Wood, Bruner &
Ross 1976) and responsive social contexts (Glynn 1985). The second part of the
chapter comprises an ethnograph of peer-tutoring interactions among the four
learners and some of their classmates in their first few weeks in Room 7. The
chapter concludes with a review of the ways in which more able peers might be
said to have scaffolded the learning of each of the four learners in focus.

Chapter Six, also in three parts, considers how these NESB pupils might
appropriate (Bakhtin 1981, Leont’ev 1981a) relevant understanding through talk
with their classroom peers. It begins by reviewing the sociocultural basis of
learning and examining different interpretations of the process of internalisation
and appropriation, and the role played by inner and private speech in that process.
The linguistic signals by which appropriation may be identified are considered in
terms of imitation and ventriloquation in the context of Mercer’s (1995) three
categories of classroom talk. The first part of the chapter concludes with a note
about the fragility of inferring thought processes from overt speech behaviour. Part
2 is an ethnograph of interactions involving each of the four NESB learners, and
examines in detail how the process of their learning may be discerned using constructs introduced and examined in this and previous chapters. The chapter concludes with a discussion of the extent to which each of the learners may have appropriated Richards & Hurley's (1988) three dimensions of classroom learning.

Examples of the NESB learners' oral and/or written work at the end of the year are provided in Appendix I.

Chapter Seven addresses the following research questions:

How was a culture of learning developed in a mainstream primary classroom?

How relevant to this context is the notion of a zone of proximal development?

How were the NESB learners in Room 7 helped to participate in the discourse of learning?

To what extent can scaffolding be applied to peer assistance for NESB learners?

How did the NESB learners appropriate the culture of learning in Room 7?

How useful in the notion of appropriation to the context of NESB learners in the mainstream classroom?

These questions focus on theoretical and pedagogical implications for non-English speaking learners as may be drawn from the specific circumstances of this study. Chapter Seven - and the thesis - will conclude with a consideration of how useful and relevant the neo-Vygotskian framework adopted in this study would be to further research into how pupils – whether NESB or not - learn in primary classrooms.
Chapter Two
Methodological Orientation

Overview
The present investigation is an ethnographic case study of the learning context of some NESB learners in a mainstream primary classroom in New Zealand. This chapter outlines the methodological framework of the investigation and explains the procedures used.

The first part begins with a brief presentation of the ontological and epistemological basis of ethnographic case study, the characteristic features of which are then considered using criteria provided by Atkinson & Hammersley (1994). Attention then turns to the role of the ethnographer in terms of cultural proximity and distance, and this is followed by a brief explanation of why an action research perspective was not considered appropriate for this study. The first section concludes with discussion of the scope and limitations of case study as a research strategy, with particular reference to the notion of ‘theory elaboration’ (Vaughan 1992) and issues of validity, reliability and ‘relatability’ (Bassey 1981).

The two principal forms of data collection employed in this study - interview and classroom observation - are then considered. In Section 2, the purposes and types of interview are discussed, leading to a brief review of issues of validity and reliability of interview data. This will be followed by an explanation of the use of interviews in this study. In Section 3, classroom observation - the data from which are at the heart of this study - will then be considered. Firstly, a review will be made of systematic classroom observation, and then a discussion of the threats to reliability of pre-determined categories and instruments. Finally, after a consideration of the epistemological basis of ethnographic classroom observation, the way by which classroom data was collected and analysed in the present study will be explained.
1. Approach

1.1 Ethnography - ontological and epistemological bases

The present study is qualitative research in the sense that investigators in this field of inquiry "study things in their natural settings, attempting to make sense of, or interpret, phenomena in terms of the meanings people bring to them" (Denzin & Lincoln 1994: 4). This study is located within the last of four broad current paradigms of qualitative research identified by Guba & Lincoln (1994: 109) - positivism, postpositivism, critical theory and constructivism. This is because I, the researcher, take as axiomatic the relativistic ontological view that "multiple, apprehendable, and sometimes conflicting social realities ... are the products of human intellects" (Guba & Lincoln 1994: 111). From this derives the epistemological point that those fundamental values which give rise to these realities are apprehendable to the investigator through interaction within the specific context of learning and with the participants of that context. It follows from this that an appropriate strategy of inquiry would be the interpretive methodology - a "search for meaning" (Lutz 1981: 55) - involved in ethnography.

The emphasis in ethnographic inquiry on the interpretation of reality, individual values and interaction between participants has led to the following ethical view of ethnography:

> Of all forms of scientific knowledge, ethnography is the most open, the most compatible with a democratic way of life, the least likely to produce a world in which experts control knowledge at the expense of those who are studied (Hymes 1976: 57).

That ethnography should seek to be democratic is based on the assumption that the actions of participants in social events should be explored, interpreted and explained in the light of their own values and beliefs. This '-emic' perspective requires the researcher to

> leave aside pre-established views, standards of measurement, models, schemas and typologies and consider classroom phenomena from the functional point of view of the ordinary actor in everyday life" (Erickson 1981: 20).
The ethnographer’s primary aim is to investigate a specific culture (‘ethno’), and then to present a picture (‘-graph’) of that culture, and to do so as accurately and fully as possible. In doing so, rather than using the one-way mirror of positivism (Guba & Lincoln 1994:110), the ethnographer may be said to hold a two-way mirror: one face truthfully reflecting to the participants their own knowledge, attitudes, skills and experience; the other face revealing an image of the researcher. If this metaphor is sustained, it is immediately obvious that - however undistorted the image, and however appropriate and rigorous the means used to obtain that image - the perspective is inevitably that of the observer, rather than the observed. This is because, in the necessary attempt to be holistic (Van Lier 1988: 55), the ethnographer must relate the observed data to existing knowledge about other components of the culture.

Invariably, therefore, the ethnographer applies personal inference, derived from prior knowledge, experience and skills, to the description of the phenomenological reality of the research setting. Janesick (1994: 212) points to the need for qualitative researchers to identify their own ideological and epistemological biases and acknowledge their ethical implications. Consequently, as Spindler & Spindler (1987: 22) point out, the need to hold inferences in check and use them ‘parsimoniously’ requires the ethnographer always to be tentative when reaching for, and attempting to provide, explanations. The ethnographic researcher certainly wishes to enhance personal knowledge and expertise from the work undertaken, but does not - or should not - seek to use this greater authority to control the actions of those who have assisted the research process. The clear implication of this is that whatever insights are gained from the ethnography of a culture can only be suggestions for consideration, and not directives for action.
1.2 Ethnographic Case Study - methodological considerations

In methodological terms, Atkinson & Hammersley (1994: 248) have described ethnography as a form of social research having a substantial number of the following features:

* A strong emphasis on exploring the nature of a particular phenomenon, rather than setting out to test hypotheses about them
* A tendency to work primarily with "unstructured" data, that is, data that have not been coded at the point of data collection in terms of a closed set of analytical categories
* Investigation of a small number of cases, perhaps just one case, in detail
* Analysis of data that involves explicit interpretation of the meanings and functions of human actions, the product of which mainly takes the form of verbal descriptions and explanations, with quantification and statistical analysis playing a subordinate role at most.

The present study incorporates all these features.

The particularity stressed in the first and third of the above points suggests that an appropriate unit of analysis for the issues in question is the single case. As defined by Cohen & Manion (1994: 106), "the case study researcher typically observes the characteristics of an individual unit - a child, a clique, a class, a school or community."

In the present study, the initial focus of study was an intermediate school; such schools, very common in New Zealand, take primary pupils for grades seven and eight in preparation for entry to high school. The selection of the school arose from a request in 1996 by the principal for my advice in the development of appropriate policies and practices to deal with the increasing number of NESB learners in the school. Throughout 1997, I undertook a few hours ESOL teaching each week in order to gain an insight into the learning context of some of these learners. At the same time, I conducted formal interviews with over twenty of the teachers in the school in order obtain information about their attitudes and practice vis-à-vis NESB learners. At the start of the 1998 school year, the focus shifted to a particular mainstream classroom - Room 7. This particular setting - and the teacher
- was chosen by the assistant principal in consultation with the teachers who had been interviewed and invited to participate more fully in the investigation by allowing their classes to be observed during the school year. My only desiderata were that it should be a seventh grade class, and that some NESB learners, new to the country, would be placed in this class at the start of the year. The reason for these requirements was that I intended to study how newly arrived NESB pupils would adjust to the new school in comparison with their Kiwi peers, all of whom would also be in a new educational environment. Thus the unit of analysis moved from the school to the classroom and its members, in particular the four NESB learners who eventually joined Room 7.

The second point made by Atkinson & Hammersley above was that the initial collection of data should be open-ended and unstructured. In this case, my previous professional experience and expertise, fortified by knowledge gained by reference to relevant literature, enabled me to identify some of the 'foreshadowed problems' which might emerge during interaction between teachers and NESB learners. However, I wished to avoid prejudicing their exploration by formulating hypotheses and testing them based on a priori assumptions. It needs to be emphasised at this point that the neo-Vygotskian theoretical framework which will be discussed in Chapter Three emerged during, and not before, the collection and grounded analysis of data. As noted above and discussed more fully below in Section 3 of this chapter, data were collected in 1997 by means of focussed interviews and reflective teaching and in 1998 by audio-recordings and field notes of unplanned classroom dialogues.

With regard to the last of Atkinson & Hammersley's four points, this study is manifestly interpretative: no attempt whatsoever has been made to quantify data or analyse them statistically. Instead, verbatim interactions are described and analysed, and subjective interpretations are offered, with the intention of following Denzin's (1989) advice to ethnographers to immerse themselves in the lives of their subjects and to produce a contextualised reproduction and interpretation of the stories told by them. To interpret such 'stories', it has often been argued by classroom ethnographers (for example, Au & Jordan 1981: 152, Carrasco 1981: 169; Florio
& Walsh 1981: 91; Watson-Gegeo & Ulichny 1988: 80) that the explicit phenomenological interpretation of the participants is highly desirable, if not essential. Teachers and learners participating in such studies give meaning and value to actions that might otherwise be misinterpreted by "outside" researchers.

It would, therefore, appear appropriate that during this study, the participants' reflective interpretations of communicative and pedagogic events in Room 7 would be elicited, recorded, and given central importance. This was not done. The reason for this decision needs to be explained, and this can be done briefly. Before starting the year-long series of observations, I explained the broad aims and procedures of my research project to the teacher of Room 7, and obtained her consent. I also maintained frequent informal contact with her - for example, by conversations during breaks and before and after school - throughout the school year. The purpose of such discussion was to seek clarification of her intentions for, and understanding of, various classroom events. I did not wish to modify her practice as a result of my presence in the classroom or by questions that arose from my research agenda, for I felt that to do so might lead to a distortion of her normal classroom conduct. For similar reasons, I did not seek the interpretation of events from the four learners who are at the heart of the study, nor from their classmates. In all cases, I explained as clearly as I could - individually, in the case of the four NESB learners - the overall purpose and procedures of my investigation and formally obtained their consent, and that of their parents. The various short interviews I held with the NESB learners during 1998 were intended to seek background information, rather than interpretation; again, I did not wish to lead them to change their classroom behaviour by my questions. The difficulty of obtaining accurate information from them, let alone reflection, was anyway compounded by maturational, sociocultural and linguistic factors - even though I used the services of interpreters.

Rather than seek the reflective interpretations of those I studied, I decided to use the ethnograph as a conduit for making their voices heard (Denzin & Lincoln 1994: 15). The verbal interactions in Room 7 - and my own interpretations of them - are the core of Chapters Four, Five and Six. I claim to hold a justifiable warrant (Edge
& Richards 1998) for the interpretations I have made, because they are the result of sharing the lives of my research participants and making rigorous efforts to understand the implications of their verbal behaviour.

1.3 The researcher as insider and outsider

To a greater or lesser extent, all ethnographers participate in the culture they observe; Gold (1958) and Junker (1960) were among the first to formulate the now-conventional fourfold typology: complete observer, observer as participant, participant as observer and complete participant. However, in order to clearly understand the context and interpret the implications, the researcher needs to be, and be seen to be, a cultural insider rather than a mere participant. Hymes (1976: 58) felt it 'highly desirable' that an ethnographer should be from within the community in a large proportion of cases. In this study, I may claim, on the grounds of my professional background as a teacher, to be such an insider. I am certainly familiar with general school routines and frames of reference, having worked as a teacher and adviser in a number of educational systems in different parts of the world. More particularly, the interviews I held with teachers at Rosegarden during 1997 enabled me to gain an overview of the school context in which the particular learners would be placed. These, and the part-time ESOL teaching I was doing throughout the year, increasingly made me a familiar presence in the school and staff room. In 1998, I was an active participant in Room 7. Although I would usually sit quietly at the back of the room, I made no attempt to hide my presence and I frequently interacted with the pupils, individually and in groups, and sometimes carried out administrative services, such as marking standardised tests, which a teacher-aide might perform.

Yet there is also a need for the ethnographic researcher also to be something of a cultural 'stranger'. In part, this is required to maintain an appropriate academic distance - to be a filter through which both familiar phenomena can be seen as strange and the strange familiar. During the preliminary interviews with the teachers, such distance enabled me to ask naive (or 'naive') questions which would not have come easily to, or be naturally expressed by, a real insider. This relatively neutral climate was an opportunity for the respondents to freely express value-
laden interpretations to my questions and elicitations. In the observational fieldwork undertaken in 1998, I was increasingly recognised as a regular member of the community of Room 7. Yet I was clearly neither pupil nor teacher; although I carried out quasi-teaching activities, I never saw it as my role, for example, to maintain discipline when the teacher was occasionally absent from the room. The fact that, by my accent and attitudes, I was British also distanced me from the politics of the classroom, school or the wider community.

Delamont & Hamilton (1984: 21) have made the point that “an adequate classroom study must acknowledge and account for both the internal and external aspects of classroom life”, as no classroom is a self-contained cultural unit, but part of a wider organisation. It may be assumed that, as a social unit, a school can best achieve its goals if those working within it share the same goals and bring to work a common cultural perspective regarding their importance (Johnson 1960). Such harmony, however, is an idealised scenario, as all organisations comprise formal and informal subgroups, united and divided by bonds of amity, collegiality, ethnicity, political persuasion, etc. There is, consequently, potential for disharmony and even conflict. Such divisions may not be openly expressed: research in schools (for example, that undertaken by Corwin 1965 and Cleghorn & Genesee 1984) has indicated that preservation of harmony is important enough to prevent open expressions of conflict and that teachers employ a variety of conflict-avoidance strategies. The present investigation did not seek to explore in any way collegial conflict and its avoidance. It is, however, necessary for its potential (and indeed, actual) existence to be acknowledged, both as a counter-balance to assumptions of organisational harmony, and also its tendency to affect the validity of interpretations expressed during the 1997 interviews, and anything said to me, or in my presence, throughout my presence at the school.

1.4 Action Research, and why this was not adopted
The initial impetus for this case study (the principal’s request noted earlier) and the active involvement of the teachers in the initial stages of, and their constant encouragement throughout, the investigation might lend an action research
perspective to this study. However, it is important to note that it was not in any way designed or carried out within that framework.

Over the past fifty years (Warmington 1980), there has been a range of interpretations of what is meant by action research, but there is a consensus that it falls within the pragmatic dimension of research. The 1972 Halsey Report (cited by Cohen & Manion 1994: 202) defined it as "small-scale intervention in the functioning of the real world and a close examination of the effects of such intervention". The use of 'intervention' and 'effects' indicates that action research is an essentially problem-solving process. Hult & Lennung (1980) added skill-enhancing and illuminative functions, which suggested that the practitioners themselves are the key actors throughout the process - a point reinforced by Crookes (1993: 130), Nunan (1993: 41) and Reason (1994: 325ff). For these, and others, action research is essentially a collaborative enterprise.

A distinctive feature of action research as thus understood is that those affected by planned changes have the primary responsibility for deciding on courses of critically informed action which seem likely to lead to improvement, and for evaluating the results of strategies tried out in practice. Action research is a group activity (Kemmis & McTaggart 1988: 6 - emphasis in original).

They add a moral and political dimension to this collaborative model of action research, which should be

a form of self-reflective enquiry undertaken by participants in social situations in order to improve the rationality and justice of their own practices, their understanding of these practices, and the situations in which these practices are carried out (Carr & Kemmis 1986: 220-1 - emphasis added).

This places action research firmly in Guba & Lincoln's (1994: 109ff) third paradigm of qualitative inquiry: critical theory. Three points arise from this. Firstly, to be properly considered as research, action research needs to be distinguished from reflective practice. One view of the teacher-as-researcher has been formulated thus:
The teacher ... alone or with colleagues, reflects on her practice outside the flow of events, in frozen time. She finds ways to collect for such reflection documentation of her teaching and of student learning (Cazden et al 1989, cited by Johnson 1992: 215-16).

As Crookes (1993: 131) has pointed out, a conventional idea of teacher-researcher such as this is "no more than a description of what good teachers might be expected to do in the course of their teaching and thinking". What more is required of a teacher-as-researcher is a clear understanding of, and commitment to, academic rigour and a procedural knowledge of the appropriate ways of safeguarding the integrity of a research project. To do this requires time, commitment and training.

Secondly, then, those involved in an action research project need to have time and expertise to permit full participation. Most schoolteachers lead very busy professional lives and are committed to meeting the needs of their students on a practical, day-to-day basis; they do not usually have the luxury of standing back, in 'frozen time' to reflect. Even less often do they have opportunities to be trained in the collection and analysis of data, and then to perform these functions explicitly and systematically enough to meet academic requirements. And if those requirements cannot be met, the process cannot properly be called research.

Thirdly, the combination of 'critically-informed action' and skills-enhancement may - and in the spirit of critical theory, should - empower practitioners in action research, which by linking reflection to action, offers teachers and others a way of becoming aware of how those aspects of the social order which frustrate rational change may be overcome Carr & Kemmis (1986: 179-80)

By doing so, according to Crookes (1993: 137) teachers as action researchers are enabled to understand and confront many of the implicit values of educational practice which both 'deprofessionalize' them and prevent the delivery of 'true education'.
In the case of the present study, the fundamental issues surrounding NESB learners in Rosegarden were, as explained in the previous chapter, initially articulated by the principal and discussed by the teachers with me in 1997. It was hoped that my study would serve to illuminate the situation and clarify problems and possible solutions. However, this is not an action research project for the following reasons. The project, small-scale as it is, is under my direction, and I take full responsibility for its design, development and presentation. Secondly, it is beyond the scope of the project design itself actually to implement any changes that may suggest themselves in the course of investigation; they will be raised, and it is hoped that the school will take appropriate action. Thirdly, the teachers did not claim to have the academic skills needed to act as researchers, nor did they have time to develop them within the time frame of the project. It would be presumptuous of me to believe that I could undertake to develop such research skills, and anyway no one asked to undertake this role. Finally, and most importantly, the purpose of the study was not to solve practical problems, but to understand pedagogical issues in the light of a particular theoretical stance.

1.5 The scope and limitations of case study

Stake (1994) refers to intrinsic and instrumental case studies. He describes the purpose of the researcher in the first type as being to illuminate the particular circumstances of a specific context because the case itself is interesting, and may not have any interest beyond that confine. The latter type of study is intended to "provide insight into an issue or refinement of theory" (Stake 1994: 237), and a particular case is studied as a means to this end.

In the case of Rosegarden, both dimensions of case study were relevant. I had an intrinsic interest in the pedagogical issues arising from the interface between teachers and NESB learners, and between those learners and their classroom peers. In order to uncover the key issues, and then study them in depth, a very great deal of empirical data had to be collected and considered. During the fieldwork conducted in 1998, there was a constant and concurrent interplay of data collection and data analysis. Huberman & Miles (1994: 429) refer to the process of grounded data management as having three steps: data reduction, data display and conclusion.
drawing and verification. Only by careful and detailed comparative analysis of
different interactions could the richness of the context be opened up and explored.
Therefore, the initial stimulus of this study was the illumination of a range of issues
within the unique cultural system of one school. And although, as stated above,
this study was not located within an action research framework, eventual
dissemination of insights thereby gained would enable teachers at Rosegarden to be
more reflective practitioners in their classes.

However, the very process of analysis - whether grounded or not - requires a
theoretical framework to provide orientation (Glaser & Strauss 1967: 105). Such
orientation

may be generated initially from the data, or, if existing (grounded)
thories seem appropriate to the area of investigation, then these may
be elaborated and modified as incoming data are meticulously played
against them (Strauss & Corbin 1994: 273 - emphases in original).
It is this second approach - theory elaboration and modification - which informs
this thesis. The limitation of specifically grounded theory is that it is inevitably
bounded by place, time and circumstance. Because it depends crucially on - indeed,
it derives from - the diverse perspectives of the actors in the specific context,
grounded theory “must correspond closely to the data if it is to be applied in daily
situations” (Glaser & Strauss 1967: 238). The issue thereafter is the extent to
which a grounded theory can serve to illuminate or explain contexts beyond that
which has been the focus of research. Strauss & Corbin (1994: 281) make it clear
that grounded theory can and should serve wider professional groups, and indeed
society at large. To do so, however, requires the further development of grounded
theory far beyond the scope of this present investigation. Thus, the decision to
work within Vaughan’s (1992) notion of ‘theory elaboration’ seemed more
appropriate than basic grounded theory.

The neo-Vygotskian framework described in Chapter Three eventually came into
focus during the process of grounded analysis. During 1998, I constantly
interrogated the data as I collected it, continually comparing it against and
progressively integrating it with previous observations; a number of patterns
started to emerge. These were matched against, and incorporated into, the
developing theoretical model. Increasingly, too, the model itself needed to be
evaluated to judge the extent to which it truly illuminated the data. This is what
Vaughan meant when she described elaboration as

the process of refining the theory, model or concept in order to specify more
carefully the circumstances in which it does or does not offer potential for
explanation (Vaughan 1992: 175)

As a result of this process, during 1999 the orientation of the case moved from an
intrinsic to an instrumental one, as it became apparent that the study of NESB
learners in this particular classroom might facilitate a broader understanding of
similar learners elsewhere. Such refinement of theory might thus enable the case
study researcher – or the reader of such a study - to transcend the particular and
establish “generalizations about the wider population to which [the] unit belongs”

However, the very particularity of case study points clearly to its manifest
limitations: a restricted purview and consequent lack of external reliability and
validity.

The inherent potential for external unreliability in any case study - that it cannot be
replicated by an independent researcher - is particularly acute where, as here, the
investigation is carried out by a single researcher. The possibility of enhancing
internal reliability by involving more experienced researchers is limited by both the
nature and resources of a doctoral thesis. Certainly, help and advice sought and
obtained from my supervisors and other academic advisers and colleagues at the
University of Waikato alerted me to, and mitigated, a number of potential
weaknesses in internal reliability. However, in an ethnographic case study of this
nature, it is the ultimate responsibility of the participant observer to correct any
tendency towards bias by a rigorous academic integrity and self-discipline.

With regard to external validity, most ethnographic research tends to lack
generative power, as Atkinson and Hammersley (1994: 253) acknowledge:
"Although such work may ultimately contribute knowledge of wide public relevance, this contribution has not usually been very immediate or specific".

This is because, as Hammersley (1992: 181-82) points out, "neither statistical nor logical inference provides a basis for extrapolation from the cases studied to all cases relevant to a theory". The threat thus posed is only to a limited extent mitigated by the process of theory elaboration.

Because of this, the main criteria for validity for case study should be internal: the study should be relevant and relatable. By relevant is meant that the research topic should be important and that its findings expand a professional and academic knowledge base (Hammersley 1992: 78). By relatable is meant that the clarity and explicitness of the description should enable a reader to relate the case study to his or her own situation, and thereby trust the judgement of the researcher:

If case studies are carried out systematically and critically,

if they are aimed at the improvement of education, if they are relatable, and if by publication of the findings they extend the boundaries of existing knowledge then they are valid forms of educational research (Bassey 1981: 86)

The first of Bassey's conditions stated above is *sine qua non*, for if it cannot be established that the procedures adopted were appropriate and rigorous there are no grounds to trust the interpretation of the researcher. It is to the specific procedures adopted in this case study that attention will now be turned.
2. Interview

2.1 Interview - definition and purpose
For the purposes of this research, the following serves as a basic definition of an interview: "a two-person conversation initiated by the interviewer for the specific purpose of obtaining research-relevant information". (Cannell & Kahn 1968, cited by Cohen & Manion 1994: 271). It is worth emphasising that although interviews need not be one-to-one, this was the format chosen for discussion with teachers in this study as it is felt that this would be the most appropriate means of creating a suitably confidential environment for obtaining relevant background data.

Interviews have been recognised as appropriate forms of sociological and anthropological inquiry for over a hundred years (Fontana & Frey 1994: 362). Burgess (1984) gave three broad reasons for interviews: firstly, to obtain information about past events; secondly, to obtain information about situations where the researcher is physically unable to be present; and thirdly, to obtain access to situations forbidden to the researcher. Interviews are now accepted as a basic tool of ethnographic research because "we cannot describe social activity at all without knowing what its constituent actors know, tacitly, as well as discursively" (Giddens 1984: 336). Without such -emic interpretation, other means of accessing cultural information, such as observation and survey, tend to be arid, partial, tendentious, and - therefore - invalid. In the present study, interviews added rich layers of information to the core data obtained by classroom observation.

2.2 Types of interview
There are clearly identifiable varieties of interview, of which the following are the most common (Cohen & Manion 1994: 273): structured, unstructured, non-directive and focussed.

The first of these four types - structured - is very similar to an oral questionnaire. The interviewer, considered to be a neutral channel, has little leeway to make deviations from the pre-determined schedule; the interviewee is not probed for
individual interpretations, as there is a limited set of response categories (Fontana & Frey 1994: 363). While a structured interview may elicit rational responses, it "overlooks or inadequately assesses the emotional dimension" (Fontana & Frey 1994: 364). For these reasons, it is inappropriate for ethnographic inquiry (Stenhouse 1984, cited by Measor 1985:6).

In the second type of interview - unstructured - it is the interviewee who provides ("imposes" according to Powney & Watts: 1987: 18) the structure of the interview. In this model, the interviewer seeks to understand the complex behaviour of members of society "without imposing any a priori categorization that may limit the field of inquiry" (Fontana & Frey 1994: 366). This has ethnographic validity, as the interviewer is primarily concerned with attempting to help the interviewees to express their own concerns and interests. Although the interviewer may lose control when the interviewee moves away from the researcher's designated areas, "the pay-off is that the researcher reaches the data which is central to the client" (Measor 1985: 67). This model of interview is particularly appropriate where the researcher is, or wishes to be seen as, a cultural outsider. There is, however, a danger in this model that in following the agenda of the interviewee, the researcher may fail to address his or her own.

Similarly, the third form of interview - non-directive - has ethnographic validity arising from its broad openness and considerable flexibility due to minimal direction and control by the interviewer. However, the subject of the interview is usually the interviewee him -or herself (Moser & Kalton 1977, cited by Cohen & Manion 1994: 273) rather than external issues. Therefore, the essentially cathartic purpose of this form of interview - based on psychoanalytical and therapeutic counselling derived from, respectively, Sigmund Freud and Carl Rogers - may again be inconducive to research purposes.

The lack of interviewer control in unstructured and non-directive interviews is remedied in the final model of interview, which focusses on a respondent's subjective responses to a situation well-known to both parties (Cohen & Manion 1994: 273). Among the earliest to apply this model were Merton & Kendall
(1946), and in their scheme the interviewer undertakes a prior analysis of the interviewee's situation and searches for 'significant' data, but allows the interviewee a maximum range of stimuli and response and encourages depth and personal contextualisation. Armed with knowledge of the objective situation, the interviewer retains control over the flow and pace of the interview. Being thus “able to recognize symbolic or functional silences, 'distortions', avoidances, or blockings, he is the more prepared to explore their implications” (Merton & Kendall 1946, cited by Cohen & Manion 1994: 290).

Clearly, each of these models is a stereotype, and experienced interviewers will vary their strategies and styles of elicitation according to the specific, and changing, needs of their research and the personalities of their interviewees. Ethnographic research, however, is not predisposed to the pre-determined structured interview. According to Johnson (1992: 144) it is the -emic goal of the interview rather than the specific techniques that are important.

The management of the interview must be carried out so as to promote the unfolding of -emic cultural knowledge in its most heuristic, natural form. This form will often be influenced by emotionally laden preoccupations that must be allowed expression. (Spindler & Spindler, Criterion IX, 1987: 19)

Hammersley & Atkinson (1983) suggest that, for ethnographers, the important distinction to be made is between standardized (structured) and reflexive interviewing; in the latter, the interviewer has a list of issues rather than questions, and is not restricted to any one mode of questioning. As they point out (1983: 113), "on different occasions, or at different points in the same interview, the approach may be directive or non-directive depending on the function that the questioning is intended to serve".

2.3 The reliability and validity of interviews

Given the interpersonal nature of interviews, the greatest threat to reliability of this form of research lies in a failure to appreciate, and where necessary rectify, factors that may affect the flow of information between the interactants. The major threat to validity lies in the truth value accounts in, and of, the interview.
With regard to relationships, all interviewers need to observe normal research proprieties (Measor 1985: 55ff) in terms of gaining and maintaining access, dressing and behaving appropriately, gathering data at a time and place convenient to the fellow participants. In addition to such social and technical skills, according to Woods (1986, cited by Cohen & Manion 1994: 275), ethnographic interviewers need three personal characteristics. Firstly, they need to be trusted, and such confidence may be gained by demonstrating a manifest personal interest in the interviewee. Secondly, Woods considers it important that the ethnographer as interviewer builds upon an existing natural curiosity about the views, perceptions and feelings of other people. Thirdly, it is important to be natural and unobtrusive, so as "to secure what is within the minds of interviewees, uncoloured and unaffected by the interviewer" (Woods 1986).

Complicating the interpersonal dimension are the implications of the inherently 'asymmetrical relationship' of interviews: "the rules of conversational discourse are flagrantly disregarded in the name of social science" (Ball 1983: 93-95). The researcher's need efficiently to address his or her agenda may lead him or her to exert control not only over the procedure but also over the interpersonal relationship. While hierarchical asymmetry is a potential threat to validity, the danger can be overstated. Although Measor (1985: 67), for example, regards the interview as "an unnatural social situation", it is an established communicative situation, with reasonably well-understood pragmatic conventions. In practice, sensitivity by the interviewer and awareness by the interviewee should enable them to trust each other to conform to normal cooperative principles (Grice 1975) for the mutually-shared purposes of the interview:

    If the interviewer does his job well, (establishes rapport, asks questions in an acceptable manner, etc.) and if the respondent is sincere and motivated, accurate data may be obtained. (Kitwood 1977, cited by Cohen & Manion 1994: 274).

Another threat to validity derives from a feminist viewpoint that interviewing is per se a masculine strategy. According to some researchers, the interview is
embedded in a masculine culture and stressing masculine traits while at the same time excluding from interviewing traits such as sensitivity, emotionality, and others that are viewed as feminine (Oakley 1981, cited by Fontana & Frey 1994: 370).

This view is not uncontended: Lynda Measor (1985: 74), for example, argues that "being a woman is an enormous advantage if the research involves interviews which attempt to reach in depth areas of personal life." Nevertheless, as Denzin (1989: 116) has pointed out, "gender filters knowledge". Therefore, the interviewer needs to be aware that the respective sexes of the participants is likely to make a difference to the eliciting, giving and interpreting of information, and to make appropriate adjustments to the conduct of the interview. The above points of asymmetrically and gender apply to my interviews with female teachers and a fortiori to interviews such as in the present study between young (often female) non-English speaking pupils and a middle-aged British man - even when accompanied by a slightly younger interpreter.

With regard to validity, it is an inevitable element of any communicative event, that - by accident or intent - neither party will reveal the whole truth to the other. Even where there is a genuine intention to communicate by both parties, many of the meanings which are clear to one will be relatively opaque to the other (Cicourel 1964, cited by Cohen & Manion 1994: 275). The full exploration of an issue may be blocked by an unwitting pragmatic breakdown in the exchange structure of the communication. Alternatively, failure to communicate may be due to a disparity between a narrator's account of an event or circumstance and what actually happened due to 'false' - or at least partial - consciousness: the difference between "things seeming to be the case to the actor and things being the case" (Sharp & Green 1975: 21). The very nature of the interview may add to this partiality:

Very often the aim is to counteract what it is assumed others have told the researcher, or what are presumed to be his or her likely interpretations of what has been observed (Hammersley & Atkinson 1983: 108).

The researcher is expected to be aware of the potential threat to validity imposed both by the interpersonal nature of the interview and by partiality on the part of his
interviewee, and to account for it both during the interview and subsequently. Moreover, bias on the part of the interviewer, whether manifest or covert, is inevitable (Kitwood 1977, cited by Cohen & Manion 1994: 274). Where - as in the present investigation - it is not possible to reduced this bias by having a team of interviewers, Measor (1985: 76) stresses the central importance to the single interviewer of "keeping a critical alertness about the interview, and also about yourself and your own performance". More subtle, however, are the implications of the fact that both interviewer and interviewee are actors in the social scene, resulting in what Giddens (1984) has called the 'double hermeneutic' - that is, the researcher's interpretations of the interpretations offered by those s/he researches. Thus findings from interviews may be invalid unless the data is carefully weighed against data from other sources - in this case, classroom observation.

2.4 Interviews in the present study

Interviews at Rosegarden took place with
a) most of the teachers during 1997 (each lasting fifteen to forty-five minutes)
b) NESB learners - both those in focus, and others, in 1997 and 1998 (all conducted with the assistance of interpreters, and lasting on average about twenty minutes)
c) the teacher of Room 7, and other teachers throughout 1998 - usually of short duration, perhaps five to ten minutes.

The primary aim of these interviews was to obtain information that was not amenable to direct observation - attitudes, opinions, background information and personal knowledge. The details and attitudes thus provided helped me to take a holistic view (Van Lier 1988: 55) of the culture I was investigating and relate it to my own previous knowledge and experience. The greatest number of interviews were the twenty two preliminary interviews with teachers in 1997 which enabled me to gain insights into the context of learning within the school as a whole. Likewise, the interviews with pairs of present and past NESB learners at Rosegarden gave me useful general background data from their perspective. Interviews with each of the four NESB learners in focus occurred shortly after their arrival and were intended to advise them of my research aims and
requirements and to seek their informed consent. At this time, too, I obtained background data - such as their attitudes to and information about their previous schooling. I subsequently interviewed each of them on at least one other occasion, the main purpose being to obtain their general attitudes and impressions about their experience in Room 7. Unlike the focussed interviews in the first two categories, interactions with teachers during 1998 tended to be unstructured and casual - taking place at odd moments during or just after the school day, usually in the staff room.

It is impossible to substantiate either the reliability or the validity of the interview data. With regard to reliability, increasing experience both in the context and with interviewing techniques led to a greater interpersonal ease and technical expertise in my conduct of the interviews. In addition to the formalities of informed consent, I scrupulously observed the social proprieties identified by Measor (1985) and attempted to display the personal qualities recommended by Woods (1986). Each interview was audio-recorded, and I chose not to make notes during the interview as I felt that to do so would adversely affect the flow of conversation. Although I initiated the round of interviews, the precise time and place of the meeting was left to each teacher. I began the series of interviews with teachers I already knew, and then worked according to who volunteered next; a few teachers did not volunteer, and they were not in any way pressed. There was no occasion when I felt that the interviewee was unhappy about the content or conduct of the interview; on the contrary, a number of them thanked me for giving them an opportunity to discuss matters of professional concern.

By the time I started interviewing some NESB pupils in November 1997, I felt that I had gained confidence and competence. To reduce some of the inevitable tensions, I always interviewed them in pairs, and was accompanied by an interpreter - a postgraduate student who was a native speaker of their own first language (Korean or Mandarin). Given the sociocultural distance between us and the fact that in a number of cases this was the only time I spoke to these students, it is impossible to make any comment about the viability of the relationship established during the interview - except that there were no overt signs of distress.
or anxiety; rather, the pupils seemed interested and willing to please. The NESB learners in focus in this study were interviewed individually and invariably with an interpreter.

The interviews in the third category are the least formal, based as they were on more-or-less casual encounters. Usually, but by no means invariably, these ‘interviews’ were initiated by me, and sometimes I had specific points I wished to discuss, but at other times issues arose in the course of conversation.

With regard to validity of content, two issues inevitably arose; were they telling me the ‘truth’, and was I faithfully recording what they told me? The first is imponderable, except to say that certain common issues did arise over the range of interviews with teachers and learners, lending some veracity to the salience of some of the issues raised. It was, of course, impossible to evaluate the accuracy of their statements. For example, when I asked for an anecdote to illustrate a point that a teacher had made, one could only take on trust her account of what she did, or her reaction to it, or the current significance of that event. Given the nature of recollected accounts, and the fallibility of any attempt to communicate their significance to another, the ‘truth’ of any such event is inevitably partial, in both senses of the word. This partiality was most clearly manifest in the interviews with the NESB learners, where much of the information had to pass through the filter of the interpreter. Sometimes the interpretation was simultaneous, and sometimes post hoc, based on the audio-recording; in all cases, there was a discussion between me and the interpreter after the interview. It is worth noting that these interpreters grew in confidence and competence, and were increasingly able to echo more and more precisely what the interviewees actually said, rather than gloss the information. Ultimately, this aspect of validity is intricately tied to mutual trust, which itself is implicated in the issue of reliability discussed above.

As for the second aspect of validity, every interview in the first and second third category was transcribed verbatim (and where necessary translated) as soon as possible after the event. A summary (one or two pages) of the interview was printed, and this was returned to the interviewee, asking for any their comments or
questions. The teachers often did not comment on this, beyond (usually after an informal oral reminder) that it was a fair account of what had transpired. A number of them did point to errors of fact or interpretation, and one or two made extensive comments to clarify points or take issues further than they had been discussed during the interview. The transcript and summary of the interview with the teacher of Room 7 is provided in Appendix D as an example. The same procedure was followed for the NESB learners, but none of them made any oral or written comment. Information obtained from the unstructured interviews with teachers during 1998 was entered as soon as convenient in my field notes and thus formed part of my research journal. In short, a consistent and honest attempt was made to check on this aspect of validity.

It was noted above that the importance of interview data is that it can serve to support interpretations derived from other forms of data collection (Giddens 1984: 336). In the present case study, the many formal and informal interviews I conducted between 1997 and 1999 provided essential background information for, and lent colour to, my classroom observations. Although it cannot be measured, the importance of this interview data was considerable.
3. Classroom Observation

This study is centred on observed interaction involving four NESB learners in a mainstream classroom. Over the past decades, two broad approaches to such work have been developed - systematic classroom observation (SCO) and ethnographic observation. Each will be examined in turn.

3.1 Systematic classroom observation: epistemological and methodological bases

Over the past thirty years, classroom observation has become a major tool in educational research, seeking to explore and find answers to two important questions: 'what makes one set of procedures more effective than another?' and 'what advice can we give teachers about how to teach?' (Allwright 1988: 256). Its epistemological basis lies in the 'ecological validity' (Bracht & Glass 1968) of empirical observation of events occurring in natural settings, rather than rational speculation of what should or might happen in hypothetical circumstances or under experimental conditions. This in turn is based on the ontological assumption that empirical 'truth', especially that which relates to social activity, is not discovered, but a construction of the human mind - an interpretation of raw data gathered by the senses, filtered through the mental schemata of the observer (Scarr 1985: 499-500). What is contentious is the source of these systematic frames, or observational categories.

Systematic attempts to analyse and describe teacher-learner interaction have been reported since 1939 (Wragg 1974:73). The first widely adopted applications of systematic classroom observation were those devised by Flanders (1960; 1970). The aim of Flanders' Interaction Analysis Categories (FIAC) was to investigate more or less authoritarian teaching styles in an endeavour to find out which were the most effective. The ten FIAC categories were adapted and expanded to twenty-two in Moskowitz's (1968) FLInt system applied to interactions in foreign language classrooms. In Britain, the term systematic classroom observation was first associated with a five-year project to study the relative effectiveness of 'formal' and 'informal' teaching styles in British primary school classrooms.
For this project, the standardised ORACLE categories (Galton, Simon & Croll 1980:17) were used as the observational instrument to be correlated with tests of achievement with the pupils. The number of classification systems has grown: over a decade ago, Chaudron (1988) identified twenty-four different schemes developed for classroom observation; in one of these schemes - COLT (Frohlich et al 1985) - he identified eighty-four different categories.

One of the earliest attempts to illuminate classroom discourse, rather than to evaluate teaching effectiveness, was carried out by Bellack et al (1966). In this work, rather than apply a pre-determined framework, the categories were derived from the actual data emerging from some sixty lessons which had been audio-recorded. In Britain, Barnes (1969; 1976) also used post-hoc analyses of tape-recorded lessons to investigate the structure of classroom discourse; Barnes himself considered (1969: 47, 53) that his work was 'impressionistic' and 'lacking in objectivity'.

The major methodological difference between FIAC, FLInt and ORACLE on one hand, and the studies by Bellack and Barnes on the other, was that the former were based on time-lapse and/or count-coding of segments in real time, whereas the latter used post hoc audio-recordings. This methodological difference has profound implications. In real time observations, decisions have to be made very rapidly, and assigned to clearly-differentiated categories, whereas in post-hoc analysis (made possible by audio- or video-recordings) it is possible to be more reflective and indeed reflexive, as there is access to the raw data, rather than annotations or field notes. Partly as a consequence of this, Bellack and Barnes were able to relate each event in the lesson to others different in character and separated by time but still within an identifiable teaching cycle (Chaudron 1988: 37). The distinction between the two systems was significantly widened by work of discourse analysts at the University of Birmingham (Sinclair et al 1975; Sinclair & Coulthard 1975; Coulthard 1977). Working within, and developing, the Bellack convention of grounded analysis, the Birmingham researchers revealed the complexity of classroom discourse, and thereby implicitly criticised Flanders' approach as being simplistic and perhaps even presumptuous (Allwright 1988: 126). However,
although originally grounded in empirical data, and intended to be exploratory, Sinclair & Coulthard's work has two considerable limitations for the present study. Firstly, as Bourne (1992:82) has pointed out, they took an unproblematic view of classroom discourse, assuming it to be a familiar and stable context. Secondly, their structure of transaction, exchange, act and move has itself become a pre-determining framework, which other researchers have systematically applied to classroom events. As a result, their approach to discourse analysis has tended to become normative rather than exploratory (Hammersley 1990: 97).

3.2 The reliability and validity of SCO

The internal reliability of systematic observation lies in the descriptive and analytical consistency permitted by the careful use of clearly established criteria by neutral, non-participating, observers. Yet there are clearly a number of potential threats to reliability.

In small-scale SCO projects, especially where no observer triangulation is applied, there is a possibility of observer bias occurring in both the recording and analysis of classroom data. In larger-scale projects, great care needs to be taken in the selection and training of the team of observers/analysts to ensure inter-observer reliability. To achieve standardisation, it is usually necessary for observers to suspend individual judgement of the event and rely on the precise phrasing of the criteria. This itself may lead to a distortion of the reality perceived by them in an attempt to fit the event within the categorical framework (Potter & Wetherell 1994). A further threat to internal reliability may be posed by the presence of a manifestly non-participant observer/analyst, whether personally present or mediated by video or audio equipment. It is quite impossible to gauge the extent to which the behaviour of research participants is affected by the presence of the 'fly-on-the-wall'.

Threats to the external reliability of SCO are posed by the great diversity of instruments serving a multiplicity of purposes. This has led to a situation where it is difficult to replicate or even compare studies (Chaudron 1988:180). Clearly, an instrument specifically designed for one purpose cannot be used unchanged for
another. Moreover, the observation instruments have been designed to investigate different approaches to, and methods of, teaching - which are themselves in flux.

With regard to threats to validity, the criteria for the various systems of classroom observation mentioned above have tended to be defined in advance by those outside the actual research settings. It is possible for system designers to build into the categories undeclared social and/or pedagogical assumptions, which - being implicit - might pass undetected and unchallenged. The earlier systems that used tally-sheets relied heavily on quantitative measures of assessment, rather than qualitative judgement. Furthermore, certain types of teacher-behaviour - and specifically teacher talk - were assumed, rather than empirically verified, to be more conducive to learning than others.

The focus on teacher-talk has dominated systematic classroom observation. This may have had its origins in assumptions about 'good teaching', but also on the early technical limitations of audio- and video-recording. At the time, it would have been difficult to have undertaken systematic study of small-group interaction, such as that conducted by Barnes & Todd (1977), with the technology then available. However, even though the technology has now made possible systematic observation of interactions among (small groups of) pupils, there has been a tendency for analysts to limit the time frame of their study. In this way, short-term gains in reliability have been achieved at the expense of long-term validity in that such an approach is unable to account for the development of shared learning over time.

The use of pre-determined categories may lead to a situation where the observed reality may be misrepresented in order to fit the procrustean needs of the instrument, the criteria for which cannot be changed during an investigation without posing a threat to reliability. Crucial features of sui generis contexts may be ignored, and the intentions and perceptions of the teachers and learners are, if considered at all, heavily discounted in the interests of reliability across a range of settings (Crook 1994). At the very least, it may be argued that the coded findings of the researchers should be triangulated with the participants' interpretations in
order to avoid possibly unjustified and invalid inferences. Draper & Anderson (1991) and Potter & Wetherell (1994) have made the point that if talk is truly collaborative, utterances will tend to be reciprocally articulated and multifunctional, and at the very least ambiguous to the non-participating systematic observer. Failure to take into account their phenomenological interpretation, as Lincoln & Guba (1985: 27) have argued, not only has implications for validity, but also raises ethical concerns.

3.3 Ethnographic classroom observation: epistemological and methodological bases
The perceived weaknesses of externally derived, pre-determined categories used in systematic classroom observation were summarised by Delamont & Hamilton (1984: 8-16). They pointed to the emphasis on the measurement of normative data, a lack of consideration of sociocultural context and the intentionality of the participants, a failure to grasp the whole at the expense of detail, and a tendency to tautology in that the criteria used often defined the data, rather than vice-versa. For these reasons, the authors recommend (1984: 21-24) the adoption of an ethnographic approach to classroom observation, following in the steps of Bellack et al (1966) and Barnes & Todd (1977). A number of the characteristics of ethnography were described earlier in this chapter with reference to case study. However, with specific reference to classroom observation Delamont & Hamilton point out that:

The most crucial difference between those using prespecified coding systems and ethnographers is that the former take for granted many aspects of school life, which the ethnographer struggles to make problematic (Delamont & Hamilton 1984: 17).

This wish to problematise a situation leads the ethnographer to work primarily with unstructured data in a natural setting. In seeking a holistic framework, no attempt should be made to manipulate, control or eliminate variables. Instead, significant issues and features emerge over time from the data, and it is on these that the researcher progressively focusses, seeking to interpret the meanings behind the overt behaviour of those observed. This interpretation is enriched by knowledge obtained from other sources - such as interviews - and the opportunity to reflect
lengthily and deeply on the data afforded by field notes and audio (or video) recordings. The additional information thus gained also gives the ethnographer the necessary distance from the setting, enabling the -emic and -etic perspectives to merge into a coherent, binocular vision.

The difficulty that arises is that this vision - in contrast to the clearly stated categories of SCO - may derive from unacknowledged and 'unprincipled' (Stubbs 1981) assumptions which would thus lend an air of internal unreliability to the research. Conventionally, if research procedures are unreliable, the findings are invalid.

The lack of any systematic categorizing of utterances or sequences leaves the analysis vulnerable to the charge admitted by Barnes and Todd - that evidence and interpretation are so run together that the reader, having nothing else to refer to than the extracts which illustrate the very interpretation being offered, is implicitly invited to trust the honesty and sensitivity of the record (Edwards & Furlong 1985: 25-26).

Lincoln & Guba (1985: 289 - 311), addressing the issue of trustworthiness, have argued that validity and reliability are criteria that belong more properly to a positivistic, rather than ethnographic paradigm of research. For naturalistic inquiry, they propose instead that, internal validity be replaced by 'credibility' and internal reliability by 'dependability'. By the former is meant that both the description of events and their interpretation be a credible version of what happened; by dependability, that the changing sociocultural context of the study be fully documented so that the researcher's interpretations can be justified in their context. To be satisfied, therefore, these two criteria require volume: 'thickness' of explicit description of context and procedures, and thoroughly-argued interpretation, without which the reader of the research report is unable to judge the researcher's trustworthiness, and without which no ethnographic case study is relatable (Bassey 1981). What eventuates, therefore, is judgement built upon judgement - the circularity of which has been recently pointed out by, among others, Hammersley (1992) and Edge & Richards (1998).
3.4 Procedures used for data collection in the present study

It was originally proposed that my fieldwork in Room 7 would extend over a half year of school. However, the unanticipated absence of NESB learners for much of the first term, and their scarcity in the second, led me to extend my time frame. Thus I was present in - and an active member of - Room 7 from the start of the school year to the last day of school. Details of Room 7, its teacher and pupils are provided in Appendix G. From 28 January to 13 December 1998, with few exceptions, I observed the classroom for between five and eight hours a week.

Initially, I attended the first hour or two each morning, assuming that there would be a fixed pattern of fairly routine events which would give some coherence to my study. However, my schedule of observations soon became more flexible as my understanding of the emerging culture of learning broadened and deepened. On every occasion I attended the class - and there were well over two hundred such observations over the period - I made hand-written field notes in my research log; these comprised a narrative of the lesson activities, descriptions of learners and teachers, and points of interest or query. Over time, as my experience grew, these notes became more interpretive and less factual. Each day these notes were entered into my computerised research file, together with any further thoughts, impressions and information - such as from unstructured interviews with teachers. An example of field notes is provided in Appendix E.

Having obtained the consent of the teacher and class, I almost invariably audio-recorded some part of the lessons I observed. (At first, all of every observation was recorded; I later became more selective.) This was done in one of two ways: either by the use of a ‘sound-grabber’ microphone to capture the teacher’s discourse; or else by means of small cassette-recorders carried in the pockets or pen-cases of individual pupils, to which were attached lapel-microphones. For the first six weeks, when there were no NESB pupils in the class, these individual recorders were assigned more-or-less at random, in an attempt to obtain naturalistic, unsolicited and uninterrupted interaction between pupils and the teacher. It was my constant practice to observe interactions between pupils at a distance. This was done so as not to interrupt or influence their discourse; however, it also meant that
much nonverbal communication was inaccessible. Very quickly, the pupils became accustomed not only to my presence in the room but also to being recorded and behaved spontaneously, very largely oblivious of my presence and the equipment. The information I obtained at this stage facilitated the analysis of the culture of learning which follows in Chapter Four. An example of a full lesson transcription is provided in Appendix F.

The first NESB learner - Jack - did not join the class until 16 March. The other three arrived in May, July and August. (Appendix H contains information about all four NESB learners in focus in this study.) I provided Jack, and each of the other three learners as they arrived, with individual cassette-recorders in order to capture some of their interactions with near neighbours. Initially, I recorded them every time I was present in the room with two purposes in mind; firstly, to familiarise them with the recorders, and secondly to capture some of their initial impressions - perhaps in conversation with peers, or in audible verbal reaction (private speech) to the ambient discourse. The first purpose was soon achieved; the latter however was futile, as they were largely silent in their first few days. Eventually, I took to giving them the tape-recorders when I sensed that the lesson was moving in a direction that would encourage peer interaction with them. At times, therefore, all four small recorders were in operation.

It was my usual practice to transcribe verbatim all the recorded material within a day or so of the recording; however, by mid-year, when both Jack and Jean were in the class, I had a considerable backlog of interactions untranscribed. The two-week school holiday in July enabled me largely to catch up, but thereafter I was more selective in what I transcribed, using my field notes as a guide to what might be useful. I might say that there were many interactions which were almost completely inaudible - perhaps because of ambient classroom noise, or occasionally because I had let the batteries run down: such lost interactions often seemed to be most promising! Despite such hiccups, I obtained a vast amount of potentially useful material, comprising several hundred hours of interactions among NESB and other pupils; it is this data which informs Chapters Five and Six. I also observed and recorded each of these four learners many times during the year in the ESOL Unit;
this taped material is not illustrated or discussed in this thesis, although it provided me with very useful background information.

3.5 How data were analysed in the present study

The grounded analysis of the data started in March 1998, and the process continued while the data was still being collected. In order to reduce "the potential universe of data" (Huberman & Miles 1994: 428) to manageable proportions, the first criteria I used were the interactional, instructional task, and cognitive dimensions of classroom learning (Richards & Hurley 1988). The first question asked was ‘to what extent might a dialogue be broadly considered as exemplifying one of these three broad headings?’. This involved examining field notes and transcriptions to identify potentially useful interactions. Once thus identified, the tapes were listened to again and, in an attempt to be as accurate as possible, re-transcribed, and displayed against each other for comparison and contrast. The very process of selection was a reflective and interpretive activity on my part, deepening my insight into the culture of learning. The transcriptions that I selected were annotated, cross-referenced and filed. At the same time, I was relating the interactions to Mercer's (1995:104) "three distinctive social modes of thinking" – disputational, cumulative and exploratory talk. (These will be discussed in more detail in Chapter Four.)

While the data were still being collected and initially processed, it became clear that a superordinate theoretical framework was needed to achieve Verstehen – deep understanding of the sociocultural context of learning - as a necessary prior stage to explanation (Hamilton 1994: 64). Extensive background reading suggested that this might be provided by the neo-Vygotskian constructs of the zone of proximal development (ZPD), scaffolding, and appropriation – each of which will be fully discussed in the following chapters.

I originally thought that the unstructured data that I collected would be coded and analysed with the help of a software programme - NUD*IST (discussed by Richards & Richards 1994) - and indeed a start was made using the package in July 1997. However, it soon became clear that the programme - or the user – was not
adept at dealing with large amounts of incoming data. The importation into the programme of many long sequences was time-consuming, and coding and cross-referencing beyond a basic level impracticable. Moreover, the design did not allow a transparent conceptualisation or display of the emerging themes. Eventually, it seemed more appropriate to rely on heuristic judgement derived from my -emic perspective, rather than a software tool, to interrogate the data. Thus, I constantly examined and re-examined the classroom sequences as I transcribed them with a view to extracting as many shades of meaning as possible in the light of both other data and the theoretical underpinnings. This interim analysis allowed me to reduce the amount of data being collected, as I increasingly focussed on the emergent themes. At the same time, the process of 'theory elaboration' started to occur: the neo-Vygotskian constructs were themselves interrogated by the data. This was an iterative undertaking (Huberman & Miles 1994: 431): as Glaser & Strauss (1967) pointed out with regard to the process of grounded theory

earlier stages do remain in operation simultaneously throughout the analysis and each provides continuous development to its successive stage until the analysis is terminated (Glaser & Strauss 1967: 105).

It seemed at first that I might be able to construct the whole thesis - not merely Chapter Four - on the basis of the ZPD, but it became apparent that I needed to pay more detailed attention to the form of assistance that might be offered within a ZPD. This gave rise to the notion of scaffolding, and peer-scaffolding in particular, as a metaphor for how the proximal distance between actual and potential ability might be bridged. This in turn led to the need to closely examine NESB interactions in terms of their ability to appropriate key elements of the culture of learning.

The grounded analysis of data and the examination of the theoretical underpinnings continued throughout 1999 in the way described above. Presentations on aspects of the work in progress were made at seminars, conferences and symposia in New Zealand for peer critique. A start was made on writing the account: thick descriptions led to thick interpretations; transcriptions of sometimes lengthy classroom interactions generated descriptions which shifted into plausible explanations, which in turn had to be related to descriptions and explanations of
other data. Over a period of months a scenario was built up and a story started to unfold. As each chapter was drafted and redrafted, it was submitted to my supervisors for comment and feedback. Also, the ethnographic accounts in chapters Four, Five and Six were given to the classroom teacher and her comments elicited; firstly in any written annotations she might like to make, and secondly by discussion of the draft, each lasting over two hours, going over any points raised. As part of the display process, a further winnowing of data was made for reasons of coherence. As far as possible, the remaining interactions were either approximately self-contained, or could be related to other interactions discussed; many were discarded because it would take undue length to ‘set the scene’ for the reader. There followed a final elimination of extracts (and accompanying discussion and interpretation) with a view to reducing this thesis to an acceptable length. The final touches of theory elaboration were still being made in the first five months of 2000.

4. Position, voice and presentation

The selection, presentation and interpretation of research data is inherently subjective. Edge & Richards (1998) address the issue of subjectivity by saying that ethnographers need to argue the case for their choice of a naturalistic orientation in terms of position, voice and presentation.

With regard to position, I have taken a constructivist, rather than (post)positive or critical theory position, because I subscribe to

the belief that reality is socially constructed and that any investigation of it involves the elucidation of the ways that meaning is constructed by those involved in the research (Edge & Richards 1998: 341).

As previously stated in this chapter, I consider myself to be in the privileged position as an insider in the culture I studied, which afforded me an -emic perspective on events.

With regard to voice, it is hoped that the ethnographs in the Chapters Four, Five and Six clearly establish my ‘authority with’ the culture, rather than ‘authority
over' the other participants (Edge & Richards 1998: 341). Paradoxically, this very
authority derives from the fact that I was also an outsider to the events, and
therefore more easily able to stand back and reflect upon the data and give 'thick
interpretation' to what I observed.

Finally, in terms of representation, I have chosen to emulate the point made by
Denzin & Lincoln (1994: 11) that "theories are now read in narrative terms". Much
of the discussion in this chapter has been a story of my personal experience as an
ethnographer, and the ethnographs in the central chapters of this thesis constitute a
'tale of the field' (Van Maanen 1988): the story of the impact of a classroom
culture upon some NESB learners. Thus, Chapter Four sets the sociocultural scene
before the NESB learners arrived. Chapter Five illuminates how, and by whom
they were assisted to settle in and perhaps bridge ZPDs in the first few weeks in
Room 7. Chapter Six discusses the extent to which these learners were, by the end
of the year, able to appropriate key aspects of the culture of learning.

The extent to which the story is valid - and whether it is credible, dependable and
relatable - is a matter for the reader to judge.
Chapter Three

Theoretical Orientation

Overview

This chapter begins by considering the complex linguistic, cultural and cognitive context of learning in a mainstream classroom, and explains the challenge faced by newly arrived NESB learners, such as those who are the focus of this investigation. In this regard, attention will be paid to Richards and Hurley’s (1988) categorisation of classroom learning into interactional, instructional and cognitive dimensions. This framework will subsequently assist the description and analysis of interactions within the specific setting of this study.

This is followed by a review of various theories and models of second language acquisition and an outline of why they are inadequate to explain how these learners may acquire the necessary linguistic and cultural competence to operate in the mainstream classroom.

The chapter continues with a consideration of the issue of second language socialisation in educational contexts from a sociocultural theoretical perspective. It then presents the notion of the socialisation of cognition through dialogue. It does so with reference to the three key neo-Vygotskian constructs - the zone of proximal development, scaffolding, and appropriation - which constitute the theoretical foundation of this thesis. This is followed by the introduction of different forms of social thinking (Mercer 1995) and ventriloquation (Bakhtin 1981), through which evidence of the co-construction of classroom learning may be adduced. These constructs will be more fully discussed in detail in Chapters Four, Five and Six and illustrated using Richards & Hurley’s threefold categorisation of classroom learning as a platform for discussion.

The final part of the present chapter considers the specific application of sociocultural theory to second language learners, and reviews relevant work in this area. It concludes by reciting the research questions of this thesis.
1. The complex linguistic and cultural context

1.1 The linguistic complexity of the mainstream classroom

The implication of the label ‘NESB’ is that the prime need of such students is to acquire English. In terms of target outcomes, however, these learners have much more to achieve than merely communicative competence. In the mainstream classroom, NESB students are expected to work towards the same objectives as their English-speaking peers (Ministry of Education 1994b: 15) - and indeed are measured against them (Ministry of Education 1999a: 6). As Collier (1989: 512) has pointed out:

The language needed for school is unique and very complex. In the past, school personnel have frequently oversimplified the language acquisition process, assuming that a child who carries on a conversation, sounding just like a native speaker, is completely proficient in the second language. We now know that the language needed for school includes not only all the domains of language ... with all four language skills ... but use of all these domains and skills within each subject area ... Language in school becomes increasingly complex and less connected to contextual clues as students move from one grade level to the next (Collier 1989: 512).

The increasing linguistic complexity to which Collier refers is that which occurs as a result of the development of different systems of thought and language in the various disciplines and fields of knowledge within the school curriculum. Subject-matter teachers in high schools build on, and largely take for granted, their learners’ previous experience in the discourse of learning at earlier stages of learning. Newly arrived NESB learners with limited English proficiency have to develop cognitive skills at the same time as they acquire communicative competence. With regard to the time needed for the acquisition of such sophisticated cognitive and language skills, after synthesising a wide body of research on academic achievement in a second language, Collier generalised as follows:

Immigrants arriving at ages 8 to 12, with at least 2 years of L1 schooling in their home country take 5 to 7 years to reach the level of average performance by native speakers on L2 standardized tests...
Adolescent arrivals who have had no L2 exposure and who are not able to continue academic work in their first language while they are acquiring their second language do not have enough time left in high school to make up the lost years of academic instruction without special assistance (1989: 527).

This perspective lends considerable urgency – in two senses - to the consideration of eleven-year-old NESB learners such as those in focus.

Firstly, there is a pressing need for appropriate pedagogical steps to be taken so that learners and their teachers do not waste their time in inappropriately focussed tuition. Collier did not identify the sort of ‘special assistance’ she had in mind, although she did refer in her article (1989: 510) to Chamot & O’Malley’s (1987) Cognitive Academic Language Learning Approach - CALLA – as a means of focussing ESOL tuition on the academic needs of the mainstream. Others have recommended this approach or similar content-area ESOL instruction for secondary school learners in New Zealand (Lo 1997) and elsewhere (Cantoni-Harvey 1987; Crandall 1987; Leung 1992), and also for primary learners (Moore et al 1986). However, the issue is complicated by the fact that many mainstream classrooms operate on an integrated day basis in which one curriculum area merges into another, and clear conceptual and systematic boundaries between the subjects are difficult to identify beyond a lexical level. The advice given to teachers by the Ministry of Education, including the most recent handbook (Ministry of Education 1999a) simply does not address this issue. Evidently, investigation of the possibility of developing content-area ESOL instruction in New Zealand’s primary schools is necessary, but has been inhibited by the lack of available resources of time and money, compounded in general by the lack of appropriate professional development for the teachers concerned. Moreover, as Chamot & O’Malley point out (1987: 245) CALLA is “an instructional method for limited English proficient students at the intermediate and advanced levels”. Many NESB learners in New Zealand are not at this stage: for example, of the four learners in focus in this study, two were regarded as ‘minimal English’.
However, the second sense of urgency is that which demands that the context of these learners and their teachers needs to be better understood, precisely in order that informed strategies can be formulated and appropriate action taken. Thus an even more pressing requirement is for empirical studies to examine the actual processes of learning undertaken by NESB students in mainstream classrooms. As discussed in Chapter Two, this study seeks to make a useful contribution to the understanding of these issues by its adoption of a case study approach, not least because of the absence of such research in the New Zealand context.

Because of the complexity of language in schools, the focus needs to shift from considering the NESB learners from outside the mainstream classroom – that is, withdrawal tuition - to examining more carefully what they actually experience inside the classroom. More than a decade ago, and with specific reference to the New Zealand context, Richards & Hurley (1988: 44) drew on insights gained from a wide review of relevant international research and pointed to the need to explore more closely the relationship between language competence and academic development. They indicated three interrelated dimensions (1988: 46) of classroom discourse. The first of these is the interactional dimension - understanding and using pragmatic rules of interaction with both teachers and fellow students. This is a specific form of communicative competence, and NESB pupils have to learn how to use rules of both verbal and non-verbal behaviour: Richards & Hurley (1988: 46-47) highlight matters such as initiating interactions, appropriate movement around the class and conventions of turn-taking. Secondly, citing Doyle's (1979, 1983) view that the school curriculum is a 'collection of tasks', Richards & Hurley refer (1988: 48) to the instructional task dimension - the need to be able to participate effectively in classroom work. In this respect, they suggest (1988: 49) that NESB students may not recognise the purposes, strategies and products involved in individual and group work. Thirdly, with specific reference (1988: 52) to CALLA, they point to the cognitive dimension - understanding and assimilating the content of the curriculum. In particular, they refer to the conceptual associations, linguistic resources and modes of enquiry crucial to each of the different school disciplines and illustrate the particular challenges of mathematics, social studies and science. They argue that even a content-based ESOL programme can at best only
partially prepare NESB students to learn "academically demanding school content such as math, science, or social studies through the medium of a second language" (1988: 49). They conclude with the need for ESOL specialists and mainstream teachers to collaborate in designing and teaching appropriate curricula.

In the United Kingdom, the same point was earlier made by the Swann Report (Department of Education and Science 1985: para 5.5) where the system of withdrawal ESOL programmes was seen to be ineffective as well as discriminatory and a move towards mainstreaming NESB pupils was encouraged. Despite this shift in policy being grounded in practice (Levine 1990:6-7), even some time later there had been "little research either on the details of the strategies adopted at school and classroom level, or on the effectiveness of the provision made on pupil achievement" (Bourne 1990: 13). The absence of empirical research was also noted by Leung (1987 and 1993a), although he himself conducted a small case study of ESL in a primary classroom (Leung 1993b). In this study, after examining the type and amount of interaction between NESB pupils and teachers, he found that much of it was not conducive to second language acquisition. Bourne (1992) conducted a year long ethnographic study of the language used by teacher and NESB pupils for writing activities in a multilingual primary classroom. Bourne argued (1992: 32) that too much attention had been focussed (by the Swann report, for example) on the location of language support rather than the quality or processes of such assistance. She also considered that there was a 'disjuncture' (1992: 198) between the contemporary rhetoric of primary education and the needs of NESB learners in the mainstream. An implication of this disjuncture was that primary teachers, such as the one in focus in her study, might tend to avoid direct linguistic contact with NESB learners rather than rethink their classroom practices (Bourne 1992: 359-60 and 367). Another implication (1992: 421) was that "there is a need to change the basic 'unit' in the study of language acquisition from the individual to the communal, and for examining the relationship of individual and context". These issues led her to conclude, inter alia, (1992: 506) that primary pedagogy in Britain needed to be recontextualised to take into account the diversity of language backgrounds in the multiethnic school population.
In another recent empirical study of mainstream classrooms, Cameron et al (1996) examined the language used in a secondary school in northern England under several categories: for example interacting in groups and pairs, coping with demanding terminology and syntax, and understanding the teacher's instructions and explanations. Their findings, similar to some of Bourne's (1992: 353-361) were that the NESB students' very minimal responses might have been due to inappropriately-pitched linguistic demands, and Cameron et al also suggest (1996: 232) a lack of awareness of the assumptions and values underlying classroom activities. They propose that their data and the questions they raise demonstrate the urgent need to find out more about the processes and possibilities of language development in specific contexts and micro-contexts, such as subject classroom events, interaction and tasks, and to develop an empirically-based theoretical framework (Cameron et al 1996: 234).

Taking its cue from these points, the present study uses the three dimensions identified by Richards & Hurley to assist the grounded analysis of classroom discourse in the development of common knowledge. This framework will be presented in the third part of the present chapter. Firstly, however, it is necessary to examine the point made above by Cameron et al, and Bourne (1992: 345-6), about the lack of shared assumptions about classroom discourse.

1.2 The cultural complexity of the classroom - 'Langaculture'

At the same time as guiding their pupils through the three dimensions of classroom learning, teachers also instill into them the social relations, identities and ideologies considered appropriate in the wider social and cultural context for which they are being formally prepared. These include standards of behaviour and academic performance, teaching and learning styles and strategies, relationships between school, home and the community, the importance attached to sport, and the purpose of extracurricular activities such as school camps. The list could be extended (Barnard 1998b). These cultural values are instilled in and through the discourse of classroom learning, and the inextricability of culture and language has been termed by Agar (1994) the 'langaculture' of the school.
Most teachers take for granted that their pupils have already been inducted by previous teachers into key langacultural aspects. Little time will be spent explicitly laying out the ground rules, except where new conventions or rules are to be added to the existing corpus - for example, appropriate behaviour in school subjects or routines unfamiliar to the majority of learners. Departure from the norms by most pupils will tend to be viewed largely as deviance rather than ignorance, and attention to breaches will tend to be drawn indirectly, rather than directly - for example, verbally through allusion, irony and sarcasm or nonverbally through gesture, eye-contact and proxemics. The allusive nature of langacultural development is also evident when it is placed in the context of learning over time. Language used by teacher and learners in any one lesson is merely a constituent element of what Maybin et al (1992: 136) referred to as the ‘long conversations’ of teaching and learning. During teacher-class interactions in New Zealand classrooms, as anywhere else, a wide range of sociocultural values are thus implicitly inculcated.

The langaculture of any school or classroom includes not only that promulgated by the school authorities but also the heterodox values, roles and modes of expression of subgroups and individuals, whether in alliance with, or in defiance of, educational orthodoxy. As in any community, individual learners in schools form themselves into friendship groups, perhaps better to meet the demands, and/or further the ends, of the organisation. Groups who stand out as being excessively zealous in their alliance with the orthodox culture may be colloquially referred to as ‘cliques’ of ‘swots’. Clearly, not all members of the school community fully share the desire to participate at all times in the orthodox discourse of learning - much though some teachers might wish this. Thus classroom members may pursue personal agendas, different from - and perhaps in conflict with - the official langaculture. Heterodox views are not restricted to pupils; teachers too, in various ways, may implicitly or explicitly deviate from the official line.

Thus, learners in school are involved in a changing pattern of socialisation through the micropolitics of social interaction (Bloome & Willett 1991), which may be summarised as the struggle of individuals to further their personal agendas by evaluating, co-constructing and contesting the understanding of others (Willett 1995: 475). The co-
construction of academic learning, featured in many primary classrooms through group activities and shared tasks, is inevitably influenced by the changing patterns of allegiances within the informal relationships among the learners. This is not merely a matter of amity: as Aston (1988: 370) pointed out, "it can be argued that the learner needs not only to make friends, but also, if not to deliberately make enemies, at least to defend himself from aggressors". This is especially true in the typically 'unequal encounters' between English-speaking students and NESB learners, where inequality is manifest most obviously in differential langacultural competence.

In summary, each classroom is a unique langaculture created through the developing patterns of interaction between teacher and class, and among students themselves. Using Richards & Hurley’s (1988) three dimensions of learning as stimuli for discussion, Chapter Four will explore the ontogenesis of the langaculture of Room 7. This will lay the foundations for the subsequent exploration of interactions between the four NESB learners and their peers in Chapters Five and Six.

1.3 The langacultural challenge faced by NESB learners in New Zealand schools

On arrival in New Zealand schools, all immigrant children have to operate in classrooms which, although superficially similar perhaps to those in their home countries, are based on profoundly different and culturally specific values and beliefs. Their ability to adapt to the new circumstances is influenced by linguistic and social distance.

Linguistic distance is often considered in terms of the extent to which two languages are considered formally cognate - for example, in orthography, morphology, phonology, syntax and discourse. While the constructs used to measure linguistic distance tend to vary, it is generally considered that English is more remote from Mandarin and Korean in these respects than it is, for example, from Indo-European languages. Linguistic distance may also be considered in terms of non-verbal communication: different cultures have specific pragmatic conventions regarding paralinguistics, optemics, kinesics and proxemics. Given that much communicative content falls within these nonverbal categories, the relatively wide distance between conventions in English and
the NESB learners' first language will tend to hinder access to the langaculture of the school.

This leads into the notion of social distance, which proposes that the greater the gap between two cultures, the greater difficulty the learner will have in learning the second language, and *vice versa*. Schumann (1976; 1978) incorporated within his concept of social distance factors such as relative dominance, size of the group, patterns of integration, group cohesiveness, cultural congruence, reciprocal attitudes, and length of contact. Difficulties encountered in measuring and correlating the attributes of actual social distance led Acton (1979) to refine the concept to that of 'perceived' social distance. There are indications of a considerable social distance - whether actual or perceived - between the first and target cultures of the young learners who are the subjects of this study.

Within the area of cultural congruence, for example, a summary of attitudes towards formal education may be illustrative. Having been inducted into the langaculture of their own schools, Chinese and Korean pupils have clear, if implicit, perceptions about the nature of learning and teaching. These include ways in which knowledge is constructed, of the respective relationships between teacher and learners (and among learners themselves), and indeed the gamut of social and cultural beliefs and attitudes engendered by schooling. These may be very different from those that obtain in New Zealand. For example, the typical Chinese learner has been characterised as having a great respect for the teacher (Mezger 1992). In large part, this derives from the importance attached to relationships in Chinese and Confucian tradition, and in particular from the transfer to the teacher of a sense of filial piety from parents (Zhu 1992). From this has emerged a style of teacher-centred instruction (Gao 1988: 13), in which the learner is passive and non-critical (Biggs 1992). To question a teacher would seem an impertinence and an implied criticism that the teacher has not made things clear (Chu 1997: 45). Chu (1997: 30) also points to the emphasis in Confucian culture on a conserving attitude to knowledge, which in turn leads to respect for books (Ballard & Clanchy 1991; Mezger 1992) as the repository, even embodiment, of knowledge, wisdom and truth. From this may derive the traditional importance attached to memorisation and a reproductive, rather than an
interprettive and interactive, style of learning. The pursuit of individual knowledge, even less knowledge for its own sake, is seen to be inappropriate: education in China has always had a utilitarian nature with an explicit function of social engineering (Zhu 1992). Formal examinations have played an important role in Chinese education for over 2,000 years (Chu 1997: 49) and today they are seen as the only gateways for academic progress and hence social esteem. This is particularly acute for entrance to higher education, but the effects percolate through the entire system, and teaching methods are geared closely to the competitive needs of examinations (Lin & Chen 1995: 150). These authors report that parents spend a tremendous amount of time and money to ensure that their children realise their high aspirations, and this pressure on their children to become 'winners' rather than 'losers' in the examination system adds to an 'examination hell'. The pressure of examinations is felt even in primary schools, where daily tests are a common experience. According to Lin & Chen (1995), society holds that parents are justified in the use of physical and psychological punishment if their children fail to achieve their academic aspirations.

A small-scale survey (Harrington 1998) of such attitudes among Chinese parents and children who had recently immigrated to Hamilton confirms that issues of social distance clearly apply locally. In particular, Harrington (1998: 164) points to differences between the attitudes of typical New Zealand and Chinese schoolchildren towards academic achievement, competitiveness, amount and use of leisure and freedom, and the concept of individuality. According to Shameem (1997), Chinese and Korean families in New Zealand continue to operate in the original language with members of their family and the wider ethnic community. The effect of this is to maintain, and probably widen, the linguistic and social distance between their children and members of the wider society in which they live and go to school. It is reasonable to assume that, on arrival in this country, the four NESB learners in focus in this study were fairly typical of their compatriots in these respects and faced the same considerable challenges.

The manner in which these NESB learners were assisted to adjust to, and work within, a New Zealand classroom will be explored in Chapter Five; their ability to appropriate the ambient langaculture will be considered in Chapter Six.
2. Second language acquisition (SLA)

2.1 Theories and models of second language acquisition

As indicated by Cameron et al (1996), a sound theoretical basis is needed in order to investigate this complex matter. Before, during and after the 1998 classroom observations in this investigation, a number of potentially useful theories or models of second language acquisition were reviewed and evaluated as to the light they could shed upon the situation facing the NESB learners in focus in this study.

Some of these models are too narrow to illuminate the complexity of the issue facing these learners. There are those which seek to explain SLA in terms of contrastive analysis and the internal processing of 'core' grammar. Many of these derive from Chomsky's theory of Universal Grammar and his (1981) Government/Binding model; for example, Eckman's (1977) Markedness Differential Hypothesis and Zobl's (1983) Projection Model. Other models, such as Bialystok's (1978) Competence/Control Model, McLaughlin et al.'s (1983) Processing Model and MacWhinney's (1987) Competition Model are based on psycholinguistic processing by individual learners. Such models, while they do not ignore social context, tend to treat it as a variable, rather than as central to the issue of second language acquisition. The same is true of Krashen's (1985) Input Hypothesis, which posits that provided that comprehensible input is received and the 'affective filter' is lowered, language acquisition is inevitable. Based on his assumption that it is "theoretically possible to acquire language without ever talking" (Krashen 1982: 60), he did not incorporate a role for social interaction in his SLA theory (Dunn & Lantolf 1998: 424).

By contrast, Schumann (1983) argued that social factors are primary in second language acquisition. In his Acculturation Model, individual psychological factors - such as language shock, culture shock, motivation and ego permeability - come into play only where the social factors do not influence acquisition one way or the other. While Schumann's model takes a broader view than the others indicated above, it has received only limited support, as he himself acknowledged (Schumann 1986); indeed, the theoretical basis of the model has been heavily criticised (for example, Schmidt 1983;
Spolsky 1989). Ellis (1994: 234) points out that the model does not explain how social factors actually influence the quality of contact that learners experience. Despite these limitations, Schumann's model has been useful to illuminate – and stimulate empirical exploration of - issues related to the acculturation of immigrants to a new social context. However, because it does not relate to formal educational contexts such as schools, the model is inappropriate with regard to the learners in this study.

2.2 A critique of the Socio-Educational Model

One SLA model which has been constructed to explore causal relationships between social and psychological factors is the Socio-Educational Model (SEM) developed by Gardner (1985) and his associates (most recently, Gardner & MacIntyre 1992 and 1993). Because of its focus on second language learning in school contexts, it seemed relevant to the present investigation. The following discussion explains why it was, after due consideration, deemed unsuitable.

The SEM seeks to relate antecedent cultural factors, individual difference variables, contexts of acquisition and learning outcomes within an over-arching social-cultural milieu. Although some insights may be gained through this perspective, the model itself is not suitable as the basis for the present study. In part, this is because the instruments and procedures of the SEM were originally designed for quantitative analysis of data, rather than small-scale case studies such as the present investigation.

More particularly, however, the SEM is inappropriate because the two sorts of outcomes it considers - linguistic and non-linguistic - do not focus on the crucially important langacultural outcome which the NESB learners in this present study are expected to achieve through the medium of English. The SEM clearly distinguishes two sorts of language acquisition contexts - formal and informal - although Gardner admitted (1985: 148) that "at times it is difficult to determine in which class a particular context belongs". By formal contexts is meant "situations that involve direct instruction in the language", while informal contexts are "all those other situations where an individual can acquire some knowledge of or practice in the language" (Gardner & MacIntyre 1992: 212-213). This simple bipartite division fails to take into account the
fact that, for NESB learners, the mainstream classroom inextricably blends both types of context. Finally, while the model acknowledges the interplay of contexts and outcomes, it does not clearly identify direct causal interconnections of the learning *processes* in the two settings. This may be behind Gardner’s (1979: 193) statement that "the learning of a second (or foreign) language in the school situation is often viewed as an *educational* phenomenon ... such a perception is categorically wrong". The emphasis here may be because Gardner, a psychologist rather than a teacher or a linguist, has a somewhat narrow view of the nature of teaching (which he consistently terms ‘instruction’) and learning. This is reflected in the model's heavy emphasis on achievement in terms of outcomes rather than *processes*, and also the use of phrases such as the “transmission of learned material" (Gardner & MacIntyre 1992: 212), which implies a one-way directional flow of information. By emphasising the importance of the ambient sociocultural milieu, the model may be neglectful of the equally important social dynamics deliberately stimulated by both teachers and learners within and between the two contexts for *educational*, rather than instructional, purposes.

Despite some criticisms (for example, Ellis 1985: 118; Au 1988; Crookes & Schmidt 1991: 502), the Socio-Educational Model may be applied to relatively large-scale studies of immersion programmes for majority-speaking learners, such as the immersion schemes in some Canadian schools with which it is closely identified. The intention of these was to produce ‘additive’ bilinguals (Cummins 1981), whose cognitive abilities would be enhanced as a result of bilingual education - in contrast to the cognitive and psychological impairment resulting from ‘subtractive’ bilingualism. In such programmes, linguistically homogenous groups of learners are systematically and explicitly inducted into a second language and culture and the entire curriculum (objectives, methods, materials, evaluation) is, or should be, geared to this bicultural outcome (Johnson & Swain 1997: chap1).

In New Zealand, the SEM might be applicable to an investigation of the immersion programmes which have been introduced for Maori learners in specially designated pre-schools (*Kohanga Reo*) and primary schools (*Kura Kaupapa*). At the secondary stage, there are eight Maori boarding schools, and in 1997 64% of the students enrolled in
these underwent Maori medium education (Ministry of Education 1998a: 33). There are also bilingual and/or immersion programmes operating in some schools with large homogenous groups of Pacific Island students - notably Samoans, who comprise 3.5% of the school population and tend to be concentrated in suburbs of Wellington and Auckland (Ministry of Education 1998a: 34). However, specially designed immersion or bilingual programmes for linguistically heterogeneous immigrant learners are impracticable for the majority of NESB learners in New Zealand. This is simply because the broad dispersion of these learners in towns such as Hamilton (Barnard & Lata Rauf 1999, Barnard in press) means that these students tend to be isolated from other speakers - and teachers - of their first languages in classrooms.

2.3 The limited relevance of SLA theories to this study

In short, many theories of language acquisition are constructed too narrowly to encompass the wide range of sociocultural factors that come into play with regard to the NESB learners of this study. Those that do seek to account for these broader factors cannot be applied to this study. Schumann's Acculturation Model is not focussed on formal instruction; the Socio-Educational Model, which is relevant to school situations, does not account for mainstream classrooms where isolated bilinguals are expected to make cognitive development at the same time as acquiring a second language and culture. This sort of learning context has been typically described (for example, by Roberts 1995: 372 and Skutnabb-Kangas 1988: 26) as submersion in contrast to immersion: sinking rather than swimming. Moreover, when no provision is made for the maintenance and/or enrichment of the first language and culture, the bilingual outcome is considered to be 'subtractive'; not only are the first language and culture neglected, ignored or denigrated, but – as a consequence - cognitive development is impaired.

Clearly, a more appropriate theoretical framework than those outlined above is necessary. Attention will now turn to a theoretical orientation which considers the langacultural challenge faced by NESB learners less in terms of second language acquisition than of second language socialisation.
3. Sociocultural theory: second language socialisation

3.1 Socialisation: the individual and the group

The process of socialisation may be understood to be the systematic adjustment or matching of the needs, wants and aspirations of the individual to those of the group with which that individual interacts. Each social group will attempt - through the deliberate and extensive social training of infants and other novices to the culture - to identify itself in terms of categories such as individualism versus collectivism, degrees of power distance, implicitness and explicitness, and masculinity and femininity (Hofstede 1986). For example, in the first of these categories every culture - and each sub-group and individual within that culture - seeks to organise itself in the light of its understanding of the respective roles of the individual and the collective on a continuum. This stretches at one end from collectivist societies which view the individual as serving the needs of the community, and at the other those groups who perceive that society exists primarily to serve the attainment of individual aspirations. The process of socialisation into such categories commences with the care of infants, and is continued through the structures of education - whether formalised in schools and other institutions, or in vocational contexts such as apprenticeships.

3.2 Language socialisation: in the use of language, and through language

The process of socialisation is conducted largely, but not exclusively, through the medium of language; according to Schieffelin & Ochs (1986: 3), language in use is "a major if not the major tool for conveying sociocultural knowledge and a powerful medium of socialization". They make the point (ibid.10) that all cultures socialise infants through fairly predictable interactional routines, though it should also be noted that such routines differ both between cultures and within them, as individuals and sub-groups adhere more or less to standard conventions.

Language socialisation may be seen in two ways: "both socialization through language and socialization to use language" (Schieffelin & Ochs 1986: 2), and this dual interpretation clearly reveals the inherent interrelationship of language and culture: each constructs and realises the other. As Poole (1992: 595) points out, socialisation in the use of language is usually more explicit than the other. It is explicitly realised, for
example, when caregivers give children specific directions to use language in culturally specific ways. Examples of this might be when British parents tell their children to say their 'pleases and thank yous', or when teachers explain the meaning and use of vocabulary, or more generally when focussing on 'language arts'. Ochs & Schieffelin (1984) note that both the content and form of such direction is culturally specific. For example, in white middle-class American patterns of infant socialisation of infants there is a tendency to reduce the differential in linguistic competence between adult and child. This is achieved by such means as parental simplification, or for the parent to richly interpret the child's expression, or to paraphrase or expand the child's utterance, or to give meaningful interpretations to unintelligible phrases. The child thereby acquires linguistic competence in such matters as dealing with incomprehension and ambiguity, and appreciating the extent and limitations of interpretation and disagreement. More importantly, "through exposure to, and participation in, these clarification exchanges, the young child is socialized into several cultural patterns" (Ochs & Schieffelin 1984: 278). Other societies, of course, have very different patterns of infant socialisation into the use of language.

The second form - socialisation through language - "concerns the use of language to encode and create cultural meaning" (Poole 1992: 595). As Schieffelin & Ochs (1986: 3) point out, "many formal and functional features of discourse carry sociocultural information". They identify (Schieffelin & Ochs 1986: 3-9) lexical, morphosyntactical, phonological, prosodic, generic, and pragmatic conventions as being culturally and socially organised in such a way as to express and create cultural beliefs, values, social status and role. For example, gender distinctions in many languages are not marked by formal grammatical categories. These may be a matter of prosodic features and register but may also - as is the case in Japanese and Korean - be indicated by systematic gender-related affixative, honorific, pronominal and lexical usage. More sharply differentiated in many languages are gender-marked pragmatic features focussing on notions of politeness and deference: conventions such as attentive listening, turn-taking, hesitation, interruption, backchannelling (Holmes 1992: 315). To these verbal and nonverbal indicators may be added culturally-determined optemic, kinesic, and proxemic conventions, which are usually differentiated for men and women (Porter & Samovar
as for other socially-distinct groups. The social and educational implications of gender-marked language distinctions need to be carefully weighed to guard against assumptions derived from ethnolinguistic bias - and balanced against other factors such as age, intimacy and social status. Nevertheless, such distinctions do reflect and - it has been argued (for example, by Spender 1980) - reinforce the perceived status of females within the culture, with consequences for the ascription of social and domestic roles and access to educational and employment opportunities. More particularly, the children within those societies have been socialised both into the linguistic conventions and into the underlying assumptions. They will tend to expect that the same conventions and assumptions apply in other languages and cultures, and behave accordingly.

In two respects, socialisation through language is more pervasive than the other. Firstly, it tends to be implicitly conveyed rather than explicitly expressed. Caregivers do not usually focus on the formal and functional features of discourse, even where they themselves are aware of them: the significance of nonverbal conventions tends to be unnoticed precisely because they are nonverbal. Secondly, while socialisation in the use of language tends to be unidirectional, socialisation through language is constructed jointly by both parties through interaction. As Willett (1995: 475) points out, "language socialisation is not a one-way process by which learners blindly appropriate static knowledge and skills". Rather, children infer social and cultural knowledge and - to a greater or lesser extent - shape it by actively participating in language socialisation activities. In doing so, they influence the reciprocal behaviour of their more expert caregivers. This leads to the consideration that socialisation also has a political dimension: "the process of constructing knowledge is one in which power and influence are inevitably exerted, and sometimes contested" (Mercer 1995: 20). The relationship between expert and child or other novice is inherently asymmetrical and - as Poole (1992: 599) points out - consistently marked by the accommodation of the expert/adult to the child/novice, but nevertheless the power and influence exerted by the latter should not be neglected.

The above discussion of socialisation in and through language has some clear implications for the langacultural development of NESB learners such as those in focus in the present study. However, the mainstream of sociocultural thinking (represented by,
for example the works of Ochs, Schieffelin and Porter) has tended to neglect
development within the cognitive dimension, which is of vital importance to the present
study. Attention will now turn to this issue.

3.3 The socialisation of cognition through dialogue - ZPD, scaffolding, appropriation
Language socialisation increasingly involves what has been termed the "socialisation of
cognition through discourse" (Edwards & Mercer 1987: 157). One of the earliest
theoretical explanations for this process is to be found in the essentially dialogic
character of learning posited by the Russian psychologist and educator, L. S. Vygotsky
(1896 – 1934). A key concept in Vygotsky's work was the zone of proximal
development (ZPD) by which he meant
the distance between the actual and developmental level as
determined by independent problem solving and the level of potential
development as determined through problem solving under adult
guidance or in collaboration with more capable peers... (The concept)
defines those functions that have not yet matured but are in the
process of maturation, functions that will mature tomorrow, but are
currently in an embryonic state (Vygotsky 1978, 86).

In a ZPD, the expert is in relationship to the novice as the master is to an apprentice,
and seeks to activate the learner's present abilities in order to bring about the novice's
eventual independence. Learning is achieved through two-way (interpsychological)
dialogue.

This process of dialogue between expert and novice is most clearly manifest in school
classrooms. Here, the discourse
functions to establish joint understandings between teachers and pupils,
shared frames of reference and conception, in which the basic process ...
is one of introducing pupils into the conceptual world of the teacher

However, in most cultures the same process begins in early childhood when, for
example, caretakers introduce reading skills to infants (Cazden: 1992: chapter 8;
McNaughton 1995: 63ff) or - even earlier - when mothers play 'Peekaboo' with their
children (Wood, Bruner & Ross 1976). In this seminal article, the authors introduced the metaphor of scaffolding to describe what Bruner later (1978: 19) identified as "the steps taken to reduce the degrees of freedom in carrying out some task so that the child can concentrate on the difficult skill she is in the process of acquiring". Even more specifically, he described scaffolding as follows:

One sets the game, provides a scaffold to assure that the child's ineptitudes can be rescued or rectified by appropriate intervention, and then removes the scaffold part by part as the reciprocal structure can stand on its own (Bruner 1983: 60).

Mercer (1994b: 103) ties the concepts of ZPD and scaffolding very closely together: it is "only when 'scaffolding' of some kind is required that we can infer that a child is working in a ZPD". In other words, if the child can do the task by him-or herself alone, or if the task is entirely beyond the learner's reach, the event is not a ZPD.

When the learner, with the help of the expert, is able to apply the new learning in a range of contexts, a ZPD may be said to be narrowed or bridged. Through the use of the cultural tool of language in dialogue, the learner may show evidence of having appropriated (Leont'ev 1981a) the meaning and use of the concept from the external (social) plane to the internal (personal). In the case of learning practical skills, learning is made explicit not only in a learner's demonstrated ability to perform a task, but also in the interpsychological use of language which may emerge in the interaction between expert and novice. The role of language is even more central to conceptual learning, where it is the only evidence of appropriation. This language may be addressed to the other dialogic partner(s): this may be termed external or social speech. Alternatively, it may be silently present in the individual's 'inner speech' reflecting his or her thinking processes, the outward manifestation of which may be termed private speech. Often, of course, it appears to be a mixture of both, as the learner seeks to add the new concept to his or her personal repertoire and in doing so adapt it to an internal value system:

One's own discourse and one's own voice, although born of another or dynamically stimulated by another, will sooner or later begin to liberate themselves from the authority of another's discourse (Bakhtin 1981: 348).
From this perspective, although the dialogic partners may achieve a measure of intersubjectivity in a ZPD and thereby jointly construct common understanding, the meanings each individual appropriates will invariably differ, to a greater or lesser extent, from the meanings ascribed by their interlocutors. As Mercer (1994b: 105) has pointed out, only by verbalising their appropriated concepts and ideas can children (and indeed other learners) become aware of differing shades of meaning, or indeed their own meaning. And only by a moment-by-moment analysis of the interpsychological use of language can appropriation be studied (Wertsch 1985: 207).

The above discussion has briefly introduced the three core constructs of the sociocultural model applied to this investigation. They are neo-Vygotskian in the sense that Vygotsky's original concept of the ZPD has generated other metaphors such as scaffolding and appropriation.

3.4 Social modes of thinking, and ventriloquation, in the classroom

It is important to emphasise at this stage that scaffolding in ZPDs may be effected by "more capable peers" (Vygotsky 1978: 86). In the context of a school classroom, this implies that pupils may act as tutors vis-à-vis some of their classmates. Mercer (1995: chap 5), in discussing this matter, has introduced three 'modes of social thinking', which he derived from earlier research in which he had been involved (Mercer 1994c). The first is disputational talk, by which is meant exchanges marked by speech acts such as assertion, contradiction, challenge, counter assertion and rebuke; in this sort of talk, attitudes may be competitive rather than cooperative, postures defensive rather than consensual, and reasoning individualised and tacit rather than explicitly shared. Such talk does not display evidence of intersubjectivity and would not be conducive to scaffolding within ZPDs. Mercer's second mode - cumulative talk - is linguistically marked by repetition, confirmation, suggestion, the exchange of opinion, (dis)agreement and elaboration. Here the participants may be seen to pool their collective information; in contrast to disputational talk, there is a sense of affective solidarity and trust - as well as acceptance of, rather than challenge to - ideas offered by partners. The interpsychological basis for a ZPD may be established in this sort of talk. Moreover, although some repetition involved in cumulative talk may be unthinking parroting,
verbal imitation may also serve a useful function in the co-construction of meaning. This has been referred to as ‘ventriloquation’ (Bakhtin 1981, cited by Maybin 1993 and Haworth 1999). By this is meant the reflection by one partner of ideas and opinions voiced by the other, and where this occurs a greater degree of intersubjectivity becomes manifest. Mercer (1994b: 105) suggests that ventriloquation enables interactants to articulate and develop shared understanding, which will lead to the other elements of cumulative talk - confirmation and elaboration. However, as he has also pointed out:

> The creation of shared knowledge and understanding is rarely, if ever, a matter of simply pooling information... it has to be generated by working with information (Mercer 1995: 67 - emphasis in original).

This leads to the third mode of social thinking - exploratory talk - which consists of statements, opinions and suggestions offered for joint consideration; these may be challenged, but alternative hypotheses and reformulations are also proposed. Mercer considers that speech in this category is more indicative of learning being shared, rather than transmitted:

> "compared with the other two types, in exploratory talk knowledge is made more publicly accountable and reasoning is more visible in the talk" (Mercer: 1995: 104).

These types of social thinking will be aligned with Richards & Hurley’s threefold categorisation of classroom learning. Together, they provide a multidimensional perspective with which classroom interactions may be discussed and analysed in terms of the ZPD, scaffolding and appropriation – each of which will be explored in turn in Chapters Four, Five and Six.
4. Sociocultural theory applied to second language speakers

This study, therefore, seeks to apply a neo-Vygotskian framework to an ethnographic case study of the learning context of four non-English speaking learners. According to Ushakova (1994), Vygotsky's thinking has influenced experimental research into some areas of second language acquisition in the former Soviet Union for over fifty years. However, Vygotsky himself had very little to say about second language learners; his main reference to them (1962: chap 5) clearly suggests that he was thinking in terms of formal instructional contexts. The initial uptake of his ideas in Britain gave rise to interesting discussions about the role of language in classroom learning in general - for example in the Bullock Report (Department of Education and Science 1975: 4.5), Mercer (1992), Daniels (1993), Fisher (1993), Maybin (1993). However, there was much less attention paid to second language learners within an educational context, a notable exception being Levine (1990; 1993). Her discussion of Vygotsky's ideas was firmly based on her practical experience in multilingual classrooms, and "her influence on the teaching and learning of children has been paramount" (Meek 1996: 7). However, despite her careful contextualisation of case studies (Levine 1990), and the action research projects she subsequently stimulated, relatively little attention was initially paid to the implications of Vygotsky's thinking to NESB learners in Britain. To some extent, this may have been due to the assumption that his theory was relevant only to English as a mother tongue (Levine 1996: 123). When Vygotsky's theories were first applied to second language acquisition in the United States, Lantolf explains (1996) that they did not fit into the dominant psycholinguistic research tradition of second language acquisition - a point also noted in Britain by Bleach (1996:39). Many of the conventional theories - as noted above - tended to examine individuals separately from their social contexts. There is clearly some point to Lantolf's view, as any new theoretical approach needs time to be carefully considered before it can be assimilated into, or challenge and break, current epistemological paradigms. In the last decade, however, there has been increasing knowledge of, and interest in, its potential application to second language learners.
Most of the published case studies focus on adults or children in specifically second language contexts, rather than - as in the present case - second language socialisation in non-language focussed classrooms. This tendency is reflected in the range of issues reported by Coughlan & Duff, Donato, McCafferty, Ushakova, etc. all in Lantolf & Appel (1994). Other ESOL case studies have been published over the past decade - for example, Poole (1992), Brooks & Donato (1994), De Guerrero & Villamil (1994), Jarvis & Robinson (1997), Ikeda (1998), Anton & Dicamilla (1999), and Ellis (1999). The latter is the only sociocultural case study of NESB learners found to have been published in New Zealand, and actually reanalysis in neo-Vygotskian terms data collected in a British ESOL class in the early 1980s. Insights gained from such studies are applicable to the present investigation and some will be considered in later chapters of this thesis, but more immediately relatable are those studies which focus on NESB learners in mainstream classrooms. While many such case studies are socioculturally oriented - for example, Flanigan (1991), Bourne (1992 - especially chapter 10), Poole (1992) and Cameron et al (1996), few of them are explicitly based on Vygotskian foundations and on NESB learners within that context.

One small-scale British study (Gregory. & Kelly 1994) considered the assessment of bilingual learners from a neo-Vygotskian perspective. After revealing the inadequacies of standardised tests to measure the actual level of linguistic and cognitive competence of learners from minority language groups, the authors note (1994: 207) that “it becomes very important therefore to gain insights into the learning experiences of the minority child within his or her community”. On the basis of such an analysis of these learners’ zones of proximal development, Gregory & Kelly suggest (1994: 208-209) that teachers should structure their classrooms to give NESB learners relevant opportunities to apply specific social and cognitive strategies. They also acknowledge (1994: 207) the “huge demands this will make upon a teacher whose class members represent a variety of groups and sub-groups”. The relevance of this short report to the present study is the recognition of the need for an appropriate analysis of the learners’ social identity
both outside and inside the classroom, and the need to relate this dimension to cognitive development.

An American case study (Willett 1995) is also clearly relatable to the present study. The title of the article, "Becoming first graders in an L2: An ethnographic study of L2 socialization", concisely indicates its scope. It was a year-long study of three newly arrived NESB girls in a mainstream classroom; the role of the researcher and the procedures for data collection and analysis approximated to those for this study described above in Chapter Two. There were, of course, some differences between Willett's study and the present one. Willett's was an integral part of a much wider social study (1995: 477); and the setting was a first grade class in California involving younger (seven year old) pupils. There were three girls in focus, and they were ethnically diverse and - importantly - they were all present in class from the very start of the year. The teacher allowed the three NESB learners to sit together - "probably because of the research rather than for any other reason" (Willett 1995: 482) - and this fact would have influenced their classroom interaction. Willett's observations centred on an entirely routine daily event, 'phonic seatwork': such predictability was not possible in room 7 at Rosegarden. Although her work was explicitly based (1995: 475) on sociocultural theory, Willett made only one passing reference each to Vygotsky (page 475), Bakhtin (page 476), and Bruner (page 477), and did not apply any of the three neo-Vygotskian constructs which are central to the present study. In short, Willett was little concerned with the children's development within the cognitive dimension. Rather, she applied insights from sociocultural theory and discourse analysis to tell the story of how "these children made sense of their new world" (1995: 480) and of course her narrative was shaped by these considerations. Despite the different avenue she followed, some of her interpretations are reflected in the present study, and where this occurs, reference to them will be made.

A more recent smaller-scale study in Australia (Gibbons 1998) explicitly applied a neo-Vygotskian approach to cognitive learning in a primary classroom. The aim was to consider the extent to which a teacher could scaffold NESB pupils' learning.
in the academic dimension. In this case, the teacher carefully structured a series of science lessons within a single unit of work from small-group work, through teacher-guided reporting to written journal entries by the pupils. The significant contextual difference between Gibbons’ study and the present one is that although it was a multilingual class - all but two of the nine-and-ten-year-old pupils were NESB – the children were “largely fluent in English in basic communication contexts” (Gibbons 1998: 100). Moreover, although the study focussed on “the notion of apprenticeship into a culture” (Gibbons 1998:103), most of the pupils had been in Australia – and at the school – for a number of years. Therefore, unlike the children in Willett’s study – and those in the present case – they did not have to be inducted into basic conventions of learning within the interactional domain, and there was also shared understanding derived from previous schooling of procedures within the instructional task dimension. Also, the fact that the investigation was limited to a single unit of work may have enabled the teacher to plan and execute the learning activities more thoroughly than if the study had occurred over a longer period of time. Gibbons drew some interesting implications (1998: 115-116) about how teachers in similar circumstances might effectively scaffold the linguistic progression, provide appropriate opportunities for learner-initiated exchanges, and take into account the degree to which academic tasks are context embedded. She also pointed to the need for further classroom based studies of young NESB learners which can draw on insights from both ethnographic and second-language acquisition research.

Such case studies may allow a grounded sociocultural theory to be developed with a view to improving understanding of the interactional, procedural and conceptual challenges faced by NESB students. Based on extensive practical experience since the 1960s, and her critical analysis of the educational context, Levine devised an approach to the teaching of NESB learners in multilingual schools, which she referred to (1996: 118) as ‘developmental pedagogy’, which she considered (1996: 126) to be “Vygotskian in character”. She saw his framework - especially that of the ZPD - as pointing towards a solution to the problems she encountered of mainstreaming NESB pupils:
With this idea comes a clear underlining of the importance of interaction in mixed-experience groups - adult to child, pupil to pupil - for the enhancement of learning through shared experience. Learning is seen as developmental, socially enhanced and with a role for others (Levine 1990: 291).

However, while much of her approach was based on illustrating and interpreting children’s talk, it is not certain how much she deliberately applied a strictly Vygotskian microgenetic analysis of the data. For example, when analysing the classroom talk of secondary school pupils (1990: 121-142 and 1996: 25-39), she made no specific reference to the ZPD. This uncertainty may be due to the fact that, being more directly concerned with producing materials useful for teachers rather than the wider academic community, her writing consisted of broadsheets and conference proceedings, rather than widely disseminated in published works (Bleach 1996: 139). In other words, while she espoused a Vygotskian approach, it is not clear to what extent she problematised the implications.

The present study will attempt to problematise the central constructs of the ZPD, scaffolding, and appropriation by illustrating, analysing and interpreting langacultural events in a mainstream classroom. It is hoped that, by doing so, a contribution will be made to the growing understanding of sociocultural theory. It will examine individual learners and their sociocultural context and address the following questions:

Chapter Four
How was a culture of learning developed in a mainstream primary classroom?
How relevant to this context is the notion of a zone of proximal development?

Chapter Five
How were the NESB learners in Room 7 helped to participate in the discourse of learning?
To what extent can scaffolding be applied to peer assistance for NESB learners?
Chapter Six
How did the NESB learners appropriate the culture of learning in Room 7?

How useful in the notion of appropriation to the context of NESB learners in the mainstream classroom?

These questions will be reviewed in Chapter Seven with a view to refining the neo-Vygotskian theoretical framework which has driven the inquiry. The chapter will contain a discussion of the pedagogical and research implications of issues raised by this case study of the langacultural development of four NESB learners.
Chapter Four

The Zone of Proximal Development

Part 1. Introduction

Overview
The aim of this chapter is to consider the extent to which the notion of the ZPD can be applied to classroom learning. It will do so by a detailed consideration of the theoretical foundations upon which the notion of a ZPD rests, followed by an ethnographic analysis of dialogues between teacher and class, and among the pupils themselves. The extent to which such dialogues may constitute a ZPD will be considered in the commentary which concludes the chapter.

The introduction to this chapter will discuss the foundations of sociocultural theory in terms of Vygotsky’s assumptions about the genesis of cultural development through social interaction, with particular reference to the zone of proximal development (ZPD). The examination of this notion in the following pages will lead to a discussion of the relationship between thought and language in dialogue and how learning may be co-constructed. This co-construction occurs through the interplay of social (interpsychological) speech and inner and private (intrapsychological) speech; these notions will be presented and illustrated in this chapter, but will be more fully explored in Chapter Six.

In order to explore the developmental relationship between thought and language in dialogue, two levels of analysis are required. To capture the process of cognitive development “in flight” (Vygotsky 1978: 68) there is a need for a microgenetic analysis of the moment-by-moment use of language. However, since no interaction can be fully understood outside its sociocultural continuity and context (Mercer 1995: 68), it is also necessary to conduct a more longitudinal genetic analysis of how dialogue develops within the specific context.

In Part 2, the ethnographic accounts (‘ethnographs’) which follow this introduction are intended to illustrate how the culture of Room 7 emerged through, and as a result of, dialogue between the teacher and the class, and among the learners themselves. Examples of these
dialogs will be subjected to analysis, in terms of Richards & Hurley's (1988) three dimensions of classroom learning, to illuminate how the particular climate of learning was co-constructed. It is important to note that this took place before the NESB learners in focus entered the classroom. It will serve, therefore, as a genetic analysis of the "interpersonal precursors" (Wertsch 1985: 61) of the subsequent interactions between NESB learners and their classroom peers, which will be explored in Chapters Five and Six.

Any such analysis is, perforce, tentative, subjective and partial. It is tentative because, as Wertsch (1985: 207) has pointed out, it is difficult to identify some important higher mental functions - such as planning, logical memory and voluntary attention - by analysis of the external speech alone, as these tend to be implicit rather than explicit. It will be subjective because of the necessity to interpret the social context which connects the language used and its sociocultural and individual meanings. The interpretation of the speech patterns, which emerge in classroom dialogues, can only be exercised by an ethnographic researcher who has become familiar with the context and continuity of that classroom. It is partial in the sense that that researcher inevitably brings a personal perspective - perhaps bias and prejudice - to the work of analysis; it is partial in the sense, too, that not all the interaction among the members of Room 7 was either recorded or analysed. Despite these limitations, it is hoped that the analysis of the discourse of learning in Room 7 will enable illumination to be cast upon a specific learning context.

Part 3 is a commentary on some implications arising from the analysed interactions, with particular reference to the extent to which the notion of a ZPD can be applied to the context of classroom learning. This discussion will point the way forward to chapters Five and Six.
1. A sociocultural theory of learning

1.1 The ontogenesis of learning

Vygotsky's initial line of enquiry into the origins and development of cognitive functions was to examine how human learning differed from that of other primates - phylogenetic analysis. In this respect, he was influenced by Haeckel's (1874) post-Darwinian law of recapitulation, which asserts that the development of the individual parallels or recapitulates the development of the species. A second influence was the experimental research on primate tool-use such as that carried out by Wolfgang Kohler, which influenced the development of Gestalt theory (Koffka, 1934, 1935). These theories led Vygotsky, and his colleague Luria, to posit a basic stage development approach marked by critical turning points:

We think that the turning point or critical moment in the behaviour of apes is the use of tools; in the behavior of primitives it is labor and the use of psychological signs; in the behavior of the child it is the bifurcation of lines of development into natural-psychological and cultural-psychological development (Vygotsky & Luria 1930: 4).

However, he did not develop this phylogenetic line of thinking, preferring instead to focus on ontogenetic analysis: the origins and development of higher mental functioning within the individual, rather than within the species. Nevertheless, he continued to place considerable importance on the use of mediating tools to control or change the environment. He argued that the individual, when seeking to exert control over the physical environment, will use mechanical tools; when wishing to influence the behaviour of other people, the individual will use psychological tools, the most important of which is language:

The primary function of speech, both for the adult and for the child, is the function of communication, social contact, influencing surrounding individuals" (Vygotsky 1934: 45).

It is also necessary to point out that such interactional use of language to regulate the action of others, is often accompanied by internal use of language for self-regulation and object-regulation; the interplay of these different uses of language will be discussed later.
1.2 Activity theory

Vygotsky developed his psychological theories of learning within a Marxist ideological framework (for example, Marx 1959), a fundamental principle of which is the inherent relationship between consciousness and activity, which itself is based on productive labour and social interaction. The theoretical foundations laid by Vygotsky in his early works stimulated the development of activity theory within Soviet psychology (A. N. Leont'ev 1981b: 59). According to his son, A. A. Leontiev (1981), for Soviet psychologists the most important element in defining man's personality are the social relationships into which he enters, and of which he is both the subject and the object. Man enters into these social relationships through his activity.” (A. A. Leontiev 1981:12)

He summarised (1981: 12-18), the three salient characteristics of activity. Firstly, it is significant: it is determined by internal motivation. This is in contrast to behaviourist theory, which does not seek to account for the motivation of the passive subject. Secondly, it is social, in that activity is never considered separately from society. This is in contrast to Piagetian assumptions of internally driven learning. Thirdly, it is systematic, in that activity is broken down into actions, and actions into operations, all serving to achieve the overall aim. This systematicity derives from the interaction between internal motivation and the external social relations: “activity emerges as a process of reciprocal transformations between subject and object poles” (A. N. Leont’ev 1981b: 46). That this process was not merely one of transfer of knowledge from one person to another, but of cognitive understanding emerging from such interaction, was stressed by Vygotsky:

Humans’ psychological nature represents the aggregate of internalized social relations that have become functions for the individual and form the individual's structure (Vygotsky 1981b: 164).

However, he differed from a strict Marxist interpretation of the social foundation of ontogenesis by assuming a very important role also for organic maturation:

The growth of the normal child into civilisation usually involves a fusion with the processes of organic maturation. Both planes of development - the natural and the cultural - coincide and mingle with one another. The two lines of change interpenetrate one another and essentially form a single line of sociobiological formation of the child's personality (Vygotsky 1960: 47).
In this way, he attempted to incorporate insights from Piaget’s contemporary work on the development of cognitive functions in children, not least in attaching importance to the interactive construction of knowledge (Vygotsky 1987: 78-79). Like Vygotsky, Piaget ascribed an important role for social relations: “there are no more such things as societies qua beings than there are isolated individuals. There are only relations” (Piaget 1932: 360).

While there are some similarities between the developmental psychology of Piaget and Vygotsky, there are also fundamental differences. These differences stem - as noted above - from the primacy in Vygotsky’s thinking of cultural factors and artifacts as mediating tools of learning rather than the inner-driven maturation (a ‘meaning acquisition device’) assumed by Piaget. Consequently, Vygotsky placed more stress than Piaget did on language, and especially interpersonal language, as the progenitor of concept formation. This in turn led to him attaching much greater importance than Piaget to the role of pedagogy or instruction, and hence to his construct of a Zone of Proximal Development (ZPD). Attention will now be given firstly to Vygotsky’s notion of a ZPD, and then to a discussion of his view of the role of language in cognitive development.

2. The Zone of Proximal Development (ZPD)

2.1 Vygotsky’s construct of a ZPD

Vygotsky felt that co-constructed understanding might most clearly be seen to occur during an intersubjective dialogue between an expert and a novice. He termed an encounter of this kind a zone of proximal development, which he defined as:

The distance between a child’s actual developmental level as determined by independent problem solving and the higher level of potential development as determined through problem solving under adult guidance or in collaboration with more able peers’ (Vygotsky 1956: 446)

Thus, the ZPD is determined by the learner’s level of ability and the form of guidance provided. It is worth emphasising that Vygotsky considered that appropriate assistance could be given by ‘more capable’ peer learners as well as adults. The ZPD is not merely, as Kozulin put it in his introduction to his translation of Vygotsky’s seminal work, "the place at which a child’s empirically rich but disorganized spontaneous concepts ‘meet’
the systematicity and logic of adult reasoning" (Kozulin 1962 - emphasis added). It would therefore be more accurate to refer to ‘more mature’, rather than adult, knowledge and forms of reasoning.

Vygotsky originally conceived the notion to deal with two practical problems: the assessment of children's intellectual abilities, and the evaluation of instructional practices (Wertsch 1985: 67). As a theoretical psychologist, he sought to explain both with how children arrive at a certain point of development and also with how to predict future intellectual growth - identifying the "buds or flowers of development" (Vygotsky 1978: 86). Unlike many contemporary psychologists who held that IQ was a genetically fixed property, Vygotsky preferred to emphasise the way that appropriate instruction could promote cognitive development. In this respect, his views can be set against those of Piaget that
each time one prematurely teaches a child something he could have discovered himself, the child is kept from inventing it and consequently from understanding it completely (Piaget 1970b: 715, cited by Bourne 1992: 208).

Vygotsky wished to explore, for example, how two co-eval children might be equivalent from the point of view of their present independent activity but sharply different in terms of their immediate potential development. Using the ZPD as a model, he sought to take stock not only of today's completed process of development, not only the cycles that are already concluded and done, not only the processes of maturation that are completed; (but) also take stock of processes that are now in the state of coming into being, that are only ripening, or only developing (Vygotsky 1956: 447).

Moving away from the context of IQ testing to pedagogy, Vygotsky applied the notion of a ZPD to classroom instruction in order to demonstrate the ways in which more capable participants structure interactions so that novices (children) can participate in activities that they are not themselves capable of; with repeated practice, children gradually increase their relative responsibility until they can manage the adult role (Cole 1985: 155).

Thus he wished to show that school instruction could have a differential effect on the development of two similarly-able children by providing instruction appropriate to the
learners' potential, as well as their actual, level of development. However, as Wertsch (1985: 73) has pointed out, Vygotsky did not always make clear the relationship between instruction and development. For example, at one point he stated "instruction creates the ZPD" (Vygotsky 1934: 450), but elsewhere in the same work he said that

instruction and development do not directly coincide, but represent two processes that exist in very complex interrelationships... Instruction is only good when it proceeds ahead of development. Then it awakens and rouses to life an entire set of functions which are in the stage of maturing, which lie in the zone of proximal development (Vygotsky 1934: 222).

This ambiguity arose firstly from Vygotsky's assumption - derived from Marxist determinism - that development "was a unidirectional process with a definite endpoint" (Hood et al 1978: 157). In the light of this assumption, the dialectic relationship between development and appropriate instruction would inevitably lead to synthesis. This direct causal relationship is open to question; what the teacher intends and what the learner understands may be quite different. Secondly, according to Van der Veer & Valsiner (1991: 343), "the examples Vygotsky gave to demonstrate the use of the zone of proximal development suggest that he conceived of the environment as a static background to the dynamically developing child". This, too, may oversimplify the dynamic nature of any learning context: it seems clear that, as the teacher's instruction and the learner's development interrelate, the sociocultural environment itself is undergoing change.

Although Vygotsky died before he could work through the pedagogical implications of his thinking in this area, the notion of a ZPD has subsequently been found to be seminal in recent developments in educational theory; for example, it has been described as

the framework, par excellence, which brings all the pieces of the learning setting together - the teacher, the learner, their social and cultural history, their goals and motives, as well as the resources available to them including those that are dialogically constructed together (Aljaafreh & Lantolf 1994: 468).

Sierpinska and Lerman (1996: 867) too point out that Vygotsky's thinking "necessarily draws teaching and learning into a unified activity". It stands in contrast to a Piagetian view which, by stressing the emergence of conceptual development motivated by the
individual's innate organising skills, discounts the importance of conceptual development derived from verbal interaction with experts.

2.2 ZPDs and NESB learners

At this point, it is necessary to point out that in his discussions of the zone of proximal development Vygotsky made no reference to the issue at the heart of this study – the ontogenesis of langacultural competence of NESB learners in an unfamiliar educational setting. His writings about second language learning are largely confined to one chapter of a book (Vygotsky 1962), where he specifically referred to learning languages in a formal and culturally decontextualised setting. He raised the topic of foreign language learning essentially to make an analogy with the development of scientific concepts in the mental development of the child (Vygotsky 1962: 109) rather than as an issue in its own right. Despite this lack of direct reference, it is suggested that the notion of a ZPD may be applied to the learners in this study. Vygotsky made the point (1962: 110) that "success in learning a foreign language is contingent upon a certain maturity in the native language" because the learner would transfer the existing systems of meaning from the first language to the new one. While Vygotsky was specifically referring to the formal elements of the language - grammar and phonology, for instance - it is not unreasonable to extend the principle of transference to socio-pragmatic and cultural aspects as well. However, that transference needs to be assisted - precisely in order that the 'buds of development' might be effectively promoted. As Levine (1993: 209) has pointed out, "the simple fact that learners are present in the linguistic context (of the mainstream classroom) cannot itself ensure success -as the 'osmosis' school of 'thought' might suggest". That way of thinking may be most clearly seen in Krashen's argument (1982: 1-14) that language acquisition is inevitable provided there is sufficient comprehensible input and a low affective filter. In contrast, central to this thesis is the assumption that NESB learners need help from langacultural experts to move from their existing levels to potential levels of ability so that they can operate within Richards & Hurley's (1988) three dimensions of classroom learning. A key issue that will be explored in the ethnograph in Part 2 of this chapter is the extent to which essential features of a ZPD may be seen to manifest themselves in a primary classroom.
As both a dialectical relationship and a dynamic pedagogical framework for NESB learners, consideration now follows of the features of a ZPD in terms of being an event and a process.

2.3 ZPD as an event

Although Vygotsky on occasion (for example, 1935: 49) referred to an individual’s ZPD - in the same way that he referred to an individual’s IQ - Mercer points out that the ZPD is not an attribute of a child (in the sense, say, that IQ is considered to be) but rather the attribute of an event. It is the product of a particular, situated pedagogical relationship (Mercer 1994b: 102 - emphasis in original).

More precisely what sort of event is considered by Wertsch (1998, chap 1). He relies heavily for his discussion of sociocultural analysis on Burke’s (1969) formulation of a pentadic perspective for sociocultural theory - purpose, agent, scene, act and agency - and argues that "it is essential to coordinate the perspectives provided by these elements in some way" (Wertsch 1998:16, emphasis in original). These elements are very familiar to the discipline of sociolinguistics, and using Holmes’ (1992: 12) terminology, one could say that the ZPD is a particular kind of communicative event: one which embodies Burke's pentad as follows:

- purpose: the function of bringing about learning, by co-constructing understanding
- agent: the participants - teachers (or more able peers) and learners
- scene: the actual setting (time and place) in which the act took place
- act: the specific topic, task or problem, under consideration
- agency: the instruments of mediation - the channel of communicative dialogue

The indivisibility of these elements is emphasised by Newman & Holzman (1993: 86): "the ZPD is not a place or a context, but a dialectic unity of learning-and-development, or more appropriately learning-leading-development" (emphasis in original). Dunn & Lantolf (1998) add that in this unity, all uniquely human forms of higher mental activity, including thinking, planning, voluntary memory, voluntary attention, creativity and control of semiotic systems (especially language) arise in the interaction between children and other members of a culture during ontogenesis (Dunn & Lantolf 1998: 420).
2.4 ZPD as a process

If the unity referred to above is truly dialectic, the event must also be dynamic - a purposeful process – and not simply the ‘product’ referred to by Mercer (1994b: 102). Thus, while the constituent elements of a ZPD as an event may indeed be ‘indivisible’, the event-as-process may be broken into constituent elements as follows:

a) a ‘problem’ (a learning task) is identified by expert and/or learner
b) the existing knowledge or ability of the learner is ascertained
c) the inability of the learner to do the task without assistance is assumed
d) the learner’s potential ability (‘buds of development’) to do the task is gauged
e) an intervention strategy is designed and applied by the expert
f) the learner’s awareness, knowledge, skills and experience are activated
g) the teacher’s treatment is tactically adjusted according to the learner’s progress
h) the learner manifests understanding of specific knowledge, understanding or skill
i) there is indication that the learner’s understanding extends beyond the specific task
j) the ZPD is bridged and a new one opens.

In summary, while the ZPD may be regarded as a product-oriented event (as does Mercer 1994b:102), it is more useful to view it as a dynamic process in which the joint activity of the participants evolves over an indeterminate period of time.

The extent to which the notion of the ZPD can be applied to the classroom learning in Room 7 will be considered in the conclusion to this chapter - after the analysis of extracts from dialogues between teacher and class, and among the pupils themselves. Before such an analysis can be conducted, it is necessary to consider more closely how learning may be created through dialogue.
3. Learning through dialogue: interpsychological speech

3.1 The role of dialogue in learning

For Vygotsky, the development of higher mental functions such as thinking and problem solving derives primarily through social contact and most notably in a zone of proximal development - although, as noted above, he also allowed an important role for organic maturation. He formulated his views on the origins of cognitive development in a 'general genetic law of cultural development', which he explained as follows:

An interpersonal process is transformed into an intrapersonal one. Any function in the child's cultural development appears twice, or on two planes. First it appears on the social plane, and then on the psychological plane. First it appears between people as an interpsychological category, and then within the child as an intrapsychological category. This is equally true with regard to voluntary attention, logical memory, the formation of concepts, and the development of volition. (Vygotsky 1981b: 163).

Each child is therefore inaugurated into human activity through, and as a result of, social interaction with "mature cultural forms of behavior" (Vygotsky 1981b: 151); such interaction is mediated by psychological tools - notably language. In contrast to Piaget's (1969: 126) view, for Vygotsky “language is not seen as giving structure to the already conscious cognitizing mind; rather, the mind is constituted in discursive practices” (Lerman 1996: 137).

Vygotsky made a distinction between interpsychological and societal use of language: by societal, he intended speech among relatively large groups of people; by interpsychological, he meant interaction between small groups - frequently dyads - of individuals engaged in concrete social interaction (Wertsch 1985: 60). Like Bakhtin (1981), Vygotsky believed that the fundamental social relationship serving the ontogenesis of higher mental functions was that of dialogue. The spoken words of the dialogic partners are the audible manifestation of creative thinking processes occurring within each individual. The interplay of the participants' voices during the dialogue - the discoursal flow - allows conceptual understanding not only to be shared but intersubjectively constructed and developed: “consciousness is co-knowledge” (Vygotsky, cited by A. A. Leontiev 1981: 56).
3.2 Intersubjectivity in classroom dialogue

The notion of intersubjectivity, essential to Vygotsky’s understanding of dialogue (Kozulin 1990:190), has been explored by Quine (1960) and developed by others since (Walkerdine 1988; Lerman 1996; Rommetveit 1980; 1985). The latter proposed "a perfectly shared social reality" (Rommetveit 1985:187), in which understanding could develop in a "dyadic constellation of speaker privilege and listener commitment" (Rommetveit 1985: 190).

Rommetveit went on to explain that ‘speaker privilege’ is the right of the speaker to decide the topic and duration of the turn, while ‘listener commitment’ requires the listener, temporarily at least, to adopt the viewpoint of the speaker in an effort to co-construct understanding. Ushakova phrased this dialogic relationship very neatly when she said:

Speech as a means of communication is a two-way process. Two partners speak at the same time, except that one speaks aloud and the other speaks to the self ...

Thought, along with internal and external speech, develops simultaneously (Ushakova 1994:140).

For the dialogue to proceed at the external, verbal level, both partners need to adhere to Grice’s (1975) conversational maxims of relevance, truth, duration and perspicacity. In particular, when overt roles switch from speaker to listener, Bakhtin’s (1986: 99) category of ‘addressivity’ applies. While Grice’s principles focus on the message, this interpsychological notion expresses the need of the speaker to be aware of the ‘otherness’ of the dialogic partners: “the unique speech experiences of each individual is shaped and developed in continuous and constant interaction with others’ individual utterances” (Bakhtin 1986: 89)

Dialogues need not be restricted to one-to-one encounters, but rather dyadic encounters between two parties (not necessarily individuals), one of which plays the role of ‘speaker’ and the other ‘listener’; to a large extent, but by no means exclusively, these roles also coincide with those of ‘expert’ and ‘novice’. This understanding may be applied to a typical classroom, the teacher constituting one party and the class the other, where the discourse of learning proceeds through interactive but asymmetrical dialogue between the parties. The idea of a perfectly shared reality is more likely to be sought for, rather than achieved, in a classroom - and one of the teacher’s responsibilities is to ensure that the pupils understand and adhere to the interactional conventions of privilege and commitment. Her work in this respect is facilitated by the fact that both parties in a classroom dialogue know the underlying principles...
of the relationship, and what is required is to work out, through dialogue, the more detailed rules of engagement. When the pupils follow the rules, at least in large part, instructional tasks may be carried out and cognitive development thereby promoted.

The purpose of the first part of the ethnographic account which follows this introduction is to show the genesis of pedagogic dialogue between a teacher and her pupils in Richards & Hurley's (1988) three dimensions of classroom learning. The question of whether the interactions which constitute this dialogue between the 'expert' (teacher) and the collective 'novice' (the class) may, in part or in sum, constitute a ZPD will be considered in the commentary which follows.

3.3. Social modes of thinking in classroom discourse

In a classroom, dyadic interaction also occurs between two or more pupils, and may indeed be encouraged by the teacher. However, not all dialogue between primary pupils is conducive to conceptual development in the various dimensions of classroom learning, and much talk between primary age pupils may be, or appear to be, unrelated to the formal learning requirements (Galton et al 1980; Southgate et al 1981). Even where it is task-related, the talk may not be productive. To some extent this may be because the division of labour (expert and novice) is not formally ascribed, as it is between the teacher and class. Moreover, in interaction among pupils, the intersubjective privileges and commitments (speaker and listener) may not be so clear-cut as they are between teacher and class, and the rules of engagement have to be established largely among the pupils themselves during their interaction. In attempts to analyse how these rules operate, various researchers have classified the speech of pupils. For example, Phillips (1985) derived from empirical study five main types of peer discourse: hypothetical, experiential, argumentational, operational and expositional, and suggested that the first two categories encourage inner reflection, while in the others the speaker's attention is turned outwards. As discussed on pages 71 and 71 in Chapter Three, Mercer (1995:104) has posited three distinctive social modes of thinking. In the illustration and analysis of classroom dialogues which follow this introduction, Mercer's framework of social modes of thinking will be applied to illuminate examples of interpsychological speech among pupils in Room 7. His classification, derived from a

Exploratory talk - and co-construction of learning - among learners involves their working independently from the teacher. In his discussion of optimum contexts for independent classroom learning, Glynn (1985: 7) argues that "the key factor in promoting child initiations is for adults to relinquish direct control over child behaviour". He refers to responsive social contexts in classrooms in which “individuals acquire not only specific skills but also generic knowledge about how to learn” (Glynn 1985: 5). He specified four crucial characteristics for his model of such contexts: initiation by the learner, shared activities between more and less able performers, reciprocity and mutual influence, and sufficient and appropriate feedback. These criteria will inform the analysis of pupil-pupil dialogues that follow, but are more fully considered in Chapter Five.

3.4 Inner and private speech: intrapsychological speech

As was mentioned above, interpsychological learning through dialogue implies more than the transfer of cognitive meaning and cultural values from expert to novice: if it were merely this, the process would be one of uncreative imitation of the expert. In contrast to these views, Vygotsky proposed a more actively interpretive role for the child: rather than just copying external reality, the learner uses it to help form an internal (intrapsychological) plane of consciousness. This plane is created during interpsychological speech:

The relation of thought to word is not a thing but a process, a continual movement back and forth from thought to word and from word to thought...

Thought is not merely expressed in words, it comes into existence through them (Vygotsky 1986: 218).

For Vygotsky, then, thought emerges from the transformation of external language (of the dialogic partner) to internal thought processes created by the inner dialogue in the listener’s mind. This inner speech of this silent dialogue (Ushakova: 1994: 140) creates its own context, meaningful to the individual. This will inevitably give rise to a somewhat different interpretation of the meaning intended by the dialogic partner, because of inevitable differences in the participants' frames of reference. In this way, Vygotsky's views of the role played by the externalisation of inner speech of the learner differed from
those of Piaget. The latter considered it 'egocentric', and assumed that it would atrophy with cognitive maturation.

For Vygotsky, on the other hand, inner speech played an important regulative function at all stages of cognitive development: that of monitoring the activity of, and seeking to exert control over, objects, the self, and other people. Because inner speech is the silent verbal processing of understanding, it is by its nature inaccessible to the outsider. From time to time, however, elements of this internal dialogue with the self rise to the surface and become audible. This may be called private speech, serving as a waystage between intra- and interpsychological processing. The function of private speech as object-regulation is very noticeable with young children when they play with, and verbally address, their toys; it also persists into adulthood, for example when people curse an uncooperative piece of equipment in 'computer rage'. Its use as a self-regulatory tool is apparent when people 'talk themselves' through particularly difficult tasks, this being an external commentary on the internal cognitive processing (Lantolf & Appel 1994:15). Private speech for other-regulation may occur when interactants are closely working together to construct meaning, as is the case of the dialogue which occurs within a ZPD. During such dyadic interactions, the internal speech - the thought processes - of either or both partners may be verbalised to promote the development of shared understanding. By thus externalising their thought processes, the interactants provide cognitive and/or affective feedback - thereby monitoring, guiding and perhaps controlling the verbal and mental behaviour of the other.

The interplay of private speech and interpsychological speech will be considered in the following analyses of dialogues in Room 7, especially those among the pupils themselves (pages 106 – 123) where it may be seen to play an important part in the co-construction of learning. The role of inner and private speech in the development of understanding will be more extensively considered in Chapter Six, which focusses on the appropriation of learning by the NESB learners who are at the heart of this study. They were not present when the school year started, and thus could not participate with the other pupils in the creation of the langaculture in Room 7.
Part 2. Ethnograph

1. The context

What follows is an ethnographic account of the development of a culture of learning during the first four weeks of the school year. Micro-analysis of short extracts of dialogue, firstly between the teacher and the class, and then between class members themselves, will show the step-by-step development of understanding within and across the three dimensions of learning (Richards & Hurley 1988) among the participants. In this way, it will show how the "long conversations" (Maybin 1994: 136) are established among the class members. It will thus illustrate both the "interpersonal precursors" (Wertsch 1985: 61) and the sociocultural context into which the NESB learners in focus arrived at various points later in the school year.

1.1 The teacher's aims

The teacher saw her primary task as being to create a classroom environment in which relevant learning could occur. She began this work armed with her knowledge of the curriculum requirements, her experience of teaching previous classes, a repertoire of pedagogic skills, and a somewhat scanty knowledge of the pupils' background (provided by enrolment forms for new students and one-page reports from feeding schools). Although the process of moulding the learning environment continued throughout the year, the first few weeks were crucial. During this time the discourse of learning - and the unique sociocultural ambience - of Room 7 was formed.

The teacher's aims during this period may be considered in terms of Richards and Hurley's (1988) three dimensions of classroom learning. Firstly, there is the need to establish the intersubjective rules of interaction in the classroom - the pragmatics of politeness, respect, turn-taking - which constitute speaker privilege and listener commitment and to inform the class about conventions of sanctions (the school-wide code of assertive discipline) and rewards (Privilege Groups, Gold Cards etc). This socialisation occurred both through and in language. Socialisation through language occurred because dialogue was the medium of learning; it occurred in language because teacher sought to develop the pupils' competence in the appropriate use of language; in
this sense, the language was the content as well as the medium of learning. Secondly, the teacher needed to establish the criteria for successful learning task performance; this can be considered in macro terms of the overall curriculum and timetabling, and in micro terms of the requirements of specific tasks related to the subjects on the curriculum. Thirdly, and only when the first two categories were established as a modus operandi, could the teacher - and the class - begin the process of cognitive/academic development: understanding and using the conceptual systems of the various subjects which were to be taught in Room 7 - Language Arts, Mathematics, Social Studies and Science.

The aims of the teacher - her illocutionary intent - need to be considered in terms of what was happening among the pupils. Initially, they had to adjust to the physical and cultural environment of a new school, and they did so at differential rates according to personal circumstances. At the same time, they were starting to socialise with new learning partners, as well as those who are already known to them. In this process, and also in reaction to the formal culture of learning promoted by the teacher, they began to establish networks of friendships, alliances and perhaps enmities both in Room 7, and in the school at large. This micropolitical climate affected their understanding and performance of new learning tasks, and the direction and rate of cognitive and academic development.

None of the above took place in a social vacuum. While beyond the strict purview of this investigation, various factors need to be acknowledged. Firstly, these pupils were undergoing the normal physical, mental, moral and emotional maturation of children of their age. Secondly, the teacher was coping with the normal demands of her life - professional relations with her line managers, colleagues and student-teachers, and personal matters relating to family, health, finance, etc. Thirdly, I was establishing my role as a participant observer in the classroom, to which presence teacher and pupils had to adjust. Finally, what was happening in Room 7 is affected by events elsewhere in the school - which, like any other organisation - was undergoing various sorts of institutional change.
1.2 The first day at school

From the very start of the school year, Ms Wilkins was keen to establish the social framework for the learning that was to take place in Room 7 - who was who, and what the rules of conduct should be. For example, on the first morning she introduced herself, called the register, and also presented me to the class, explaining that I would be a member of the Room 7 community. I then outlined to the class the general nature of my study and distributed letters of information and consent forms to be signed by the pupils as well as their parents/caregivers. Afterwards, the teacher spent about twenty minutes informing the pupils of some basic school and class rules; the class was quiet and very attentive during this explanation. She then set up an ice-breaking activity using a questionnaire: the pupils were to interact with each other asking questions about their likes and dislikes, hobbies, previous experiences and so on. A few minutes later, the teacher called the class to order and elicited some of the information exchanged, and thereby initiated a pool of shared interpersonal knowledge. It was then time for break, so she told the class that they would continue with this activity later and, with a final reminder about the need for good behaviour, the teacher sent them off. After the break, she took the class on a tour of the school and they completed the questionnaire activity on their return. In the afternoon, she asked the pupils to start work - together, if they wished - on preparing a curriculum vitae; this was an activity which would occupy them at various times over the next week. This initial piece of work embraced all three of the dimensions of classroom learning: it was a learning task which promoted social interaction and also served to achieve specific curricular (presenting written language) objectives. It also allowed the teacher to start to identify for herself the levels of actual ability among the class members, and to commence the long conversations of Room 7.
2. Teacher - class interaction

2.1 The interactional dimension

Much of the subsequent classroom discourse between the teacher and the class related to establishing the conventions for how the students were expected to behave in the classroom, around the school, and even outside the school. The following extract shows an example of such social interaction in Room 7. This was the beginning of lessons on the fourth day of the school year. The class had just returned from a school assembly.

# 1a
01. T: Right, good morning everyone
02. Ps: Good Morning Ms Wilkins
03. T: And Mr. Barnard
04. Ps: Good Morning Mr. Barnard
05. RB: Good morning
06. T: Right. We have two people who are new today - Jill, and Jed. xxx You'll soon get to know who's who. Nathan, was it you I saw on my way to school this morning?
07. Na: Yes
08. T: It was. Thank you. I really enjoyed the wave and the smile. There was one thing I didn't like. Know what it was?
09. P: xxx (indicates he does not get the point)
10. T: It's actually against the law. Not just, you know we don't just say it here at Rosegarden. You know what it was?
11. P: xxx (this time he has got the point)
12. T: Good one. OK. So you won't ride on the footpath again, will you. Glad you had your helmet on though. Right. So - (starts to call register) Harry....

Perhaps the first thing to note is Ms Wilkins' intention to involve all members of Room 7 - including the researcher. Throughout the year, she marked the commencement of the teaching day by greeting the class, and she expected the pupils in return courteously to greet her and any others (such as student teachers) who might be present in the room. She then introduced two new pupils to the class and said that they would soon get acquainted with their classmates.

The subsequent exchange with Nathan is interesting in that the teacher wished to make a general behavioural point based on an out-of-school incident. The criticism was framed by social moves complimenting the boy on his greeting (08) and on wearing a helmet. The interaction might be interpreted in several ways. Ostensibly directed to one pupil, it might be regarded as a simple conversational exchange between two individuals; however, the classroom setting and the teacher's volume and her wide-
ranging eye-contact suggests that the remark was addressed to the whole class, or at
least those of them who were cyclists. The explicit connection made (10) between the
law and the school rules reinforces that this was not merely social banter but that there
was an underlying pedagogical purpose. The use of questions by the teacher (08 and 10)
might suggest the stereotypical didacticism of 'Guess what's in my mind'.

However, the structure of the exchange suggests that Ms Wilkins was engaging in an
interpsychological dialogue with the class as a whole; Nathan serving as interlocutor on
behalf of his classmates, who participated in the dialogue as silent actors. Having
engaged the interest of Nathan and the class by reference to an out-of-school event
(08), she thanked him for his friendly greeting and then indicated that something was
amiss. Her open question (08) required Nathan to reflect on the earlier event but his
response (9) indicated that he had not grasped the point. Rather than telling him
directly, Ms Wilkins preferred to give clues (10) that would enable the boy - by working
through the clues - to reflect on his earlier activity. This time, his response (11) to her
repeated question - though inaudible to the microphone - was evidently appropriate: the
teacher’s positive feedback (12) indicates that the conceptual gap had been narrowed.
Ms Wilkins’ assumption about Nathan’s future action might be seen as extending
Nathan’s understanding from the specific to the general, and she closed the exchange
with a final compliment.

In the above exchange the teacher may be seen to be inculcating, or reinforcing, the
values of wider society with an implication of the school’s expectations in this area: an
example of socialisation through language. The tactful way in which it was done also
suggests an intention to socialise the pupils in language - the use of appropriate forms of
language for social control. The interaction continued with the calling of the register,
where a focus on socialisation in language use was also evident.

# 1b
12. T: ...Right. So - (starts to call register) Harry
13. Ha: Yep
14. T: Pardon (sharply)
15. Ha: Ah - yes!
16. T: Pardon (sharply)
17. Ha: Yes Mrs. Wilkins
18. T: Ms Wilkins
19. Ha: Ms Wilkins
Once again, it is reasonable to assume that the exchange between the teacher and Harry (12 - 20) was intended to be attended to by the whole class; this was borne out by the way that most of the class, except Trevor (23) subsequently responded. As in the previous exchange, the teacher at first chose not to correct the individual's solecisms (13, 15) but implied that he should think the matter through for himself with minimal interactive clues (14, 16). He accurately interpreted the illocutionary intent of her laconic requests for reformulation, and gave an approximately appropriate response (17), which was corrected (18) and echoed by him (19) - indicating that he had got the point. Typically, she thanked him courteously for his attention before passing on to other pupils. Here it is interesting to note not only the teacher's insistence on being properly addressed with her chosen social title but also her decision to make explicit her rationale for this, once she had obtained the required behaviour. Her reference to what she had said on the first day shows that the 'long conversation' between her and the pupils in Room 7 was already being activated.

2.2 The instructional task dimension
For the first two weeks, the classroom discourse included a significant amount of discussion about how learning tasks should be carried out. There is clearly a link between conduct required in social interaction in Room 7, and that required for instructional task performance, the former being a pre-requisite for the latter. Ms Wilkins was keen to ensure that uniform - and high - standards were understood and activated in both dimensions. In the following extract from a handwriting lesson during the second week, she was recapitulating how letters should be formed and linked, which she had introduced in previous lessons. She began with how work should be set out in the pupils' books:
As before, the discourse of learning progressed by interpsychological dialogue between the teacher and the class, using individual members as representative interlocutors. The intersubjective rules of speaker privilege and listener commitment apply, although - as can be seen above (04 to 07) - some degree of overlapping was permitted, as it would in normal social conversation. Ms Wilkins continued by eliciting the way that the letters should be formed:

This extract shows how the teacher worked interpsychologically with language, to co-construct understanding with the class. As before, it may be inferred from Ms Wilkins paralinguistic and nonverbal behaviour in the dialogue that she assumed that the pupils as a whole, and not merely the interlocutor, were collectively learning specific issues about handwriting. For her part, the pupils' responses enabled Ms Wilkins to gauge their existing abilities and promote their 'buds of development' by probing questions, such as illustrated in the exchange with Roger (13 to 17). At this point (18), she summarised and repeated the information before passing on to the next stage.
Ms Wilkins' nomination of Nathan to describe a flick (18) was occasioned by her perception that he was not paying attention, and presumably flouting the rules of intersubjectivity. His response (19) appeared to confirm her assumption, and she sharply rebuked him. (It is possible that he was using the pen as a mechanical tool to mediate his understanding). The illocutionary intent of her directive to focus (20) was that he should look at her, it being commonly understood in classrooms that visual engagement with a speaker implied listener commitment. Nathan's response (21) was accompanied by a gesture, which was interpreted by the teacher as indicating that he had grasped the point at issue. Her tone of voice and positive language 'Yes...nice ... good... please' (22) addressed partly to Nathan and partly to the rest of the class may have repaired any disequilibrium caused by her earlier rebuke, and the lesson proceeded smoothly.

In the above extract, the pupils were expected to follow the teacher's instructions, literally to the letter, and not to add variations of their own. Soon, however, the pupils begin to influence the way that tasks were carried out. In the third week of term, the following exchange took place as the pupils were working on a task, for which the pupils had to paste a worksheet into their books:

# 3
01. T: If you stick them this way, they'll stick out over the edge of the page, so we put them sideways and I'll give it to you round that way... Logan, you have a question
02. Lo: How about if we like trim the sides>
03. T: Now, That's the other thing I was going to do. Good thinking. If you have got scissors, you can trim it so it fits really well; you can fold the bottom bit up. It's going to be a tight fit, but you can do that. That might look a bit better.... Only if you're a very good cutter. Yes?
04. P1: Can we cut out the name and the date?
05. T: Yes, you can cut out the name and the date. We know it's in your book.
In this extract, two pupils (02, 04) made specific suggestions which the teacher accepted, positively evaluated, and shared with the class as a whole by echoing, expanding and qualifying their contributions. She also implied (03) that Logan had anticipated her own line of thinking; whether that was the case or not, there is evidence here of explicit intersubjectivity - pupils and teacher exchanging roles of speaker and listener - and verbally co-constructing understanding within the dimension of instructional task performance. The teacher made consistent efforts to encourage a positive social and working environment by explicitly praising pupils’ efforts; a little later in the same lesson, the following exchange occurred:

# 4  
01. T: (to class) ... Just trim...Nina. Hold yours up please. Everybody look at Nina’s piece of paper. She's cut it out beautifully. Turn it round so the others can see>  
02. PI: (sotto voce) What a stupid xxx>  
03: T: Now that's going to fit perfectly. Not going to stick out of the edges of the book. xxx That's going to go in here really well. Look at that, Mark  
04: Ma: Yeah - that's what I'm doing, man>  
05: T: That's really beautiful>  
06: Ma: Yeah - I think that's just the best ....

The teacher’s purpose in this exchange was to provide an example of one pupil’s work as a model for others to emulate, and this intention was picked up by Mark’s interjection (04). The teacher’s next remark (05) - a continuation of her previous statement - was not intended to refer to Mark, who continued to talk quietly (06). It is not possible to tell whether Mark’s comments were interpsychological speech addressed to the teacher or another pupil, or externalised private speech acts, with a view to self-regulation - or indeed a shift from one to the other. It is not easy, either, to interpret the other pupil’s whispered utterance (02). It might have been addressed to another pupil as a subversive comment on the teacher’s appraisal; alternatively, it might have been the externalisation of private speech referring either to what the teacher said, or to something completely different - such as his own work. It would appear anyway that the teacher did not hear him and - except possibly for those nearest to him- the discourse was not disrupted by the boy’s remark. What the incident does indicate is the way that the teacher’s dialogue with the class was being internalised by the pupils actively working through language to create their own meaning.
The pupils' suggestions for instructional tasks were, however, not always accepted. In the following extract taken from the first week of term, the pupils were completing the section about hobbies in their curricula vitae. The level of class noise had been rising for some time, and the exchange started with a warning to the class from the teacher that she was going to add some names to the blackboard list for assertive discipline:

# 5
01. T: I'm now ready to put names up on the AD board...
02. Ge: (sotto voce, to Na) She's looking at us (raising his voice) Ms Wilkins, can I, er, put page 4 and 5, can I put them on the same page cos I've like only used up that much of a page for>
03. T: I do want separate pages because you will add to them as time goes on, and if you put them together now, you'll run out of room later
04. Ge: (quietly) Hmm. OK (louder) Thanks.

Gene had been talking and laughing with a group of boys, and his first comment (02) implies his appreciation that he and his neighbour were in some peril. His request to the teacher may have been intended to deflect sanction by asking a task-related question. It is noteworthy that the teacher considered it appropriate to give an elaborate reason for declining (03) Gene's proposal. Also important is the way the rejection was received. In three short speech acts (04), Gene considered the decision, accepted it, and thanked the teacher, shifting from thinking aloud to speech on the intersychologpical plane. This suggests an assumption of his right to evaluate, not merely obey, the teacher's response - and is further evidence of how understanding might be internalised and appropriated through dialogue, not merely transmitted from expert to learner.

2.3 The cognitive dimension

As with learning in the other dimensions, the favoured approach to the presentation of conceptual knowledge was that of a dialogue between teacher and the class. The following extract occurred towards the end of the first week and shows the teacher encouraging the class to co-construct a particular social convention by engaging in a dialogue with her. She began this by referring to a newsletter, which all first-year pupils in the school had been asked to take home.
01. T: Right. Pens down. Eyes open. ... You've been given two newsletters today to take home. One of them is about 'Fair Play Agreements'. OK? Who can tell me what is meant by 'fair play'? What are we talking about when we say 'fair play'? ... Nina
02. Ni: Working well with other people
03. T: Good>
04. P1: Don't get angry with the other team>
05. P2: If the other team scores a try, you don't say "Oh, what a dumb try" or something
06. T: Good
07. P3: xxx
08. T: Definitely. Right
09. P4: Don't argue with the ref
10. T: Right xxx
11. P5: xxx
12. T: Yes, exactly. And it applies to living, not just playing games and sports. It's for general living. And this is an agreement between you and between me and the school. OK. So let's have a look. At the top, there on the left hand side. For the player - that's you. OK. You agree to (reads aloud) always play by the rules; never argue with an official. Fair play and ...

After a transaction boundary marker (01 - 'Right'), the teacher asserted the rules of intersubjectivity (her speaker's privilege and the pupils' commitment to listen) by two conventional directives, and then introduced the topic of fair play. Her subsequent use of "OK?" was probably intended to signal that she expected the class by now to have tuned in to the topic. She then sought to elicit responses from the class in general by two formulations of the same question (01). As there was no immediate response, she nominated a particular pupil: by now, she had gauged who would be likely to be able to provide a suitable answer. Nina's response (02) was positively evaluated, and this prompted other members of the class to contribute their ideas, each of which also received positive, and unqualified, feedback. In this accumulating climate of cooperation, the teacher was able to lead the class from their concrete examples of fair play on the sports field to her own, wider concept of the notion. It is interesting to note that she stopped at this point, assuming that - having, so to speak, led the horses to water - she presumed that they would then drink, and sought no further confirmation, or development, from them at this stage of the extended concept. An opportunity for a fuller co-construction of knowledge within the cognitive dimension was thus missed.

The inter-relatedness of the dimensions of learning is clearly shown in this extract. The teacher's intention (12) was to extend the pupils' notion of fair play beyond its
application to sport: she sought to inculcate the values of wider society, and their relevance to school life. This may be seen as an example of socialisation through language. At the same time, she was socialising the class in language: specifically by applying a code of pragmatic markers for attention-getting, elicitation, turn-taking, etc. The verbal markers of evaluation ("Good", "Right", "Definitely", etc) were reinforced by nonverbal signals, such as smiles and nods; turn switches were indicated by pausing, eye-contact, and intonational cues. In this way, she was controlling the discourse, allowing it to flow and even overlap (for example, 03 - 05) in an orderly manner. Although this was implicit, the pupils were appropriating the code at differential rates and levels of sophistication. They were assisted in doing so, of course, because other teachers in this school and in their previous schools used many of these conventions; those that were part of Ms Wilkins' idiolect were easily added to the pupils' store. Typically, too, the sequence above concluded with elements of task performance:

# 6b
12. T: ... Fair play and sportsmanship start at home. So at the top on the left hand side - whose name is going to go there? Yes - ?
13. P6: Ours?
14. T: Yes. Good man. And on the right-hand side, whose name is going to go there?
15. P7: Parents.
16. T. Exactly. Good. And what about the signatures on the bottom. On this side, on the left, will be - ?
17. P8: Ours
18. T: Good. On the right will be - ?
19. P: Parents
20. T: Great. And then the date. And that is part of your homework
21. P9: xxx
22. P10: xxx
23. T: So today. You need to get that pasted in, if you haven't already done so.
   Then, you're working on c.v., your island story, and then that. In that order. Could be xxx. OK? (Ps get on task).

Here, the teacher might merely have given a set of instructions; instead, she continued to encourage the class actively to participate in the discourse - albeit with minimal verbal contributions (13,15,17,19). In this way, she involved pupils in the explicit clarification of the task requirements and - on the assumption that the interlocutors represented the class as a whole - ensured that they had appropriated the task requirements. Her final utterance (23) related this task to others the pupils had to do, and thereby was initiating the class into patterns of self time-management, which she
saw as a very important learning goal for these pupils as preparation for entry to high school in two years' time. The pupils responded to the final boundary marker - “OK?” (23) by getting down to work.

On the first morning of the fourth week, a new unit of work was started in the area of Language Arts. Ms Wilkins wished to introduce the concept of a ‘biopoem’, by which she appeared to mean two different things: a poem about life (31 below), or a verbal self-portrait (34 below). Rather than tell the pupils what she meant, she elicited their ideas:

The clue she mentioned (01) referred to an immediately previous conversation about the biotechnology room: this hint led the class down a natural history path from which she was not immediately able to lead them to the notion of ‘bio’ implying life in general. Although she verbally drew attention (05) to the by-now well-established classroom rule of raising hands before speaking, she actually struck a balance between the need for order and the spontaneous generation of ideas - and the attempt to co-construct
knowledge - by as many pupils as possible. Thus she provided positive feedback to all suggestions, making a few probing moves (07, 13, 17) to develop the ideas she felt most relevant. Evidently, in the flow of the discourse, she slightly misheard Gene's contribution (14 and 16) despite its repetition, possibly because she wished to steer the dialogue in the direction of the key word 'life'. Having involved many of the pupils, focussed their attention on the key issue (24), and perhaps aroused their interest, she then moved on to the next step:

# 7b
24. T: ...what then is a biopoem? (adds POEM to BIO on board) What's a biopoem? Cos we all know what a poem is
25. Ps: Oh xxx>
26. P7: xxx a poem about yourself
28. T: Yes. Does it have to be about yourself? Does it have to be about you?
29. Ps: No, no>
30. P: It could be about someone>
31. T: It could be about anybody, or anything actually. Cos we can give life to other things...

Once again, rather than tell the pupils, the teacher sought to elicit their ideas by open questions (24) and by rhetorical repetition of a leading question (28) to get the answer she wanted. Then, wishing to broaden the concept beyond the level she had brought them to, she gave an illustration of what she meant:

# 7c
31. T: ...Cos we can give life to other things. One of the best biopoems I have ever read was written by a child in this room about, 1995 - three years ago. And we had done a study on New Zealand disasters, and she did hers on... (volume and pitch of voice drops) the Tangiwai disaster - the great train crash (almost whispering).
32. Ps: Oh! (also quietly)>
33. P1: Cool!>
34. T: She wrote her biopoem, using a mountain - the life that came from a mountain. OK (sharp raising of volume, and pitch to a higher key) ... So, essentially we're looking... (turns over wallchart on whiteboard)... a biopoem... isn't necessarily a self-portrait - it normally is, OK. It doesn't have to be. It could be about the mountains - it could be about the weather, it could be about somebody (voice raised) else who you're going to do a biopoem on. OK? So it's a self portrait in words. You're going to write a biopoem about a person....

She started a narrative (31) to make her point, and it is significant that the anecdote related to a previous pupil in Room 7, implying that its present occupants could emulate such excellent work. The dramatic effect of the story was heightened both by setting the poem in the context of a well-known railway disaster and by the teacher's voice control. That this was effective is indicated by the pupils' breathless backchannelling. The sharp
raising of the voice at the end of the anecdote and using “OK” as a boundary marker (34) clearly indicated a shift of topic. She moved from narrative to concept clarification by providing examples, and reinforced the point repeating structural elements. At the same time, she referred the class to the wallchart, on which were written the specific task requirements; the teacher thereby sought to convey understanding by both visual and auditory means. She then mentioned that there was a specific task involved: the first time that one had been specified, although it probably did not come as a surprise to the class. She summarised the concept in a terse, four-word definition (34): “a self-portrait in words”.

Given that this definition differed from the one she had previously suggested, at this point the pupils might have been somewhat confused, and the teacher went on to be more specific:

# 7d
34. T: ...You're going to write a biopoem about a person - you're going to start in a moment - about a character you know - some people already knew this character, but I introduced this character to everybody - something I do most days for about ten minutes. Anybody like to tell me who it might be? ... Some of you know? Yes?

At first, despite several increasingly heavy hints, the suggestions were quite random: they included Ms Wilkins, her son, her dog, myself, an imaginary friend, members of the class, a shadow, and water. Finally, one of the pupils guessed that it was the protagonist of the story the teacher has been reading to the (avidly interested) class every afternoon - Dahl's *Danny, The Hero of the World*. The teacher's pedagogic aim had become clear: she wished to extend the pupil's understanding of the story into an imaginative, but structured, piece of written work, the conceptual basis of which was new to the pupils. She continued for several more minutes to reactivate the pupils' knowledge of certain of Danny's characteristics which might be included in their biopoems. The lesson ended shortly afterwards.

This process might appear lengthy: in fact, the entire dialogue from the teacher writing BIO on the board to the final identification of Danny lasted only seven minutes or so. It might also appear imprecise, with unspecific outcomes; conceptual development might
have been more effective - as well as more rapid - if the teacher had stated the definition of a biopoem - 'a (self) portrait in words', shown the class the instruction on the wallchart, and told them to write a biopoem about *Danny, The Hero of the World* - and perhaps given a formal concept check afterwards. It is, however, irrelevant to consider whether other strategies might have been more appropriate. The point is that a microgenetic analysis of this episode - and the others above - shows how the teacher used language as an interpsychological tool in an attempt to co-construct understanding with her class. This 'biopoem' episode can be viewed as an attempt by the teacher to guide the learning of the class through an interpsychological dialogue, which incorporates some essential elements of a shared zone of proximal development. The implications of this notion will be commented upon in Part 3 of this chapter.
3. Pupil - pupil interaction

The above extracts showed the teacher and the class working towards mutual understanding in the three overlapping dimensions of classroom learning through interpsychological dialogue. In this dialogue, the teacher assumed one part in a dyadic relationship, and the class - sometimes represented by individuals - the other. Not only were the members of the class working - albeit at different rates - towards understanding, they were also forming relationships with the teacher, thereby creating the sociocultural framework within which meaningful learning activity could be carried out.

The following account illustrates how this sociocultural climate was further developed by interpsychological dialogue among the pupils, and how they co-constructed learning within the three dimensions. It will show how the pupils worked with language among themselves (interpsychologically) and within themselves (intrapsychologically).

A fully adequate microgenetic analysis of the early language-cultural development among the pupils in Room 10 is constrained by a number of practical difficulties. In the first place, the researcher was present for an hour or so a day, and these may not have been the most significant times. Secondly, it was not possible to use an individual lapel- microphone until formal consent had been obtained from the pupils and their parents; however, within two weeks all the pupils had consented (except for one girl, who later agreed to participate). Thirdly, the pupils were asked to wear the microphone on a random basis - sometimes pupils volunteered their services (offers which were readily accepted) and this may have distorted the nature of the data obtained; it also took time for some pupils to adjust to the presence in the class of the microphone, as well as the researcher. Finally, ambient noise often made the speech of individual pupils inaudible, which was not usually a problem as regards the teacher's speech. Elsewhere, talk among the pupils was just unintelligible: as Mercer (1995: 70) says, "speakers are only as explicit as they feel necessary" and implications shared by partners in a dialogue are often opaque to the outsider. This applies a fortiori to externalised private speech of individuals, where they were thinking aloud.
Despite these constraints, some useful interactions among the pupils were obtained, and the dialogues included stretches not only of interpsychological language use but also of some intrapsychological speech. The use of language both intra- and inter-psychologically - and the frequent transition between the two uses - will be discussed below in terms of the same categories as those used above to illustrate the teacher's use of language.

3.1 The interactional dimension

On the first morning, Ms Wilkins allowed the pupils to decide where to sit (other teachers organised seating differently) and all the pupils chose to sit beside same-sex peers, and most next to friends from previous schools. Much of the talk between them involved social interaction. Sometimes this was a scheduled element of the lesson, as for example on the first day when the teacher invited the pupils to exchange information about themselves in the ice-breaking questionnaire activity. At other times, the talk was undirected and spontaneous: The following exchange occurred on the third day of school between two boys - Kenneth and Calum - who had come from different schools, and had no friends in the room from their own previous school:

| #  | 01. Ke: I don't take the bus       |
|    | 02. Ca: Why?                      |
|    | 03. Ke: I did. I used to take the bus to school - to my old school. But then it ... |
|    | oh, then it went out. They stopped using it; then I went in the car. I also don't really like buses, cos sometimes they take ages to get to destinations. |
|    | Biking to school - I can get here in... I can get to my place in - from Hamilton Lake all the way to Rosegarden all the way in, er, about 25 minutes on my bike |
|    | 04. Ca: But you ride fast, don't you |
|    | 05. Ke: Oh no - some bits I have to walk with my bike. I have to walk across the bridge with my bike |
|    | 06. Ca: You can ride?             |
|    | 07. Ke: Yeah, but my Mum doesn't want me to ride across the bridge. Mum gets really pissed off. She gets really angry if she finds out. |

This conversation occurred while they were working on aspects of their curriculum vitae, and followed earlier exchanges about the number of siblings, where their parents worked, and how the boys earned pocket money. In this way, not only was personal information shared, but also social bonding started to occur. This might be seen as an example of cumulative talk, where Calum's questions (02, 04, 06) served not only to acknowledge Kenneth's points, but also perhaps encouraged him to elaborate. While this exchange enabled Kenneth to transmit (interesting) information, it cannot be said that they were
working with language in a collaborative way to co-construct conceptual understanding. The spontaneous nature of Kenneth's interpsychological speech - indicated by lack of cohesion, while still retaining topical coherence - may be seen as a smooth transition from intrapsychological speech. Such social interaction was often interspersed with, or arose from, task-related talk.

Another example occurred later the same week among a group of boys sitting together:

# 9
01. Na: Where's my, where's my pen? Where's my scissors?
02. Ma: They're away, your pen>
03. Ge: Your what?>
04. Na: Where's my scissors? (laughs, as he finds them in his desk)
05. Ge: That's what I do sometimes. Once I had my pencil in my hair, and I was going - 'Ah! Where's my pencil'. I was looking around and I could just, I took, I went, I just took it out - Ah, there it is!' - I almost had a fight with him.
06. Wa: Who?
07. Ge: This fellow... (to self, reading from the worksheet) Home study .... (quieter) Home study (then reads the rubric silently).

Nathan's rapid delivery of questions (01, 04) might well have been externalised private speech, perhaps not intended to elicit any response. Alternatively, the questions might have been addressed to his classmates, but perhaps Nathan became so busy looking for pen and scissors that he did not hear Mark's suggestion (02) or Gene's request (03) for repetition. The questions might indeed have begun as private speech and become transformed into social speech. In any event, his classmates assumed that he was talking to them, and they tried to help him. The exchange stimulated Gene to recount an anecdote (05). Although perhaps trivial in itself, the story displays evidence of the way that bonding was beginning to occur among these classmates through cumulative talk. Gene apparently wished to close the exchange after his brief response to Walt's enquiry (06). His first reference to Home Study (07) may be seen as an explicit notice, and its softer repetition may indicate a shift from external to private speech, as he started to refocus his attention on the task at hand.

Sometimes, however, social interaction had a less positive outcome. The following extract, which took place a few minutes later, is the fuller context of that illustrated above at #5 on page 99:
This extract began with Gene externalising his thought processes as he worked through the criteria for inclusion on his c.v. Although he then appealed to the others to be quiet, he himself contributed to the ensuing off-task hubbub. His final utterance (01) appears to be addressed to the others, but again may have been private speech. The exchange stimulated by Nathan’s question (02) might have initiated some collaborative discussion about their work experiences, but soon degenerated into disputational talk, marked by assertion and counter-assertion (03 - 05). The point of Gene’s subsequent remarks (05) is unclear, but the boys - illustrating Mercer’s (1995: 70) point about explicit economy - were evidently enjoying some private joke. Stimulated perhaps by Arthur’s attempt (06) to re-focus attention to the task, Gene then returned to the work in hand (07) but continued talking aloud, both to Arthur and to himself. The earlier laughter from this group augmented the general increase in class noise and stimulated Ms Wilkins’ cautionary remark (08). Gene’s question (09) to her might possibly have been a ploy to suggest to the teacher that their interaction had been task-related, and therefore permissible. Rather than answer Nathan’s reiterated question (12) about what the teacher
had said, Gene preferred to end the interaction, possibly for fear of sanction. Nathan persisted and when Gene refused to cooperate he continued the interaction by physical means (15). This gave rise to a verbal dispute (16 - 18), which in turn led to a reprimand.

The above extracts reveal how pupils in Room 10 used interaction with a social agenda - to establish identities and build relationships. On occasion, such interaction led to interpersonal disputes which may have been dysfunctional to the learning objectives of the curriculum. Nevertheless, interactions among the pupils contributed to the emerging sociocultural climate: mutual interests were discussed, information and ideas exchanged, and friendships - and perhaps some antagonism - emerged through the interpsychological speech.

3.2 The instructional task dimension

At the start of the third week, the class had been set the task of writing a letter to a new friend they had met on holiday. The following conversation occurred between two girls - Melanie and Jill - who had been classmates at the same primary school, and were sitting with four new classmates: two girls, who tuned into the conversation, and two boys who did not. It may serve to illustrate the merging of learning in the social and instructional task dimensions, and also the shift between private and external speech:

# 11a
01. Me: (to herself, about the task) Hey, I don’t know who I met in the holidays. All I did was break down in Wairoa .... Hey - erm, Jill. All I did was break down in Wairoa, then we went to Mahia ... you know, camping. Oh, I know who I met - I met Karen
02. Ji: Who?
03. Me: Not that Karen, another Karen who lives in Napier
04. Ji: But you didn’t go to Napier>
05. Me: I know, but she was camping in Wairoa>
06. Ji: You say Wairoa>
07. Me: Er in Wair, ah>
08. Ji: (firmly) You should say Wairooa. It’s Wairooa>
09. Me: And Mahia. She was camping in Mahia. Mahia... Oh, she wasn’t booked in the same camping ground, but I’d better write that ... (to herself, as she starts to write the letter) Room 7...

This exchange began with some intrapsychological speech, arising from the task requirements: inner speech may become externalised into audible private speech when the individual is faced with some challenging problem, and is working with the language on his/her own. In this case, the low key and volume of Melanie’s first utterance
beginning with ‘Hey’ (01) indicates that the speech was probably inner-directed as she talked herself through the issue. Her second ‘Hey’ was explicitly addressed to Jill, and the structural and lexical repetition of the phrase may be seen to mark the transition from private to social speech. It is likely that this process of thinking aloud to an audience allowed Melanie to activate her memory and resolve the problem. (It is, of course, impossible to say whether she would have arrived - more or less quickly? - at this point if she had remained silent.) Jill seemed willing to participate fully in the conversation, and indicated her attention firstly by seeking clarification (02) of who Melanie was referring to; Melanie’s comment (03) was intended to distinguish the girl she met from a classmate with the same name. Jill then pointed out (04) an apparent inconsistency in Melanie’s account, and interrupted the latter’s explanation (05), by correcting Melanie’s pronunciation of a Maori place name (06, 08). Being herself part Maori, Jill sought perhaps to act as a more able peer, and one may interpret this as an attempt by Jill to promote Melanie’s knowledge of the language, or maybe as just showing off. Perhaps because of Jill’s assertive tone (08), Melanie sidestepped the correction, preferring instead to refer to a different, perhaps more precise, location. She closed the interaction, by shifting from inter- to intrapsychological speech though still externalising her thinking about the task requirements. The exchange continued:

# 11b
09. Me: ... (to herself, as she starts to write the letter) Room 7
10. Ji: Don’t you put the date first?
11. Me: No you don’t! You put>
12. Ji: Yes you do! You>
13. Me: Rosegarden Intermediate, Reardon Road
14. Ni: I’ve just asked her (i.e. Ms Wilkins). We gotta put the date and then xxx>
15. Me: Ah, OK. I’m gonna put the letter, ... writing a letter to a friend ... (to herself) OK, erm 17 February ... writing a letter... I don’t know what I’m going to write (more loudly) I don’t know what I’m going to write! I don’t know where Karen lives - I know, all I know is she lives in Napier, but I don’t know where.
16. Ni: I wouldn’t want to write about somebody ...
17. Me: I .. er, she er, but the Karen that I met ... she’s annoying.
18. Ni: Is she?
19. Me: Yes, she follows you around all the time. Not you (to Karen in class) Another Karen (laughs). She follows ... and she says that her name, she made up, she made up a name so that, you know erm... she’s in xxx I think, and she, and she made erd up a name to me and I didn’t know her real name ... But then somebody told me her real name. (to herself) A letter to a friend. She’s not really a friend, but who cares. It’s all I can think of. ... Ah - Oh ...
Tuned in to this private speech Jill - again - sought to correct her (10). This led to a brief disputational altercation of assertion and counter-assertion (11 - 13) about the layout of the letter. This was resolved (14) by a third girl, Nina, who had previously sought the teacher's instruction in the matter. Melanie briefly but explicitly accepted this ruling (15), and then reverted to private speech. It may be interesting to note that the pattern of speech here (15) does not manifest the syntactical and phonetic agglutination suggested by Vygotsky (1934:307) as indicative of inner speech. This may be because Melanie actually intended her speech to be heard by her classmates; alternatively, the speech pattern may have been influenced by self-consciousness about the lapel microphone she was wearing. In any event, both pitch and volume rose sharply at the repetition of 'I don't know' (15) and by the end of her utterance she had turned to her neighbours and was addressing them. Nina took up the topic, and the following exchange caught the attention of Karen, the namesake of the 'new friend', who was seated nearby. Melanie addressed a comment to her and went on to provide further details to a now-attentive audience of four girls before once again reverting to task-focussed private speech. This extract clearly shows the shifting of speech between instructional task and social interaction dimensions.

The above extract also illustrates the interweaving of private and social speech, as does the following example, when the teacher instructed the class to complete a handwriting task:

#12
01. T: (to class) Right. Finish the line you are on
02. Ma: (to self) Finish the line th, I'm on. Finish the line that I'm on
03. P: Do we have to do this bottom thing?
04. Ma: Which one?
05. P: xxxx
06. Ma: (does not respond, instead whispers to self) Finish the line I'm on
07. P: Have you finished it?
08. Ma: Yeah - when you're up, you're up where I am, you just finished it.

Mark repeated to himself (02) the general instruction given by the teacher. In doing so, he modified the syntax by changing the pronoun so that the general directive could relate to himself, and later repeated the modified instruction to himself (06) as he performed the task. It can be seen that this was an example not merely of parroting, but of ventriloquating the instruction; it may be said that Mark's understanding was facilitated by working with the language: syntactically personalising the instruction in his private
speech. While he was doing this, a neighbour asked him (03, 05) about the task requirements. Mark gave scant attention to this request, concentrating instead on finishing the task in hand. His response to his neighbour’s further enquiry (07) marks a transition from private to social speech and further confirmation, this time interpsychological, of his understanding of the teacher’s instruction. Of course, inner speech was not always present in interactions as may be seen in the following brief exchange:

# 13
01. Pa: Do you have to colour it in?
02. Ti: Are you allowed to do a border?
03. Ca: Um yeah
04. Ti: Um are you?
05. Ca: Yeah
06. Pa: I've done that.

In this case, the cumulative talk among the pupils enabled them to reach a consensus about the task requirements without needing to refer to the teacher. This was not always the case, as may be seen a little later in the same lesson when the pupils were required to cut out words from the worksheet, and paste them in the right place on a picture of pond life:

# 14
01. Na: What do you do? What do you>
02. Ge: You're supposed>
03. Na: What do>
04. Ge: .. to cut out the words
05. Na: What?
06. Ge: Cut out the words
07. Na: Are you supposed to cut out the words?
08. Ge: Yeah
09. Na: (loudly, to T) What are you supposed to cut out - just the words?
10. T: Yeah, the words, and stick them xxx

In this case, it seems that Nathan was so impatient to repeat his question that he didn't at first heed Gene’s advice; here, as elsewhere (for example, #9 on page 108 above) he flouted the rules of intersubjectivity in his interpersonal behaviour with peers. Even when he received and checked the information (07), he still sought a ruling from the teacher. This brief exchange indicates that some pupils were not always ready to accept help from their classmates - even when apparently sought. On some occasions, the pupils not merely disregarded advice given by peers but argued about what had to be done, especially where peer intervention was neither sought nor welcomed. An example of such
disputational talk occurred when a girl, Gail, insisted that she had done what was expected of her.

1. Ma: ... You didn’t, you haven’t even finished it; you only got to do half of it
2. Ga: No - I’ve done all of it!
3. Ma: (laughs brusquely) What! You haven’t done all of it! Show me it. See! Look at that one!
4. Ga: What one?
5. Ma: That one
6. Ga: That one’s number 3
7. Ma: Yeah exactly - then the question xxx
8. Ga: Oh I don’t want too>
9. Ma: You’ve done no more than one question xxx>
10. Ga: Didn’t! I’ve done all of them! See!
11. Ma: You’ve done just a little xxx (mocking?)
12. Ga: Shut up, you xxx
13. Ma: You’re swearing, Gail! (to other Ps) She’s swearing. ...

In this case Ms Wilkins, having previously identified Gail as a pupil with some learning difficulties, had given her a lighter workload than her fellows - a matter which Mark would not have known, at least at this stage of the school year. Gail rejected his persistent assumption of greater authority, knowledge or expertise, and the exchange shows clear indications of disputational talk, with assertion (01, 09) challenge (03, 11) and counter-assertion (02, 10). In the middle of the exchange (04 - 07) a window of opportunity was opened for collaborative talk, but the antagonism generated by the earlier utterances increased until Gail reacted to Mark’s mockery (11) by swearing at him (12) - a matter which Mark broadcast to their neighbours (13). As shown before, it can be seen that dialogue between pupils was not always conducive either to the achievement of learning tasks or to harmonious social relationships.

For the first few weeks, the learning situation in Room 10 reflected to some extent the finding in the British ORACLE project that "while children were often placed in small groups around tables (the usual practice in British primary schools) they worked almost entirely as individuals" (Edwards & Mercer 1987: 25 - emphasis in original). In most of the above interactions, pupils used language to clarify the requirements of tasks which they were usually expected to complete individually. In the fourth week of the term, however, Ms Wilkins initiated tasks, which required pupils to work collaboratively with language in order to complete them. The first of these - where pupils worked in pairs to practise spelling - was very basic in terms of linguistic interaction, task requirements and
cognitive development. One pupil read aloud words one by one from a list, and the other
spelt each word aloud; in the event of an error, the listening pupil had to write the word
in his spelling book; after a few minutes the pupils exchanged roles. The following is an
extract from the interaction between Calum and Logan.

# 16a
01. Ca: B I xxx C L E
02. Lo: Say that again sorry
03. Ca: B I K
04. Lo: C!
05. Ca What? Oh, yeah - it's what I said before isn't it?>
06. Lo: No>
07. Ca: B, B I C R L, C L E
08. Lo: No. Write that down. Bird
10. Lo: Bird!
11. Ca: Oh, B I A
12. Lo: No!
13. Ca: B I R D
14. Lo: Yes!!...

During this task Glynn's (1985) four criteria for responsive social contexts may be seen in
embryonic form. (These were briefly stated on page 91, and will be more fully discussed
in Chapter Five, page 143ff.) Firstly, the task involved initiative by the learner, or in this
case, a pair of learners - as they worked through the task procedures without needing to
refer to the teacher. Secondly, the activity involved a 'more skilled performer' - but only in
sense that one had more knowledge (the list of words) rather than more skill. Thirdly,
there was a quite considerable measure of reciprocity and mutual influence between the
speakers within the confines of the task. This in turn created the conditions for the fourth
criterion - that of feedback - to occur, as pupils had to respond (verbally or non-verbally)
to the efforts of their partner. Thus, individually and jointly, they took control of their
own learning for a reasonable period of time and it may be assumed that they found the
materials and the procedures reasonably motivating. It was (perhaps) remarkable that
these boys - and the rest of the class - kept on task for about fifteen minutes without any
intervention by the teacher. Also, as may be seen above, the boys negotiated elements of
the task performance: sometimes these were immediately and amicably agreed, and
sometimes they led to short-lived disputes, some of which provided scope for social
interaction and hence, it may be assumed, social bonding:
The task was simple and cognitively undemanding, so there was little scope for pupils to work more collaboratively with cumulative and exploratory talk. Elements of these may be found in exchanges within the cognitive dimension, to which attention will now be turned.

3.3 The cognitive dimension

This section illustrates and discusses examples of how pupils in Room 7 helped each other to clarify, co-construct and develop concepts - in short, where pupils were assisting each other's cognitive development, without recourse to the teacher. In some cases, conceptual understanding emerged as a result of social openings and in combination with interpersonal bonding, and it would perhaps be surprising if this were not the case. For example, the following interaction between three boys occurred on the fourth day of school:

# 17
01. Tr: (sotto voce to Ma) We're going swimming after this, eh?
02. Ma: Are we?
03. Tr: Yeah
04. Ma: I thought what we was doing was PE.
05. Tr: PE is swimming.
06. Ma: Cool!
07. Na: That's what I xxx. I didn't know that. I thought PE was sports [?]
     I know cos I haven't got my xxx kit, clothes. Is PE swimming gear [?]
08. Ma: I dunno. I should take...

Trevor's opening social remark (the tag 'eh' had a falling tone, and was not intended as a question) conveyed pleasurable anticipation, but was met with some incomprehension (02, 04). Acting as a more able peer, Trevor efficiently clarified the issue (05), and Mark responded with enthusiasm (06). They were overheard by Nathan, who also indicated (07) - despite some unintelligibility in the recording - that he shared Mark’s misunderstanding, and consequently had not brought his swimming costume. This interaction also shows indications of Glynn's (1985) four criteria - being an example of pupils sharing, and to some extent co-constructing, meaning. It also shows that although
the teacher had sought to explain the timetable details in the first days of the school year, and had reinforced this point earlier in the very same lesson that this exchange occurred, there was still conceptual confusion about the timetable among some of the pupils. This particular lack of understanding may have been due in part to information overload at the start of a new school, but it also indicates the inevitable gap between illocutionary intent and perlocutionary effect in classroom discourse - a gap which pupils sometimes attempted - with varying degrees of success - to close among themselves.

There were many occasions when pupils solicited help - perhaps limited, but nevertheless within the cognitive domain - from a classmate; the following is a simple example of the very many occasions when pupils helped each other's spelling in the course of another task:

# 18
01. Ge: How do you spell Pond Habitat?
02. Pa: H A B I T A T
03. Ge: H A B I T A T (to self, as he writes it down)

The verbalised repetition of the word in such exchanges was an almost invariable accompaniment to its being written down, and may be seen as evidence of private speech facilitating understanding. Of Glynn's criteria only the element of reciprocity was missing.

On other occasions, a pupil offered help without being asked - for example:

# 19
01. Ti: (to Ca, looking over his work) You haven't got the 'i' on xxx
02. Ca: What?
03. Ti: You haven't got the 'i' on xxx. The 'i' (shows mistake) There
04. Ca: Thank you.

This exchange is notable not only for Tilly's spontaneous offer of help (01) but also for the courteous way that Calum acknowledged her expertise (04). A little later in the same lesson, he sought her help:

# 20
01. Ca: Is that an 'i' in the middle of that, or ...?
02. Ti: Three xxxes. Drop the 'y'. Same as the xxx, see?
03. Ca: Drop the 'y'?
04. Ti: Drop the 'y' and make it an 'i'.
05. Ca: Drop the 'y' and ... ah!...Yep!

Rather than simply providing the answer, the girl (02) gave Calum the first part of the relevant spelling rule and - assuming he could work out the implication - an example.
(The actual examples given by Tilly are not audible, but they could be 'berries' and 'cherries'). In this exchange, too, the same three of Glynn's four criteria are met. There may too (02) be an attempt, presumably intuitive, at strategic scaffolding by Tilly, inasmuch as she provided a basic framework within which she supposed the boy might help himself. Calum indicated his lack of complete comprehension by echoing the part rule with a rising intonation (03). This time, Tilly responded by giving the complete rule; the boy started to repeat it when, suddenly it seems, the penny dropped - and it is possible to hypothesise that 'Ah' (05) was an intrapsychological signal of his understanding, and 'Yep!' an interpsychological announcement of the fact. On such foundations may peer-tutoring be built - although sometimes such assistance was not well received - as is shown in this brief exchange between Gerard and Nathan, altercations between whom have already been noted.

#21
01. Ge: Oh - You've left the 'p' off!...
02. Na: Get away!

The above interactions show some indications of pupils helping each other within the dimension of cognitive development. However, as noted above, Mercer (1995: 67) has stressed the need for working with information - not merely transmitting it - if understanding is to be truly co-constructed. This is also the point of Glynn's third criteria - reciprocity - which so far has been missing from the interactions illustrated above. The following extract is taken from a word-find task at the start of the fourth week of term, in which the pupils were encouraged to work together to find about forty 'food' words in a letter (which started Dear Dad, I've already arrived... = veal)

#22
01. Am: (finding a possible word) Fat. Could you eat fat?
02. Ni: Fat! (laughs) Ugh!>
03. Me: You can eat fat! >
04. Am: Well, you do eat fat
05. Ni: Ask her if it is one of them. Ms Wilkins, is fat one of them?
06. T: Fat? - no >
07. Ni: It's not one of them >
08. T: Well if you've found it xxx
09. Ni: OK - xxx

In this extract, the three girls were amicably working with the language to decide whether fat is a food. At first, Nina rejected the notion (02), but Melanie offered her opinion (03), which was supported by Amy (04), being "only as explicit as they feel necessary" (Mercer
1995: 70). Unable to reach agreement among themselves, they appealed to Ms Wilkins for a ruling (05). At first, the teacher informed them that it was not one of the words on her own list and (implicitly) therefore was not to be classified as a food. This understanding, which coincided with her own, was quickly adopted by Nina (07) who passed it to the others. As she was doing so, however, the teacher had second thoughts and implied (08) that fat might well be included in the girls’ list of food. Nina adopted this changed ruling (09) as readily as she had accepted the first, which may indicate the weight of the teacher’s authority, rather than rapid thinking on her own part. This extract suggests how the pupils’ working with the language influenced not only their own, but also the teacher’s conceptual framework. Shortly afterwards, the girls disagreed about another item:

# 22
01. Am: Hen
02. Ni: What?
03. Am: Hen
04. Ni: Hen? ... What?
05. Am: Hen. Hen
06. Ni: You don’t eat hens!
07. Me: (laughs) you eat chickens>
08. Ni: Yeah!
09. Am: (laughs) You-oo- weird! (merry laughter)
10. Me: (or Am?): xxx
11. Ni: What? ... Do you know that duck’s a type of food? You eat duck. It’s yum, - it’s like chicken
12. Me: (or Am?) Duck?
13. Ni: Duck’s like a, type of chicken... It’s real yum ... cos my nanna she comes from Holland and we have duck every time we go to her house
14. Me: You go to Holland?
15. Ni: No! She comes from Holland.
16. Me: Ah.. Ah....

Amy’s suggestion (01) of hen as an example of food gave rise to some amicable disputational talk followed by elements of cumulative talk (repetition and confirmation) as well as some elaboration. The reiteration of 'hen' (03, 05) ensured that Amy’s meaning was understood - and then flatly rejected - by Nina (06) and Melanie’s brief (but, for the purposes, apparently adequately elaborated) distinction between hens and chickens, which was reinforced by Nina (07). Amy considered the point and appeared to accept the distinction (09), possibly without fully understanding why. In the laughter that followed, one of the girls said something that led Nina (11) to classify duck, like chicken, as a food type. When (implicitly) challenged (12) on this conceptualisation, rather than appeal for a ruling from the teacher as she had done before, she repeated (13) elements of her
previous statement and elaborated on her own experience to substantiate her point and perhaps convince Nina. This led easily to Melanie’s social enquiry about Nina’s background and the exchange finished with Melanie appropriating a new piece of information about her classmate. The two extracts above show indications of a responsive social context for learning: the girls co-constructed meaning by working with the language - crossing the different dimensions of classroom learning. It also shows the way that interactive talk among pupils blurs the distinctions between the different dimensions of classroom learning.

The following week, the class worked on a unit on Road Safety; the preliminary task was to label parts of a bike and then colour the picture on the worksheet. There was no built-in information gap but the pupils were allowed to discuss their work with others. The following extract features a boy who was not a native speaker of English, but who had lived in New Zealand for three years and had attained considerable fluency in English:

#23a
01. Yo: Right. (to self, reading through the list of items) Seat, seat, handlebars, ... erm seat...>
02. T: (to class) Colour your bike, use pens>
03. Yo: (to self) Um...>
04. T: (to class) Colour the bike whatever colour you like.
05. PI: Can we colour the bike whatever colour we like?
06. T: (to PI) You may. It may be one>
07. Yo: (to self) Seat>
08. T: (to class) And the first two people who are finished>
09. P2: Yeah?
10. T: (to class) I’ve got an extra little job for those two, something if they wouldn’t mind helping me, to colour these in, with felts which I will provide, so that we can put them up in our cloak bay. OK?
11. Yo: (to self) xxx bell, wheel, axle. (whispering) Mudguard!

Throughout this extract, Yorin was studying the worksheet and muttering to himself (01, 03, 07, 11) presumably in an attempt to work at meaning by externalising his private speech. It might be thought that he was paying no attention to the teacher’s instructions to the class, but - as will be seen below (23) - he registered the import of her message at the same time as thinking about his present task. (In the background, there is an interesting example of ventriloquation, as a pupil modified the syntax and intonation of the teacher’s instruction in order to appropriate the meaning to himself.) The extract continued:
Stuck on an unknown word - mudguard - Yorin externalised his inner speech (11), presumably attempting to locate the meaning within his own mental lexicon, or to deconstruct its morphological elements. Failing to do so, he made an explicit request to his neighbour for assistance. Help was readily given, first by Arthur's verbal explanation (12) and then after cues for more help (13, 15) by pointing to the object in the picture (16). Eventually, with Arthur's help, the penny appeared to drop ('Oh' - 19) and the process of internalisation continued as Yorin repeated the word aloud while writing it. The use of 'OK' (19) may well signal that appropriation had finally taken place. Yorin continued to verbalise his thinking processes as he checked that he had completed the task.

The interaction between the two boys was evidently in the domain of cumulative talk, as it was marked by repetition, confirmation and some elaboration. It cannot easily be claimed that the talk was collaborative - working together with language to co-construct meaning reciprocally - because Yorin cannot be said to have contributed to Arthur's understanding; rather, the latter transmitted information to Yorin. There is, however, ample evidence of Glynn's other criteria - and of Yorin working intrapsychologically with language to construct meaning for himself.

This exchange was immediately followed by one with the teacher:
19. Yo: ...Ms Wilkins, finished!
20. T: Already?
21. Yo: Yep
22. T: Let's have a look. (T approaches) Are you a good cyclist too? ... (checks work)
   OK. Colour it in. Cut that off. Paste it in. See if it fits in. You might need >
23. Yo: Then can I colour one of them in? (indicating posters T is carrying)
24. T: Yes you may>
25. P: Cool>
26. T: Take your choice, and I'll give you these... Make sure they go back in the box.
27. Yo: OK
28. T: Thank you dear.

As elsewhere, there is a smooth interplay between social interaction - Ms Wilkins' enquire (22) as to his being a good cyclist - and task performance, when in the same move she checked and confirmed his work. Yorin's request (23) to do another task indicates not only that he had registered the previous instruction (10) but that he was an enthusiastic volunteer, which may have given rise to the teacher's endearment (28).

Work started one day was subsequently developed in various ways. For example, having cleared some terminological and (hence conceptual) issues about bicycles in the above task and others, on the following day the pupils were asked to prepare an imaginative autobiography of a bicycle. Once again, they were encouraged to share ideas with each other. The following exchange between neighbours, Trevor and Tilly, is another example of a responsive social context without reciprocity. It also clearly illustrates the shift between intrapsychological and interpsychological language use:

# 24
01. Tr: Erm ... (aloud, but initially at least addressed to self) I don't even know (crescendo) what my title's gonna be
02. Ti: Are you going to call it a name, or like you just gonna call it suspension bike or something like that?
03. Tr: No, I'm gonna give it a name, call it erm, call it ... Marko - that's my bike ...
   Marko! That's my heading. That's the bike's name - Marko. "There's only room for one of us in this town". That's my heading. Tss! (laughs)
04. Ti: (not paying attention to him, to another pupil) This is my mind xxx>
05. P: What's this?>
06. Ti: Aren't you gonna mind-map it? I am xxx>
07. Tr: (aloud) That's my heading! "There's only room for one bike in this town".
   (Then to self) That's me. "... in town" - what a suck heading! ... Nah, I'd better not... OK, erm. (to Ti) Why are you doing that?
08. Ti: It's a mind map - it's easier. Cos like you just write all the things down about, that you're thinking about, like...
09. Tr: I don't wanna xxx, (then to self) erm...
Trevor's private speech (01) increased in volume until it seems to have become social in intent; in any event, it stimulated Tilly to seek to guide her classmate's thinking through a question (02). Trevor responded (03) and started to focus his thought processes, verbalising a couple of ideas. It is not clear at what point this utterance moved from inter- to intrapsychological speech, but while he was talking Tilly turned her attention away and showed her developing mind-map to another pupil (04), inquiring if she too was going to use one (06). Trevor had meanwhile decided that his heading was unsatisfactory - still externalising his thought processes. His final decision to reject his original idea is marked by 'OK' (07) and he then turned his attention to Tilly - interrupting her conversation with the other girl - and inquired what she was doing. She told him (08) and started to explain why she found it useful, but he quickly switched off - possibly unable to grasp the conceptual usefulness of a mind-map. Tilly's interactions with her two classmates clearly show indications of exploratory talk - statements and suggestions offered for joint consideration. Tilly's attempt here is typical (see #19 and #20 on page 117 above, and pages 149 – 151 below) of her willingness to take a role as a peer tutor, and perhaps attempt to scaffold the learning of her peers. However, it does take two to tango, and Trevor was unwilling, explicitly at any rate, to acknowledge her help. While there is some evidence here that her intervention did stimulate his thinking, this may not always be the case: as Mercer (1995: 93) points out "working with a more knowledgeable and competent partner who dominates decision-making and insists on the use of their own problem-solving strategies may hinder rather than help the less able."
Part 3. Commentary

Review

These interactions illustrate the genesis and development of a culture of learning in Room 7. They reveal the ways in which relationships were forged between Ms Wilkins and her class, and among the pupils themselves, and how the discourse of learning was thereby initiated and generated. The context thus created may be considered a specific type of communicative situation. Therefore, if one takes a broad view of the “dialectic unity of learning and development” proposed by Newman and Holzman (1993), the learning context in Room 7 may be regarded in terms of a ZPD as an event. This chapter will conclude with a discussion of the extent to which the notion of a ZPD as a process can usefully be applied to the context of classroom learning which existed when the four NESB pupils arrived later in the year.

As explained on page 84 above, the process of a ZPD may be considered as follows:

a) a ‘problem’ (a learning task) is identified by expert and/or learner
b) the existing knowledge or ability of the learner is ascertained
c) the inability of the learner to do the task without assistance is assumed
d) the learner’s potential ability (‘buds of development’) to do the task is gauged
e) an intervention strategy is designed and applied by the expert
f) the learner’s awareness, knowledge, skills and experience are activated
g) the teacher’s treatment is tactically adjusted according to the learner’s progress
h) the learner manifests understanding of specific knowledge, understanding or skill
i) there is indication that the learner’s understanding extends beyond the specific task
j) the ZPD is narrowed and a new one opens.

Elements e) to h) will be considered fully in Chapter Five, when the notion of scaffolding will be examined with reference to NESB learners and their classroom peers. Chapter Six will consider the extent of learning in terms of appropriation. Therefore, the following discussion will focus on the first four elements above by examining the nature of the ‘problem solving tasks’ in a ZPD, the respective roles of expert and novice, the notion of a shared ZPD, and the identification of existing and potential ability.
Chapter Four: The Zone of Proximal Development

1. The nature of problem solving tasks in a ZPD

A ZPD is determined, as Vygotsky said (1956: 446), through problem solving activity under adult guidance or in collaboration with more able peers. The learning task within a ZPD must fulfil certain fundamental criteria of activity theory. Firstly, there must be a goal or purpose to motivate the activity, and that goal needs to be recognised as such by the respective participants. Secondly, the 'problem' posited by the task must not merely be beyond the learner's actual ability, but it must also be something that s/he can reach out for. Thirdly, that 'reaching out' is to be achieved through social interaction - primarily interpsychological speech. Fourthly, within the activity, the subordinate actions and operations which fulfil the task need to be differentially shared by the participants, divided according to their ability and their needs.

In literally dyadic situations, those with one expert and one novice, it may be possible to isolate particular tasks, which might promote pre-determined learning outcomes, and devise and apply specific instructional techniques. Where this is done, the relationship between instruction and development may be mapped, and causal links drawn. For example, in a number of the interactions among pupils exemplified above, a goal or other problem was identified by one of the parties which served to motivate the ensuing exchange. These goals were often very specific and limited, and may not have required much cognitive 'reaching out' on the part of the less able peer. However, it was also seen that a solution was often arrived at by interpsychological speech, sometimes with manifestations of private speech assisting the construction of meaning. The extent to which the labour was divided by pupils according to their abilities and needs varied; sometimes the task required merely the transfer of simple information, rather than co-constructed learning; at other times, the cumulative talk among pupils enabled the task to be jointly, if asymmetrically, achieved; there were some occasions when the pupils collaborated to arrive at collective understanding. At times, no collective understanding was reached. What may be said about all of the pupil-to-pupil interactions is that some, but not usually all, of the criteria for appropriate tasks applied, and that therefore - in this respect - some of the interactions may be considered as potential, rather than actually realised, zones of proximal development.
In dialogues involving a larger group of learners, such as those between Ms Wilkins and her class, it is more difficult to strand out these criteria. One reason for this is that there are synergetic relationships among all three of Richards and Hurley's (1988) dimensions of classroom learning: learning in one dimension is intended by the teacher to build upon skills and knowledge gained in another. There is also overlap within each dimension: for example, there is assumed to be a transfer of knowledge and skills within and between different sorts of instructional tasks. Because of the integrated nature of classroom learning, it may seem problematic to apply the notion of a ZPD to classroom learning. However, although integrated, classroom learning is not always seamless. In her long conversations with her class, Ms Wilkins had some very specific 'problems' in her mind and she shared these with her class. Examples of such issues included appropriate forms of social address, the correct formation of letters, and notions such as 'fair play' and (perhaps less clearly) a 'biopoem'. It is entirely reasonable to assume that she felt that her guidance was necessary for students to understand these points, and she sought to ascertain and activate her pupils’ existing knowledge and skills and then to extend their reach to a higher plane. This she did through intersubjective dialogue, the purpose being to guide the thinking processes of her learners by involving them, sometimes vicariously, as interlocutors. It is possible to suggest that she interacted with pupils according to their abilities and needs - for example, by eliciting ideas from all and providing positive feedback in most cases. But it is not easy to appreciate the extent to which, either during or as a result of the interaction, differential learning took place among all her pupils. Thus, once again, while some of the features of appropriate tasks might exist in the context of a dyadic teacher-class dialogue, the majority of the interactions illustrated above may be considered only as potential ZPDs, not ones that were fully realised.

2. The roles of expert and novice

Within a ZPD, "there are participants who exercise differential responsibility by virtue of differential expertise" (Cole 1985: 155). Unless this condition is fulfilled, the apprenticeship model which is at the core of Vygotsky's application of activity theory cannot be sustained. The fundamental roles of 'expert' and 'novice - the cornerstone of the ZPD as a specific type of communicative event - exist in the sociocultural
relationship between teacher and pupil. Unsurprisingly, the overall authority and expertise of Ms Wilkins was never challenged by her pupils in Room 7, at least not explicitly – although there were occasions when she encouraged, or permitted, students to comment on this authority.

Vygotsky (1956: 446) also made it clear that a more able peer could take the role of expert within a ZPD: learning might be co-constructed between fellow-learners, provided that differential expertise is mutually understood and acted upon. For this to happen, the culture of learning has to be conducive for learners with differential abilities to take on the respective roles of expert and novice. The climate of cooperative learning encouraged by the pupils co-constructing learning through dialogue with the teacher extended to the interactions among themselves when, on occasion, greater expertise of classroom peers was assumed, or ascribed. Sometimes this expertise was a matter of factual knowledge - as, for example, when a pupil asked another about the timetable, or for a spelling or meaning of a word. At other times it was a matter of procedural knowledge - for example, clarifying instructions or telling how to do a task properly. However, the assumption of greater expertise was sometimes challenged, and help that was proffered might be ignored or rejected. Thus, only in some circumstances might pedagogically-focussed interactions between pupils satisfy this pre-requisite of a ZPD: not only must one pupil be objectively more knowledgeable, or more able, but it is also necessary that this ability be recognised by both parties.

There is nothing within Vygotsky's theory that suggests that the role of expert needs to be restricted to an individual; two or more teachers or more able peers could do the guidance. This view is adopted by Newman & Holzman (1993) who argue, according to Dunn & Lantolf (1998), that it is precisely in the ZPD that children's creativity emerges as they undertake to imitate their collaborative partners, who may or may not be adults, and may entail entire groups of other individuals (Dunn & Lantolf 1998: 435 - emphasis added).

However, if a ZPD is to be distinguished from other forms of collaborative learning events, the expertise of several more able partners, and the consequent division of
labour among them, would need to be identified and recognised. This is often seen to occur in team-teaching situations, and when teacher-aides and student teachers operate in a classroom alongside the supervising teacher. Although not illustrated above, such occasions did occur in Room 7 and the work was divided appropriately between Ms Wilkins and other adults as quasi teachers. The few examples of collaborative learning among peers that were illustrated above did not show such delineation – although there was, again, potential for more than one expert in such interactions.

3. Shared ZPDs
The question that arises is whether there is scope for more than one learner in a ZPD. In the introduction to this chapter, the dyadic nature of dialogue was discussed in terms of parties rather than individuals. If there were validity to that point of view, a logical extension would be to consider the ZPD as a pedagogical event which need not be restricted to one-to-one encounters. Instead, it would comprise dyadic encounters between two parties, one of which is identified as ‘expert’ and the other as ‘novice’. This is most obviously the case where the teacher constitutes one party and the class the other engaging in the discourse of learning through interactive dialogue; one might equally well posit one or more peer experts with a group of lesser able partners.

Vygotsky himself conceived that such a collective or shared ZPD was - at least theoretically - possible:

The analysis of the zone of proximal development becomes not only a magnificent means for the prognosis of the intellectual development and the dynamics of relative success [of the child] in school, but also a fine means for the composition of classes ... the level of intellectual development of the child, his zone of proximal development, the ideal [mental] age of the class, and the relation between the ideal [mental] age of the class and the zone of proximal development...[form] the best means to solve the problem of the composition of classes (Vygotsky 1935: 49, cited by Van der Veer & Valsiner 1991: 366).

This statement that an analysis of the ZPD might serve as the basis for the formation of classes does indeed suggest that Vygotsky conceived of a shared ZPD, within which a the learning of a group might be guided. Such a view may be read into the following statement:
The teacher’s skill lies in matching professional knowledge of the developmental stages through which children pass, knowledge of the difficulties of various classroom activities, and an informed assessment of each child’s performance, abilities and readiness to proceed (Schools Council 1983: 118).

There may be nothing inherently illogical in the proposition to extend a ZPD to embrace more than an individual learner, but it may be impractical. Mercer, for example, argues that teachers normally have to plan and operate at the level of the class or group, and the idea of a group of learners with a shared ZPD seems to me to stretch the concept too far (Mercer 1994b: 104).

The most difficult practical problem of a ZPD shared among a group of learners lies in the identification of actual and potential ability, which is the initial step in the process of a ZPD.

4. The identification of existing and potential ability

While it may be relatively easy to identify an individual learner’s knowledge (or lack of it) in a specific area, it is more difficult actually to identify his or her ‘actual developmental level’ (Vygotsky 1956: 446) - a much broader issue. For example, when a well below-average pupil is recognised as having specified ‘learning difficulties’, it takes hours to collect and analyse the data in order to establish individual education plans for him or her. Moreover, logically speaking, the ‘expert’ cannot identify the existing ability of a ‘novice’ until the latter is engaged within the ZPD - for otherwise the assessment would be of pre-existing, rather than actual, skills. However, once both parties are working ‘inside’ the ZPD, it becomes impossible to strand out what Vygotsky (1978: 91) described as the “highly complex dynamic relations” between instruction and development, and development and learning. In practice, therefore, one cannot identify the existing ability of a child without some form of intervention, which itself may affect both the learner’s performance and the analyst’s interpretation of the learner’s existing ability. This implies that the expert has to make an assumption, rather than an analysis, of the learner’s actual developmental level - and this is in practice what frequently happens when the teacher makes judgment calls about any learner’s abilities and needs.
If this is so with a single learner, it is evidently more problematic to ascertain the existing knowledge and skills of a group of learners; and it is impractical to analyse the actual abilities of a classroom group in any great detail. However, for instruction to be effective (for example to achieve a specific curricular objective), some such identification is necessary; this was the point made by Mercer when referring to the need for teachers to plan and operate at the level of the class. One way that this was done in Room 7, as in any other classroom in New Zealand, was by administering pre-tests within any of the seven curricular areas. Armed with the results of such tests, Ms Wilkins planned units of work to narrow the gap between the actual independent problem solving ability as measured by these tests and the specified curricular objectives. This, however, is only a very approximate estimate of actual abilities - a rough-and-ready guide to action, and cannot be considered as an analysis. Moreover, there is a need to estimate not only the actual level of development, but also the ‘buds of development’. Once again, such analysis is difficult with regard to an individual, and it is even more difficult to do so for a diverse group of thirty or so learners. This problem is dealt with by an experienced teacher working heuristically over a sustained period of time with the class; at this point the notion of a ZPD must logically shift from a product-oriented event to dialectical process. Ms Wilkins learned to appreciate her learners’ actual and potential abilities; she tactically and strategically altered her guidance in the light of this growing understanding; she progressively encouraged the pupils to identify and promote their own (and each others’) higher level of potential development though interaction with herself and among themselves.

However, the circumstances of interactions among peers, even more so than those with the teacher, meant that the ‘buds of development’ of less able learners’ remained undiscovered. This was due to two factors. Firstly, help from peers was given spontaneously and tended to focus on a specific issue, rather than any understanding of a deeper systematic incompetence. Secondly, it would be unreasonable to expect peer tutors to have the expertise, even if they had the time, to conduct such an analysis. Their pedagogical naivete extended to the sort of assistance they were able to provide: intervention was spontaneously applied rather than strategically planned, and inexpertly and relatively ineffectively implemented. Thus, of the characteristics of the ZPD as a
process identified on pages 84 and 124, two – the fifth and the seventh (the strategic
design and tactical adjustment of pedagogy) - appear to be unfulfilled in these early
interactions among pupils. Over time, however, some of the more able pupils might
show evidence of developing pedagogical strategies and skills vis-a-vis- less able peers
- albeit at a less sophisticated level than that of their teacher.

Viewed as a process, then, a ZPD is not a static moment in time, but extends
dynamically through time. As Hood et al (1978: 157) point out, “psychological
processes constantly undergo change, and are actively maintained, as a function of
ever-changing socio-environmental circumstances”. However, the question arises as to
over what period of time a single ZPD might extend. In classroom circumstances, given
the multiplicity of objectives and tasks - and the range of existing and potential levels of
development - the zone might extend into weeks. Indeed, a shared ZPD might last the
entire relationship between teacher and class, since from a dialectic point of view the
ZPD is never closed: as soon as the gap between actual and potential development is
perceived to be bridged - or narrowed - the dialogue may be resumed at another level.
There is a danger, as Mercer (1994b: 104) pointed out, that the metaphor of such a
lengthy and shared ZPD might become so stretched as to make the construct
indistinguishable from other forms of classroom pedagogy. In the notion of a ZPD
shared between teacher and class, the essential element of a truly intersubjective
dialogue between expert and novice becomes lost; and the buds of development of
individual learners can be neither identified nor promoted.

Therefore, in the following chapter, which illuminates and analyses the initial learning
context of four NESB learners, the notion of a ZPD will be restricted to dyadic
interactions between one (or possibly two) more able peers and a single NESB learner.
The extent to which these interactions constitute fulfilled, rather than merely potential,
ZPDs will be considered in terms of scaffolding within responsive social contexts.
Chapter Five
Scaffolding in Responsive Social Contexts

Part 1. Introduction

Overview
The aim of this chapter is to consider the extent to which the metaphor of scaffolding (Bruner 1983; Mercer 1995) in responsive social contexts (Glynn 1985) can be applied to the context of NESB pupils in a mainstream classroom. It will do so by a discussion of the criteria relevant to these constructs, followed by an ethnographic analysis of dialogues between NESB learners and some of their classmates. The relevance of the two notions to the specific context of this study will be considered in the commentary which concludes the chapter.

The ethnograph in the previous chapter showed how a unique language culture was created in Room 7 during the first weeks of the school year, when no NESB students were present. This chapter will now consider how four NESB learners - novices to the language and culture of New Zealand schools - were assisted in Room 7. (A description of the four NESB learners actually in focus in this study is contained in Appendix H, together with transcripts of some of their recorded speech soon after arrival.)

Part 1 will begin with a brief review of why these learners need to be helped, and who might be expected to provide assistance in closing the gaps in their langacultural competence. There will then follow a discussion of scaffolding and responsive social contexts, and the extent to which insights from the alignment of these two models might be applied to peer-tutoring situations in Room 7. Scaffolding is a specific form of pedagogical assistance, and will be related to other forms of learning support in terms of four criteria (adapted from Maybin et al 1992 and Mercer 1995): that there is a clear intention to develop specific understanding, that the learner accomplishes the specific task with help, that the support is increased or withdrawn according to the learner's developing competence, and that the learner achieves greater independent competence. These criteria will be explored more fully on pages 141 -
146 and this will be followed by a detailed discussion of Glynn's (1985) responsive social contexts, the criteria for which were outlined in Chapter Four (page 91) and exemplified in the subsequent ethnograph. The extent of the fit between these two constructs will be summarised on pages 149 and 150.

Part 2 of the present chapter comprises a detailed ethnographic illustration and analysis of the assistance provided by their classroom peers. In this section, interactions involving each of the four learners in turn will be considered in terms of the extent to which their learning might have been scaffolded by classmates. Richards & Hurley's (1988) three dimensions of classroom learning - social interaction, instructional task and cognitive - will inform the discussion in each case, rather than (as in Chapter Four) provide the overall structure. As discussed in the commentary to the previous chapter, the construct of a ZPD cannot be fully applied to peer interactions. Therefore, this ethnograph will suggest that responsive social contexts, rather than ZPDs, are conducive to scaffolding. However, where appropriate, reference will be made to partial and embryonic ZPDs.

The chapter will conclude (Part 3) with a commentary about the peer assistance provided to these learners and will review the usefulness considering such help as scaffolding in responsive social contexts.

1. Support for NESB learners in the mainstream

That NESB learners need help to settle into their new schools was argued in Chapters Two and Three: without adequate support, these learners will find it difficult to come to terms with language cultural assumptions and practices of their new educational environment. The Ministry of Education (1994b: 15) recommends that "some new learners may need transition time within an intensive English language class as a first step". While the assumption here is that these learners need language tuition, a key function of such an induction would be to analyse the students' readiness for entry to the mainstream - in educational and cultural, as well as linguistic terms. In other words, to establish their 'buds of development' so that they could be assisted to make the transition to the mainstream. However, no primary school in Hamilton was able to do this in 1998
(Barnard and Lata Rauf 1999; Barnard in press), and no detailed analysis of these learners' actual or potential abilities was ever carried out at Rosegarden.

Even if such initial induction and analysis were provided, what is really needed is ongoing support once the new learners are in the mainstream classroom. This support should be able to deal with needs, difficulties and questions as they arise, and also provide feedback and/or specific learning opportunities - to identify and then close ZPDs as they arise. Indeed, the national curriculum document goes on to recommend that "the transition is best managed, however, by planned immersion experiences in mainstream classrooms" (Ministry of Education 1994b: 15 - emphasis added). The question arises as to who might be in the best position to undertake this necessary work.

1.1 Teaching staff
An obvious possibility would be ESOL-qualified teachers. Having attended training courses in EFL/ESL, such teachers would have had the opportunity to develop skills in analysing learners' needs, designing appropriate syllabuses, selecting and adapting published materials, applying methods and techniques in the classroom, and assessing language competence. Another very important skill they will probably have acquired from training or experience is the ability to listen to, and learn from, speakers whose language is not English. Such a background would put them in a key position to facilitate the lan- gacultural induction of NESB students before they enter the mainstream classroom. However the reality of the situation in New Zealand is that - even where these are available - they do not have time to spend working with individual pupils (Barnard in press). At Rosegarden, the ESOL teacher taught small groups of NESB pupils in withdrawal lessons, and her schedule did not permit her to provide more than about four hours a week of such tuition to each learner. Due to her timetable, she was unable to assist - or even observe - NESB learners in the mainstream and there were insufficient funds to pay for non-teaching assistants, working under her supervision, to carry out such work on a regular basis.

Clearly, in primary schools, the mainstream classroom teachers are the professionals most in contact with the NESB learners, and see them in their daily routines. They might be able to share this work with supervised teacher-aides, and to some extent this is already
operative in some schools in Hamilton (Barnard in press). However, the present level of funding for NESB learners from the Ministry of Education does not realistically permit this; and schools are unable, or reluctant, to dedicate more than a small proportion of their operational grants to pay teacher-aides for this work. Such teacher aides are more frequently used, where they are employed at all, working under the direction of the 'Special Needs' coordinator. Even where teacher aides are employed with NESB pupils, this occurs for at most an hour or so a day (Barnard & Lata Rauf 1999) and this does not permit the continuity of observation and attention needed to identify and resolve learning difficulties. One final point is that very little use is made of the services of bilingual support assistants. Partly this is due to the slow recognition in New Zealand - as well as in the United Kingdom (Cameron et al 1996:233) - of the valuable service these resource people might provide, but also to the fact that the Taiwanese and Korean communities are small and relatively new in Hamilton (Appendix B refers).

There is a lack of funding in New Zealand to provide effective advisory teams - perhaps along the lines of the Support Teams for Ethnic Minority Students in the United Kingdom - to help mainstream teachers to plan and implement immersion experiences for NESB learners. Without such help, the task of dealing with the educational management of thirty-plus pupils may be considered quite sufficient without taking on specific responsibility for planning and effecting the cultural induction of NESB learners. In an interview in 1997 (a full transcript is in Appendix D), Ms Wilkins put it this way:

Well, we've got quite a few problem children in this class, and one who has a fulltime teacher aide because of the problems that she has. So of course when I have to deal with those other problems, whether they be behavioural, or learning, that type of thing, I don't have the extra time for the ESOL learners. I don't write individual programmes for them any more, like I used to

Because of the time?

Because of the time. Making the programmes work, I just couldn't do it

What sort of individual programmes did you use to write then?

Reading and maths. With social studies and science they just slotted in. But they'd have their own reading and maths programmes. And I've stopped that.

1.2 Peer tutors

Another possibility is to harness the willingness, skills and resources of the other pupils in the classroom to help the NESB learners. Ms Wilkins had previously found some pupils in her classroom useful in this respect:
Do the other children help them at all?
Yes. Mm.
In any particular way?
In any particular way? Just explaining things, or particularly if they've come in and the lesson's already started, whoever they're sitting next to will then say this is what we're doing. Because they keep coming and going, not only those... (Interview 1997 in Appendix D).

As noted in Chapter Four, some of the group interactions included quite considerable amounts of very useful task-focussed discussion about the aims, content and procedures of learning. It will become evident in the ethnographic account in Part 2 of this chapter that Ms Wilkins relied very heavily on other pupils in the class to support the learning of NESB pupils from the time they arrived until the end of the school year.

The effectiveness of peer tutors in second language acquisition has been explored in studies by, among others, Webb (1985), Johnson (1994), and Willett (1995). In her study of an American primary school, Flanigan (1991: 153) concluded that peer tutoring could be an optimal means of successful second language learning provided that certain conditions were met. These included that "the speakers are engaged in talk on interesting and relevant topics, and where speech is directed to individual learners and attention is on function rather than form" (Flanigan 1991: 153). Moreover, it was important for the teacher to provide a good model, and that some training is provided for the tutors. In New Zealand, Vin Glynn (1988) made some very practical points about planning and establishing peer tutoring systems for NESB learners. More recently, van Hees (1997) recommended the use of peers for support to NESB learners in primary classrooms, and Kennedy & Dewar (1997) also cite teachers as arguing that, properly used, peer tutoring can be of mutual benefit to both parties:

Participants in the study ... felt that peer tutoring was a good way of helping integrate the new NESB students into the classroom and of giving the students who act as tutors an important role - one which gives them a sense of pride and achievement in helping a fellow student, and which, as well, often enhances their own learning and achievement (Kennedy & Dewar 1997, 131).

The obvious point is that classmates are likely to be more accessible to the newcomers than teachers at the time when help is most needed. Being of the same age and status as
the NESB learners, classroom peers are not so psychologically distanced from them as would be an adult. They may also have the time, opportunity and willingness, both inside and outside the classroom, to share common interests with their NESB fellows. As suggested in the final section of Chapter 4 they are, if not necessarily experts, certainly more able peers than the NESB learners in a number of respects. Firstly, the pupils already in Room 7 - even those whose first language was not English - had a greater command of English than any of the four NESB in focus in the study. Secondly, all the pupils in the room had been carefully inducted into the sociopragmatic rules of engagement during the first four weeks of the year. Their ability to operate these rules was built upon foundations laid in their primary schools, while the NESB learners had been socialised into rather different educational conventions. Thirdly, they had a better understanding of requirements within the instructional task dimension; as was shown in Chapter Four, when a task-type was new, or a refinement of previous practice, Ms Wilkins engaged the pupils in dialogues by which they could co-construct the meaning with her. The NESB pupils had not been present when these matters had been discussed. Finally, to the extent that they had been attending to, and participating in, the classroom discourse, the pupils already in Room 7 were aware of some of the academic requirements of the curriculum. Many of these were very different from those in Taiwanese or Korean schools, and it is possible to suggest that peer tutors could clarify issues within the cognitive dimension to NESB learners. Because they are themselves engaged in the mainstream, they might be able to act as interpreters of the learning context. For example, they could explain the rules and standard of conduct inside and outside the classroom, demonstrate the rationale and requirements of various learning tasks, and also perhaps clarify areas within the academic/cognitive dimension.

What follows is a consideration of how peer assistance in Room 7 may be conceptualised. As noted in Chapter Three, Mercer (1994b: 103) argued that "it is only when scaffolding of some kind is required that we can infer that a child is working in a ZPD". However, the commentary in Chapter Four discussed some of the problems which arise when the notion of a zone of proximal development is related to interactions involving pupils as more able peers. Therefore, scaffolding will be considered in this chapter in terms of scaffolding within responsive social contexts (Glynn1985).
2. Scaffolding

2.1 The original metaphor of scaffolding

The metaphor of scaffolding originated in a paper by Wood, Bruner and Ross (1976), in which they examined the role of verbal interaction between mothers and their pre-school children. In their conception, an adult may scaffold the learning of the child in six ways: recruiting interest in the task, simplifying the task, maintaining pursuit of the goal, marking critical features and discrepancies between what has been produced and the ideal solution, controlling frustration during problem solving, and demonstrating an idealised version of the act to be performed. Thus, in the same way that a building in progress is supported by a physical scaffold, so too may a child's learning be facilitated by the step-by-step construction - and subsequent dismantling - of a conceptual scaffold. By shifting the scaffold upward or downward in response to the child's emerging capabilities, the adult ensures that the child is able to hold on to what has been learned, thereby avoiding a premature collapse of the mental edifice. Bruner (1980 in a private communication cited by Cazden 1992: 103) referred to this as a ratchetlike quality. The adult judges the point at which the responsibility for learning may be safely handed over to the learner.

Coincidentally, a very similar process of vertical construction was described by Scollon (1976) in his examination of the development of syntax in infancy. However, the notion of scaffolding is not limited to vertical constructions; Cazden (1992) cited research into adult/infant activities such as ‘peekaboo’ (Ratner & Bruner 1978), picture-book reading routines (Ninio & Bruner 1978) and early language games (Snow et al 1982), and she suggested that

two kinds of scaffolds - vertical constructions and gamelike routines - provide different kinds of support for the child's growing ability in both language and social interactions (Cazden 1992: 106)

Common to the notion of scaffolding in these studies is the adjustable and temporary support provided by the adult which enables the learner to achieve certain objectives.

2.2 The metaphor elaborated

The notion of scaffolding has since been extended to interactions between teachers and pupils in formal learning contexts. Some authors have built the original simple metaphor
into a complex edifice. For example, McArthur et al (1990) refer to scaffolding as an overall pedagogic strategy; Merrill et al (1995) regard scaffolding as a matter of policy. Others, such as Cazden (1979; 1988), Poole (1992), Mercer (1994b), and McNaughton (1995) keep more closely to the basic notion, although they too have tended to amplify the concept in an effort to delineate its essential features. Cazden (1992:103-110), for example, distinguished scaffolding from other forms of assistance such as modelling and direct instruction; while the two latter forms are important pedagogical tactics, they tend to discount the participatory effort needed by the learner. Following her line of thinking, McNaughton (1995: 69-72) proposed three (not mutually exclusive) configurations for scaffolding. Firstly, he suggested *directed performance*, in which the role of the expert is to model the performance, and that of the learner to imitate, to match the performance. While this includes some of the features of the original model by Wood et al, and echoes the imitation inherent in the master/apprentice model of the ZPD, it seems to ignore Cazden's stricture that

we must remember that the child's task is to acquire an underlying structure; imitation of the model itself does not suffice. The texts we supply are examples to learn from, not samples to copy (Cazden 1992: 107).

McNaughton's second pattern, based on a structure described by Ninio & Bruner (1978: 62) is that of *item conveyancing*, in which the learner, by acquiring and displaying specific information, moves from novice to holder of authoritative knowledge. This, too, contains elements of the original model but may appear to be too close to Cazden's direct instruction in that the learner may merely repeat the learning without providing evidence of actual appropriation. Moreover, there is an emphasis here on knowledge, rather than competence. McNaughton's other configuration is that of *collaborative participation*: "The child's interactions with the more expert person have a 'give and take' quality. The expert's control reduces over time" (McNaughton 1995: 69).

This seems closer to the original model suggested by Wood et al. However while the six features of the original model might well be part of a regular pedagogic repertoire, it is a moot point whether all of them need to occur in a specific classroom learning activity in order for it to be considered scaffolding. Realising this, Mercer (1994b: 97) argued that classroom scaffolding should be clearly distinguished from other forms of pedagogical help with reference to criteria derived from an earlier study in which he had been
involved (Maybin et al 1992: 188). These criteria are that firstly, the teacher wishes the child to develop a specific and finite skill, concept, or understanding. Secondly, more stringently, that the learner succeeds in accomplishing the specific task with teacher’s help, and not by his or her efforts alone. Thirdly, Mercer later added a version of Bruner’s ratchet: "the provision of guidance and support which is increased or withdrawn in response to the developing competence of the learner" (Mercer 1995: 75). Finally, even more stringently, the learner should achieve greater independent competence with subsequent, similar problems as a result of the scaffolding experience.

2.3 Criteria for scaffolding

These four criteria will be applied to the interactions presented and discussed in the ethnograph in Part 2 of this chapter. Before doing so, however, they need to be considered in terms of their relevance to the present study. This discussion will deal with the second, third, fourth and first criteria, in that order.

The second of these criteria - the accomplishment of a specific task - may relatively easily be established through close observation and microgenetic analysis of actual classroom interactions. The following ethnograph will consider in some detail the extent to which this characteristic is present in peer tutoring situations in Room 7.

The third criterion - the ratchet - appears to be somewhat difficult to apply to the pedagogic strategy adopted by a teacher with regard to the whole class. As Cazden (1992: 106) points out, "classroom lessons are notably less responsive to the child’s growing competence" - Vygotsky’s (1978: 86) ‘buds of development’ - precisely because it is difficult for a teacher to address the development of specific abilities of individual children. This was the underlying point of Mercer’s (1994b: 104) objection to the notion of a shared ZPD - a point reinforced in the commentary in Chapter Four. However, as the ethnograph in that chapter also illustrated, the teacher created a participatory learning environment in which the pupils collaborated both with her and among themselves to narrow potential or partial ZPDs. Despite Cazden’s (1992: 106) view that the learning structure within a typical classroom remains intact, rather than being dismantled, the previous chapter also showed systematic - and successful - attempts by the teacher in Room 7 to dismantle the learning scaffold she had created for the class as a whole.
However, all the scaffolding studies cited above have focussed on interpsychological, usually dyadic, interactions promoting the development of the abilities of the individual learner, rather than that of a group of learners. While it may be supposed that a good teacher attempts to provide some personal tuition to members of a class, it is too much to expect the teacher to provide an effective scaffold for every member of the class. Mercer (1995: 75-77) gave an example of a teacher scaffolding the classroom learning with the ‘assisted performance’ of an individual pupil. It is possible to argue that in this way the teacher met an individual’s needs, but she could not have given equal attention to all the other members of the class. Rather, she used the individual pupil as representative of what she presumably perceived to be the needs of the class as a whole: one does not know the reason why she chose this particular pupil. The developmental buds of the other members of the class were inevitably different from those of the individual she selected. Such vicarious scaffolding does not sit easily with the notion of a ZPD, and the connection between the two constructs made by Mercer (1994b: 103) could be reformulated to the effect that scaffolding is a necessary, but not sufficient, condition to allow an inference that a ZPD is in process.

The fourth criterion - that of the development of a more general competence - may be inferred from longitudinal evidence of developing competence; this will be considered in this chapter, and dealt with more extensively when appropriation is examined in Chapter Six. However, there is a need to acknowledge, in principle, the difficulty of inferring the causality of independent (and general) competence to the effect of specific interactions. This is particularly true in a naturalistic inquiry such as the present case study, where no attempt has been made to control or remove intervening variables. What might be claimed in this respect is not a relationship of cause and effect, but the possible contribution to the development of a general competence from specific learning in particular events. Moreover, given the temporal and other limitations of the observations recorded, inferences made in this regard will perforce be very tentative.

There has been a tendency in studies such as those cited above to emphasise the use of scaffolding by adults (parents or teachers). In order for individualised scaffolding to be possible in a classroom, attention can be turned to Vygotsky’s view that a learner’s progress through a ZPD may be “determined through problem solving under adult
guidance or in collaboration with more able peers (Vygotsky 1956: 446 - emphasis added). Cazden argued (1992: 106) that in order to create opportunities for students to take over the adult role, "peer dialogues are essential". The previous chapter showed that such dialogues among pupils are a key feature of the learning discourse in Room 7, and could thus form a basis for peer scaffolding. (Donato 1994 also examined this possibility with students studying French.) The following ethnograph will therefore examine how classroom peers scaffolded the learning of NESB pupils through dialogue.

It is now necessary to consider the first of Maybin et al's criteria - that the expert wishes the learner to develop a specific and finite skill, concept, or understanding. If more able classmates are to be viewed in this respect, the question arises as to the extent to which the (pedagogically naive) peer scaffolded is conscious of specific learning objectives and the helping strategy applied. Manifestly, a teacher - whether or not aware of terms such as ZPD and scaffolding - is self-consciously applying a pedagogical strategy in the classroom. It is reasonable to argue, however, that a successful scaffold need not be deliberate or even consciously applied. For example, when parents play peekaboo or word games with infants, the learning of the latter may be scaffolded whether or not the adults are aware of this: from their point of view, they may just be having fun with their children. Similarly, it can be argued that classmates may be unaware of the extent to which they can scaffold, or are scaffolding, the learning of less able peers. Noting this lack of awareness, Mercer sought to distinguish scaffolding by teachers from that occurring in informal contexts, arguing that education in and through language is the professional concern of the teacher, and something not easily effected by amateurs. The extent of the pedagogic self-consciousness of peer-tutors, and the effectiveness of any scaffolding they erect, is of major interest.

The manifest purpose of the classroom is the collective endeavour to learn. As has been noted, the extent to which all participants cooperate in that venture is variable, but none of the pupils would suggest the ostensible purpose would be otherwise. Because of their naivete, they would find it difficult to conceptualise the areas of learning involved, and would hardly formulate learning in terms of the three dimensions (Richards & Hurley 1988) which have been used in this study. Nevertheless, as was shown in the ethnograph in the previous chapter, some of them were willing - and able - to help their classmates to
overcome learning difficulties in quite often very specific areas, and were largely conscious that they were doing so. Of course, any strategy of help they employ might be improved by consciousness-raising and perhaps subsequent and effective training. By the same token, however, a naive but effective strategy might be impaired if awareness is aroused without concomitant development of appropriate pedagogical skills.

3. Responsive social contexts

The issue of scaffolding by peers contains a number of interesting points which will soon be explored. However, in order to be applied to the specific context of this study, it is felt that the metaphor of scaffolding may be further refined by alignment with the construct of a responsive social context (RSC) formulated by Ted Glynn (1985) in his discussion of optimum contexts for independent learning.

3.1 Characteristics of Responsive Social Contexts

Glynn (1985: 6-10) specified four crucial characteristics for his model: initiation by the learner, shared activities between more and less able performers, reciprocity and mutual influence, and sufficient and appropriate feedback. As with scaffolding, the ultimate aim of an RSC is for individuals to be in control of their own learning through the assistance of another, and the above delineation clearly shows similarities between the two concepts. However, there are some shades of emphasis in Glynn's model, different from scaffolding, which may be useful in illuminating the situation facing the NESB learners in focus in this study. These differences, it may be suggested, stem from the fact that, whereas the notion of scaffolding has developed from the early language socialisation of infants, Glynn's model is rooted in the classroom.

Firstly, Glynn's emphasis on promoting (linguistic) initiation by the learner is stronger than is the case with scaffolding. In the latter, the tutor more closely guides the performance - linguistic or otherwise - of the learner: the latter may be encouraged to respond to, rather than to initiate, interactions. This may derive from the assumption of the tutor's assumed greater knowledge and pedagogical expertise, especially when interactions with infants are concerned. Glynn suggests (1985: 6) that learners in schools should be able to initiate interactions with both materials and other people - an
(unconscious?) echo of Vygotsky's notion of the use of language as a regulatory tool over both objects and people. This point is found also in discussions of scaffolding - although the use of language to control material objects is somewhat discounted by Mercer (1995: 75): "education is not about manipulating objects. A great deal of it is learning how to use language". While Mercer's emphasis is appropriate, it may be thought that the transition from one language focus to another is smoother than he implies - and especially so in primary classrooms, where realia provide contextualisation for much learning - and, in Vygotskian terms, a focus for object-regulation through language.

According to Glynn (1985: 7), "a key factor in promoting child initiations is for adults to relinquish direct control over child behaviour". At the same time, he also made the point later noted by Cazden (1992: 106) that, in the interests of apparent efficiency, normal classroom teaching does not usually permit much initiation by pupils. The ethnograph in the previous chapter showed that the teacher did in fact strategically co-construct with her class a learning environment in which the pupils were encouraged and enabled to take the initiative in interactions both with herself and among themselves. Glynn emphasised the need for children to "learn the general strategy of engaging and maintaining adult attention (1985: 6): In Room 7, the quantity of sustained pupil-to-teacher interaction was limited perhaps more by the constraints imposed by the size of the class than by the psychological climate. However, the ethnograph also showed that the pupils had considerable opportunities for initiating and sustaining among themselves discourse within the various dimensions of classroom learning.

In this respect, peer interactions - whether in informal exchanges or in structured tasks - provide an appropriate social context for initiations by the learners in focus in this study. While NESB learners are, to a greater or lesser extent, constrained by their lack of linguistic competence, the psychological context allows them at least to initiate an interaction spontaneously with a neighbour; they do not need to formally bid for a turn or wait to be called upon. They also have the opportunity to observe and possibly acquire the necessary pragmatic conventions for sustaining interaction with their peers, which could give them confidence to sustain interaction with the teacher when opportunities arise. Furthermore, as was shown in the previous chapter, interactions started within one dimension of classroom learning very easily shift into the others; thus communication
initiated by an NESB learner within the social dimension may develop into task-related interaction, and talking about a task may promote cognitive development.

The second of Glynn’s characteristics - the importance of the learner sharing activities with a more able performer - is central to both scaffolding and RSC. As noted in the commentary to Chapter Four, the pupils in Room 7 may be viewed as more expert than the NESB learners in a number of respects. However, more than scaffolding, Glynn’s model stresses that the learning task should be "functional for both the less skilled and the more skilled performer" (1985: 7).

This leads into the third characteristic - reciprocity and mutual influence. Unlike most discussions on scaffolding, which tend to assume that learning is unidirectional, Glynn emphasises (1985: 7-8) that the more skilled performer is also acquiring skills, such as interpreting and responding to the learner’s needs. In the absence of such reciprocity, the less skilled performer might be maintained in what McNaughton (1981, cited by Glynn 1985: 10) referred to as ‘instructional dependence’. It is clearly the case that the ultimate goal of scaffolding is learner independence, and this is quite appropriate, given its origins in the context of infant learning. But it implies a strongly directive role for the tutor, appropriate for a parent or adult, but less so perhaps for a coeval peer-tutor. Glynn, on the other hand, expects each party to modify the behaviour of the other. This differs from the repartee assumed in scaffolding, where the verbal (and other) responses of the learner serve to guide the tutor in the extent to which the scaffolding needs to be increased, maintained or dismantled. In an RSC, the verbal interaction is intended to enhance the actual learning of both parties (Glynn 1985: 9) and examples of this occurring among peers in Room 7 were illustrated in the previous chapter. In this study, the NESB learners are at a langacultural deficit, but they do have resources and skills - material, social and cognitive - to share with their classroom peers to mutual advantage. The extent to which such reciprocity occurs will be explored in the ethnograph which follows.

Finally, as in scaffolding, a responsive social context requires sufficient and appropriate feedback, the quantity of which should diminish as the responsibility for learning is increasingly in the hands of the learner. Glynn sets his discussion of this firmly in the context of the normal classroom where, he says (1985: 10), under-achievement may be in
part a function of excessively delayed and infrequent feedback by the teacher. Although he gives some examples how teachers might develop techniques in this area, he also acknowledges the pressure imposed by time and numbers in a school context. Clearly, too, the immediate feedback needed to ratchet an individual scaffold requires time not usually available to teachers. However, an RSC involving collaborating peers might provide considerable opportunities for immediate feedback - both cognitive and affective. However, while a teacher has the professional duty to ensure the quality and appropriacy of feedback to learners, and has developed skills to deliver it, fellow pupils are under no such obligation and have had no formal training. It remains, then, an open question as to whether the advantage of immediate ad hoc feedback by peers is outweighed by possible inaccuracy or inappropriacy.

4. Summary

Both models assume that the ultimate goal is for the learner to take control of the content and process of learning; However, as indicated above, scaffolding may assume a directive approach by the tutor, who is expected to relinquish control as and when s/he judges appropriate. Thus learning is 'handed over' to the learner by the expert. On the other hand, the reciprocal nature of learning within an RSC assumes that, rather than being handed over, the process is taken over by the learner (Glynn 1985: 12) - which is much more suggestive of the notion of the appropriation (Bakhtin 1981, Leont'ev 1981a) of understanding. Moreover, because of its reciprocal basis, the RSC assumes that learning may be appropriated by either party, whereas the novice-expert relationship posited in scaffolding assumes a one-way transfer of learning, in which the influence of the learner is restricted to that of moderating the facilitating role of the more able partner.

Learner independence is, of course, the aim also presumed by a ZPD. Neither scaffolding nor the RSC makes any claim that the tutor should be able to identify and analyse the learner’s buds of development. Consequently, the pedagogical support proposed by Mercer and Glynn need not be so sophisticated as that posited as a central part of the ZPD, and may be more easily accomplished by more able pupils acting as peer tutors. In the following illustration and analysis of interactions, while reference will be made to the
emergence of ZPDs, it will be understood that they will be only partially-realised and not fully-developed.

There is, finally, the matter of whether pupils are willing to accept a peer in the role of more expert partner. All the pupils in Room 7 acknowledged (if not all the time!) the authority of the teacher, and accepted her pedagogic expertise. However, as was also shown, 'less able' pupils might resent the assumption of such authority and expertise by peers. Moreover, while the teacher may (deliberately) eschew pragmatic conventions of politeness, Grice's (1975) conversational maxims apply a fortiori if peer tutoring is to be acceptable. Finally, while the pupils may be pleased if the teacher is friendly, none of them would actually regard her as their friend: if peer-tutoring roles are adopted, there is at least the potential for role conflict among friends. Although the assumption of reciprocity within an RSC might also reduce the potential for role conflict in peer tutoring, an examination of this issue must also take into account the micropolitical situation in the classroom. It may be felt that Mercer may not have fully taken into consideration this micropolitical factor, or the affective implications, in his categorisation of classroom talk.

The following ethnograph, by analysing interactions in terms of the criteria for both scaffolding and responsive social contexts, will consider how some of the pupils in Room 7 assisted their NESB peers to cope with the langacultural demands of the mainstream classroom.
Part 2. Ethnograph

Overview

This section will illustrate and analyse recorded interactions involving the four NESB learners in focus, giving examples within social, task performance and cognitive dimensions. For reasons of narrative coherence, they will be considered in the following order: Jean, Jack, John and Alina. Throughout the discussion, reference will be made to various sorts of assistance: directed performance, item conveyancing, collaborative participation, scaffolding, and responsive social contexts. For ease of reference, descriptive criteria for these are summarised below.

Directed performance
the expert models the performance for the learner to imitate and match

Item conveyancing
the learner acquires and displays specific knowledge, and thereby moves from novice to holder of authoritative knowledge

Collaborative participation
a give-and-take quality between expert and novice; the expert’s control reduces over time.
(McNaughton 1995: 69-72)

Scaffolding
a) the more able peer wishes the child to develop a specific skill, concept, or understanding
b) the learner succeeds in accomplishing the specific task with the help of the teacher (or more able peer), and not by his or her efforts alone
c) Bruner’s ratchet: “the provision of guidance and support which is increased or withdrawn in response to the developing competence of the learner”
d) the learner has achieved greater independent competence with subsequent, similar problems as a result of the scaffolding experience.

Responsive Social Context (RSC)
a) initiation by the learner
b) shared activities between more and less able performers
c) reciprocity and mutual influence
d) sufficient and appropriate feedback
(Glynn 1985: 6-10)
1. Jean

A week after Jean's arrival, the teacher started the morning's work in Language Arts by going over some homework with the class - a worksheet for which they had to distinguish various homophones, such as *their/there*, *buy/by*, and *two/too/to*. Jean was sitting among a group of girls who had started to befriend her:

# 1

01. T: Right. For the next ten minutes you should be quietly working away at that worksheet until you've finished and then we're going to go over it together
02. P: xxx (asks a question to clarify instructions)
03. T: No, no - all of the first box on the second sheet (Ps get on task)
04. Ti: (quietly, to Jean) Have you finished?
05. Je: I don't know how to do some>
06. Ti: I do!
07. Je: I don't know, I didn't finish this one, and, this one, and some others. I don't know how to do this one
08. Ti: You don't know how to>
09. Je: Can I use your scissors?
10. Ti: I haven't>
11. Je: Oh. Andrea, can I use your scissors? (Andrea hands them over.)
12. Je: Thank you. (Je trims worksheet)
13. T: (to class) OK. What's the xxx (elicits first answer)

This extract shows a typical example of one of the girls amicably checking (04) that Jean knew what to do. Jean indicated her lack of complete understanding (05, 07), so Tilly expressed her own greater expertise (06), and started to explore Jean's difficulty (08). This was interrupted by Jean switching the topic to her more immediate need for a pair of scissors (09), which shows the ease with which Jean felt able to move the interaction to the direction she wanted. Such requests for material objects were frequent between pupils, and interactions starting with this purpose often led into more specific learning areas. In this case, however, the interaction between the girls had to end when the teacher started to go through the task with the class. While this was happening, Jean occupied herself with cutting, trimming and pasting the worksheet into her book. She looked up occasionally to follow, although not to participate in, the classroom interaction: typically, no task information was elicited from her, and she volunteered none. At one or two points, while the teacher was discussing an item with a pupil, she initiated brief whispered interactions with a neighbour - for example:
This brief exchange too shows Jean’s linguistic and social ability to initiate interactions, and (again) obtain a desired object; in this respect, she operated like any other member of the class. After going through the worksheet, the teacher set the evening’s homework.

Having failed to understand the teacher’s instructions, Jean initiated (02) an interaction relating to task performance. The more able peer, Tilly, was willing to help her - by instruction and showing what had to be done. The interaction, showing three of the characteristics of an RSC (reciprocity was lacking) might have developed into a more extensive example of directed performance - perhaps even scaffolding - if it had not been interrupted by the teacher’s call to the class. In the next part of the lesson, the teacher spent ten minutes explaining and eliciting examples and rules of punctuation, such as the use of quotation marks, commas, full stops and so on. Jean did not pay much attention to the discourse. The teacher then set the next activity by showing an OHT of an unpunctuated text from Danny, The Hero of the World - the story she had read to the class in the previous term - saying "Do you remember this?". The teacher’s reference to the actual story was - in itself - meaningless to Jean, as she had not been in the school when the teacher read it aloud to the class. This may have been one reason why she switched off from the teacher-class dialogue; another factor may have been mental fatigue induced by the attention needed to follow the discourse in English. As the class settled down to the task, Tilly turned to Jean:
Tilly was presumably aware that Jean did not know what was expected. Without prompting, she told Jean what to do (01 and 03) - to copy and punctuate the text. This instruction may be seen as setting the overall goal of the activity. If this had been sufficient, no more elaborate help - scaffolding - might have been needed. However, Jean's questioning intonation (04 and 06) uncovered a conceptual gap - that she did not know what 'punctuate' meant: a potential ZPD was identified. Smartly picking up the implicit cue, a third girl - Sally - started to erect a scaffold by giving direct instructions and examples (07). This assistance was supported by Tilly showing Jean her own work in progress (08) - thus providing Jean with a model, which she might have imitated. Jean's concept check (09) indicated growing, but still only partial understanding. Sally built on this growing understanding by starting to repeat her previous instruction (10) - building the scaffolding higher. Jean showed her increasing understanding verbally - by anticipating and completing the phrase (11). This was reinforced by Sally's confirmation, "Yeah" (12). At this point, the scaffold could start to be dismantled. Jean's "OK" (13) may be seen to mark her takeover of the idea, and her starting to do the task reinforced this. Her final question may be seen as a check that she had understood the basic concept, but also perhaps wished final - and verbal - confirmation. Sally provided this (14), thereby dismantling the scaffold - and also gave a clear model of how the word should be pronounced. This point marks her handover to Jean, who continued with the task by herself with no further help sought or offered.

The effectiveness of the scaffolding may be gauged by Jean's appropriation of the task at hand, and also an indication of a wider competence - her explicit understanding of the
general notion of punctuation - indicated by her ability to work alone on the rest of the task. There was also evidence of the ratchet being applied: Tilly and Sally built a framework to scaffold Jean's understanding and sustained it until she showed her comprehension. Two of the criteria for an RSC were also clearly in evidence: that of interaction with and assistance by more able peers, and sufficient and appropriate feedback. An element of initiation may also be discerned: Jean's indication of her lack of understanding of punctuation changed the direction of the exchange from directed performance to the cognitive dimension. However, the other criterion - that of reciprocity - was lacking in this case, except that it might - possibly - be construed that Sally and Tilly may, through this interaction, have enhanced their skills of interpreting and responding to Jean's needs. There is clear evidence here – by the repetitions, confirmations and elaborations - of Mercer's (1995) cumulative talk in progress. While conducive to a collaborative mode of operating, though, the interaction cannot be regarded as exploratory. One final point can be made with reference to all of the interactions discussed above: they show not only peer support but also the development of a firm bonding between Jean and the group of girls who were seated near her. The friendship and mutual respect thus engendered was to prove most important for her langacultural development.

2. Jack

The sequence of extracts above show how, in the course of a single lesson, Jean's peers worked with her in embryonic ZPDs and helped her to become an active member of the learning community. The interactions involving Jean can be contrasted with Jack's experience in the same lesson. He had been in the class since March - although the two intervals, occasioned by the three-day camp and the following two-week Easter holiday, meant that he had only been in Room 7 for fifteen working days.

As usual, the lesson started by the teacher greeting the class, to which Jack had (by now) learned to respond, though he did so only in an inaudible mutter. This was about the limit of his verbal social interaction skills at this time. It was noticeable that he greeted teacher and peers - in one-to-one situations - with a deferential bow
with hands pressed together, even when carrying books. He responded to personal
greetings at first nonverbally, but eventually learned a formulaic "Fine (+ How are
you?)" although he rarely initiated such greetings. The teacher then started the
lesson:

# 5
01. T: You will need to take out your English books with>
02. Na: (to Ja) English book!
03. Ja: English book?
04. Na: English (waving his book, which he has now got out of his desk))
05. Ja: English (does so)
06. Ro: English. English reading. ... English. English reading
   (Ja flicks over pages in his book - to find the right page?)

Nathan helped Jack to perform this simple task by means of an abbreviated, though
probably well meant, imperative (02); he confirmed Jack's query by repeating the
word. Jack showed that he understood by taking out the relevant book and echoing
Nathan's phrase (03). Ronald's repetition (06) may be interpreted as helpful
linguistic and conceptual feedback, perhaps reflecting his awareness of Jack's very
limited competence in English. This was a brief exchange with restricted scope, and
is an example of directed performance, rather than the sort of scaffolding which
would be needed to close a fully developed ZPD. However, there is evidence of a
ratchet being held by Jack's classmates. In addition, the first two of the criteria for
scaffolding may have been satisfied - if one assumes that Jack would not have been
able to carry out the task without assistance from more able peers, and Ronald's
reiteration may also have planted seeds of a more general competence. This was an
RSC only to a very limited extent: while it did involve interaction between more and
less able peers and appropriate and sufficient feedback was provided, there was
neither initiation by Jack and no evidence of reciprocity of learning.

For the next twenty minutes, Jack attempted to follow the teacher's dialogue with
the class, his eyes tending to follow the various speakers, but he did not participate
verbally. He often referred to his bilingual dictionary (which he had been told to
bring to school every day) and the worksheet, occasionally picking up minimal clues
from the teacher's discourse and repeating them to himself, for example:
Jack's private speech here suggests he is trying to appropriate elements of the discourse - but clearly what he managed to understand was minimal. At the end of this task, the teacher started the work on punctuation. For the next ten minutes, Jack did not follow the dialogue at all, consulting instead the worksheet and his dictionary, subvocalising the English words and their Korean equivalents. Such evidence of mental processing is further indication that Jack was trying to understand elements of the previous part of the lesson; it was clearly impossible for him to follow, let alone participate in, the ongoing discourse of learning. When the teacher showed the OHT with the unpunctuated text, Jack showed some muted signs of impatience or exasperation - clicking his pen and (inaudibly) muttering to himself. He did not attempt to do the punctuation task, which was far beyond his linguistic ability, but instead returned his attention to the worksheet tasks. At no time was he involved in any verbal interaction with peers or teacher. In this lesson, like most others, Jack was confronted by a large amount of incomprehensible input. Unlike Jean, he was unable to initiate, let alone sustain, verbal interactions with his peers to ask for assistance. Other than the example cited above at the start of the lesson, there was no attempt by teacher or peers to give him any individual help - whether by scaffolding or other means - nor could he be said to have been in a responsive social context. Left to his own devices, he tried to make some sense of what was happening by working assiduously with his dictionary. It is uncertain how useful this was, but clearly Jack made very little progress either in working through the tasks or in making much conceptual development. While Jean was already a participating member of the langaculture of Room 7, Jack remained isolated and incommunicado. Jack's neighbours sporadically tried to help him, although they were among the less able members of the class. They did not seek to befriend him; perhaps they felt that the effort of engaging him in their in- and out-of-class social activities was too challenging - linguistically and culturally - for both parties.
The first occasion when Jack was observed to take an active part in a shared task was on 16 June - three months after his arrival. The teacher organised the class to work in a paired spelling practice with their usual partners. Jack did not have one - and neither did the naughtiest boy in the class, Roger. Since he was at a loose end and no other pupils were available, the teacher asked him to work with Jack - which (perhaps surprisingly) he did very conscientiously:

#7
01. Rr: What list are you on Jack?
02. Ja: Uh?
03. Rr: What list?
04. Ja: xxx (shows Roger the list pasted in his book)
05. Rr: Are you there? ... There? OK - Until. Do you know how to spell car?
06. Ja: CAR
07. Rr: Yes. Child
08. Ja: Uh?
09. Rr: Child
10. Ja: Child? CHILD
11. Rr: Yes. Children
12. Ja: CHILTEAN
14. Ja: NERE
15. Rr: CHILDREN. Clock

The task continued in this way for fifteen minutes. Jack quickly understood what to do, and settled down to work in this basic item conveyancing mode. Verbal interaction throughout was minimal, consisting only of very short initiating and responding moves, with occasional corrective feedback (such as 'yes', 'wrong' or a correct model - but never any affective evaluation such as 'good' or 'well done'). No social interaction of any sort was evident - unlike that which occurred among other classroom pairs (as indicated at #16, pages 118-119 above). Also, unlike tasks with other pupils there was no alternation of roles, which might have given Jack a role as a quasi 'more able peer' in collaborative participation. Thus, although he worked with (for the purposes) a more able peer and received minimal but sufficient corrective feedback, Jack cannot be said to have been in an RSC; and Roger cannot be said to have scaffolded Jack's learning, though he might have contributed towards it. Nevertheless, the task is a useful indicator of Jack's progress: expansion of vocabulary and the development of listening and spelling skills; he could also communicate lack of comprehension, albeit vocally and kinetically rather than verbally. It also shows that he could work with another pupil: for the first time, Jack was engaged in sustained task-related verbal interaction.
Ten days later, the pupils were instructed to write self-evaluations of their term's work. Ms Wilkins spent ten minutes explaining, eliciting and exemplifying the task requirements. During this time, and for thirty minutes afterwards, Jack - as usual - did not verbally participate, and struggled to write a few words. Eventually one boy tried to help him:

#8
01. Ke: Do you understand?
02. Ja: (nonverbal response)
03. Ke: Do you know what to write?
04. Ja: Write?
05. Ke: Or, is it difficult?
06. Ja: Difficult?
07. Ja looks in dictionary
08. Ja: D, DI, Difficult.
09. Ke: Do you understand? Good. (Kenneth turns his attention away)

Kenneth was not one of Jack's usual neighbours: they were adjacent for the first time quite by chance. Kenneth was a very quiet but sociable boy - as noted in the extract at #8 in Chapter 4, page 107 above; he might have made a more sympathetic partner for Jack than the noisy boys who were his neighbours up to this time. Noticing that Jack appeared to be having difficulty, he offered to help (01). The interaction between them indicates both his willingness and Jack's inability either to understand him (06) or to express his needs. Kenneth's failure to actually support Jack may be inferred by his change of attention (09). After the short interaction, Jack referred to his dictionary (10) in an attempt to unpack a single element - 'talking about' - of one of the rubrics on the evaluation proforma. Although Jack's task performance needs were not met, the interaction had been useful as a social icebreaker, as the next extract suggests. A few minutes later, Ms Wilkins told the class that they had two minutes to finish off, an instruction, which Jack appeared to understand. Sighing, perhaps with exasperation, he continued to check his dictionary, muttering occasionally (unintelligibly) in Korean. He then turned to Kenneth:

#9
01. Ja: (writing something with his finger on desk) Today?
02. Ke: Tell?
03. Ja: Today
04. Ke: Today. Do you want me to spell it?
05. Ja: Er - yes. Uhh
06. Ke: OK, erm. Here (writes 'today' for Jack)
07. Ja: Wah?
08. Ke: What do you want?
09. Ja: Want? What xxx
10. Ke: Yeah
11. Ja: Waa
12. Ke: What - do - you - want, from me? Do you want me to tell you something?
13. Ja: xxx
15. Ja: Aaah
17. Ja: Itaekaji (= KOR = up to now/ so far) ... and starts to write with his finger
18. Ke: When... Tell... How
19. Ja: Ah, Aah. Ah (as he writes with his finger on the desk)
20. Ke: Ah, get it finished! Get it - You've got to get it finished today, or you've probably
got to go home and do it for homework (Ja appears to understand; mutters in KOR)

At first Kenneth did not clearly see what Jack was writing on the desk and, through
mutual lack of comprehension, Jack's need for task clarification was in danger of being
sidetracked into a matter of spelling. Jack however persisted in using all linguistic and
non-linguistic resources he could muster and, by showing great patience, Kenneth
eventually understood what Jack wanted. (It is difficult to interpret Jack's utterance in
Korean (17): it may have been an impatient indication of the time it had taken to get his
message across, but it also seems to be the climax of the interaction between the boys:
thereafter comprehension came more easily.) This short interaction cannot be regarded
as scaffolding, but it does display key elements of peer tutoring within an RSC. There
was initiation by Jack - significantly, the very first recorded instance of Jack initiating a
task-related interaction in Room 7 - and help provided by a more able peer, which
enabled some learning to proceed. While the learning involved was not reciprocal, there
was considerable feedback in the exchange, enabling the two boys to co-construct
mutual - albeit very limited - understanding.

Jack's level of communication stayed at this level: one- or two-word utterances with
strenuous paralinguistic and nonverbal effort - throughout his time in Room 7. The
sporadic amount and type of assistance given by his peers remained at the level
illustrated above for several weeks. At the beginning of the third term, Jack was seated
with two other boys - among the cleverest in the class - with whom he established a
sound, if largely nonverbal, friendship, which lasted for the rest of the year. (He never,
however, socialised with them outside school or indeed outside the classroom). With
their encouragement and support he was gradually drawn into the langaculture of Room 7; he joined with them in some of the group learning tasks, and occasionally helped in the execution of work - for example, by drawing maps and other illustrations. However, his verbal participation remained minimal, and thus he could not effectively participate in any of Mercer's (1995) three categories of interactional talk. Similarly, he cannot be said to have made a valid contribution to the other boys' understanding in any of the three dimensions of learning.

3. John

For his first few weeks in Room 7, John was seated (near Jack) at the back of the room next to Mark and soon made friends with him. By his third day, John was already bored as Ms Wilkins had not given him any work for the large science project which occupied the rest of the class for most of the afternoons at that time. After sitting beside Mark at the computer, he looked for something to read in the class library, talking to himself:

# 10
01. Jo: (singing another aria as he gets to desk, then, as he finishes with a flourish, to self)
   That's what I sing! Ha ha ha. (Starts to sing again, but then yawns) So - er, I'll take this book to my table, oh desk. Just put it away. (sings again, as he returns to his desk)

John's private speech, a very frequent phenomenon throughout the year, is interesting. It often took the form of a running commentary - augmented by paralinguistic elements and singing - on his thoughts and actions. Different from Jack's private speech in Korean, his verbalisation tended to be fully formed, manifesting none of the syntactic or phonetic agglutination that Vygotsky suggested was typical of externalised private speech. This phenomenon might have been due to self-consciousness about the lapel microphone, or it may be because he always thought aloud in English; none of John's private speech was ever recorded in Mandarin. A few minutes later in the lesson, one of his neighbours started a social interaction:

# 11
  01. An: How long have you been learning English for?
  02. Jo: Uh?
  03. An: How long have you been learning English for?
  04. Jo: Er, er, let me thing - when .. I was (starts singing) at, at eight years old or nine years old. About third grade
  05. Ph: Oh that's why you're good at it
  06. Jo: Then I learned about three years by now
  07. Ph: About three years?
08. Jo: Yeah ... (referring to book, to self) What is this guys doing? What's this fish?
09. Ph: You're really good at talking English

This incident was typical of many others in which John was engaged at the start of his

This incident was typical of many others in which John was engaged at the start of his
time in Room 7. His social ease and the friendliness of his two interlocutors are
apparent, both parties showing conversational tact and courtesy; and evidently John
impressed the two boys with his bilingual skills. There is evidence here – repetition,
confirmation and expression of opinions – of cumulative talk. The discussion ended at
this point; the two other boys got on with their science task and sought no further
interaction with him. Having no work to do, John again started to talk to himself:

# 12
01. Jo: ... (to self) So noisy! Com,puter, com,puter. I wish Daniel was here. I wish I can go to
Daniel's house - play the computer game War Class Two. Oh, I wish I know how to play the
Class Two...

The ambient noise of the class increased, and John, telling himself that he had nothing
to do, started humming the Turkish March to himself. He then got another book:

# 13
Jo: (to himself) Oh, let me see... OK. I Know. (Reads title of book he has taken) "I wish
that I had Duck Feet". Oh what a silly book!

The lesson continued with John reading in a desultory way, occasionally interacting
socially with his peers, but otherwise he did not participate in the discourse of learning
in the room. A few days later, John asked Mark for help in a handwriting task:

# 14
01. Jo: I should write that now? I should write them all down there?
02. Ma: Yeah. Do you want this? Want one of this? (criteria sheet)
03. Jo: What's that?>
04. Ma: Shall I go 'n get one for you?
05. Jo: Oh, no thanks
06. Ma: You have to underline the title of your handwriting - like this.
You know how to do handwriting? ... Handwriting. Like that
07. Jo: Just write it down?
08. Ma: Write it like this (demonstrates). Oh, like this.
Write it down there. Copy it. You know copy it? Like this.
See. Like this. Watch. Watch John - watch! (demonstrates) The>
09. Jo: You should write it like this?
10. Ma: xxx
11. Jo: Not like that?
12. Ma: No
13. Jo: Oh Goodness! I'm not a good handwriting
14. Ma: Yes xxx you do. You gotta Twink?
15. Jo: Yeah. (reluctantly corrects his previous work)... (reading the text he has written) "The night was>
16. Ma: Yep! Like that. Gotta do xxx like that
17. Jo: Oh-ho. (commenting on his work) Not very well.
18. Ma: That's good, cos you're learning.
John clearly signalled his need for help (01) and thus opened a potential ZPD, to which Mark responded very positively. He sought to establish the overall goal with an oblique reference to the criteria for good handwriting (illustrated in the sequences at # 4 in Chapter 4, page 99 above) about which John had not been instructed. Mark offered to help (02) by sharing his criteria sheet. John did not know what was on offer, and briefly (03) sought clarification. Rather than answer John's question, Mark offered to fetch one of the handouts for him. However, John declined his offer, still without knowing what it was. Although there is evidence of some mutual incomprehension in the above short exchange, it is also clear that Mark realised that John did not understand the task requirements. Because he knew the criteria for good handwriting, he was in a position to act as the more able peer. One can see (06) a scaffold being erected where Mark provided John with a model - his own work in progress. Evidently unsatisfied by the extent of John's level of understanding (07) Mark then built the scaffold higher (08) with instruction and further modelling, and focussed John's attention on key features of the task. John's concept-checking questions (09, 11) show his developing understanding - as well as a modest disclaimer of his handwriting skills. These questions allowed Mark to start to release the ratchet and dismantle the scaffold (14) - the reference to Twink was an implicit cue for John to start work on his own. He also provided positive affective feedback, which may have been intended to minimise any frustration that John might have been feeling. John's takeover of the learning task was marked verbally (15) and nonverbally - by his self-correction. John's understanding was confirmed by Mark's immediate and enthusiastic cognitive feedback (16) and the handover of responsibility to John for the completion of the task. John acknowledged this in his next utterance (17) - followed by yet another modest disclaimer. Mark gave further encouragement (affective feedback) and also indicated his self-consciousness of - and perhaps pride in - his role as more able peer (18). As ever, it is difficult to say how much generic learning emerged from this specific event, but Mark's help may have contributed to a wider competence. This interaction was also characteristic of an RSC. In the first place, there was scope for the learner to initiate the interaction, and sustain it (for example, the questions at 07 and 09). Clearly there is give and take between more and less able peers, with Mark guiding John's performance -
although there was no evidence of reciprocal learning at this stage. Finally, there was abundant and immediate feedback, not merely corrective but also affective - as is indicated in Mark's final three utterances cited above. Clearly, peers could be very effective in clarifying the requirements of routine tasks such as the above, and there were other occasions when John benefited from such assistance. The two boys continued to converse easily while they worked. At one point, Mark discovered that John could read and write Chinese:

# 15
01. Ma: What did you learn in Taiwan?
02. Jo: Handwriting was mostly Chinese words
03. Ma: Chinese!
04. Jo: Yeah (showing his Twink pen) Those are Chinese words
05. Ma: What do they say?
06. Jo: Uh?
07. Ma: What do they say?
08. Jo: They tell you how to use it
09. Ma: Do you understand it?
10. Jo: (carelessly) Yeah, I know
11. Ma: Cor!
12. Jo: Everyone in Taiwan knows this. Even everyone. Even if you are five years old.
13. Ma: Are you a, are you a Chinese?
14. Jo: Yeah
15. Ma: Are you?
16. Jo: Just a moment. (reading the handwriting task) "The night was still..."

This extract may be considered an example of collaborative participation within an RSC - the emphasis being on the social dimension of learning - but with the roles reversed: here, Mark initiated the exchange and took the part of the less able, or knowledgeable, peer. During the interaction, Mark learnt John's nationality and was impressed by his bilingual skills. In this short exchange, John was able to establish that he had particular knowledge and skills and thereby established a basis for reciprocal learning. The exchange also indicated John's ability to engage in cumulative interaction with an element of social tact, and appropriate feedback, and also to terminate it appropriately - in order to get on task like any of his classmates. After the handwriting task, with no other work in hand, the conversation turned to John's favourite topic - geography; after spending a few minutes talking about places in John's atlas, the conversation turned to the places they had visited.

Their conversation was overheard by some of their neighbours, one of whom joined in:
16
01. Ma: Here's my country (pointing in map) My country>
02. Jo: (to Bu) Where do you come from? I bet you're not, a Kiwi
03. Bu: Here, Auckland
04. Jo: Uh> Where do you come from?
05. Bu: Auckland
06. Jo: Oh - are you a Kiwi?
07. Bu: Yes
08. Jo: Yes? I'm not. Sure not! Sure is not a Kiwi
09. Bu: Me?
10. Jo: I said me!
11. Bu: Some Taiwan people are Kiwi. Cos their mum is a Kiwi or their dad is a Kiwi. See?
12. Jo: And your mum is a Kiwi or your dad>
13. Bu: My mum's a Kiwi and my dad's an is there - Tuvalu (pointing to map).

The entry of Buna into the conversation reveals the social ease with which John was able to extend the number of his interlocutors, and the following exchange exemplifies some elementary scaffolding. John verbalised a superficial assumption based on Buna’s Polynesian features; as the more knowledgeable peer, she firmly insisted (07) on her status as a New Zealander. At this point, John appeared to be in some confusion, so Buna explained (11) how some people can have two nationalities. Her ‘See?’ may be regarded as a ratchet holding the scaffold in place until John understood the import of the information thus conveyed. John’s following ventriloquation (12), with pronominal and intonational changes, may be seen as his appropriation of the concept. Buna’s next remark (13) may be seen as reciprocal ventriloquation - implicit acknowledgement of John’s understanding. She was thus able to bring the conversation from the general back to the particular, as she showed him on the map the provenance of her father. In this exchange, the two of them were working collaboratively - albeit with some elements of disputation - with the language to come to mutual understanding. John was the only one of the four NESB learners to interact with classmates of the opposite sex.

The following Monday, Ms Wilkins initiated a Social Studies unit on New Zealand (and other) disasters, which occupied the class for most afternoons for two weeks. After doing pre-tasks and tests, the pupils were told to choose individual topics, carry out library research, make notes, discuss their work in groups and eventually prepare and give oral and written presentations. Jean was expected to do this work, and she completed all the required tasks with some help in the instructional task dimension from Tilly and the other girls in her group. Jack was not expected
to do a project, but he did join a group and tried to follow their discourse - as well as that of the teacher's dialogues with the class. Of course, how much he understood of what was said was questionable; when on his own in class or in the library, Jack spent much of his time writing key words and translations into his workbook. Ms Wilkins did not require John to do a project, although he had performed reasonably well on the pre-tasks; instead, she gave him some simple - and unrelated - vocabulary worksheets to do, which he did quite easily and quickly. With nothing else but time on his hands, he spent the class hours devoted to the project either reading his atlas, or drifting from group to group. On occasion, he was asked for his help; for example, at the start of the second week a girl sought his help:

# 17
01. Amah: xxx?
02. Jo: Draw a map of New Zealand? This one? Sure!
03. Am: Like that one, please - cos I don't know>
04. Jo: Did you need more little?
05. Am: I need a big one
06. Jo: A big one?
07. Am: Just like that one.
08. Jo: OK
09. Am: Can you draw?
10. Jo: Yep, I can... I can. I have drew with, with yeah this pen, with this one ... and it's easy>
11. Am: It's not easy>
12. Jo: It's easy - for me!

Having responded to Amah's presumed request, John negotiated with her fairly precisely (02 to 08) what she wanted him to do - an example of pupils working collaboratively and using language cumulatively within the instructional task domain. Their tone was one of mutual friendliness. He willingly set to work, and incidentally demonstrated his greater expertise in this area. While drawing the map for Amah, he occasionally muttered or sang to himself (as always in English) and sometimes interacted with Amah about the work in hand: the exchanges showing a fair amount of amicable give and take. For example, a few minutes later, Amah was able to reciprocate his help:
Amah helped John firstly by directed performance: she effectively modelled the pronunciation of the word (02), which John repeated. She then followed up John’s incomprehension (03) by explaining what it meant (04), reinforcing his learning by spelling the word aloud, and again modelling the pronunciation. (The effectiveness of this explanation cannot, however, be gauged from John’s verbal reaction.) Although there is little evidence of a scaffold being erected, these two interactions together - and others in between - manifest all the characteristics of an RSC. Both pupils initiated interactions, and amicably collaborated in a shared task - each (in different ways) being more able than the other. In this way assistance was reciprocal and feedback was provided where necessary. However, the interaction was then interrupted:

Deprived of the chance to interact and collaborate with his classmates - and of the possibility of acting as a more able peer - John increasingly lost interest in what was happening in the class project. In the following days, he rarely attended to the teacher-class dialogues, and showed little interest in the eventual presentations of their projects by his classmates. It would seem that this was an opportunity lost - especially given John’s interest in and knowledge of world affairs - for other responsive social contexts which could have enhanced his own learning, as well, possibly, as that of his peers - and facilitated a fuller appropriation of the langaculture of Room 7.
4. Alina (and Jean)

By the time Alina arrived in the middle of August, Jean (her compatriot) was well able to participate in the langaculture of Room 7, although still seeking help of various sorts from her friends. When Ms Wilkins placed Alina beside her, she did so with the explicit intention of Jean assuming the role of Alina's more able peer. During her time in Room 7, Alina rarely communicated - even at the social level - with anyone other than Jean, and all of the interactions recorded between these two were in Mandarin (utterances translated from Mandarin in the extracts below are printed in italics). For example, one morning in Alina's fourth week, the pupils were put into groups to work on various tasks associated with the forthcoming publication of the school magazine. The group of girls including Jean and Alina were to cut out photographs of the class taken during the school camp earlier in the year. After giving instructions to the class in general, the teacher came to the group of girls and spoke quite sharply to Jean:

# 20
01. T: All right girls? Now (to Je), come on, I want you helping. Don't just sit doing nothing. You're to help. You know what you're doing
02. Je: Yes.
03. AI: Do you understand what the teacher says?
04. Je: What do you want me to help you with?
05. AI: xxx (inaudible; the two girls get down to work, Jean moving photos around)
06: T: OK. Where is it? All right. (T sits beside Amah and works with her.) Now you'll need - this. Good girl. Well, xxx (to another pupil) Not now dear. Get yours. (To Amah) OK. You'll need to put this one first, so we'll do a swap. That's the same as that. You need to take erm, ... You all right there?

Alina's question to Jean (03) may be interpreted as a check on Jean's comprehension skills, and the latter's response an implicit confirmation as well as an explicit offer of assistance. Although it may be presumed that Alina was thereby enabled to do work with Jean's help that she might otherwise have been unable to carry out on her own, the assistance given to Alina in this brief exchange cannot be considered characteristic of either scaffolding or of an RSC. It is, however, interesting to note that the teacher started to erect a scaffold for the other girl - but did not include these two, who might have benefitted from her attention. Almost immediately, the following occurred after a loud noise in the classroom:
# 21
01. T: (to two boys, who had been misbehaving) Name up. You know that is inappropriate behaviour. You chose to do it. Name up>
02. Je: Do you want that cut? (whispering) Do you want that cut? I've got nothing to do. She wants me to help you. I'll just help you to cut this one...
   (they work together cutting up photos...Je indicates something on the desk, and helps Alina wordlessly)
03. Al: OK (starts cutting, working silently for a minute)
04. Je: Hang on a minute. I'll help you cut it later.

Once again, Jean showed willingness to collaborate with Alina and the latter - presumably with her help - worked on the (far from difficult) task. Seeing that Alina could manage on her own, Jean left her and joined another group elsewhere in the room. Alina occupied herself for the next five minutes cutting up photographs. Jean returned briefly:

# 22
   Je: xxx (about the photos) There are two... Do you want this one?
Alina did not audibly respond, and Jean returned to the other girls. Alina spent several minutes gazing around the room, not interacting at all until Jean’s next brief visit:

# 23
   01. Je: (in English, counting the photos) One, two, three..
   02. Al: There are a few not there? ... Why do you want to do that?
   03. Je: Just put it back - it'll be OK. (leaves for the other group)
While the help that Jean provided was neither substantial nor perhaps strictly necessary (she did not wait to see if Alina followed her instruction) these fleeting visits served the purpose of reminding Alina of her companionship. Finally Jean returned to sit at her desk and checked what Alina had been doing:

# 24
   04. Je: This seems all right - nothing wrong
   05. Al: It seems we lost one picture
   06. Je: (reaching for it on the floor) I can't get it>
   07. Am: Ms Wilkins says we need all the people>
   08. Je: What?
   09. Am: Cos she said, you're gonna put, erm, the new, er, new xxx people>
   10. Je: Oh!>
   11. Am: and this is the New Zealand people
   13. Am: You just do the xxx
   14. Je: Can I?
   15. Am: Do the xxx (samples?) first
   16. Je: Yeah, these people come from from different country. OK. And these, erm
   17. Al: What did she say?
   18. Je: (inaudibly) xxxxx

Here there is evidence of Amah conveying her knowledge of the task requirements to Jean, and of their collaborating, by verbal give and take, to share the work involved. Responding to Alina’s query, Jean presumably relayed this information to her - indicating that she had
moved from less able to more able peer. Alina spent the next fifteen minutes watching Jean and Amah cutting up photographs. There was only one more brief exchange between the two girls in Mandarin, and no further interaction with other pupils - not even Amah. There was little need for much scaffolding to occur within the lesson, but it may be felt that Alina was in a responsive social context vis-à-vis Jean - if with no other pupils: she was able to initiate, work with a more able peer and obtain feedback on her efforts. Her situation in this respect may be contrasted with that of Jack. However, in this lesson Alina spoke no English, nor was any communication in English directed to her by classmates or teacher. Like Jack, therefore, she was unable actually to participate to any significant extent in the langaculture of Room 7.

Two days later, the teacher was engaged for twenty-five minutes in a dialogue with the class about the requisites of a good speech (such as appropriate volume, expression, gesture, and eye contact). During this time, both Jean and Alina were completely silent, and it may be assumed that the input was totally incomprehensible to Alina, and possibly largely so as far as Jean was concerned; in any event she did not act in her established role of more able peer. When Jean was not available (for example in ESOL lessons or working in another group) Alina would spend most of her time incommunicado. There were a few occasions when other pupils tried to communicate with Alina, but these were very limited. For example, the dialogue above was immediately followed by a maths session with student teachers, in which Jean and Alina were placed in separate groups. The topic of Alina's group was decimals, and it is probable that she had the necessary background knowledge, but apart from giving her name when asked by the student-teacher, she remained silent throughout - even when spoken to by another girl:

# 25
01. ST: What are percentages used for?
02. Ps respond giving examples of shopping, in school, etc. ...
03. P: (To AI) Do you know what percentage is?
04. AI: (responds nonverbally)
05. ST: ... You guys know a lot... (ST distributes worksheet.) ...
06. P: (To AI) Do you know what that is?
07. AI: (responds nonverbally).

Shortly afterwards the pupils were told to get on with some sums which they did interactively; Alina worked silently on her own. At one point, the student teacher spoke to her:
ST: (to Al) Can you do this one? Point seven five equals - percent? Erm, changing decimals into percent?
Al looks at ST but does not respond.
ST: And then the other examples. Half>
P: She doesn't speak English>
ST: Yeah, I know.

This was, therefore, another typically silent lesson for Alina, where she made no effort to communicate with either (student) teacher or peers, no attempt was made to scaffold her learning, and where there was no evidence of a responsive social context in which she could articulate or develop her knowledge. Alina - like Jack, Jean and John - was above average in mathematical competence. This ability was particularly manifest in those lessons where they had to carry out timed computation tasks. For example, in a maths lesson three days later - when, incidentally, Jean was absent - Alina indicated that she had finished her task in just under the five minutes set - among the first pupils to do so. (Jack was invariably the fastest in the class.) As usual, the teacher elicited the answers from members of the class; typically, neither Alina nor Jack chose to bid for a turn, and neither did the teacher call on them; an opportunity was missed, therefore, to confirm effective item conveyancing. After eliciting the answers, the teacher elicited the scores:

Alina's appeal to Tilly might have been to check whether or not she had understood the routine instruction; in any event she responded to Tina's direction by imitating her performance. Alina then had to draw herself to the teacher's attention. This was a rare occurrence of her initiating any sort of interaction in English and - when she did - the teacher wrongly identified her and was corrected by another pupil.
After eliciting all the other scores the teacher organised the next task, writing the textbook reference on the whiteboard and set the class to work in two groups. Before moving to her (more advanced) group, Tilly thought she could help Alina:

01. Ti: (to AI) Page 63. Six three. And, one, two... one, two. One, to 36. (showing AI in the text book) So from 1,2,3,4,5,6, 7,8,9,10 - down to 36 OK?
02. Al silently indicates understanding.

While Tilly showed she was willing to help, her assistance (directed performance) may not have been necessary, as Alina immediately got down to work with no further interaction. The teacher then guided the group including Alina through the required method for multiplication, but she paid no particular attention to Alina, who was diligently copying the tasks from textbook and writing the answers in her book. After the teacher had finished her exposition, Alina did not interact with the two adjacent boys, who engaged in a fair amount of on- and off-task talk once the teacher set them to work. At one point, the teacher approached these two boys to check that they knew what to do, and give some further assistance. She did not, however, interact with Alina. The only speech uttered by Alina was when she occasionally subvocalised figures and brief calculations to herself in Mandarin.

What has been reported above was the total interaction in which Alina was engaged for more than fifty minutes. Given her background knowledge, perhaps little scaffolding was needed, but again there were no indications that she was in, or provided with, a responsive social context. Therefore, her access to, and participation in, the langaculture of Room 7 remained extremely limited. Alina's reliance on Jean as her sole line of communication and source of help continued throughout her time in Room 7. For example, in a lesson in Alina's seventh week in school, the teacher started a lesson within a unit on the contemporary Commonwealth Games by reviewing tasks set for homework:

01. T: Who has not done that one?
02. Jo: xxx (offers an explanation...>)
03. AI: (riffling through her papers while T talking, whispers to Je) I still have some to do. It's a lot more than I thought... I want to examine how many are left. I've only done two
04. T: Number 5 - Who has not completed their mascot? (following interactions whispered during T> class interaction)
05. AI: What is that? (referring to mascot)
06. Je does not respond...
The conversation between the two girls took place while the teacher was addressing the class as a whole, and it is possible that Alina's continued expression of her concern may have distracted Jean from attending to the classroom discourse. Jean may have shared her ignorance of what was meant by a mascot and had little chance to find out, as Alina continued her questioning.

#29b
06. Je does not respond...
07. Al: *How many you got left?>
08. T: Six. (eliciting from class) Three big countries that are not part of the Commonwealth....
09. Ps: xxx (respond to elicitation)
10. Je: *I've got two left and you've got seven left† xxx (starts to explain to Al - inaudibly - what she should have done)
11. T: (eliciting) Number Seven. ....
12. Al: *Jesus! (nervous)
13. P: I haven't done that>
14. T: OK. But tell me >
15. Al: *Which two didn't you do?
16. Je: The last two
17. Al: *What shall we do about the last two?>
18. T: ...the final report written on the three you have done. Who has not completed those three? They need to be done today.

Jean responded to Alina's request by conveying the extent of the task requirements. This, coincidentally confirmed by the teacher's general elicitation of responses to question 7, manifestly came as a surprise to Alina, because she had underestimated the amount of homework she had been expected to do. Jean's admission that she had not herself completed the homework led Alina to seek her advice, rather than information. Jean was prevented from responding to this plea by the teacher's instructions to the class, to which she turned her attention. Very shortly afterwards, Alina again sought Jean's help:

#30
01. Al: *How do you spell soccer?
02. Je: S O C C E R
03. Al: *How do you spell xxx>
04. T: Put up your hand if you understood ....
05. Al: *How do you spell badminton?
06. Je: B A D M I N T O N
07. Al: SON?
08. Je: No - TON...

Given the sequence of initiation, actual assistance from a more able peer and the provision of appropriate feedback, this exchange is indicative of an RSC, but without the vital element of reciprocity. Clearly, Jean facilitated Alina's learning but this limited
help - providing two spellings - cannot be considered as scaffolding, nor can this event in itself be regarded as a ZPD. Alina might have found ways of helping herself in such routine matters rather than continuing to rely on Jean, as she did again only a few moments later:

#31a
01. AI: You said there were three different countries. Is this a different task? What is this?
02. Je: You just write the three biggest countries you can think of
03. AI: America?
04. Je: Whatever! (exasperated?)
05. AI: How do you spell America?
06. Je: Use the dictionary
07. AI: Use this one? (shows Je her computer translator.)
08. Je: Use the dictionary. Why don't you just put USA? (the girls find that the translator isn't working) Why didn't you put the battery in?
09. AI: I put it in yesterday!
10. Je: What kind of battery did you put in? ... You should have some ready in case it doesn't work. Oh - just write USA...

Alina sought Jean’s help to clarify the instructional task requirements and Jean responded appropriately (02). Alina’s question about America (03) may have been intended as a concept check, but was met with what seemed like exasperation. Jean perhaps wanted to get on with her own work, so rather than comply with Alina’s next request for a spelling (05) - as she had done before - Jean tried to get Alina to take more responsibility for her own learning - by suggesting (06) the use of a computerised dictionary. This may be seen as an attempt perhaps to erect a simple scaffold which would enable Alina to take more responsibility for her own learning. The following exchange shows why this avenue could not be further explored, so eventually (10) Jean reluctantly gave Alina the information she wanted. However, immediately afterwards Alina - apparently unable or unwilling to work on her own - again sought help:

#31b
10. Je: .... just write USA
11. AI: and RoC?
12. AI: What is RoC?
13. AI: Taiwan
14. Je: (Impatiently) I said to put the three biggest countries! Taiwan isn’t>
15. AI: What about Russia? Is that the biggest one?
16. Je: I don’t want to tell you again. Oh - just copy it (gives AI her own work)
17. AI: Where can I find the book to tell me the answer?
18. Je: If you really don’t understand just ask the teacher
19. AI: How do I ask the teacher?
20. Je: Just tell her you don’t know what to do. Just tell her you don’t know what to do for question 6. ... What time is it?
21. AI: (shows Je her watch)...

- 174 -
By now, Jean seems to have become irritated with Alina’s constant importuning for help not only about the spelling of words in English but also matters within the cognitive domain which Alina might reasonably have been expected to know. Jean referred (14) to earlier guidance she had given (02). This was evidently insufficient scaffolding for Alina, who sought - with the two questions about Russia (15) - further help. By now, probably anxious to get on with her own work, Jean completely abandoned any scaffold she might have been attempting and passed over her own work for Alina to copy (16), hoping to end the interaction at that point. Once again, however, Alina solicited Jean’s help (17) - this time, indicating an attempt to take more responsibility for her learning than merely copying Jean’s work. Jean’s suggestion (18) that Alina ask the teacher might mark her impatience with the role of more able peer. This view is reinforced by the repetition of her advice (20) to Alina’s hesitant question (19). However, the suggestion was not followed up, and it seems from an exchange a few moments later that Alina was very uncertain of how to phrase the question to the teacher, and preferred to rely on Jean for guidance:

22. Je: The teacher’s coming now (T approaches) ... Raise your hand - Hurry!
23. AI: (nervously) Let me think about it.... Where did you find this? (= the information)
24. Je: I didn’t get it from a book. I found it somewhere else... The information’s in your hands. The teacher gave it to us. You should know this. I’ll show you what it is (shows her). Just think about the three biggest countries in the world.
25. AI: Canada?

This time, perhaps appreciating the extent of Alina’s lack of communicative confidence to speak to the teacher, Jean once more assumed the role of peer tutor. The conversation between the two girls continued in this way with Jean trying to get Alina to work on her own, and Alina persisting in asking Jean for help. A few minutes later, half an hour after the start of the activity, the teacher instructed the class to finish their work:

01. T: Seven. Time to pack up. Take out your speech sheets
02. AI: When shall we finish this one?
03. Je: It must be finished today
04. AI: What!
05. Je: Today it must be finished because tomorrow the teacher is teaching us another one. You still have a lot to finish. You have to finish it as soon as possible>
06. AI: But I don’t know what to do
07. Je: Actually, some of them I don't know what to do either. You have to pick up those (points to work on desk) right now (and puts papers in desk.) You can't do it right now.
08. Al: Well if you can't finish it what will happen?
09. Je: Well, the teacher wouldn't know.
10. Al: How much is left?
11. Je: You got - Oh, I don't know. How many have you done? ... There are still five that you haven't finished.
12. Al: What are those five?
13. Je: Just look, look what you've done. The others are the ones you haven't finished - the third one, the fourth one, the seventh one, and the ninth one.
14. Al: (having run out of space?) Oh, I'll just put it in the back.

The first exchange between the girls (02 to 07) indicated Alina's continuing uncertainty about the basic task requirements, which Jean explained to her quite fully (05 and 07), and also confessed her own uncertainty (07). The next exchange (08 to 09) is significant because Jean explained to Alina that there would be no severe consequences of her failure to do the work. This was a matter which may have been weighing on Alina's mind throughout the lesson: she would have been accustomed to Taiwanese teachers checking all prescribed work, and punishing pupils who had failed to complete tasks. The information Alina received in these two exchanges possibly marked an important step in her acculturation to the different procedures in New Zealand. The final exchange (11 to 14) reverted to the sort of direct instruction that Jean had previously been trying to avoid.

In summary, the lesson shows how Jean had moved in a few weeks from uncertainty and dependence - on Tilly and other girls - to a position of authority vis-à-vis Alina. The entire interaction between these two girls throughout this lesson was characteristic of an RSC, with initiation from Alina, help from Jean as the more able peer and constant immediate feedback. However, the essential ingredient of reciprocity was missing: at no time did Alina attempt to promote Jean's learning - unintentionally, she probably did the opposite by distracting Jean with her constant importuning for help. There was very little overt disputation between the two girls, and on the whole their interactions may be considered within the cumulative category: there was very little evidence of any exploratory talk between them at this stage. With regard to scaffolding, Jean was clearly attempting to give specific help to Alina, and tentatively sought ways for Alina to take more responsibility for her learning and thereby promote a more general
competence. However, Alina resisted these attempts and showed a lack of self-confidence in all aspects of her learning, remaining in a state of 'instructional dependence'. Her reliance on Jean became increasingly marked, and eventually the teacher decided to separate them when making a room change in early November. Such a move would have given Alina the opportunity to interact with other pupils, and also release Jean from the constant burden of peer-tutoring. However, just as the teacher decided this, Alina announced that she was leaving Room 7 a week later to pay an extended holiday visit to Taiwan, and would not return until the next school year.
Part 3. Commentary

Review

The ethnograph in the present chapter indicated that some (by no means all) of the pupils in Room 7 were able to make valid contributions towards helping their new NESB classmates to bridge the gaps between their existing and potential levels of development. In doing so, they were building on the foundations of co-constructed learning established in the first weeks of the year, as illustrated and analysed in Chapter Four.

It was also shown in that chapter that responsive social contexts started to emerge in Room 7. In these, pupils could support - and sometimes scaffold - mutual development within the three dimensions of learning under consideration - social, instructional task and cognitive development. Clearly, some of the pupils in the class were more willing, and better able, to collaborate in constructive learning than others.

The ethnograph in the present chapter showed that such assistance was extended to the four NESB learners as, one by one, they entered Room 7. It is not possible - even if it were desirable - actually to quantify the amount, time, or different forms of help received by NESB learners from their peers. It is, however, clear that each of them was able to operate more effectively with the dialogic help of more able partners than he or she could have done alone. In this way, various partial ZPDs were narrowed.

This commentary will firstly summarise the factors which affected the peer tutoring of each of the four learners in turn, and then consider the role of the teacher and some implications for peer tutoring arising from the above points. It will conclude with a brief review of the relevance of scaffolding in responsive social contexts to the learning context of NESB pupils.
1. A comparative summary

1.2 Jean
Jean was most easily and rapidly integrated into the learning culture of Room 7. This process was facilitated by her experience of relevant pragmatic groundrules derived from her previous schooling in New Zealand, and some degree of proficiency in English. As important, if not more so, was the amicable support immediately offered to her by the group of girls, among whom she was seated by the teacher and with whom she developed close social relationships. The combination of these factors enabled her to seek - and obtain - help at times when it was most needed. The willingness and ability of her friends to assist her has been clearly illustrated above. The help they gave ranged from spontaneous or responsive direct instruction and modelling to a more structured form of assistance: evidence was cited of effective scaffolding in responsive social contexts. Jean willingly assumed the role of a less able peer, seeking help from her friends within all three dimensions of classroom learning. However, after a few weeks, while still not completely independent of her classmates, she started to contribute ideas to group activities and thereby share in the reciprocal co-construction of learning in the instructional task and cognitive dimensions. As was seen, she eventually initiated Alina into the langaculture of Room 7 by acting as her more able peer. It may reasonably be assumed that the tuition she had received from others enabled her more effectively to help Alina.

1.2 Jack
None of the factors which facilitated Jean's langacultural appropriation was available to Jack: he had no knowledge of New Zealand school conventions, no local friends, and a minimal competence in English. Moreover, during the first few weeks he was in Room 7, he was seated at the back of the room among boys who were not entirely suitable as peer tutors. This nexus of factors presented considerable difficulties both to himself and to those of his classmates who wished to initiate him into, and develop his progress within, the discourse and procedures of learning in Room 7. He was unable properly to articulate his needs, and even
when his needs were evident it was difficult to provide comprehensible help beyond a basic level. Within the limits of their competence, some of his peers voluntarily helped Jack to perform basic undertakings - usually by direct instruction and modelling. Thus assisted, and by effort on his own part, he was gradually able to participate in some elements of the langaculture. His ability to interact socially was severely hindered, but not entirely prevented, by his linguistic incompetence. As much by his own efforts as by peer assistance, he came to understand some classroom routines and apply the basic skills necessary to perform routine tasks - such as tests and practice activities in spelling and mathematics - and he thereby made some limited cognitive progress. However, there was no scope for the effective development of higher mental functions within ZPDs. This was because the absence of a mutually comprehensible language prevented any effective interpsychological use of dialogue, without which the gap posited by the ZPDs of specific learning situations could not be identified, let alone bridged. In these circumstances, effective scaffolding in appropriate responsive social contexts was impossible and Jack was thus unable to participate in the discourse of learning.

1.3 John

Like Jack, John came to Room 7 with no background experience of local schools and no supportive network of friends. However, contrary to the pre-enrollment information received by the school, he was far more linguistically competent than Jack and rather more communicatively confident than Jean. This enabled him to seek help when and where it was needed, and at the beginning he socialised easily with a wider circle of his classroom peers than either of the other two. The extracts above illustrate that some of his peers were effective in scaffolding some elements of his learning and also that he could operate within fully developed responsive social contexts - acting variously as more- and less- able peer, depending on the circumstances. There were, apparently, few linguistic barriers to his integration into Room 7. However, the very fact of his communicative ease might have disguised his fundamental unawareness of the pragmatic conventions obtaining in New Zealand classes such as Room 7, and he had no close friend who could appreciate this and guide him into and through the langaculture. For example, his
educational background in Taiwan would have provided him with little understanding of learning discourse openly co-constructed by teacher and class in dialogue, or of unsupervised learning, or of the way that classmates were expected to work collaboratively. It may be felt, therefore, that there was a lack of recognition - by teacher and peers, as well as himself - of the extent of his langacultural deficit. Consequently, he did not receive the assistance needed to help him close gaps in the interactional and task performance dimensions so that his real cognitive abilities could be developed.

1.4 Alina
Alina entered Room 7 with all the disadvantages faced by Jack, but with the significant difference that there was a more able L1 peer in the classroom from whom she could learn. In her first few weeks, she interacted exclusively with Jean, and invariably in Mandarin. Jean was able to induct Alina into the learning culture by providing information and advice about pragmatic matters such as school and class rules, routines and procedures. She also showed her how to fulfill learning task requirements; this she did largely by modelling, item conveyancing and comprehensible instruction - precisely the sort of direct help which would have benefitted Jack. Although many of the interactions between Alina and Jean clearly reveal characteristics of responsive social contexts, there was very little evidence of reciprocal learning: all the traffic appeared to be one-way. Moreover, as was illustrated at length in the final lesson above, Alina's instructional dependency on Jean was so strong that it probably prevented Jean from constructing scaffolds within potential ZPDs which might have assisted Alina to close the gap between her actual and potential abilities. Alina's consistent use of Mandarin, and her dependence on Jean for linguistic interpretation, probably retarded her engagement with, and active participation in, the discourse of learning in Room 7. Moreover, the exclusivity of their classroom relationship probably had negative academic implications for both girls. Alina's lack of social self-confidence and linguistic competence, combined with the constant reliance she - and the teacher - placed on Jean as the more able peer, may have inhibited other pupils from trying to assist her in any systematic way. For her part, Alina sought help from pupils other than Jean
only in the latter’s absence for three or hours a week in the ESOL Unit, and then but very rarely. It may also be inferred that Jean’s own langacultural development may have been hindered by the constant obligation to help her compatriot.

2. The role of the teacher

At this point, it is appropriate to consider the role of the teacher. There was sufficient evidence in the examples illustrated above to indicate Ms Wilkins’ general *laissez-faire* attitude towards these learners. As she said in her 1997 interview (Appendix D), she no longer had the time - or perhaps the inclination - to deal with the particular needs of NESB pupils by, for example, preparing special worksheets for them. Nor did she ever attempt to work individually with them or to scaffold their learning - as she did for other pupils in Room 7, especially those with conventional learning difficulties, with whom perhaps she felt more competent to deal. In this respect, she may have resembled the teacher in Bourne’s (1992: 359-60) study, who distanced herself from early stage English learners as a coping strategy to avoid raising serious doubts about her pedagogical strategy. Like that teacher, Ms Wilkins expected

that the children would help each other in their work. ... Most particularly... peer interaction was considered to be the major arena for the integration into the class and into English of the [newly-arrived] pupil (Bourne 1992: 448).

Ms Wilkins relied almost exclusively on other pupils. In the case of Jean, she made it clear to the group of girls that they should help her, and in turn Jean was explicitly instructed to help Alina. Ms Wilkins made no similar provision for either of the boys. As soon as he arrived, Jack was seated at the very back of the room and Ms Wilkins made no effort to specially select or brief his first set of neighbours. As indicated in the ethnograph, they were a rather rowdy group of boys, none of them considered above average in ability or leadership qualities; two of them were themselves non-native speakers of English. The same attitude was shown towards John when he arrived; Ms Wilkins simply assumed that he would
pick things up, and did not delegate any pupil to help him. With regard to these boys, it seems that Ms Wilkins again resembled the teacher in Bourne's study (1992: 360), who deliberately placed NESB learners with those who were themselves seen as neither independent nor competent; they were as a result marginalised (Bourne: 1992: 474). Among others, Fisher (1993:242) and Lyle (1996: 28) have pointed to the need for teachers to group pupils carefully if peer collaboration is to be effective.

Although she relied on peer tutoring, Ms Wilkins gave no guidance as to how this might be done. Nor did she tailor the instructions or group tasks in any way so that peer tutoring might be eased, or how the tasks might be more easily completed by any of the four NESB learners. When she monitored pupils working in groups, she rarely engaged with the NESB pupils, other than cursorily to check that they appeared to be on task; nor did she seek to assist the peer tutors to work more effectively. In her lack of discrimination between NESB and the other learners in her room, her attitude is similar to those of teachers studied by Biggs & Edwards (1991) - “I treat them all the same”. However, perhaps because of this lack of specific guidance, Ms Wilkins had low expectations of the quantity and quality of the work she expected from them. Unlike their classmates, their folders of written work were very slim and the contents rarely checked. Once again, there are similarities between her attitude and that of the teacher in Bourne's study:

The demands made on them and expectations of their work were much less explicit; indeed they were expected and permitted to produce far less work than other children... they found themselves spending long hours filling in time (Bourne 1992: 474).

In short, Ms Wilkins made very little allowance for the needs of NESB learners in her class, or to make changes in her normal classroom practice. In effect, the only source of langacultural help directly available to these pupils in Room 7 was their peers.
3. Some implications for peer tutoring

The issue was raised in the introduction to this chapter as to whether less able pupils would be willing to accept a peer in a 'more expert' role. From the evidence cited above, it is clear that all four NESB pupils willingly (and gratefully) accepted the authority of whoever sought to help them; at no time was any resentment shown towards peer tutors. Rather than create conflict, it became clear that peer tutoring facilitated, rather than hindered, classroom friendships. This can be seen with Jack and his two final neighbours, Jean and - to a lesser extent, Alina - among the group of girls, and John (initially) among a wider, if less intimate, circle of classmates, including some of the opposite sex. As has been said:

To be alone in a new place without friends is potentially devastating.
To find a friend is partially to alleviate the problem. By building with that friend a system of shared meanings and understandings such that the world is a predictable place, children can take the first step towards being competent pupils within the social setting of the school (Davies 1982: 63).

This comment applies even more to NESB learners than to other newcomers to a school. It may be pointed out, however, that the friendships these four children made were entirely school-based; none of them ever exchanged home visits or out-of-school activities with any of their classmates - not even Jean and her primary school friend.

Secondly, the sort of help detailed in the preceding ethnograph suggests that peer tutoring was sometimes, but not always, effective in identifying and bridging developmental levels posited by zones of proximal development in specific learning areas. Failure to bridge a potential ZPD, or to develop the assistance into fully-fledged scaffolding, may have been due to a combination of factors. For example, the limited sort of help needed on any given occasion may not have required the expertise assumed by a ZPD. Sometimes interactions were interrupted before they could be fully developed. Also, the NESB pupils were sometimes unable to comprehend or act upon the help that was offered. Most important, peer tutors
were usually unable to identify the learner’s underlying needs and abilities. Even where these were identifiable, the more able peers may have been unable to provide appropriate or sufficient assistance because – quite understandably – they lacked the expertise to gauge the gap between actual and potential development levels and then bridge that gap.

It is also true that all the pupils in Room 7, while more experienced in participating in group discussions than the NESB learners, were still coming to terms with working collaboratively. Undoubtedly, had more guidance been given to the more able pupils, their tutoring would have been more effective. Likewise, the purpose and requirements of specific tasks and activities could have been made, if not simpler, then more explicit to the tutors so that they might more effectively share this understanding with their less able peers.

However, in broader terms, there is no doubt that classroom peers did scaffold the entry of their NESB classmates into the broader, shared langaculture of Room 7. Reference was made in Chapter 4 to the ‘long conversations’ between teacher and class, and how these were an integral element, indeed the building blocks, of the discourse of learning. In a very similar way the separate, sometimes very short, interactions conducted between NESB learners and their classmates merged into long conversations which facilitated the second language socialisation of these learners, enabling them to come to terms with the conventions of learning in Room 7. That this was the case with Jean and (initially, at least) John there can be no doubt. Alina’s conversations with Jean were in Mandarin, but through them she gained some understanding of the prevailing langaculture even if she did not put the knowledge into practice for many weeks. Jack had most difficulty but with minimal verbal and maximum nonverbal means, even he engaged to a limited extent in communicative interactions with some of his peers.

Thirdly, although the respective contributions to such conversations of NESB learners and their peers were asymmetrical, it may be allowed that conceptual understanding was not only shared but mutually constructed and developed.
Examples were given where reciprocal learning clearly did occur; and even where specific learning was not reciprocated, peer tutors may have gained in various ways. The very act of helping another person is considered an educational goal in itself and one which was explicitly encouraged in Room 7. Moreover, the tutors may have contributed to the development of their own understanding by helping others; they may also have gained insights into the complexity of the linguistic, and - possibly langacultural - difficulties faced by their NESB classmates. The precise ways by which, and the extent to which, they actually benefitted from tutoring NESB classmates remains a matter of speculation until further research can be conducted in this area. It had been assumed that peer tutoring would be voluntary, both in the assumption of the role and in its continuance; in the vast majority of cases, this was so. However, the constant demands made by Alina on Jean tested the latter's patience and may have led to some resentment - although this did not give rise to any overt conflict, and Alina remained a member (albeit silent) of Jean's circle of friends. This reinforces the view that pupils asked to be peer tutors need to be carefully advised about their proper role - and supervised during their performance.

Finally, these peer interactions were invaluable to the NESB learners. Taken as a whole, they constituted the only available bridge in Room 7 across a broad langacultural gap in which instruction, development and learning could potentially be unified to accelerate their integration in, and appropriation of, the discourse of learning of Room 7. If this be doubted, one might consider what would have been the effect if the conversations illustrated and analysed in Part 2 had not occurred.

4. The relevance of scaffolding in RSCs to classroom learning

The introduction to this chapter suggested that these two concepts were in principle compatible, and the ethnograph illustrated the extent to which they co-occurred in Room 7. The first three criteria of scaffolding were evident at various times during some interactions between the NESB pupils and their more able peers: there was evidence of the intention to bring about learning, the learner was
enabled to accomplish a task, and the scaffold was raised or lowered to meet the achievement of the learner. Some pupils, it appeared, were more adept at intuitively scaffolding their classmates than others. The fourth criterion – the attainment of a wider general competence – may reasonably be inferred in a number of cases. Thus, in general, the metaphor can be applied to peer-tutoring. The circumstances in the classroom afforded both opportunities and constraints to its effective use. Opportunities tended to occur where the conditions for Responsive Social Contexts were also evident. RSCs were not always fully realised, and this was particularly true as regards reciprocal learning. However, the ethnograph in this chapter indicated that the notion of an RSC might be more relevant to peer tutoring situations than that of the Zone of Proximal Development. This was because, as discussed in the commentary to Chapter Four, it is unreasonable to expect schoolchildren to be able to analyse developmental levels or to deploy a wide range of pedagogic strategies and tactics within a ZPD. The notion of an RSC demands less expertise from pupils when attempting to scaffold the learning of less able peers, and may therefore more readily be applied to peer tutoring situations. This is because learner initiative may be easier, shared activities and mutual influence more likely, and sufficient and appropriate feedback more feasible. RSCs do, however need to be appropriately structured, and the constraints to effective scaffolding occurred most frequently where this was not done. In short, the effectiveness of peer scaffolding in responsive social contexts would have been enhanced by specific and direct intervention by the teacher. In the case of scaffolding, this might have been achieved by closer attention to the selection of potential peer tutors, clear guidance about, and perhaps modelling of, how to scaffold the learning of their NESB peers, and careful monitoring of their work in this respect. In the case of RSCs, the teacher’s intervention might have been directed at the class as a whole rather than individuals; rather than merely encourage the pupils to work together (as was shown in the ethnograph in Chapter Four) she could have shown them how to collaborate more effectively.
Chapter 6
Appropriation

Part 1. Introduction

Overview
The aim of this chapter is to consider the extent to which the notion of appropriation (Bakhtin 1981; Leont’ev 1981a) may be applied to NESB pupils in the mainstream classroom. It will do so by reviewing and exploring key aspects relating to interpsychological learning and drawing attention to the need for caution in extrapolating evidence of learning from verbal manifestations. This will be followed by an ethnographic analysis of dialogues focussing on the NESB learners and some of their classmates, as in Chapter Five. The question of whether appropriation is a useful construct to apply to Richards & Hurley’s three dimensions of classroom learning will be considered in the commentary which concludes this chapter.

According to Edwards & Mercer (1987: 86-87),
the natural end-product of the learning process is a competent individual who has become able to perform alone, or in new contexts, activities and conceptualisations which could earlier be achieved only with the teacher's help.

Vygotsky assumed that children’s cognitive development would be promoted by effective engagement in joint activity in zones of proximal development with either adults or more able peers. Chapter Four illustrated how a culture of learning was created in Room 7 through dialogue among the participants. Some of these interactions may be described as potential or partially realised ZPDs. It was suggested that the four NESB learners in focus would be, initially, novices in that langacultural context, and would be unable to operate without ongoing assistance in the mainstream. Chapter Five illustrated and analysed the scaffolded assistance provided by their peers, rather than by the teacher, in Room 7.
A consideration of the effectiveness of such assistance - the extent to which the four NESB learners were enabled to appropriate key aspects of the langaculture - is the purpose of the present chapter. This issue may be simply posed in three questions. What is the stimulus for learning? What is the process by which learning occurs? What may be adduced as evidence of that process?

The first part of the chapter will review the interpsychological basis of learning before considering various theoretical interpretations of internalisation and appropriation as the process by which learning may occur. This will be followed by a brief delineation of the role of inner speech in that process, and how it transmutes into private speech. The linguistic manifestation by which appropriation may be inferred are then considered in terms of imitation and ventriloquation and how these may be contextualised in Mercer’s (1995) three categories of classroom talk, already considered in Chapters 4 and 5. This introduction will conclude with a discussion of the limitations of the analysis of verbal language and the fragility of inferences made therefrom.

In the ethnographs which follow in Part 2, examples of interactions involving each of the four NESB learners will be subjected to microgenetic analysis, with particular reference to the issues discussed above.

The chapter will conclude with a consideration of the extent to which each of the four learners was able to operate within the three dimensions of classroom learning in Room 7.
Chapter Six: Appropriation

1. Interpsychological learning

1.1 Review: The interpsychological basis of learning

As was noted in Chapter Three, the key issue in the social construction of learning is the process by which individual understanding emerges from thought to, and through, language. Fundamental to Vygotsky's thinking was the point (1986: 218) that cognitive processes develop during interaction - the result of joint endeavour manifest in, and created by, interpsychological speech. However, within the internal processing of the individual, meaning comes before the word: thus, although the speech of a child proceeds from the word to the phrase to the sentence, the thought processes start with the whole, and only subsequently evolve into separate semantic units. The two processes come together when language is used as an interpsychological tool. Vygotsky's stress on the importance of language as a tool was posited on an underlying Marxist theory of activity, which assumes that a fundamental human relationship is one of cooperative labour. Vygotsky developed his educational views in reaction to both the unidirectional perspective of behaviourism and the innatist assumptions of Piaget. With regard to the former, he argued that the simple binary division of learning into stimulus-response allowed no active or voluntary part to be played by the individual. Following Vygotsky's lead in this direction, Leont'ev later formulated a three part scheme that includes a middle link (a 'middle term') to mediate the connections between the other two. This middle link is the subject's activity and its corresponding conditions, goals and means (Leont'ev 1981a: 46; original emphasis).

The individual's 'middle link' activity constitutes learning - within a zone of proximal development. However, while asserting the importance of an active role for the individual, Vygotsky also critiqued (1978: 78) what he saw as Piaget's assumption that cognitive development is primarily an inevitable maturational process. In Piaget's view, the innate motivation of the individual - rather than interaction with the ambient culture - guides adaptation to the environment through the two processes of assimilation and accommodation. In contrast, Vygotsky emphasised the importance of socially mediated action - in terms both of a motivated, active child and an active supportive environment (Cole and Wertsch...
1999: 1). That environment crucially depends on social interaction with other people and the 'middle link' activity in a ZPD is learning that is scaffolded by more able partners. Even at the time, Piaget (1932: 360) acknowledged the importance of social relations, and later (1970a: 114) argued that "there is no longer any need to choose between the primacy of the social or that of the intellect". However, Vygotsky's 'general genetic law of cultural development' (1981b: 163) argued that social interaction is absolutely fundamental: learning of the higher mental functions (cognitive and cultural) is primarily stimulated by, and realised through, the interactive use of cultural tools, chief among which is language. There is, therefore, an inextricable causal relationship in Vygotsky's thinking between cognitive (and cultural) development and interpsychological language.

1.2 Internalisation and appropriation

The process by which an individual's understanding develops through language in social activity is often referred to in Vygotsky's work as internalisation; in some translations (for example Vygotsky and Luria 1994) it is referred to as 'interiorisation'. Vygotsky himself used the concept so often in various circumstances that it is not easy to be sure what he meant. A number of explanations have been offered. Leont'ev (1981a) explicitly identified Vygotsky with the notion, which he referred to as 'rooting', and described it as the term applied to the transition that results in the conversion of external processes with external material objects into processes carried out on the mental plane, on the plane of consciousness. In the transition these processes often undergo specific transformations - they are generalised, verbalised, 'abbreviated; most importantly, they can be developed further (Leont'ev 1981a: 55)

The key point in this brief explanation is the role played by verbalisation not only in the ontogenesis of understanding, but in its further extension. Such extension is inherent in the notion of a ZPD, but is also relevant to scaffolding in other contexts. The bridging of the gap is measured not only by the novice's assisted ability to perform the task at hand, but also - and more importantly - by a generalised internal capability of subsequently doing similar tasks independently.
Attempts have been made to describe the process of internalisation more systematically than Vygotsky. For example:

Berger and Luckmann argued that there are three components to the social construction of reality: externalization, objectification, and internalization. All three components are necessary to their theory and together they explain how social institutions, technologies and knowledge are created, maintained, legitimated, and transmitted through social interaction. They proposed that knowledge begins as a natural by-product of the externalization of human activity. As people try to interact over time with each other, an implicit mutual understanding develops between them. Soon, however, this tacit knowledge becomes objectified in explicit concepts and rules, to which language and other sign systems can refer. The final step in this process occurs when this knowledge needs to be internalized by people who were not part of its creation (Forman 1989: 57).

However, such a detailed explanation, although lucid, tends to assume that understanding is a product, rather than a process: as Rogoff (1993a: 139) puts it: "something rather static is taken across a boundary from the external to the internal" and separates the individual from the interactive, dialogic context. She herself prefers the term appropriation, which she took from Bakhtin:

The word in language is half someone else's. It becomes "one's own" only when the speaker populates it with his own intention, his own accent, when he appropriates the word, adapting it to his own semantic and expressive intention (Bakhtin 1981: 293-294).

Rogoff considered that appropriation, more clearly than internalisation, expresses the fundamental point that knowledge is not merely the result of interpsychological activity but its constitutive mode, being the process by which individuals transform their skills and understanding through their participation. Appropriation occurs in the context of engagement (often with others) in sociocultural activity, but focuses on the personal processes of transformation that are part of an individual's participation (Rogoff 1993a: 138).
This understanding of appropriation focusses attention not only on understanding as a process (rather than a product), but also on its social ontogenesis within dialogue - or, as Vygotsky phrased it, within interpsychological speech.

Other writers have also explored the notion of appropriation: as with internalisation, there are various interpretations of the term. For example, Harre (1983) used the term to refer to the period preceding understanding, rather than to the constitutive process itself. Newman, Griffin and Cole (1989: 68) used the term, referring to "productive participation in joint activity" to focus on the acquisition of cultural tools. Like Rogoff, Mercer (1994b: 104) referred to Bakhtin (1981), but also attributed the term to Leont’ev (1981b) as "a sociocultural alternative to Piaget’s biological metaphor of ‘assimilation’". Like Newman et al, Mercer (1994b: 105) interpreted the term to mean the meanings taken by children from encounters with objects, concepts and ideas in the cultural context of schooling. Valsiner (1994a: 253-254) added a further dimension to the construct of appropriation by suggesting that it is necessarily bidirectional: "all the participants in the cultural transmission are actively transforming the cultural messages". He maintained that mutual appropriation would perforce be asymmetrical, and pointed to the need to keep a sense of separation between personal and social co-construction, referring to the concept of ‘inclusive separation’ (Valsiner 1985: 347). By this oxymoron he meant that although some elements of co-constructed understanding can be shared, others will invariably differ phenomenologically among the interactants.

One of the factors that tends to widen the gap of phenomenological appropriation is the relative status of the interactants. Differential status between dialogic partners may be based on unequal power (such as between parent and child), or unequal distribution of knowledge (novice and expert). In the case of teacher-pupil relationships, both conditions explicitly apply, and it may be difficult to judge the extent of actual appropriation by the learner (and hence genuine internalisation) rather than imitation, obedience, or socially acceptable response. Where, however, the dialogic partners are equal in power but unequal in knowledge, meaning is more likely to be mutually constructed - and appropriation more likely to be participatory. Typical of such relationships are the collaborative pupil-to-pupil
interactions considered by Rogoff (1993a: 139-141) and Mercer (1995: 105). Equally important is any linguistic and sociocultural distance which may divide interactants. However, as shown in Chapter 5, it is possible for peers working in the same langaculture to assist novices to understand and participate in at least some elements of the discourse of learning. Nevertheless, though it may not actually prevent the occurrence of appropriation, the cultural gap between partners is likely to hinder, or retard it.

It should be clear that appropriation is a neo-Vygotskian construct; and although some translations of his work do use the term (for example Vygotsky 1934: 356), he himself never elaborated the concept. However, all the above interpretations extend or develop his view that "the social dimension of consciousness is primary in time and in fact. The individual dimension of consciousness is derivative and secondary" (Vygotsky 1979: 30, cited by Wertsch & Bustamante Smolka 1993: 69). Differing as they do in shades of meaning - Bakhtinian appropriations, indeed! - there are features common to all interpretations of appropriation. Above all, there is the assumption that individuals actively construct meanings through cultural encounters mediated by dialogic partners. Where one partner is more able, skilled or knowledgeable than the other, one may assume that the construction of knowledge is asymmetrical; but it may also be assumed that both partners have the opportunity to develop understanding (perhaps in different domains of learning, as well to differing extents) as a result of the interaction. Finally, in appropriating a word or concept, the dialogic partner is not taking it directly from the other person, but adding another dimension to its meaning by tailoring the understanding to that individual's cognitive repertoire and belief system.

In summary, the notion of appropriation seeks to explain how language mediates the process of learning and understanding. Learning is co-constructed, and understanding jointly shared, through dialogue. The rhetorical transformation needed to move meaning reached on the interpsychological plane to personal significance on the intrapsychological plane is brought about by inner speech. This, however, involves a semantic shift as the content of learning is referred to, matched against, and entered into the individual's cognitive and value schemata.
Paradoxically, therefore, once shared learning and understanding enters the subjective frame of reference it will differ, to a greater or lesser extent, from that reached intersubjectively during the external dialogue. In order to reconcile, indeed even to recognise, such phenomenological differences the message needs to be returned to social modes of thinking on the interpsychological plane. The mechanisms which serve this purpose are ventriloquation and externalised private speech. This view of appropriation as the means by which learning and understanding are processed is that which is adopted in the present study.

This view of appropriation is that which is adopted in the present study. Where it is However, appropriation in itself - being an internal cognitive process - is inaccessible to anybody but the deeply introspective thinker. There is a need to find evidence for this process within the observable behaviour of the interactants - and the microgenetic analysis of interactions in the second part of the chapter focusses on verbal behaviour (the limitations of which will be addressed at the end of this introduction). Before proceeding, it is necessary to discuss more precisely how appropriation may be inferred from verbal manifestations in dialogues. Attention will be turned first to the cognitive function of inner and private speech, and then to the mediating role played by imitation and ventriloquation in Mercer’s (1995) three modes of social thinking.

1.3 Inner speech and private speech

Vygotsky developed his thinking about inner speech from Piaget’s (1926) discussion of egocentric speech. He shared some of the latter’s assumptions in this area, for example agreeing that "word and thought are not each other’s mirror images" (Van der Veer & Valsiner 1991: 362) and that therefore a child’s language development was differential for the internal and external manifestations of speech. However, there were important differences. Piaget considered that egocentric speech had no communicative function but was merely an accompaniment to action and would wither away once cognitive development matured. By contrast, Vygotsky established – at least to his own satisfaction (Vygotsky & Luria 1994: 108) - that inner speech, far from being a mere accompaniment to thought, serves a crucial role in cognitive development. Moreover, although structurally difficult to understand, elements of inner speech may also constitute a form of social speech.
Vygotsky believed that thought and speech formed a unity, but distinguished two planes of speech: the internal semantic plane and the external auditory plane. He posited that the direction of internal semantic development was a matter (in today’s terminology) of top-down processing, while the route of external language lay in the opposite direction - from smaller units of language to the larger. According to Vygotsky, inner speech acts as the transitional mechanism, taking meaning from the external plane into the internal mental world, processing it en route, and then enabling thought to surface once again in external speech. Both thought and language are transformed as part of the process of appropriation. The thought has become internalised, lodged within the individual's unique frame of reference, saturated by a mental lexicon - and thereby appropriated: "thought is not expressed in the word, but is completed in the word" (Vygotsky 1934: 269). Inner speech is by definition silent, and therefore - like appropriation for which it is the channel - inaccessible to external analysis. However, occasionally inner speech is externalised and moves into the auditory plane as private speech. Vygotsky distinguished the structure of such speech from that of normal (that is, interpsychological) external speech by its syntactic fragmentation and phonological abbreviation and agglutination (Vygotsky 1934; 307); the individual, economising effort, articulates no more than necessary to develop and/or manifest his/her own understanding. It must be pointed out that Vygotsky did no empirical work to distinguish these differing structures, but rather reasoned from analogy.

The reason why inner speech may become externalised into private speech is that it has an important regulative function: that of monitoring - and seeking to exert control over - the activity of material objects, oneself, and other people. The function of private speech as object-regulation is very noticeable with young children when they play with, and verbally address, their toys; it also persists into adulthood, for example when people curse an uncooperative piece of equipment in 'computer rage'. Its use as a self-regulatory tool is apparent when people 'talk themselves' through particularly difficult tasks, this being an external commentary on the internal cognitive processing outlined above. Private speech for other-regulation may occur when interactants are closely working together to construct meaning, as is the case of the dialogue which occurs within a ZPD. During such
dyadic interactions, the inner speech - the thought processes - of either or both partners may be verbalised to promote the development of shared understanding. By thus externalising their mental processes, the interactants provide cognitive and/or affective feedback - thereby monitoring, guiding and perhaps controlling the verbal and mental behaviour of the other. Such feedback may be provided by imitation and ventriloquation, to which attention will now be turned.

1.4 Imitation and ventriloquation within categories of interactional speech

The core notion of activity in Vygotsky's theoretical orientation caused him to posit that within a ZPD, the novice - analogous to an apprentice - would be doing things under the guidance of the expert. Included in this category of activity is verbal and nonverbal imitation as a waystage process which could help to promote eventual independent performance:

Research shows the strictly genetic lawfulness between that which the child can imitate and his mental development (Vygotsky 1933, 1984: 264, cited by Van der Veer & Valsiner 1991: 342).

The above authors go on to comment (1991: 343) that "the concept of imitation has overtones of noncreative copying mechanisms". However, empirical studies of the private speech of children placed in non-communicative situations conducted by Vygotsky (Vygotsky & Luria 1994: 108) may have been the same as they later referred to (1994: 140) as having been "carried out in our laboratories" which focussed on 'reflective imitation'. The use of 'reflective' in this context may be ambiguous; it may mean reflective as in inwardly contemplative or - more likely - as an external mirror of inner activity: in this sense, the learner could be expected to provide some verbal account for the imitative behaviour. Elsewhere, also while referring to imitation, Vygotsky (1935: 356) stressed the need for the learner to make an 'act of generalisation' beyond 'mere verbalisation'. However, as Van der Veer & Valsiner (1991: 342) have pointed out, Vygotsky did not either "refer to or provide a fully-fledged theory of imitation".

One line of thought that has developed a role for reflective verbal imitation within the context of Bakhtian dialogue is the notion of 'ventriloquation' (Maybin 1993), when learners may be heard to (apparently) appropriate the ideas and opinions of
more able partners by repeating their words and echoing their language patterns. Mercer (1994b: 105) has explained that ventriloquating is deeper than mere parroting, as it is part of the mental processing by which understandings can be articulated and shared. Rather, ventriloquation is a particular application of repetition. The use of lexical, syntactic and prosodic patterns of the dialogic partner not only eases the flow of the discourse and creates an externally-apparent affective cohesion, but - more importantly - gives the novice time and opportunity to reflect internally on the meanings ascribed by the expert. In other words, it is a special form of verbal repetition which serves to promote intersubjectivity, and may be consciously or otherwise applied by the novice within the discourse.

Given the reciprocity essential to authentic dialogue within a ZPD, Mercer (1994b: 105) has extended the notion of appropriation to include ventriloquating on the part of the more able partner. Citing Newman et al (1989), Mercer refers to "a particular kind of discourse event whereby one person takes up another person's remark and offers it back, modified, into the discourse". By echoing of the learner's verbalisation - perhaps including some slight lexical, phonological or structural reformulation - the more able partner may give positive cognitive and affective feedback on the learner's own developing thought processes. In this way, the contribution of the learner to the joint construction of knowledge is acknowledged, and some adjustment made to the asymmetry of the pedagogical, as well as social, relationship within the ZPD.

The closer the empathy between the interactants, the more likely it is that the inner, silent conversation described by Ushakova (1994: 140) will surface as ventriloquation on the plane of external speech, linguistically marking and regulating the occurrence and acknowledgment of appropriation. When it does so, private speech will tend to shed some of the characteristic fragmentation posited by Vygotsky, reflecting the shift from intra- to inter-psychological use and the consequent need to make some elements of meaning explicit. For example, externalised private speech will certainly manifest a greater degree of phonological clarity in order to ensure mutual comprehensibility. However, although likely to be better formed than speech for purely private thinking, ventriloquated speech will
also retain vestiges of abbreviated syntax for two reasons. Firstly, it will be abbreviated because the mind of the speaker is still working with, and shaping, the concept being appropriated. Secondly, utterances will be syntactically incomplete because of the mutually understood context. For example, predication is likely to predominate, and deictic markers will be absent, precisely because the theme of the discourse is a matter of shared knowledge, both partners tending to adhere to Grice's (1975) maxim of quantity, saying only what is necessary for mutual understanding.

Vygotsky, arguing (1986: 256) that "a word is a microcosm of human consciousness", proposed that the way forward would be a close examination - a microgenetic analysis - of the interpsychological speech of the individuals concerned. This is the approach that will be adopted in the following ethnograph, in which linguistic evidence of appropriation within specific interactions will be presented and discussed. Mercer (1995: 68) has emphasised the need to account fully for the actual context in which key exchanges and utterances occur: therefore, the key interactions will be situated within the wider context of the lessons within which they occur. Mercer (1995: 68) has also pointed out that the importance of such interactions to the co-construction of knowledge can only be understood in relation to the long-term continuity of the sociocultural context. Such continuity has been presented in the two previous chapters, where the analysis was assisted by reference to Mercer's (1995:104 -106) "distinctive social modes of thinking" - disputational, cumulative and exploratory talk. These threads of continuity are resumed in the following ethnograph.

Of these three categories, exploratory talk embodies certain cultural principles: accountability, clarity, constructive criticism and receptiveness (Mercer 1995: 106). These principles are those which are, or should be, valued in the discourse of education, and thus exploratory talk is more conducive than the other two types for the joint construction of knowledge and growth of mutual understanding.

"Compared with the other two types, in exploratory talk knowledge is made more publicly accountable and reasoning is more visible in the talk" (Mercer (1994b: 104, emphasis in original). It may be assumed that the more interpsychological talk
shifts into the third category, the more the likely it is that the NESB partner will be seen to move from apprentice to collaborator and possibly into the role of more able partner - even if only for the specific purpose of a specific interaction. To facilitate that process, externalised private speech and ventriloquation may be the key linguistic signals of the shift from cumulative to exploratory talk, as they are the verbal manifestation of the sharing and appropriation of understanding. Particular attention will be paid to them in the ethnograph that follows.

2. The limitations of a analysing verbal language

It needs to be noted that dialogic encounter is enriched by other means than verbal language to convey meaning. For example, in the sort of skill learning associated with conventional apprenticeship models, the novice will imitate the master's craft. In some cases, the expert might use interpsychological speech to supervise and guide the imitation so that the learner can reflect upon the skills that lie below the surface. In other cases, the process might be one of noncreative copying from silent observation of a given model or demonstration, with no overt use of language. In this sort of learning, as well as in cognitive and cultural learning, elements of conceptual meaning, often quite significant, will be offered, shared and co-constructed from kinesic, proxemic and optemic signals. Shore (1996: 56) has pointed out that abbreviated, nonverbal or invisible elements of appropriation compound the difficulties faced by the non-participating researcher's attempts to understand (actually make sense of) what the interactants are saying to each other, as well as interpret their actions, intentions and motivations. In the light of this complex problem, it is hardly surprising that Vygotsky did not make his deductions about inner speech from actual observation, but rather sought to "infer the properties of inner speech by extrapolation" (Van der Veer & Valsiner 1991: 366) from external and social speech. Inner speech, therefore, remains a useful theoretical construct rather than an empirically verifiable phenomenon. Its value to the researcher rests on the assumption that it is the mechanism by which understanding is appropriated from interpsychological speech to internalised understanding - and reformulated, perhaps partially, in externalised private speech and ventriloquation.
It was noted above that imitation may be nonverbal, and the notion of ventriloquation may be metaphorically, but very usefully, extended into nonverbal areas. These issues could be studied by means of microgenetic analysis of video-recorded interactions (as has been done, for example, by McCafferty 1998). From time to time in the discussions which follow, reference will be made to these nonverbal means of communication. However, the circumstances under which the present investigation was conducted - notably, its reliance on audiorecording as the primary means of data collection - did not permit these important forms of nonverbal communication to be systematically observed, recorded and analysed.

3. The inevitability - and fragility - of inference

Before proceeding further, a further caveat is necessary. In the introduction to his translation of Vygotsky's Thought and language, Kozulin (1986: xxxix) stated that Vygotsky "emphasized that psychological inquiry is akin to criminal investigation, relying on circumstantial, indirect evidence". As Vygotsky (1934) acknowledged, it is problematic to infer direct causal relationships between joint activity and the evolution of understanding, even in tightly controlled experimental conditions. One important reason for this difficulty is that one approaches an analysis of the development of thought processes (higher mental functions) through their manifestation in speech. Overt speech is at best only a partial manifestation of those mental processes, and much therefore remains implicit. The issue is further complicated because behind thought is personal motivation: "a full and true understanding of another's thought is possible only when we understand its affective-volitional basis" (Vygotsky 1986: 252). As Van der Veer & Valsiner point out (1991: 370), Vygotsky himself did not elaborate this thesis. However, the centrality of motivation to learning in general has frequently been emphasised - notably, by Maslow (1954) - and more specifically to learning in second language contexts (by Lambert 1967, Gardner 1985, Gardner & MacIntyre 1993). There is less unanimity on the construct of motivation itself, and the validity and reliability of Gardner's well-known model has been challenged (Au 1988). Even where satisfactory operational definitions of motivation are devised, the question then arises as to how the motivational consciousness of another person may be
interpreted. For the interactants themselves, the process is facilitated when they share the same frame of reference and purposefully co-construct knowledge within that frame - but even here the process is uncertain:

Direct communication of minds is impossible not only physically, but also psychologically. It can only be reached through indirect, mediated ways. This road amounts to the internal mediation of the thought first by meanings, then by words, Therefore, the thought can never be equal to the direct meaning of words. The meaning mediates the thought on its road to verbal expression, that is, the road from thought to the word is a roundabout, internally mediated road (Vygotsky 1934: 314).

For the observational researcher not directly engaged in the interaction, the process is even more inferential - and circumstantial.

As a final point to the fragility of inference, it needs to be noted that Vygotsky was primarily, though not exclusively, concerned with the evolving thought processes of young children operating in their first language. The process of appropriation for these learners may be described as follows. The conceptual input (pragmatic, procedural or cognitive) is received in words. Metaphorically, the pupils hold this verbal input in their short-term memories while searching their mental lexicons, sited in the long term memory, for meaning. If a lack of comprehension is perceived, the speaker may reformulate the input. The learner would once again attempt to match this paraphrase to the internal repertoire. Bakhtin (1981) and Ushakova (1994) assumed that this process was facilitated by an internal conversation conducted in the individual's inner speech. Only when the verbal concept is matched in the internal schemata can appropriation start to occur. The ontogenesis of understanding occurs when the learner reformulates - in inner speech - the input in terms comprehensible to, and commensurate with, his or her personal knowledge and belief system. This reformulation may be facilitated by the transition from inner speech to audible private speech, which may then be thrown onto the interpsychological plane for the dialogic partner to respond to and/or share. If the individual's contribution is mutually agreed to be appropriately valid,
relevant, lengthy and perspicacious (Grice 1975) for the purposes at hand, the dialogue moves on.

The above process is more complicated for learners trying to understand and express concepts in a second language. As noted on pages 82-83 in Chapter Four, Vygotsky (1962: 110) assumed that the learner would transfer the existing systems of meaning from the first language to the new one. This implies additional layers of mental functioning required in the process of appropriation by the NESB learner. Firstly, he or she has to make sense of the stream of sound representing the conceptual input and relate it to a possible lexical form. That form then has to be matched against an inevitably much smaller mental lexicon than the native speaker’s. This search takes time – perhaps longer than the short-term memory span will allow. While this process is taking place, any further reformulation in the second language is likely to hinder, rather than help the NESB learner, as the short-term memory becomes overloaded. Assuming that a match is made, the learner then has to relate this concept to the mental schemata. This inner speech processing occurs in the first language. A transition from inner to private speech, still in the first language, may occur for self- or object-regulation. However, the next transition to the interpsychological plane for other-regulation in English requires yet further cognitive and linguistic processing.
Part 2. Ethnographic

Overview

The introduction to this chapter presented a theoretical framework with which to analyse the progress of the NESB learners in focus in this study towards independence in situations, activities and conceptualisations which could earlier be achieved only with help (Edwards & Mercer 1987: 86-87). A number of issues constrain this analysis. Mention was made of theoretical complexity, controversy and ambiguity, and of the limitations of the type and extent of the data collected in this study. There is, consequently, a need for caution and circumspection. Inferences can only very tentatively be extrapolated from externalised verbal language because the internal mechanisms described above are invisible, inaudible and therefore inaccessible.

However, there is reason to believe it is possible to illuminate at least some of the ways by which the four learners moved, with some assistance from their peers, towards autonomy. The aim of the following ethnographic accounts is to consider the extent of their appropriation as it might be inferred from their verbal activity. This will be done, as before, by a detailed microgenetic analysis of interactions between the NESB learners and their peers.

1. Alina

It was shown in Chapter 5 that Alina – having arrived in mid-August - was both socially and instructionally dependent on Jean in her first two months in the mainstream class. This dependency continued for the rest of her time in Room 7 until her premature departure for Taiwan on 18 November. However, there were indications that her contextual understanding was growing, that her reliance on Jean was diminishing, and that she more actively participated in the langaculture of Room 7. In the following ethnograph, the ontogenesis of Alina’s appropriation of elements of the langaculture will be illustrated and discussed.
In the following lesson in mid-October, two months after Alina’s arrival, the class had been set the task of providing synonyms and antonyms for a list of words including repair, beat, stingy, etc. The other members of the class had to work without assistance from dictionaries, but Alina and Jean worked with a computer translator. As usual, they spoke in Mandarin:

# 1a
01. Je: I’ll use it with you together. You can copy mine. I’ve already finished it
02. Al: What does ‘repair’ mean?
03. Je: (It means) Just fix it up. Where is ‘repair’?
04. Al: (shows Je) What shall I write for that?
05. Je: You just write ‘fix’. F I X. ‘Fix’ is a word>
06. Al: Is it FIX?
07. Je: Yes. You can copy mine first. I’ll keep going to check the words...

Alina’s continuing reliance on Jean’s help is clearly indicated by her series of questions (02, 04, 06); the last of these echoed - possibly ventriloquated – Jean’s earlier response and reveals her understanding of the small piece of information required. Jean briefly acknowledged this (07) before suggesting that Alina should allow her to get on with her own work. Alina initially resisted this:

# 1b
07. Je: ...I’ll keep going to check the words
08. Al: What does ‘clever’ mean?
09. Je: Clever
10. Al: So what shall I write?
11. Je: You can just write ‘smart’.
12. Al: Is it S M A R T?
13. Je: Yes... (Al writes the word). What else shall I check?>
14. Al: Oh yes! I know this one. I can >
15. Je: ‘Hit’ >
16. Al: H I T (laughs slightly). Like we say ‘yang’ in Mandarin. Do you know the answer to number 10?
17. Je: No, I haven’t checked that yet
18. Al: Well, we’ll look at number 10 now. Its says S P E E D Y- ‘mingcheata’
19. Je: You can put ‘fast’ on it.

In the above exchange, a slight change of interactional pattern can be noted; although Alina continued to ask Jean for help (08, 10, 12), her growing self-confidence is revealed in the rest of the extract. She pre-empted Jean’s offer of help by stating (14) that she knew the synonym and could also (16) spell the word as well as provide its Mandarin equivalent – thus showing her appropriation of the word into her own lexical frame of reference. She immediately built on this small cognitive step by focussing Jean’s attention on a new item, and then (18) took the initiative by indicating the direction they could take next. Realising that she was
ahead of Jean, she displayed her appropriation of the meaning of *speedy*, for which Jean then supplied the English synonym (19). This sequence indicates that the two girls were moving towards a more collaborative mode, rather than the direct apprenticeship that had until now characterised most of their interactions. In Mercer's (1995) terms, the above exchange has elements of cumulative talk-repetition, confirmation and elaboration - through which they might arrive at reciprocal understanding. They continued in this mode for two or three words on the list, until Jean changed their focus from the first to the second part of the task:

# 2
01. Je: Now we've got to do the opposite words... Oh I never realised you've got the same (xxx) as I have... You can continue to write the words you know, as much as you can. Or else you can copy mine. It doesn't matter.
02. Al: I think it's better if I do it myself.
02. Je: You can copy mine! Then you'll get a lot of words. Do you want to? It really doesn't matter if you copy mine.

After explaining the task requirement (01), Jean made a brief social aside before giving Alina a choice of how she might proceed. It is an interesting mark of Alina's growing self-confidence that she chose (02) to do her own list, rather than copy Jean's. Their mode of thinking in this exchange was undergoing a subtle change towards exploratory talk, for example by Jean explicitly giving reasons for her suggestion (03). Their work was shortly afterwards interrupted by the teacher:

# 3
01. T: (to class) Five minutes. And then we'll go through them ... (to Al) You all right here? ... (checks work) Good girl. Well done!
02. P: She can do them easy. See, she's got the erm, the thing, she just needs to.
03. T: Well that's good cos she's, she's learning to do it.
04. P: Oh! xxx.
05. T: (To Al) See if you can find that one because that's our, the topic of our new reading, isn't it. Ghost. See if you can find 'ghost'.
06. AI: 'Ghost' (checks in translator; T moves away).
07. Je: This means ghost. So you should put 'god' (i.e. the opposite). Hang on, I'll just have a look at what I put on my sheet. This is 'ghost'. S O U L. 'Monster' is 'gwai-oo'. So you should put 'yu-hwon' (i.e. evil spirit)... This (i.e. the translator) is very useful. Ms Wilkins said it is good to use this together... You can just check the words (in the translator) I've written down. It's OK for you to copy mine. Later on, if you've got time, you can check the meaning. It's a part of learning...

Ms Wilkins checked Alina's progress (01) and explicitly praised her efforts. This initiated a short disputational challenge by a neighbouring girl, complaining that Alina had an unfair advantage because she was using a dictionary. The teacher explained to her, and indirectly to Alina, that the use of the translator was
appropriate (03) before focussing (05) Alina's next task. The instruction was delivered fairly rapidly; Alina echoed the key word (06) and started to work on her own, having at least picked up the gist of the directive. Immediately Ms Wilkins moved away, Jean offered direct assistance to Alina (29) by translating the instructions and suggesting what Alina should write. She went on to ventriloquate the teacher's approval of their joint use of the translator as a learning resource and, in her role as more able peer, to suggest a learning strategy for Alina.

All of the above exchanges occurred in the space of ten minutes; two minutes later the teacher started a class elicitation of the task information:

# 4
01. T: Finish the word you are writing. Pens down. Eyes this way. ... Right. Well done. Let's go over what we have done so far. Repair - Alina - repair?
02. Je: (whispering, and showing her the word on the list) Repair>
03. Al: Fix
04. T: Fix. Good (to class) Any others?

It is interesting that Ms Wilkins called upon Alina first of all. Having noted that the girl's list included the relevant synonym, she sought to demonstrate to the other members of the class that Alina had understood both the task requirements and the specific information, thereby valorising Alina's participation in the langaculture. Jean's immediate support for Alina (02) is typical, although it not clear whether this was needed as the latter's response (03) was prompt and clear - and readily acknowledged by the teacher. The class elicitation continued for another eight minutes, with both girls following the discourse, but neither participating verbally. The lesson ended with the teacher eliciting lexical sets they had been asked to collect for homework based on the word spooky. One boy offered 'spinecracking':

# 5
01. P1: Spine-cracking?
02. T: Cracking?
03. P1: Yeah
04. Je: (whispering) Later, the teacher will ask you and you will have to speak out. Don't be so nervous! I'll help you to write it
05. P2: Supernatural
06. T: Supernatural (writing on board)... Good. Thank you. Alina - ?
07. Al: Ghost
08. P3: Ghost - yes!
09. T: Good. Did you get a second one?
10. Al: What is the next?
11. Je: I don't know!
Jean warned Alina (04) that her turn to speak would come and, appreciating her nervousness, promised to help her. Alina’s turn came sooner perhaps than expected, but she was able to show her ability to participate in the classroom discourse by offering ‘ghost’ - which the teacher had earlier suggested (#4.05). However, she was not prepared for a supplementary question, and turned in some slight panic (10) to Jean for help, who could not read her writing, or perhaps had forgotten the word on the list. The teacher helped them out by reading aloud the next two words on their list, explicitly praising both her effort (14) and (16) Jean’s.

The lesson from which the above extracts were taken suggests that the long-term scaffolding provided by Jean was beginning to take effect: Alina was enabled to participate overtly, for the very first time, in the classroom discourse. The help given to her in Mandarin by Jean, and the collaborative mode which was beginning to emerge within a responsive social context, enabled her to work more confidently within the task performance and cognitive dimensions of classroom learning. This development was recognised by the teacher; having ensured that Alina would be able to respond without difficulty to her elicitations, Ms Wilkins provided an opportunity for Alina to display her knowledge to the class as a whole.

Alina publicly participated in the learning discourse of Room 7 a second time two weeks later, when the teacher called upon every pupil to deliver a prepared speech. Having been heavily coached by the ESOL teacher aide, Alina too made a short speech in English, which was received by the class as courteously as any other. Ms Wilkins had instructed the class to grade each speech according to criteria which she had fully discussed with them a few days earlier and also reviewed at the start of this lesson. However, none of the NESB learners made any attempt to assess their classmates’ contributions - no specific effort having been made to help them understand why and how they should do so. Thus, while seeming to work towards the same objectives as other members of the class, Alina’s ability to understand and
perform the curricular tasks remained at a level below that of her cohort. In the circumstances, it is likely that her appropriation of the purpose of the activity – like that of the other NESB learners - remained at a very superficial level; none of them perhaps appreciating why peer appraisal might have been considered educationally valid.

In a maths lesson the following week, Alina worked with a Pakeha classmate for the first time. Until now, in Jean's twice-weekly absence in the ESOL Unit, Alina had worked by herself on the computation tasks - or gazed around the room - without interacting with her classmates. On this occasion, after the computation task, the 'teacher as usual elicited the task information and - again, as usual - neither Alina nor Jack was nominated, and neither did they bid for a turn. The teacher then embarked upon a pre-test relating to numerical sets, explained what had to be done and divided the pupils into two groups. Alina, in the less advanced group, sat beside Gail. The teacher distributed the worksheets, giving one to Alina, but without addressing her:

#6
01. AI: (To Gail) What you have to do?
02. Gi: (whispering the rubric) Describe in your own words the following patterns
03. A: xxx (inaudible)
04. Gi: Like, erm 2,4,8,16... and then that with that, and the next one will be three, five – Do you get it?
05. AI: Yes
06. Gi: You get it?
07. AI: Yeah. ... (silence as girls work on task)

Perhaps the first point to note is that Alina felt confident enough to initiate the interaction (01) by asking what had to be done. Gail's first response was simply to read aloud the rubric, but presumably felt from Alina's muted response that further assistance was needed. Her laconic verbal explanation and exemplification (04) was reinforced by pointing and gesturing to the worksheet; throughout this time (04 to 07) Alina was nodding her head. Gail checked twice (04, 06) and Alina verbally confirmed (05, 07) that she had understood. The limited help Gail gave was evidently sufficient to enable Alina to appropriate enough understanding work on her own. Three minutes later, seeing that Alina had completed the first task, Gail referred to the next one:
01. Gi: Do you understand that? (pointing with her finger)
02. Ai: Yeah
03. Gi: (reading rubric) Make up your own rule. Follow, following that rule to make a pattern.
   So you have to make the a pattern and ...it could be one, two, three; two, four, you
   make up your own rule following that rule to make a pattern
04. Ai: You go up in fours? Four>
05. Gi: Eight, yeah>
06. Ai: Twelve
07. Gi: You get it?
08. Ai: Two, four six eight>
09. Gi: Do you understand?
10. Ai: Like this
11. Gi: Like that
12. Ai: Like this.... Circle (drawing)>
13. Gi: Yes. So you make up your own pattern. Make your own pattern up... (girl's work on
   task)... 
14. Gi: (looking over Al's work) Good. That's good. And then you do it over again.
   (Al works silently on task 2).

Despite Alina's statement (02) that she understood, Gail felt the need to explain
more fully what had to be done, which she did (03) by repeating, exemplifying and
reformulating the task rubric. A confirmatory question (04) and an example,
different from Gail's, marked Alina's growing understanding. The talk became
cumulative as the girls confirmed and built upon each other's contributions. Gail
checked that Alina understood (09) and the next three utterances might be seen as
reciprocal ventriloquation. Gail sought to reinforce Alina's understanding by
reiterating the instruction (13) and the two girls worked silently for a moment or
two before Gail checked and approved Alina's work (14). It is not clear how
necessary Gail's help was to close a possible ZPD in terms of the particular
mathematical concept: Alina's initial response, and her subsequent utterances,
indicated that she had grasped the point of the task well enough. However, from a
broader langacultural point of view, the interaction is important as it reveals that
Alina could engage with a Pakeha classmate on equal social and academic terms
despite her linguistic limitations. Moreover, the pattern of interpsychological speech
- reformulation, explanation and exemplification - was evidence of co-construction.
About five minutes later, having completed the second task, Alina wordlessly drew
Gail's attention to the worksheet:
After Alina tacitly opened a potential ZPD, Gail's first reaction once again (02) was to read aloud the task rubric, her private speech shifting into the interpersonal plane. This was evidently insufficient for Alina, who was able to express her lack of comprehension in English (03). It seems that Gail found it difficult to explain clearly what was required (04, 06), possibly because she had reached the limits of her own understanding. Eventually, she suggested that Alina work on the next task. Alina tried to do so (07) but, observing her difficulty, Gail advised her (08) to leave it and go on to the next one. After thinking about it, Alina confessed her inability (09) and Gail tried to reassure her that it wasn't important (30). More clearly than Alina, perhaps, she understood that the purpose of a pre-test was for the teacher to establish the learners' present capabilities in order to focus her subsequent teaching.

Ten minutes later, the teacher took the class outside to check the pre-test. With the pupils seated around her on the grass, she started by running through the first task. Having presumably noted (the field notes do not record this) that Alina had completed at least some of the tasks, Ms Wilkins called upon her to demonstrate her knowledge for the benefit of the class:

# 9a
01. P1: It's too hot to do.
02. P2: It's too hot to do maths.
03. P3: No, it isn't.
04. T: If it gets too hot, we'll go inside. OK. Now, B. What is happening in those three pictures? What is the pattern? Alina - can you tell me what the pattern is? What is happening, in those pictures? (beckons Al to stand beside her) What is happening from that to that to that?
05. Al: Erm...
The first point to observe is that this is the first time that the teacher had used Alina in what Tharp & Gallimore (1990: 58) referred to as 'assisted performance'. In this strategy, teachers use a dialogue with one pupil to scaffold the learning of the class as a whole. It is possible to surmise that Ms Wilkins called upon Alina, confident in her ability to speak in front of the class as a result of the speech she had made a week earlier. Her set of questions (04), delivered at normal, 'non-caretakerese' speed puzzled Alina. Realising this, the teacher started to unpack the issue in order to help her, and also – perhaps - for the benefit of the class:

# 9b
05. Al: Erm...
06. T: What’s the difference between that one and that one?
07. Al: Oh, erm, one square two squares.
08. T: Triangle>
09. Al: Oh yes>
10. T: Yes. Good. Now, how many sides has that one triangle got?
11. Al: Three.
12. T: Good. And this is two triangles -
13. Al: Yes
14. T: How many pieces, sides like that do we need to make that those two triangles.
16. T: Good girl.....

In this sequence, Ms Wilkins attempted to scaffold Alina’s progress by a series of context-embedded questions and elicitations, holding the ratchet and giving praise as Alina took each step. Alina's responses were linguistically minimal – one-word utterances - but adequate to demonstrate her understanding. The interaction continued:

# 9c
16. T: Good girl.....So that’s three, that’s five. Here we’ve got three triangles - how many pieces?
17. Al: Seven.
18. T: Good girl! Can you tell me that pattern? One, er sorry that’s three>
19. Al: Three, five, sev>
20. T: Three, five seven. So if I wanted to make the next one with four triangles how many sides would I have there?
22. T: Good girl. So for making one more we need, one more triangle we need - how many more sides?
24. T: That’s for the next one, going up and -
25. Al: Nine
26. T: Yeah. One up, three -
27. Al: Five, seven, nine - oh, eleven. So ten, fifteen.
28. T: Good girl, you’ve got it! Well done. (to class) OK.....
By the use of questions (16, 19), cues (24, 26), confirmation (20) and approbation (16, 18, 22, 28), the teacher instructed the class, using Alina as a representative, until the task had been completed (28). There is no evidence here of Alina's appropriation of any new mathematical concept. However, even if this is the case, it is also clear that she would not have been able to express her understanding even minimally without the explicit verbal scaffolding provided by the teacher. By her careful structuring of an extended public interaction, Ms Wilkins may have added to Alina's confidence to speak in English in front of the class, thus marking another step in Alina's emergence as a participant in the langaculture of Room 7. While the above interaction was in process, Jean returned from the ESOL Unit and sat on the fringe of the group. Finishing with the teacher, Alina returned to her original place, rather than move next to Jean - a physical sign perhaps of her diminishing reliance on her. The teacher continued the group discourse, during which Alina did not bid for a turn when it might have been appropriate to do so, but she did respond to the round-the-class elicitations when they came her way.

Another lesson in the same week shows how the relationship between Alina and Jean was changing. Ms Wilkins had instructed the class to design a cereal packet, and the two girls were working together, chatting in Mandarin, as they drew and coloured their pictures. After a few minutes Alina began the following exchange:

```
# 10a
01. Al: I want to draw a thin cow
02. Je: Oh you want to draw a thinner one!
03. Al: Do you think it's big enough?
04. Je: You want to draw a small plant over there?
05. Al: Do you think that's big enough?
06. Je: Yes, this bowl is big enough
07. Al: xxx?
08. Je: You should turn it around like this - just half a bowl
09. Al: Do you want to draw something beside that?
10. Je: Yes - I'll draw a dog now - just over there, beside the bowl. ... I might just separate them. Just like this...
```

At this stage Alina was still adopting the role of a less able peer, seeking Jean's advice. However, this exchange (different from those in earlier weeks) shows the two girls working more collaboratively, and verbalising their thinking processes. The cumulative talk is marked by reciprocal ventriloquation (01 - 06), confirmation (06) and elaboration (08) with a shift towards exploratory talk: Alina's question
(09) and Jean's further elaboration (10) are examples of language used for joint consideration and sharing. The interaction continued:

\begin{verbatim}
# 10b
10. Je: ... Just like this
11. Al: Oh, I see. Don't you think it's too big?
12. Je: It's the patterns on the paper. Actually, it's not too big
13. Al: What about this size?
14. Je: Yes - just like this
15. Al: You should turn on the left
16. Je: Yes, it is on the left
17. Al: Don't you think it's bigger here?
18. Je: What? ...
\end{verbatim}

Here, Alina started to take a more leading role, offering suggestions for Jean's consideration in the form of cumulative questions (11, 13, 17) and, on one occasion (15) a piece of direct advice. This was the first time that Alina was noted as having so directly shifted her role. (It may be assumed that she might have done so on other occasions; however, this was the first time that this had been recorded.) Jean, indicating perhaps that she was unaccustomed to the turn that the relationship was taking, tried to defend her position:

\begin{verbatim}
# 10c
18. Je: ...What? No - it's not on this side. Have you seen the pattern? - Straight line up there? Have you seen the blue on the top up there?
19. Al: That's what I mean. You should draw it thicker
20. Je: You see - this is the one you said
21. Al: Is this one?
22. Je: No - this is the one
23. Al: You should draw like this to the border like that
24. Je: This is not a boundary - on the other side is the border (laughing). You should look at that carefully!
25. Al: You see, this is the border and that is the middle line - right?
26. Je: Yes
27. Al: Don't you want to paint the colour in the middle?
\end{verbatim}

Here, the two girls were disputing - very amicably - about how to draw the picture, both being perhaps rather defensive, challenging and counter-challenging until Alina (23) firmly asserted her opinion, following it up with two leading questions (25, 27), eliciting Jean's assent. Even more clearly than the previous exchange, this shows Alina assuming the role of more able peer. Her more dominant position was consolidated a few moments later, when she spoke inaudibly to Jean:
# 11
01. Al: xxx (inaudible)
02. Je: Yes, I know. The bowl isn't so big, is it?
03. Al: xxx (inaudible)
04. Je: I still think the bowl is too big, you know
05. Al: xxx (inaudible)
06. Je: I feel, it seems the bowl is too big and this (indicating something on the drawing) is too small
07. Al: xxx (inaudible)
08. Je: (quietly – to herself?) I think I shall erase this part and draw it again
09. Al: xxx (inaudible)
10. Je: (quietly, working on the drawing) I still feel it isn’t right... (rising pitch & volume)
   ... I think you’re right. I’ll do it your way. It’s much easier than mine. ...

In this exchange, it is impossible to hear what Alina was saying as she spoke very softly, her interjections were very brief, and the microphone was on Jean’s lapel. Although her first comments (02, 04, 06) were clearly addressed to Alina, it is possible to infer that in her next two utterances (08, 10) Jean was talking to herself, rather than communicating with Alina. The translation from Mandarin is not delicate enough to make clear the extent of syntactic abbreviation and phonological agglutination which Vygotsky suggested are characteristic of private speech.

However, the pitch and volume were more reduced than usual, until both increased markedly in her final three remarks (10), which were clearly addressed to Alina. To the extent that this is true, it could be an example of Jean externalising object-directed inner speech as a means of regulating her own thought processes - Alina’s backchanelling providing feedback. In any event, the exchange concluded with Jean’s explicit acknowledgement of Alina’s greater expertise. On several other occasions in the next few minutes, Jean admired Alina’s artwork and sought her help - for example:

# 12
01. Al: I really love to draw pictures - especially watercolours
02. Je: I think you show a lot of creativity in your drawing. You’ve got a moon, a star and the school campus ...
03. Je: ... Can you show me how to finish this picture?....
04. Je: How do I draw this next? I really couldn’t understand....
05. Je: ... the Taiwanese size. Can you teach me how to draw it?...
06. Je: Can you teach me how to draw that? The bowl I want to draw is much flatter than this... Oh I think that’s too small. I want the bowl to stand like this in this space (puts a cut-out over the picture)
07. Al: How can you paste that over your name?
08. Je: Doesn’t matter - I can write on this side
09. Al: We’ve got to paste this on the paper (they begin to do so)
10. T: (approaching) Bece-autiful!
11. Je: Such a genius!
By this stage in the lesson, Alina had so established herself as the more able peer that she felt emboldened to criticise Jean's work (07) and - even if Jean was not quite ready to acquiesce (08) - to extend the role beyond the domain of drawing, to encompass the requirements of the task (09). Ms Wilkins' enthusiastic evaluation (10) was affirmed by Jean (11), whose approbation was jocular but genuine. The lesson, which had lasted about thirty minutes, concluded shortly afterwards.

The above lesson showed Alina's growing confidence, and her expertise in this area shortly came to be more widely acknowledged. About ten days later, the class was designing movie posters, following up previous work on the topic of ghosts and spookiness. Alina was sitting among her usual group, each girl working on her own. Two or three of the girls openly expressed admiration for Alina's art skills.

Five minutes later, a pupil approached the group from another part of the room:

13a
01. P: Can you draw a really good, er who can draw a really good ghost?
02. Sh: Sally>
03. Ni: Alina>
04. P: (to Alina) Could you do me a really good ghost?
05. AI: Ghost? Ghost?
06. P: Ghost
07. Ni: Ghost like that one
09. P: (watching with interest as AI does so) Yes! herr, herr (= sounds of approval) Oh, yes!
10. Al: Not only, really, erm to there...

Sharon immediately suggested (01) that Sally could help, but the pupil chose to take up Nina's recommendation and asked Alina instead (04). The following sequence (04 - 08) is an example of cumulative talk. The pupil (06) echoed Alina's ventriloquation of the word 'ghost' (05) and perhaps assuming that she did not understand, Nina pointed out what was required (08). The visitor's next utterance (08), ventriloquating Nina's previous remark, was a request for help; perhaps in consideration of Alina as an NESB learner, this was expanded to include repetition of key lexical and deictic items. Thus assisted, Alina's appropriation of the request was marked by her starting to draw. As she did so, the visitor showed mounting signs of admiration (09), to which Alina responded with a modest and sociolinguistically appropriate rejoinder. The interaction was then interrupted by the teacher calling across the room:
Not for the first time, the teacher confused the two girls (11) and Alina was now bold enough not only to respond – in a complete sentence - to the teacher (12), but also to pass a wry comment to her visitor (14) before passing the work over. The following exchange (16 – 18) was not directed at Alina. The visiting pupil praised Alina's effort to the group (19) and left duly impressed. During the rest of the lesson, the other girls in the group took various opportunities to admire Alina’s work and ask for her help. Evidently, she had made a deep impression on her group of friends, and this contributed to her integration into the langaculture of Room 7. Two days later she left for Taiwan, not to return to Rosegarden until the start of the next school year, when she would find herself in a new classroom with none of the girls who had befriended her in Room 7.

2. Jean

In Chapter 5, Jean was shown to be alternating roles between less able peer, particularly with regard to Tilly in the weeks after her arrival in mid-May, and more able peer vis-a-vis Alina. The ontogenesis of a more collaborative relationship between her and Alina has been illustrated in the above account of Alina’s appropriation. The following microgenetic analysis will trace the further development of her participation in the langaculture of Room 7. It will begin by showing how Jean was able to move from peer tutee to tutor in a single lesson in mid-October. At the start of the lesson, the teacher allocated pupils different vocabulary tasks, according to their scores on a pre-test given the week before. Ms Wilkins mentioned that Jean had not completed her second test and said she would discuss it with her. She then distributed worksheets and told the pupils that they
could work through them individually or collaboratively. Jean sat beside Tilly, who had been placed in the top group:

# 14a
01. Ti: Hi. What group are you in?
02. Je: I don't know. Erm, Ms Wilkins couldn't find the other sheet - Ms Wilkins couldn't find the other sheet because of when the class did the first spelling test I was at ESOL
03. Ti: Don't worry>
04. Je: And (laughing) you have still got yellow lips! (the girls take out their pencils etc. then, referring to Tilly's worksheet) Level tw, two, oh no - seven
05. Ti: That's easy
06. Je: xxx Find - is that all you learn, all you gotta learn?
07. Ti: Not exactly - that's the list words, the words on the list...
08. T: Put up your hand if you have NOT got your worksheet....

Jean (02) explained why she didn't know to which group she had been allocated; this explanation was clearly but hesitantly delivered, suggesting perhaps that she was monitoring her linguistic output for formal accuracy. Her response (04) to Tilly's reassurance was a light-hearted aside referring to visible evidence of Tilly having eaten a sweet before the lesson. She then immediately returned to task-related talk to check the work that Tilly had been allocated. The interaction started to develop into cumulative talk (06 – 07) when it was interrupted by Ms Wilkins' instruction to the class. Jean then raised her hand, and the teacher approached the two girls:

# 14b
08. T: ... Put up your hand if you have NOT got your worksheet
19. Je: Ms Wilkins! I was at ESOL while the class did the spelling test>
10. T: Ohh! That's why I've only got one sheet from you, not the other one. OK what I'm going to do, Jean, is, I'll give you this one. Cos this is where I think you are - OK - what level I think you're on. Erm. But if it works out not right, then we'll give you a little test and see - OK. So do that one for now, and you and - where's Alina gone?
11. Je: She's at ESOL.
12. T: Oh she's gone to ESOL. OK. But you and Alina can work together when you need to. Right now, you and Tilly can. OK?
14. Je: Yeah. Thank you
15. T: Good girl. If you've got a problem and you find it's not right, you can come to me (walks away).

By now, Jean felt confident enough in Room 7 to initiate an interaction with Ms Wilkins. Her earlier rehearsal with Tilly may have facilitated the succinctness of her explanation (09), and the substitution of 'while' for the previous 'when' shows a degree of lexical flexibility. The teacher's suggestion or directive (12) to Jean to
work with Tilly and then Alina set the interactional frame for this lesson. Jean
silently read through the worksheet, the first four tasks of which were:

- a) Write out the twelve [listed] words in alphabetical order commencing with 'ask'.
- b) Sort out the naming words (nouns) in this week's list. You should have eight down.
- c) How many words can you sensibly add the suffix 'ing' to? Write them down neatly.
  e.g. drink - drinking.
- d) I want you to make a crossword using this week's list. All the words should join
together and read from left to right or from top to bottom. e.g. 

Jean then turned to Tilly for help:

# 15a
01. Je: I don't know how to do it
02. Ti: I'll help you - if you like
03. Je: Yes - I would like
04. Ti: (reading aloud the rubric for first task). Write out>
05. Je: You're on unit nine?
06. Ti: Yeah –
07. Je: Is that high or low?
08. Ti: Erm fairly high....

The whole exchange marks the mutual acceptance of Tilly's status as the more able
peer. She responded promptly and positively to Jean's implicit, but evident, request
for help and, having received Jean's grateful confirmation started to read the task
rubric (04). Jean, however, interrupted her to check Tilly's level in relation to her
own (05). The interaction continued:

# 15b
08. Ti: .... Erm fairly high (quietly & rapidly reading aloud the rubric) Write out the,
twelve words in alphabetical order, words commencing (checking worksheet) ....
  Twelve (pitch & volume up) There's twelve, and you've got>
09. Je: There's twelve
10. Ti: (softly) What does that mean?
11. Je: Oh, I know - I have to write these words in alpha-be-tical order
12. Ti: No, I know that, but what does that mean 'commencing with ask'?
13. Je: Starts with 'ask'? ...

Tilly checked what Jean had to do by reading the rubric aloud (08) – the low key
and fairly rapid speed suggests that this was externalised inner speech, quite
probably assisting her own, as much as Jean's, cognitive processing. The shift in
pitch and volume after 'twelve' in this utterance marks a transition from intra- to
interpsychological speech. Jean manifested her own mental participation by echoing
the word 'twelve' (09). Tilly's question (10) – once again, possibly self-regulating
private speech - allowed Jean an opportunity to indicate understanding of the task
requirement, indicated by a slight reformulation of the rubric. Tilly confirmed this
understanding, but still seemed puzzled (12) by the instruction. Jean offered a
possible solution by readily supplying a synonym (13) - further evidence of her growing appropriation. By this stage, it seems that the potential ZPD opened earlier (01) had been bridged, as Jean was ready and willing to start the task as a result of collaboration with a more able peer. However, the actual help given by Jean was indirect; at no time did she in any discernible way scaffold her learning. It may reasonably be inferred that engagement in interpsychological speech - following Tilly's verbalisation of the rubric, and her own laconic contributions - stimulated Jean's mental processing, even to the extent that she was more quickly able than Tilly to appropriate the requirement of the task. Neighbouring boys, who had been listening to their discussion, interrupted the girls:

# 15c
14. Je: ... Starts with 'ask'?  
15. Anthony: No, it>  
16. Je: It is!  
17. Ti: Oh yeah....

Jean was sufficiently sure of her interpretation, and pragmatically confident enough, to sharply contradict one of the boys (16). She then got on with the task - nonverbal confirmation of her appropriation. Tilly's confirmation of Jean's point (17) was accompanied by raising her hand to attract the teacher's attention:

# 15d
17. Ti: Oh yeah....  
18. T: (approaching) Tilly?  
19. Ti: Oh, I was just gonna say - you know how this says 'commencing with ask' - that means just starting with 'ask'?  
20. T: Yes. So you've got to write out those words, putting them into alphabetical order, commencing - what's another name for commencing?  
21. Ti: Starting  
22. T: Yes, good. Starting with 'ask'. (To Jean) So, there's 'ask'. OK? Cos it's the 'a' word. Right. The only one there that begins with 'a', being the first letter of the alphabet. OK?  
23. Je: Thank you  
24. T: OK. (reading Jean's list) 'Colour'. 'Fly'. You've got the idea. Good girl  
25. Je: Thank you.

Tilly, in her usual thorough way, wished to check the task rubric and did so by offering the meaning she and Jean had jointly constructed (19). Ms Wilkins, although confirming Tilly's hypothesis, responded by paraphrasing the worksheet rubric (20). She then checked the girls' appropriation by a concept question: in itself a move towards scaffolding, as it was intended to lead the girls to working out the meaning for themselves. Tilly provided (21) the synonym earlier suggested
by Jean, which the teacher acknowledged. Rather than release the ratchet, the
teacher raised (22) the scaffold for Jean’s benefit, and checked (24) and praised her
work, thereby confirming Jean’s earlier appropriation. Strictly speaking, the above
interaction was unnecessary for Jean’s cognitive development, although she may
have appreciated the teacher’s confirmation of the understanding earlier reached
with Tilly. Being unaware of this, the teacher may have used the exchange as an
opportunity to ensure that Jean was appropriately on task. Two minutes later,
having finished the first task, Jean interrupted Tilly’s work:

# 16
01. Je: Tilly
02. Ti: Yeah?
03. Je: What does this mean?
04. Ti: (putting aside her work) What does what mean?
05. Je: (showing Ti her worksheet) This
06. Ti: (Looking at sheet) Well, all of these - how many are there? (counting) five, ten,
twelve – you should have erm a couple of nouns
07. Je: Er>
08. Ti: Nouns are words that are er like names
09. Je: Is it xxx - oh, yeah>
10. Ti: OK>
11. Je: Yep>
12. Ti: You gotta pick up the ones that are nouns - er>
13. Je: Eight>
14. Ti: And there are eight. Yeah
15. Je: Yes. Thank you.

Another potential ZPD opened when Jean sought clarification (03) of the rubric of
the second task, which Tilly proceeded to explain, both girls focussing on the
worksheet. Tilly’s embedded question and counting aloud (06) - both marked by
rapidity and low pitch - were probably examples of verbalised private speech,
guiding her own mental processing. Their externalisation probably, though
unintentionally, served as other-regulation: to keep Jean apace. Thinking quickly,
Tilly then offered (08) a definition of a noun, which Jean picked up, started to
query and then appeared (09) to understand. Tilly acknowledged (10) that Jean was
following her thus far, and this was instantly confirmed by Jean (11). Tilly then
provided direct instruction to Jean by paraphrasing the worksheet rubric. Jean
showed that she was following (13) by interjecting the number needed, which Tilly
(14) acknowledged and amplified. Jean’s final confirmation and thanks (15)
appeared to indicate that she had appropriated enough understanding to do the
task. In this exchange, the discourse - characterised by repetitions and
confirmations - was clearly within the area of cumulative talk; even though Tilly was the more able partner, both girls were working to co-construct the precise task requirements. The girls got on with their respective tasks, but within a minute Jean was again stuck. She had not appropriated enough conceptual understanding to be able to continue independently:

In this exchange, the girls were co-constructing understanding within the cognitive dimension - having previously collaborated within the task dimension. Again, Tilly's externalised private speech (02) enabled Jean to follow her thought processes and her attention was sharply focussed by Tilly's final exclamation. She showed her understanding by ventriloquating (03) - with slight modifications of syntax and intonation - Tilly's point about the word class of 'drink'. Her processing was interrupted by Tilly's reference (04) to 'nearly' and she immediately rejected the possibility (05) of it being a noun. This was too fast for Tilly, who needed to focus her own attention (06) on the list before making a judgment - again externalising her mental processing. The following rapid discourse (07 - 13) is an example of cumulative talk, linguistically marked by contribution, ventriloquation and confirmation. Although there was no elaboration, it is evident that the girls were
co-constructing understanding by sharing each other's ideas - until Jean firmly queried (15) Tilly's rejection of 'nearly' as a noun. This caused Tilly to think again, some doubt evident in her response (16). She was about to elaborate when Jean sidetracked her (17) by checking the number of nouns she had identified with Tilly's help. Finding that she was one short, Tilly (18) confidently offered 'truly', a point which Jean accepted (19) by contrasting it with 'killed', which she knew could not be a noun. Tilly's immediate ventriloquation (20) indicated assent to Alina's formulation. Despite this verbal affirmation, Jean's brief silent reflection (20) may have led her to doubt the construction they had jointly made. She invited Tilly to ask the teacher, but was unwilling to do so herself when Tilly made the counter-suggestion (22). Her decision to work it out on her own (23) may show a degree of self-reliance or else her accustomed reluctance to trouble Ms Wilkins.

The above extracts occurred over a period of about twenty minutes, and the girls alternated between individual and collaborative work for another ten minutes or so. During this time, Jean asked - and obtained - Tilly's help to get started on both the third and fourth tasks. Although Jean constantly adopted the role of the less able partner, she was fluent and increasingly confident in initiating, sustaining and terminating dialogues. Her close psychological affinity with Tilly easily enabled them to share their thoughts: the rapid, overlapping and laconic exchanges between them reveal the intersubjective frame of reference that underlay their cumulative talk. Their speech patterns exemplify Ushakova's (1994: 140) point about two partners speaking at the same time - one speaking aloud and the other speaking to the self. Tilly's tutelage consisted of a variety of direct and indirect verbal functions which enabled Jean to cope with the procedural and cognitive demands of the tasks; her appropriation was marked by both her nonverbal activity (that is, by completing the worksheet) and her ongoing dialogue with Tilly. At ten o'clock, Alina entered Room 7 after her ESOL lesson and sat beside Jean. The teacher approached:

# 18a
01. T: Alina, do you know what to do?
02: Al: xxx (inaudible response)
03. T: Yes, you do. Good girl. How are you finding those words Alina, er I mean, Jean?
05. T: Not too hard? Not too easy? OK Good! (moves away to talk to another pupil)
06. Al: What's this about?...
Alina was unwilling or unable to admit ignorance to the teacher, who did not pursue the matter anyway. Not understanding what was required, Alina turned to Jean as peer tutor, speaking as always in Mandarin:

\# 18b
06. Al: What’s this about?
07. Je: It’s on the second page. You have to write down all the nouns on the list
08. Al: What?
09. Je: The nouns. You look at that and write down all the nouns. There are eight nouns on that. And you have to find out>
10. Al: Eight?
11. Je: Yes, eight. You have to find out and write down.

Jean’s first instruction (07) was too terse for Alina, so she reiterated and elaborated it (09, 11) and then helped her to start working on the task - both girls using Alina’s computer translator. The confidence with which she guided Alina was in marked contrast to the diffidence she had shown half an hour earlier - further evidence of Jean’s appropriation. Two minutes later, Alina stopped working and indicated a permission slip which had been issued to the class in her absence:

\# 19
01. Al: xxx (inaudible, referring to the permission slip)
02. Je: It seems like the “Social”
03. Al: I don’t want to go
04. Je: I don’t want to go either
05. Al What’s this?
06. Je: You don’t know the meaning of ATE? (spelt aloud in English)
07. Al: Is it a noun or verb?
08. Je: It’s grammar
09. Al: Did you find out?
10. Je: Do you think it’s a noun or a verb ... (thinking) ... I really don’t know... (quietly, to herself?) probably it’s a noun, or probably it’s a verb. (volume up) You should find out from the translator. They have some examples and you can figure it out. ... If you check the translator it will tell you if it is a verb or not. I think we could check the noun first. "Noun" means ming-su. If you look at the word “n”, that means noun.

The first exchange in this extract (01 – 04) reveals that neither girl wanted to attend the forthcoming social evening, and this was typical of the disengagement of all four NESB learners from the school’s extracurricular events; literally, they did not understand what they were missing. Given the importance attached by the school to this dimension of education - and the interest and talk generated among their classmates before and after events like dances - it marked a lost opportunity for involvement in the langaculture of Room 7. Alina soon (05) reverted to the task, but Jean misunderstood her first question; Alina sought to clarify her point (07) but
Jean's response (08) was so cryptic that Alina formulated yet another question. This perhaps gave Jean the impetus she needed to focus on her role as peer tutor. Her speech (10) appeared to move from private speech - a rare occurrence - to the interpsychological plane as she seemed to be verbalising her thought processes. Her advice to Alina (marked by heightened pitch and a slight increase in volume) was clearly expressed and authoritatively elaborated. The shift from 'you' to 'we' in the penultimate utterance indicated her willingness to collaborate with Alina in the work ahead, and indeed they set to work silently together for another two minutes before Alina complained:

# 20
01. Al: It's so hard!
02. Je: I tell you - if the last letter of the word is 'y' it normally means it isn't a noun. There is one word there where the last two letters are 'ly' (in English). But that is a noun. You have to think about that. I think you should check every word here, then if you understand the meaning you will know if it is a noun or not. I can't find out from the dictionary for some of the words, either. And then I asked the teacher, and she told me the answer, then I knew.

With a degree of authority and assurance, Jean gave Alina (02) a morphological rule of thumb, and then imparted some linguistically inaccurate information about 'truly', derived from her earlier interaction with Tilly (see above #17.18-20). She then told Alina to get on with her work, and suggested how she might set about it. In doing so, she admitted her own lack of knowledge and her own need to ask the teacher. It may be that she was anxious to get on with her own work, because a few moments after this Jean sought help from Tilly in another task. However, a few minutes later Alina again caught her attention:

# 21a
01. Al: Oh my God! (finding a mistake in her work, and correcting with Twink)
02. Je: It's "soft", it's not "sick"
03. Al: What is number two?
04. Je: You have to find eight. (counting aloud) One, two three four five six seven - you missed out one. There is number eight over there
05. Al: I think we should make it brighter (?)
06. Je: Oh! I've got it! You can copy mine to write it down. Hold on, I'll change this paper. I shouldn't show that to you. Have you seen that? ...

Jean (possibly unnecessarily) volunteered the information (02) to enable Alina to correct her work and then gave clear directions (04) on how to complete the same task which she had done in collaboration with Tilly (#16.12-15) - again evidence of, and reinforcement for, her own earlier appropriation. The illocutionary intent of
both Alina’s remark (05) and Jean’s rejoinder are now obscure, but Jean then
suggested that Alina copy her work and the interaction continued as follows:

# 21b
06. Je: ... Have you seen that? Wow! Did you check the eight by yourself?
07. Al: Yes, I did
08. Je: You should check it again - from the beginning. I told you before that if you see the
little square and they write ‘n’ in it means it’s a noun - not a verb. But you’ve already
written it down. I don’t think you should check that again. Oh, you see the second one,
you’ve written that again - if you check that again it’s useless... Look at this. This is
the one. (Al writes it down) Now let’s look at number three. There are some words
where you can put ‘-ing’ at the end. And you have to write down all the words where
you think you can write ‘-ing’ on the end.
09. Al: OK
10. Je: (To Tilly) Can you hold that for me, Tilly? Can you hold this for me? Thank you...

There is little evidence of collaborative talk between the girls in the above
exchange, Jean taking a very didactic attitude in her role as peer-tutor. She issued
directives firmly and comprehensively, and did not allow Alina to contribute her
own ideas. While relevant knowledge may thus have been transferred from ‘expert’
to ‘novice’, it cannot be said to have been a matter of understanding being co-
constructed, nor did she give much opportunity for Alina to reflect upon and make
her own appropriation of, the information which she so confidently transmitted.

By this time, Jean also began to show more confidence towards other members of
the class. For example, a lesson towards the end of November began with a routine
spelling test, for which the class was divided into three groups: Jean was in ‘B’ -
the middle group. At various times during the test, Jean interacted with classmates
while the teacher was reading out the test words. For example:

# 22
01. T: Group A ‘Fair’. Adele has fair hair... ‘Fair’>
02. P: (whispering) Jean, what was that last one?>
03. T: Group B>
04. Je: ‘Fair’>
05. T: ‘Fever’>
06. Je: Fierce. No – Fair (looks at the other’s work)
07. T: He had a fever. C - ‘forecast’. The forecast is for more rain later>
08. Je: You can’t - it’s not ‘excuse’. It’s ‘fair’>
09. T: A: ‘families’. Last week four families>
10. Je: That is ‘fair’. That is fa>
11. T: ...went on holiday. Families. B. ‘Fierce’>
12. Je: Whoops!
13. T: The wild animal was very >
14. Je: Oooh>
15. T: fierce. C. ‘Forehead’. I’m sure you remember that one.
The conversation shows that Jean was now able to disregard the formal rules of classroom conduct by talking during a test - as, of course, did some other pupils. In the first whispered exchange between the girls, her help was both sought (02) and given (04). Her ability to respond promptly and correctly is surprising because her partner was working at a lower level than she was, and Jean therefore had been able to keep in her mind the two lists read aloud by Ms Wilkins. Her thinking process was then verbalised as she rapidly checked herself, changed her mind and then reverted to her previous answer (06). Her next utterance (08) occurred when she looked at her partner's work, and saw that the latter had written the word in the wrong place, and then reiterated her correction (10). Her feelings were also verbalised (in English) in two short interjections (12, 14) as she appropriated the relevance of what the teacher was saying (11, 13) to her own work. The above exchanges - and others in the same lesson when she flouted the rule of not speaking during a test - indicate the extent to which Jean had appropriated elements of the unorthodox langaculture of Room 7 - although it is worth noting that she did not actually cheat by asking for or giving the spellings. After the test, Ms Wilkins instructed the class to write a sentence using four of the words from their lists, which generated various interactions among the pupils. For example:

# 23
01. Je: what have you written?
02. Sh: xxx I'm gonna put 'Every day xxx and I forgot xxx'
03. Ad: (reading aloud her sentence) I forgot to close the fridge and the cat got in xxx
04. Je: That's not true! Adele, xxx I've said my dog had a fever
05. Ad: and xxx>
06. Je: It's not true>
07. Ti: xxx got to put a full stop, put a full stop in there
08. Je: But I haven't got three, three words yet>
09. Ti: xxx
10. Je: No - it's only three. I didn't - it's not forgotten. It's, erm, and, and>
11. Ad: ran away and down the footpath>
12. Je: Foot. (laughs) And .. (pause, thinking) I thought I was a fool! Oh, (quietly) and I was, I felt I was a fool (volume rising) There you go!

Now confident to initiate a peer interaction, Jean elicited Sharon's sentence, and also listened to Adele's before making a jocular commment (04) and reading aloud her own - admitting (06) that this wasn't factually correct either. Tilly interjected (07) and instructed her to punctuate her sentence, advice that was rebutted by Jean (08) protesting and - overriding Tilly - repeating firmly (10) that she hadn't
completed the sentence (and therefore a full stop wasn’t needed). In the same 
utterance she started to think aloud about how to end her sentence, which 
stimulated Adele (11) to suggest a possible completion. Jean briefly considered this 
(12) and proposed a completion to herself, apparently using private speech for self-
regulation.. Her repetition, firmer and louder, sounded acceptable to her, and 
without seeking the advice of her friends, marked her satisfaction by a recently 
acquired colloquial exclamation. In this brief interaction, the other pupils were 
engaging in collaborative talk - making statements and suggestions stimulated by 
Jean's externalised speech - to assist her to complete her task. Jean was manifestly 
receptive of these offerings, considered each, but finally used intrapsychological 
speech to come to her own conclusion.

The above spelling lesson exemplifies the extent to which Jean was eventually able 
to participate in the discourse of learning, both in its formal and informal aspects. 
Her pragmatic competence in the social dimension of learning is evident in such 
interactions. She did not need to ask for clarification of routine instructional tasks in 
order to carry them out. With regard to the cognitive dimension, the lesson revealed 
that she was working towards the same objectives as some of her peers.

3. John

Chapter Five showed that, immediately after his arrival on 20 July, John was 
interacting conversationally with his peers, both seeking and offering assistance - 
but unable to settle into some of the classroom routines. A later example of this 
occurred towards the end of October, when the teacher was working within the 
Visual Language strand of the English curriculum. She spent a few minutes setting 
the scene for this activity, which would require the pupils to identify incongruities 
in a set of illustrations in a book, which she was holding up. The class, including 
Jack and Jean (Alina was in ESOL) followed the explanation attentively, but John 
paid no attention, fiddling with papers on his desk instead. He remained in his seat 
when the rest of the class then gathered around the teacher. After a few minutes, 
however, he did move closer and then sought to participate. Once or twice, he
bidded unsuccessfully for a turn by raising his hand, but - passed over - he eventually called out:

# 24
01. Jo: (raising his hand and calling out) Excuse me>
02. T: (speaks to another pupil)
03. Jo: Ms Wilkins! Ms Wilkins!
04. T: I'm not going to pick you cos you're calling out. You're also making it impossible for the people behind you. (gestures John to sit) Thank you John, that's better. What do you think Mark?

John's first utterance (01), using a conventional formula for initiating or interrupting an interaction indicated that he probably did not intend to be rude. However, the next bid (03) and the accompanying behaviour was deemed inappropriate; Ms Wilkins, firmly but courteously, explained (04) how he was flouting the conventional rules of classroom interaction. John resumed his seat and followed the discourse with increasing interest; a few minutes later he raised his hand, managing not to call out, and was nominated:

# 25
01. T: (responding to a P) Wheelcap. Yes. Yeah - good. John?
02. Jo: The picture is upside down
03. Ps: Doh!
04. T: We've had that before! You must listen
05. P: Three-times!
06. T: (to class) That's the Mona Lisa

John's failure to have understood, or even perhaps have heard, the previous discourse was explicitly criticised by both classmates (03) and Ms Wilkins (04). One pupil's comment (05) indicated that at least one other pupil had done the same as John, and it is interesting to note that this earlier repetition had not been similarly commented upon. On several other occasions, John tried to gain attention by raising his hand, but was thwarted:

# 26
01. Jo: Ung, Ung
02. T: Gene? (To John) No - you're calling out again>
03. Jo: Oh>
04. T: I won't pick you if you call out
05. Ge: The person in the painting's drinking this thing
06. T: (laughs) Yes. Painting on the wall - extra-long straw. Yes, Buna?
07. Bu: The dog is playing
08. T: What's the dog doing?
09. Ps: xxx
Three times in this brief sequence (02, 04, 10) John was reprimanded for calling out, although he was vocalising (rather than verbalising) his bid for a turn. Despite this lack of encouragement, he continued to take an interest in what was happening, several times moving around in order to get a better view of the pictures held up by Ms Wilkins. At one point, as he walked to the other side of the teacher he inadvertently bumped into a classmate, who complained vociferously:

# 27
01. P: John!>
02. T: (To John) Sit down. Quick. Down! You can stay where you were, but I want you sitting down. (T shows next picture) "We went through this old photo album, and I listened as he told stories">
03. P: John, don't play with that!>
04. Jo: Huh?>
05. P: xxx (to teacher)
06. T: No, we don't need xxx>
07. P2: John's pulling this thing out of there!
08. Jo: Oh! I just>
09. T: Right>
10. Jo: I'm just xxx it out, and I put it back
11. T: Just leave it, thank you. I'm not going to continue if you're going to be disruptive.
Would you hold those still please...

Once again, John's inappropriate classroom behaviour caused the teacher to reprimand him (02), and her displeasure was picked up by two or three of his classmates, who (05, 07) drew the teacher's attention to something John was doing off-task. John tried to defend his actions (08, 10), but this led to further public rebuke from the teacher, and she implied that John was likely to bring the enjoyable activity to an end. In this lesson, John's genuine, if pragmatically clumsy, attempts to participate in the discourse of learning were thus thwarted: none of his contributions to the class dialogue were appreciated. As on previous occasions, he was publicly rebuked, and this added to his reputation for being inattentive and disruptive. He did not enjoy close relations with any particular classmate; unlike Jean and Alina, he had no friend to guide his appropriation of the pragmatic groundrules in Room 7.

However, when he felt confident about his ability to do a task, or interested in it, he could work diligently. For example, in the cereal-box design activity (Alina #2, page 201 above), he settled down to work on his own, without interacting with his neighbours except to ask to borrow equipment such as a pencil sharpener. Twice
during this lesson one of the nearby boys asked him for spellings, which he was easily able to give - indicating an acknowledgement by some of his classmates of his greater knowledge in some areas.

Another example was a science lesson in the middle of November. The teacher had revised earlier work on the orbit of the earth around the sun, and set the class to work in groups to answer questions on a worksheet. John was seated among his usual group of five boys, and engaged Ms Wilkins in conversation as she was distributing the worksheets:

# 28
01. Jo: Ms Wilkins! Ms Wilkins. When I was in Taiwan, I ha, I read a book about those things. I ha, looked at about, the earth when it turned around. Correctly, it's twenty-three hour fifty six minutes and four second. But I axed my Mum, and I say why do we say twenty-four hour, and my Mum say>
02. T: Well, we call it twenty-four hours to round it off>
03. Jo: Yeah>
04. T: And, but it is only twenty three hours and a few minutes - you're right. That's why once every four years we have leap year day - the twenty-ninth of Febru>
05. Jo: But I have>
06. T: ary to catch up>
07. Jo: But I thought, but in the book it's also writing about when the earth tum the sun around, it's twenty-three, three hundred and sixty-five point three days, so I'm thinking>
08. T: We just round it off, don't we
09. Jo: Yeah. (teacher moves away)

Ms Wilkins confirmed (02), although she did not valorise, John's display of knowledge and presented the notion of rounding off, which he appeared to appropriate (03) by verbal confirmation. Wishing to elaborate the point, he twice interrupted (05, 07) the teacher's explanation in order to further display his knowledge, and perhaps seek further clarification. This was, however, pre-empted by the teacher (08), whose repetition of her earlier utterance seems intended to 'close the exchange, confirmed by her subsequent action. John's ability and willingness to interact freely with the teacher - and display the extent and precision of his knowledge - is very noticeable here; the other NESB learners in focus lacked the linguistic competence or confidence to do so. While this exchange indicates John's conversational fluency, it marks too an unawareness of verbal tact towards the teacher - manifest, for example, by his interruption of her explanation, and the assertive implications of his use of 'but' (07) to preface a remark. He was also delaying the distribution of worksheets. Having had his knowledge on the subject
matter confirmed by the teacher, John read aloud (to himself) the first task on the worksheet, and immediately turned to one of the boys:

# 29
01. Jo: (to self) 'Just half in the shadow, half in the light' ...OK - let's do it. (volume and pitch raised) Hey Arnold, you just tell me quick and quick and qui and you don't even do it
02. Ar: What?
03. Jo: This one
03. Ar: This one? (reading) The earth is rotating round the sun every twenty four hours - that's how we get night and day. Write down...
05. P: What?
06. Na: John - get your fingers off!
07. Jo: Correct? Every twenty-four hours?
08. Ar: Yeah
09. Jo: No!
10. Ar: Yeah, yeah
11. Jo: Twenty-three hour and a few minutes
12. Ar: Is it?
13. Jo: Yeah - yeah, twenty. Twenty-three hour fifty six minutes and four seconds
14. Na: We just round it off, make it twenty-four
15. Jo: Yeah, we just, cos we just made er, we just made a closer hour, oh we say twenty-four hour, because just, about three minutes... Hey! (to Peter, who joined the group)...
   Let's do it!

His intrapsychological speech (01)- verbalising part of the rubric - may well have assisted his thinking processes, and his appropriation of the content may be assumed in his next utterance - 'OK let's do it' - private speech addressed to himself. His following interpsychological remark to Arnold was intended to stir him into action, but the other boy appeared to need more time than John did to appropriate the task requirements. He carefully verbalised the entire rubric (04) but he was interrupted before he could finish. The criticism addressed to John (06) did not distract him from displaying his superior knowledge. This he did, giving rise to some disputational talk before he elaborated (11, 13). One of the boys echoed (perhaps ventriloquated) the teacher's previous summary and John showed his own appropriation of the concept of rounding up by paraphrase (15). In this interaction, John immediately assumed the role of more knowledgeable peer, and - by his challenging tone - asserted his cognitive dominance within the group. His repetition of 'Let's do it!' (15) was now directed at a new audience, and may be seen as a bid by John for task leadership within the group. He continued to participate fully in the discussion, as may be seen in the following interaction, which occurred very soon afterwards, when Arnold started to draw a diagram to illustrate the point:
Much of this sequence is a melange of disputational and cumulative talk - marked by short, overlapping suggestions and directives with little follow up, except that they allowed the pupils to exchange ideas and, possibly, understanding. In three of his utterances (14,16,18), John showed his mental engagement by picking up the previous statement, ventriloquating elements of it and elaborating the point. His imitation of what he heard was not always accurate - the interaction continued:

Gene's suggestion (24) about including a crater in the drawing evidently puzzled John; trying to appropriate the word with reference to his mental lexicon, he came up with 'equator', which was within the semantic field of the topic. He verbalised it
twice (28, 34) as he attempted to think how the word applied to the drawing in front of him. He did not take part in the disputational talk among the others, becoming so engrossed in looking at the sketch that he got too close to Calum, who complained vociferously (56). John apologised and backed off.

This exchange, as others before and afterwards in the same lesson, showed that John was able to engage in typically competitive and sometimes disputational interaction with other boys. He made some attempt to use language to share ideas and promote common knowledge. This was facilitated by mutual understanding within the group of what was required (completion of a worksheet) and shared ideas about what sort of information was relevant to the discussion. John’s background knowledge enabled him to take a prominent part, at times transferring concepts within the cognitive dimension to his peers - although he cannot be said to have scaffolded their learning within a ZPD. At the same time, there was an opportunity for him to appropriate some of the socio-pragmatic rules of peer interaction, and thereby promote his membership of the language culture of Room 7. Although the other boys were not deliberately trying to help John, their interaction with him provided a verbal platform, which might have enabled him to build, shape and extend his speech repertoire, and thereby develop his cognitive processing.

Where, however, the task was less well defined and where he did not share the same frame of reference as his peers, John found it difficult to collaborate. At the beginning of the following week, the teacher started the class on a series of sessions which would culminate in groups presenting playlets, which they would have planned, scripted, and rehearsed collaboratively. John was part of a group of six boys, which also included Jack. As usual, John’s attention had wandered while the teacher was setting up the activity, and he played no part in the planning discussions during the first lesson in the series. In fact, several times he disrupted the work of the group by talking off-task, to such an extent that the teacher warned the group to be quiet. This was insufficient to deter John, who continued to distract the other boys - for example:
# 31
01. Ar: John! Stop it - you're hurting my sandal.
02. Jo: Huh?
03. Ar: You're hurting my sandal.
04. Jo: Oh, you're hurting my, shoe. Yes you did.
05. Ar: Stop it! Stop it! Stop hitting me! John!
06. Jo: Don't hit me!
07. Ar: Stop that John.
08. Jo: He hit me!
09. Ar: I'm not hitting him!
10. Jo: Did you like that?
11. Ar: What?
12. Jo: Did you like that?
13. Ar: xxx (noise)
14. Jo: Did you like that?
15. Ar: Yes, I did.
16. Jo: Yes you did! Don't hit me! Oooh!" (mock sobs. and continues to make crying noise, quite loudly, then laughs) Nah. Nothing! Nah, nah, nah>
17. Ar: Did you>
18. Jo: Nah, nah, nah. Nah, nah, nah...
19. Ar: xxx Kicking me!
20. T: Right boys! Pack up! Quietly take out your (reading books).

The illocutionary intent of some of the above utterances is now obscure; however, the exchange does indicate, at least in disputational talk, that John was able to hold his ground in micropolitical discord. It also indicates an inability to focus his attention on the work at hand, and a readiness to distract others by creating a disturbance. After Ms Wilkins had stopped the activity, John sighed, took out his reading book and was silent for the rest of the lesson. The following afternoon, the teacher instructed the class to resume the activity. This time, John took an immediate interest:

# 32
01: Jo: Are we going to act a movie?
02. Art: That's what we're doing
03. Jo: Oh - what shall we act? Phil is writing>
04. Art: (to Peter) We need someone else
05. Pe: Calum was in our group wasn't he?
06. Ge: No he wasn't
07. Pe: Oh, that's right cos we ...
08. Ma: (to Arthur) You record what we did.

John's first question may be seen as seeking confirmation the understanding he had gathered from the teacher's instructions to continue working on their plays - but both this question and his next (03) also indicate how little attention he had been paying the previous morning. Arthur dealt quite brusquely with John, ignored his second question, and settled down to work with the group by initiating a
collaborative, exploratory discussion. Although John was not explicitly rejected, neither was he welcomed into the discussion; he turned aside, yawning and humming, while Arthur listened to and noted down several of the boys' suggestions.

A few moments later, John was called into the group's discussion:

# 33
01. Ar: John, listen! John, xxx (Jo stands and looks over Ant's shoulder.)
02. Art: Listen - here's the idea. There's like two flatmates and erm we'll have a TV and they're announcing the Lotto results there's only one of them at home, and then 'Hey - that's my Lotto result!' or something and the other guy comes in and then erm, you know, and, then the guy that came in says he's lost it and that's erm>
03. Pe: Ah>
04. Ge: He's lost it. And then they>
05. Art: Yeah>
06. Ge: like through a big ordeal to try and find out>
07. Art: Yeah>
08. Ge: Try and find out whereabouts it is
09. Art: But, before like, before that the guy that came in - he's at the gym or something - and he just sort of like meets this guy at the gym and he's got the same jacket as the guy, and they accidentally swap them. And like the jacket's got the lotto ticket in it
10. Pe: Yep. Good idea
11. Art: Something like that>
12. Ge: Yep that's>
13. Art: And then, there's this, they hear on the news about this murder and then>
14. Na: Murderer came in>
15. Art: Yeah, the murderer came in, the murderer came in, and got the erm>
16. Na: Yeah, xxx
17. Art: The guy that owned that erm place, and erm you know the murderer kidnapped the guy that owned the place, and then the guy that came in finds out he's got a gun in it, cos he swap, accidentally swapped it with the police officer, and he uses the gun for, then the police officer comes in, and er>
18. Ar: It's good
19. Pe: That's good as. That's good as
20. Art: Oh, and then xxx comes in and erm in the middle of the scene and he goes 'Hey, I think you've got the wrong xxx'. He goes>
21. Ar: John, listen... listen! ... Jo gazes away, yawning.

Arthur's summary of the plot (02) met with approval, and Gene elaborated (04, 06, 08) on the ideas while Arthur acknowledged their relevance. He then made a further elaboration of his own (09); the subsequent confirmations (10,12) also indicate the way that the knowledge was being accumulated and shared among the boys. By the time of Arthur's further elaboration (17), six of the boys were fully engaged in working out the plot, affirming and building on each other's ideas. The interesting point in the above interaction - which is framed by two boys calling on him to pay attention - was John's total lack of involvement, either verbally or
nonverbally, in this co-construction of learning. Having worked out a plot, the boys started casting the play, and John and Arnold were to play the role of news presenters. For several minutes, John's attention wandered to what was happening outside the room—at one point he was told by classmates and then by the teacher to get off the windowsill and get down to work. John resisted several attempts by Arnold to work with him, but eventually he became more amenable:

 Arnolds re-introduction of the topic was met by an apparently indifferent response, but he persevered and suggested (03) names for their characters. John's counter-suggestion (04) was accepted by Arnold, who reformulated his earlier suggestion. A common frame of reference having been established (06), the interaction continued:

 This exchange is a good example of cumulative talk starting between the two boys. Accepting John's readiness, Arnold proposed (07) a line of dialogue, to which John readily assented, although he rejected (10) Arnold's next suggestion that he be the sports commentator, perhaps resenting the idea of playing a less important role. Arnold then playfully directed him to announce netball results, to which John riposted sarcastically - and then subverted Arnold's idea by inserting an aspect of the play's plot (12), which would also enable him to take a more prominent role.
What might have turned into dispute turned towards cumulative talk as Arnold readily built (13) on this idea. John further elaborated the theme by making a specific reference to two of their classmates (14) and Arnold readily built on this, too. However, this was overheard by Mark who wanted to know what they were saying about him (16), which started to led the discussion away from the task in hand. A few moments later, the teacher told the group to be quiet. In this exchange - the only one in the entire lesson - John started to work enjoyably (18) with language to develop mutual understanding, and perhaps to heal any rift with Arnold caused by their earlier bickering. The above interactions reveal that John was largely inattentive and disruptive - frankly making himself something of a nuisance. A major factor in his misbehaviour may be thought to be his inability to appropriate both the broader purpose of the task in hand, and the operational means - collaborative groupwork - by which this end was to be achieved. How much of this was due to his ebullient personality, and how much to langacultural incompetence, is difficult to judge, but he would certainly have benefitted from more focussed guidance in the clarification of the purposes and procedures of tasks.

Thus, it may be considered that John’s overall failure to appropriate learning within the instructional task and cognitive dimensions was due to his failure to understand the basic pragmatic conventions within the interactional dimension. He became aware of their importance only in the last few days of the school year, when he - like his classmates - had to write a self-evaluation report. The criteria for these reports had been introduced to the class on the first day of the year, and insisted upon throughout the year, but John had been expected to acquire the conventions without any specific guidance. Thus, when attempting to evaluate his progress and achievements in Room 7, he struggled to comprehend these categories; he diligently worked with his dictionary on the meanings for the five key concepts, and also sought and obtained help from two classmates. His complete final draft, and that of Jean, is contained in Appendix I. Much more detailed and reflective than hers, John’s account shows that he was beginning to understand some of the langacultural conventions and also that he clearly appreciated his limitations within these areas. It also reveals his intelligence and desire for self-improvement. It is
very poignant that there was nobody who could have identified his 'buds of
development' and then provided scaffolding appropriate to his needs and abilities.

4. Jack

In Chapter 5, Jack was slowly coming to terms with what was going on in Room 7 in the weeks after his arrival in mid-March. His verbal participation with both the teacher and his classmates remained minimal – due to his lack of communicative competence in English. He was, however, usually attentive during the teacher's instructions and dialogues, and closely observant of his classmates' actions in an effort to understand what was required. While he sometimes switched off, and gazed around the room, he did so much less frequently than either John or Alina. He participated to the best of his ability in some classroom activities - most successfully in the computation tasks in maths lessons, for which he was working well within his cognitive competence. At other times, he sought and obtained a measure of help from his peers, but unlike Alina, he had no classmate who could speak his first language, and thereby to provide more focussed guidance. At the beginning of the third term, and for the rest of the school year, he was seated next to two boys, Gene and Peter, who attempted to help him as well as they could.

The extent of the help he received may be gauged in the activity with vocabulary tasks in mid-October noted on pages 213-218 above. His unaided understanding of the teacher's general instructions was manifest when he promptly took out the relevant book when the class was so instructed, and by his ready understanding of which group he was placed in. When the teacher gave him his worksheet, he received it in his usual manner - holding out his right hand, while holding the wrist with his left and bowing his head slightly on receipt. He then read through the worksheet (utterances in Korean are given in italics):

# 35

01. Ja: (vocalising to himself the rubric) Write out...Write out, er, ...twelve words...
alphabetical order ... 'ask' (to Peter) What? What?
02. Pe: Yeah - Alphabetical order
03. Ja: Order?
04. Pe: Yeah - ABCDEFG (singing ditty) Alphabetical. Order
05. Ja: Order? (Ja checks in dictionary) Order? Order
06. Pe: Order
07. Ja: (saying quickly to self) A B C D E F G
08. Pe: OK - 'ask' (pointing to first word on list)
09. Ja: A K S
10. Pe: Yeah - and 'ask', is first (shows Ja on worksheet)
11. T: Put up your hand if you have NOT received your worksheet>
12. Pe: And then, B C D E>
13. Ja: Ah! I know (looks through dictionary, muttering to self) this seems difficult
   Order.... Order? ... G... H I J (finds the entry) Ah – here it is!

Jack externalised his thought processes while reading through the rubric (01): that he verbalised only the key lexis may indicate some development in his ability to read for meaning. However, he did not understand the meaning of 'order', and his first 'What?' was probably self-regulating private speech. The second, slightly louder and accompanied by tugging Peter's sleeve and pointing to the worksheet, was sufficient to enable the other boy to recognise his need. The laconic response (02) was inadequate: Jack's echo (03) showed that he could identify the word correctly, but could not attribute meaning. Noting Jack riffling through his bilingual dictionary, Peter expanded his explanation by chanting an alphabet ditty. The following five brief exchanges (03 to 07) occurred while Jack was looking through his dictionary, and it is clear that Jack was trying to appropriate some elements of meaning, evidenced by repeating 'order' and ventriloquating (saying, not singing) the letters Peter had just chanted. Peter built on Jack's attempts to understand by indicating (08) the first word on the list. Jack again showed (09) some understanding, to which Peter applied a ratchet (10) by telling and showing Jack what to do, and then elaborating (12). Jack explicitly - and in English - marked his understanding of what he had to do (13), which he sought to more fully appropriate by further reference to his dictionary, although - as he said to himself in Korean - he found it difficult. His private speech indicated his mental processing. He kept the English words and letters at the forefront of his mind while using Korean to comment on his activity, culminating in his final utterance - further indication of some appropriation having occurred. He then got on task with no need for further assistance, writing the worksheet words in alphabetical order, externalising elements of his thinking as he did so. At one point, Gene overheard him saying one of the words to himself, and leant over to repeat the letters of the alphabet. His assistance was probably unnecessary, but it showed willingness. In the above, Peter's scaffolding, though limited, enabled Jack to complete the task on his own.
This was done by working with, and through, language: what is significant is Jack's very restricted interpsychological use of English, even after seven months in the classroom.

A few minutes later, Jack was singing the alphabet ditty to himself (echoing Peter's earlier cue) as he completed the task, and then muttered to himself:

#36

01. Ja: (reading the rubric to himself) Sort out the naming words... what does this mean? ... what's this? ... will do like this ...

02. T: (approaching) How're ye going Jack?

03. Ja: Yeah. .... will do!

04. T: (looking at Jack's work) Good. Yes (T leaves)

05. Ja: (reads through the rubric for task 2, and identifying a key word, then) 'should' ...

'Shouldn't should, shouldn't, should' (looks in dictionary, then mutters inaudibly in Korean).

Trying to understand the worksheet, Jack verbalised the first part of the rubric, asking himself what it meant: another example of self-regulating private speech. Jack's final utterances in 01 and 03 are obtuse: they suggest that he had perhaps found a possible way round the problem. Lacking a subject, they manifest the predication Vygotsky said was typical of inner speech, although it should be noted that the Korean language permits the omission of the subject of a sentence. In any event, Jack was evidently thinking quite hard and kept his eyes down, responding only briefly (03) to the teacher's enquiry: she moved away after a cursory check, offering no further assistance.

Jack soon got stuck (05) and, rather than seek help from the teacher at this point, he waited until Peter and Gene had stopped talking to each other and then vocally but nonverbally sought Peter's help, pointing to his worksheet. Peter responded:

#37

01. Pe: (quickly and silently reading the rubric: 'Sort out the naming words (nouns) in this week's list. You should have eight down') Well, I'm not sure

02. Ja: Not sure?

03. Pe: Well, I don't know

04. Ja: Ah! Very unusual - this is! ... How can I know this! ... (checks through his dictionary for each word in the rubric)...How can I know this! (tone indicates exhaustion) ... It sucks! Noun ... it's difficult, it really is! .... naming word, naming word, er na-ming word. naa-ming. Name!
Peter apparently could not help: like Tilly, he and Gene were working on a more complex task and they may have wished to get on with their work at this point.

Jack ventriloquated (02) Phillip's first response with a rising intonation - clearly, if disappointedly, showing his understanding that he would have to work on his own.

Peter returned to his discussion with Gene. Jack first tried looking up 'name' in his dictionary, commenting - increasingly impatiently - on his activity as he did so.

Eventually he found the Korean entry for name - chiminyanghada - but this did not help him, as it indicated that 'name' could be a noun or a verb. He then spent the next four minutes carefully checking the dictionary meaning of the listed words, again externalising his mental processing:

# 38
01. Ja: 'Guess' (looking for one of the list words in his dictionary). ...Guess... Guess (finds entry) Guess... noun
02. Pe: What?>
03. Ja: noun - it sucks! ... sucks! ... No... sucks! ...what is this? What? (pointing)
04. Pe: Noun
05. Ja: Noun?
06. Pe: Which of these are nouns?
07. Ja: Guess? Guess?
08. Pe: Uh?
09. Ja: Guess... (refers to dictionary) Noun? ... (to self) ... 'picture'... (more inaudible muttering) ...R, S, T....

Jack found the Korean entry for 'Guess' and his audible private speech in both English and Korean caught Peter's attention and he started to speak (02). Jack at first ignored him, bound up in his inner search for meaning. He appeared increasingly frustrated (03) with trying to understand what to do; at last his private speech broke into English and he appealed to Peter for help by echoing (ventriloquating?) Peter's earlier question and by gesturing. The subsequent exchange (04 - 08) was very laconic: Peter responded briefly, firstly (04) providing the class of the word Jack was pointing to and then built on Jack's indication of partial understanding (05) by paraphrasing the task rubric (06). Jack then reverted (09) to private speech. Subsequently, it seems, he worked out what to do and continued on his own for several minutes referring to his dictionary, verbalising in English and Korean, and writing the nouns in his book. He then started - by himself - on the third task (-ing suffix):
Despite his evident frustration (01), Jack did not seek help from the teacher when she made another very brief check (02) that he was on task. As before, she did not stay long, nor did she offer to help Jack in any way. When he finished the third task, he carefully checked what he had done, erasing some words and occasionally verbalising his thought processes in Korean and English.

In this lesson, Jack had been working towards the same curricular objectives as some of his peers, and - with considerable difficulty and evidence of frustration - was painstakingly carrying out tasks below the level of the slowest learners. Without assistance from the teacher, he was able to do the tasks only with some help from two of his classmates and by inner conceptual struggle; his thinking processes were constantly manifest in externalised inner speech – abbreviated phrases and/or words in Korean and English. His interpsychological speech in English was restricted to the ventriloquation of short previous utterances and monosyllabic contributions of his own.

The limit of his interpsychological competence was also manifest in the maths lesson in early November, illustrated above with reference to Alina (#7). In the first part of the lesson, Jack was - as usual - the first in the class to complete his computation tasks (in just over two minutes). It is interesting to note that as he did so, his private speech was in English:

These brief utterances show a shift from self-regulation to other-regulation (in this case a signal for the teacher to note his completion) and back again, to focus his thinking on the need to check his work. After the five minutes set time had elapsed, the teacher elicited the scores from the pupils, for which (as usual) Jack was not nominated, nor did he bid. At the end of the elicitation, Peter turned to him:
This laconic exchange - mutually comprehensible because of its contextualisation - was immediately followed by the teacher's instructions to the class about pre-test tasks, to which Jack attended carefully. At the end of the first set of instructions, the teacher asked pupils to raise their hands if they were unsure what to do. Nobody did so, although it is very unlikely that Jack knew what precisely to do: although the teacher spoke quite slowly, the instructions were quite complicated, and were said only once. This was followed by another set of instructions about the grouping. As the class reorganised, Jack muttered to inaudibly to himself in Korean.

The teacher approached and spoke to him:

Ms Wilkins acknowledged Calum's willingness to help (02), so long as he did not tell Jack the answers. Jack took no part in the exchange, and responded neither to the teacher's offer, nor to that of Calum. He muttered something to himself and resumed reading his dictionary, from time to time subvocalising and writing in his book. Two minutes later, after fiddling around in his pencil-case, he got up from his desk and gestured wordlessly to Calum to borrow his Twink pen. Typically, he sought to achieve such ends without recourse to verbal language. Jack continued to work for the next fifteen minutes and completed three of the four worksheet tasks. He occasionally subvocalised but did not interact with any of his classmates. This lesson shows that - unlike Alina - Jack could undertake some of the required work with little or no need to call upon external assistance.

When the class were taken outside a few minutes later Jack muttered to himself, showing some resentment at having to sit on the grass in the afternoon heat:
Despite the dissatisfaction with the setting clearly manifest in his private speech (01), Jack was ready and able to respond (05) to the teacher's (rare) elicitation and also monitor his own production. A few moments later, while the teacher was interacting with others, his private speech again revealed his intense boredom:

This stream of consciousness - crude, ironic, impatient - was possibly provoked by the uncomfortable setting as well as by the simplicity of the pre-test the teacher was reviewing. Jack continued to mutter inaudibly to himself, and click his pen constantly during the ensuing dialogue between teacher and class. After Ms Wilkins had called upon Alina (#9 on pages 207-208 above), she asked Jack to come to her side to carry out a similar assisted performance:

This was the start of the longest recorded public interaction between the teacher and Jack. The required task information was simple - too simple, according to Jack's ironic private speech (06). It is noticeable that although his understanding of the required maths information is evident, it seemed necessary for him first to count...
in Korean (10) before providing the correct answer in English. Moreover, his spoken English is very limited: not only does he reply almost monosyllabically - but unlike his previous response (#57.05) - he did not monitor his use of the plural form (02, 04). The interaction continued:

# 45b
10. Ja: ... one, two three four five - six
11. T: Good. So - are you listening there Yorin? Jack's just told us that the first one's got three sides, the second one has got five sides, the third one's got seven sides. If we put a fourth one in Jack, how many sides would it have?
12. Ja: three four seven - just a moment, three four seven
13. T: You wanna write it for me?
14. Ja: Ohhh>
15. T: if you can't say the word, the number?
16. Ja: just a moment (and draws the triangles/diagram on a piece of paper)
17. T: That's the idea Good. Yes
18. Ja: Eleven?
19. T: Good man. So each time, it's going up by how many numbers? ...

Jack's private speech in Korean (12) alerted the teacher to his presumed inability to express his understanding in English, and he readily followed her suggestion (13, 15), once again making use of private speech (16) to regulate his activity. He then showed his understanding of the concept, first nonverbally (16) and then verbally (18), which was confirmed by the teacher. The interaction continued:

# 45c
19. T: ... it's going up by how many numbers?
20. Ja: Four?
21. T: No - one, no - sorry sorry, three, five -
22. Ja: Seven?
23. T: Yes. Next one'd be - ?
24. Ja: Eleven
26. Ja: xxx
27. T: Each time it goes, you see you've made another one. How many sides?
28. Ja: xxx
29. T: You've already got that>
30. Ja: Two
31. T: Two. Good man. So each time it goes up by - ?
32. Ja: Two?
33. T: Yeah. Good. Well done (starts to address class) ..... 34. Ja: (sighs as he sits on grass) What a prick! I don't want to live!

Jack's initial utterances in this exchange (20, 22, 24) indicate perhaps a growing confidence to respond immediately in English without recourse to mental or verbal activity in Korean. However, he reverted to private speech in Korean (26, 28) although what he actually said was unintelligible. The teacher's final elicitations (29, 31) were presumably intended as a concept check, and Jack's prompt and correct
answers in English allowed Ms Wilkins to end the dialogue. Jack resumed his private speech as he took his place, and continued to curse and swear volubly up to - and after - the teacher told the class to go back inside Room 7. So voluble was it that it came to the notice of some of his classmates:

# 46
01. Ja It sucks! I'm fed up!
02. Ca: What's the matter? Jack?
03. Ja: xxxx
04. Ke: Is he swearing?
05. Ja: xxxx
06. Ca: Jack's swearing!

Although Jack was unable to express the cause of his annoyance to his classmates, he left them in no doubt about his illocutionary intent. What the above lesson shows is the level of frustration and anger that Jack at times felt. The precise cause of his mood cannot be stated, although the combination of the weather, the triviality of the task and his communicative incompetence were evidently contributing factors. There may, of course, have been other reasons on this particular occasion: it was certainly unusual for Jack to manifest disgruntlement so violently.

Unlike John, Jack tried hard to follow the group discussion in the play-writing activities in late November (#31-34 on pages 230-233 above). His constant eye contact with group members and body language indicated the extent of his attention and he contributed by gesture rather than by word. For their part, the boys tried to involve Jack; they allocated him a small part and tried to explain what he was required to do by gestures and laconic phrases. The series of afternoon activities based around the play – as well as other occasions - show Jack's wish to be involved in the discourse of learning, but also the strictly limited role he was able to play in the langaculture of the Room 7.

In the final days of the year, like the rest of the class Jack was engaged in self-evaluation. As will be seen below, he was given some help in this work by Peter, but unlike Jean and John, he never actually completed a written report. One afternoon the teacher instructed the class to take out their previous work on this:
Jack’s immediate reaction on hearing the word ‘evaluation’ - a very audible sigh of exasperation (02) - showed that he understood at least the gist of the instruction. His personal construction of the activity was evident in his private speech (04) bracketing an echo of the word. He started to read the rubric of the self-evaluation form:

His verbalisation of the task instruction (06) caught Peter’s attention, who echoed one of the words Jack was reading. The precise significance of Jack’s repetition of ‘why’ (08, 10) is unclear except that he appeared to be signalling his need for assistance, which Peter tried to give (11) by exemplifying the notion of oral skills. Jack received this information (12), but still did not understand what was meant, as indicated by his private speech in Korean. Peter tried again:

His immediate reaction on hearing the word 'evaluation' - a very audible sigh of exasperation (02) - showed that he understood at least the gist of the instruction. His personal construction of the activity was evident in his private speech (04) bracketing an echo of the word. He started to read the rubric of the self-evaluation form:

His verbalisation of the task instruction (06) caught Peter’s attention, who echoed one of the words Jack was reading. The precise significance of Jack’s repetition of ‘why’ (08, 10) is unclear except that he appeared to be signalling his need for assistance, which Peter tried to give (11) by exemplifying the notion of oral skills. Jack received this information (12), but still did not understand what was meant, as indicated by his private speech in Korean. Peter tried again:
In the above exchange, Peter attempted to help Jack by speaking very slowly (13) and then dictating (17, 19) a version for Jack to write on his self-evaluation form. Jack's ability to do so was very limited - as may be indicated by his repetition of only the final words in Peter's utterances (18, 20). The interaction was soon interrupted by the teacher:

# 47d
23. T: ...Pay attention. Tomorrow, you are going to do class duty for Room S. Who are our monitors?
24. Ja: (to Pe) Crass duty?
25. Pe (inaudibly explains?)

Jack's response here (24) indicates firstly his attentiveness, and secondly his wish to understand what was meant, which Peter presumably then tried to explain (25). In matters like this, Jack differed markedly from John. For the next few minutes, Peter tried assiduously to help Jack understand the task rubrics, by exemplifying and offering synonyms etc. The teacher approached:

# 48a
01. T: Does Jack know what this is all about?
02. Pe: Oh, he doesn't know what to say. He's like (dries up)...
03. T: OK. Well, I'd like you to think along the lines of ... (slowly) how, how well, (more quickly to another P) You go and sit down thank you, Harry. I'll come to you ... slowly and deliberately) How, well do you talk, to the class, to Peter, to other people. (more quickly) Do you make a big effort, (more quickly) do you try hard to talk, to people?
04. Ja: Ah (mutters inaudibly - in English or Korean? - as he refers to dictionary)
05. T: Let's see if we can find speak... (looking through dictionary with him)
06. Ja: mutters inaudibly as they search
07. T: (reads through dictionary) 'Talkathon' isn't here - Harry would do well at that, wouldn't he?
08. Ge: (aside) I could talk for ages>
09. T: (finding entry in dictionary) Talk, speak, chat...
10. Ja: Talk? Oh, mm
11. T: Got it?
12. Ja: Mm
13. T: OK, good (T leaves) ....

The teacher's question (01), directed at Peter rather than to Jack, may be seen as indicative of her reliance on Peter as a peer tutor. Peter's disconfirming reply (02) led her to try to help Jack herself. Her attempt to gloss the rubric (interrupted by another pupil) may have been understood by Jack, although his minimal response (04) did not persuade her. She suggested an obvious course of action (05) but her next comment (07), though delivered in a friendly tone of voice, would not have added much to Jack's understanding of what he was required to do. Her reading aloud of the dictionary entry (09) began to be ventriloquated by Jack, which
seemed sufficient for her to assume that he had understood what was required; she briefly sought (36) and obtained (37) confirmation before leaving. Peter, who had been attending to the interaction between Jack and the teacher, immediately tried to give further help by starting to repeat the teacher's advice:

- 250 -

Jack interrupted Peter's attempt to help with a question (15), which may have been intended to seek confirmation that 'chat' was synonymous, a matter which was presumably dealt with in the next few laconic utterances (16 -18). Jack then reverted to private speech for a minute or so as he again consulted his dictionary to make sense of what he had to do. Although the precise illocutionary intent of these remarks (19) is not clear, it would seem that this verbalisation was accompanying, and perhaps assisting, the development of his understanding of the rubric he was translating. The final utterance in this stream of private speech emerged in English and gave the attentive Peter an audible cue to try to provide further help. While he was speaking (20), however, Jack continued to consult his dictionary, and he then directed Peter's attention to the relevant entry:

In this brief exchange, Jack inarticulately but effectively acknowledged Peter's help (27). The school year ended a few days later, and when he returned to school at the beginning of the next year he found himself in a new class, which contained neither Peter nor Gene.
Part 3. Commentary

Review

The preceding ethnograph illustrated and analysed at necessary length the context and continuity of learning of the four NESB pupils in the final weeks of the school year. This part of the chapter will review the extent to which they were able to appropriate the langaculture of Room 7, and the discussion will be conducted in terms of the three dimensions of classroom learning. Before doing so, it is necessary to review the concept of appropriation in the light of the above analysis.

Appropriation is understood to be the process of transferring meaning from the social to the personal frame of reference. In other words, it seeks to explain how learning moves from input to intake, and language plays the key role in this process. Language firstly occurs on the interpsychological plane, where meaning may be co-constructed in dialogue, especially where the social mode of thinking is collaborative and the participants are working with and through language (Mercer 1995). A second role for language occurs intrapsychologically, where the understanding just reached is matched against, and/or integrated into, the individual’s conceptual schemata. The transitional mechanism for this purpose is inner speech. While language is central to this process, linguistic evidence is virtually non-existent. This is because inner speech is essentially silent, and the only evidence that can be adduced is when inner speech might on occasion be externalised into private speech for self-, object- or other-regulation. Not only is this manifestation relatively rare, it is usually difficult to understand – either because of the syntactic and phonological agglutination proposed by Vygotsky (1934), or because of the sheer inaudibility of the data. Even where understood, the illocutionary intent of private speech is difficult to interpret.

Language plays a third role where the concept is returned to the social plane. Here, the individual’s appropriation of the meaning may be checked and compared with that of the dialogic partner(s) - one means of which is ventriloquation – and this allows the intersubjective dialectic to proceed.
The transcripts of dialogues between pupils in Room 7 showed that some of interactions among them, but by no means all, might be conducive to the co-construction of understanding; a number of examples of cumulative and exploratory talk were illustrated and analysed. However, the ability of all four NESB pupils to engage in such dialogues in English was constrained to a greater or lesser degree by their linguistic as well as cultural limitations. Even where there was evidence that mutual understanding was reached on the surface, the linguistic traces within the intrapsychological plane were, unsurprisingly, negligible.

It can be assumed that the process of appropriation (and inner speech) of these students took place in their first language, but of course there is no evidence to substantiate this. There were occasions when private speech in both first language and English were recorded, and these are amenable to interpretation, although extra caution is required. The inevitable difficulties of understanding and interpretation are compounded by the linguistic filter imposed by either the speaker or the translator operating in a second language. There were occasions when understanding which had been appropriated was returned to the interpsychological plane to be further refined, sometimes by means of ventriloquation. Such interactions, though more accessible to interpretation, were affected by the NESB pupils’ linguistic and cultural limitations. Therefore, although language is central to the process of appropriation, the linguistic evidence is thin or tenuous, or both – and the discussion which follows needs to be understood with this caution in mind.

1. The interactional dimension

The key issue in the interactional dimension (Richards & Hurley 1988: 46-47) is that NESB learners need to acquire social skills to enable them to initiate and sustain contact with teacher and classmates. They also need to understand the pragmatic conventions relating to such things as classroom movement, turn-taking and attention-paying signals. It is necessary to recall, as Mercer (1995: 96) has pointed out, that classrooms do not operate in a social vacuum. Above all, these NESB learners were initially (and for some time), operating in a sociocultural frame of reference that was alien to their experience of classroom learning in their home
countries, and they needed help to relate the interactional features of Room 7 to their existing frame of reference. Their ability to do so depended on a number of factors. The most obvious was linguistic - in terms of the extent that their communicative competence in English facilitated or constrained interactions in Room 7, and the availability of help in their first language. A second matter was social: in particular, the relations they were able to establish with their classroom peers. Thirdly, personality traits such as gregariousness, initiative taking, intelligence, self-esteem and confidence may, in many circumstances, be the most powerful factors in interaction. To these points may be added the undoubtedly enormous influence - inaccessible in this investigation - of their life outside school in such matters as family relationships, adjustment to living in a new society, and the extent to which they maintained close cultural and linguistic links to their families and ethnic communities.

1.1 Jean

Jean started in Room 7 in early May 1998 with considerable advantages in the interactional dimension not shared by the three other NESB learners. In the first place, and probably most importantly, her 1996 experience in another local primary school undoubtedly facilitated her appropriation of similar conventions in Room 7. Her earlier friendship with Sharon provided a social entree to the group of able girls in Room 7 who provided her with the support that was shown in Chapter 5. This was facilitated by a reasonable initial competence in English, which increased steadily over the year. Jean seemed determined not to use Mandarin as a \textit{res media} to promote her development in this dimension, or indeed any of the others, and in this decision she was supported by Tilly - also a native speaker of Mandarin.

With the help of these girls, and using them as role models, Jean learned how to initiate, sustain and terminate social interactions with some of her female classmates. Her ability by October to initiate and terminate interactions courteously with the teacher, too, has been noted (Chapter Six, \#14b) - although such interactions tended to be brief encounters, usually because the teacher had little time to attend to her individual needs. It is clear from almost all her interactions with Alina after the latter's arrival in August that Jean herself knew the classroom conventions regarding active involvement in the discourse of learning. Despite this, her own performance remained
largely quiescent: she was rarely seen to volunteer information, ask a question or bid for a turn - although she responded accurately if briefly when solicited. Thus it is difficult to gauge the extent to which she might be said to have appropriated these conventions within her own semantic and expressive frame of reference, and acted upon this understanding. It has also been noted that she occasionally participated in heterodox interactions, by for example talking during a test in November (Chapter Six, #22) - although her deviance from formal standards did not exceed minor infringements such as this. In other matters of classroom interaction, she conformed to formal expectations; she sat quietly at her desk, except when specifically required to move. She never interrupted the teacher or other pupils by unacceptable verbal or nonverbal behaviour. In this respect, the conventions she followed in Room 7 were not dissimilar to those into which she had been socialised in Taiwan.

1.2 Alina

Alina was deemed to be 'minimally competent' in English on her arrival in mid-August. Allied to this linguistic deficit was the fact that she was very shy and apparently lacking in self-confidence. Although this diffidence diminished, and she made some progress in her spoken English, she rarely initiated or participated in interactions with the teacher or with unfamiliar classmates. Nor, evidently, did her behaviour cause any inconvenience to other pupils or the teacher - except possibly Jean. Sitting beside Alina, and constantly speaking Mandarin with her, Jean was able to induct her into the langaculture of Room 7 - for example by explaining what other pupils were saying, how and when to ask the teacher for help, and the implications of not doing work that had been set. When Jean was absent, in ESOL lessons or otherwise engaged (for example Chapter Five, #22 to 24 and #25 to 26), Alina tended to rely heavily on observation to understand the pragmatic implications of classroom events. In the absence of verbal evidence, however, the extent of her appropriation by such means is incalculable. By November, she was beginning to interact, albeit in a very limited way, with Pakeha classmates (Chapter Six, #6 and 7).

Jean shared with Alina her group of friends, among whom they always sat in class, and with whom both girls spent morning and lunchtime breaks. However, Alina rarely spoke directly with them, preferring instead to channel her infrequent questions and
comments through Jean, using Mandarin. Moreover, there was no out-of-school contact - even with Jean: they never visited each other's homes, and did not know each other's family and social circumstances. Likewise, neither Jean nor Alina's out-of-school life included participation in school sports teams, or attendance at extracurricular events. Although they were aware of their occurrence, the girls' failure to participate in such activities is an indication that they had not appropriated the sociocultural importance attached to them by classmates and teachers.

1.3 John

Although Ms Wilkins had been led to expect that he would be at the level of 'minimal English', John's communicative competence and confidence was greater than that of the other three. Arriving after the middle of the school year, he was seated at the back of the room quite near Jack and - although they never interacted with each other - they shared the same group of not entirely suitable neighbours. These boys showed some initial interest in him (for example, Chapter Five, #11 and 15), but by this time of the year (July) social relationships in the class were well established, and he was not integrated into any of the various friendship groups. No one, for example, ever showed a preference to work with him or sit beside him when Ms Wilkins made periodic changes in the seating arrangements.

Because of his gregariousness, intelligence and communicative confidence, John may have seemed to need less help than the other three to adjust to the langaculture of the classroom. Certainly, his early interactions with peers in July proved his ease in initiating, sustaining and terminating conversations with them (for example, Chapter Five, #16 and 17). However, he did not appear to understand the pragmatic difference between conversational and classroom usage; thus in November he talked out of turn and addressed the teacher tactlessly (Chapter Six #28) - matters in which the other pupils had been schooled. Likewise, schooled in the formal ambience of a Taiwanese classroom, he did not appreciate the conventions for moving around Room 7. His proxemic sense, while perhaps apposite in Taiwan, was often seen as invasion of personal space. His inept appropriation of classroom dynamics had earned him by November a reputation as a nuisance (Chapter Six, #27 and 30b) and he would have
benefitted either from explicit explanation or consistent and focussed guidance - rather than reprimand - in this dimension of classroom learning.

1.4 Jack

Having arrived in mid-March, Jack was judged to be still at the level of 'minimal competence' in English after seven months in Room 10. There was sufficient evidence to suggest that his receptive competence in both listening and reading improved, but his verbal response to elicitations, and his ability to initiate interactions, remained at most monosyllabic. Only very occasionally was he observed bidding for turns by raising his hand, and was rarely nominated by the teacher. Although he occasionally sought to interact with his peers, he was never seen to initiate a verbal interaction with the teacher, even when as late as October (Chapter Six, #37 and 39) it was clear that he needed help.

His development in the interactional domain was further impaired by ambient social factors. When Jack arrived - and indeed throughout the rest of the year - he was allocated a place right at the back of the room. For several weeks, his immediate neighbours included three very pleasant boys who were considered to be below average in terms of academic achievement, and tended in various ways (for example, by two of them constantly drumming on their desks) to be somewhat disruptive. In the latter part of the year, he tried very hard to initiate and sustain interactions - usually nonverbally - with Peter and Gene, but had absolutely no contact with these - or any English speaking friends - outside school. He took no part in social activities, whether school related or otherwise, which involved English speakers. For example, his interest in soccer became known in April, and both he and his mother were advised that he should join one of the school's teams. He did not do so; neither did watch with classmates the extensively televised FIFA World Cup.

Behaving very much according to Korean classroom norms, he was quiet, attentive and ostensibly polite in class, causing no disturbance or disruption to the discourse of learning in Room 7 - and there were occasions when he seemed to be enjoying himself. Underlying his outward behaviour were aspects of his personality which remained largely inaccessible, although his loneliness, lack of confidence and a sense
of helplessness - almost of despair - emerged at times in his private speech. His peers sometimes noted his evident frustration, but they lacked the linguistic means to guide him. In short, Jack was unable to understand anything beyond the most basic social conventions in Room 7, and his appropriation of their importance within his conceptual frame of reference was impaired by his lack of linguistic proficiency.

2. The instructional task dimension

Instructional tasks are used in any classroom to determine how information is processed, how learning occurs and how learning is demonstrated. Chapter Four showed that Ms Wilkins had spent much time in the first part of the year initiating the class into matters such as standard rubrics, task performance criteria, timing, available resources, and to what extent the pupils should work as individuals or in groups. It may be assumed that the four NESB learners had been inducted into somewhat different conventions in this dimension and the point at issue is the extent to which they were able to appropriate the significant differences. For example, all the pupils in Room 7 were expected to have a file of written work, but none of the NESB learners had been instructed how to maintain it. Unused to making such decisions for herself, the only written work in Jean's folder, other than results of maths and reading tests, were two short stories and a few illustrations. The others had even less.

2.1 Jean

The ethnographs in Chapter Five and this chapter have shown that Jean saw herself almost invariably in the role of less able peer vis-a-vis her friendship group and consistently sought their interpretation of learning tasks and their help in carrying them out. With their help, she acquired a sense of due timing, learnt where resources were kept, and understood what standards of performance were required from the class, and was able to appropriate how these might apply to her. She began to work collaboratively with others in the interpretation and execution of some tasks. Towards the end of the year, she showed that she could work on her own in routine tasks - in maths, social studies, language arts etc. - once guidance had been given. However, she still tended to rely on peer support to give initial help even as late as mid-October (Chapter Six, #15-17). At the same time, she was able - and expected - to lend
considerable tutorial assistance to Alina. In the same lesson as above (Chapter Six, #18 to 21) Jean shifted status from less- to more able peer; that she was able to recapitulate and reformulate task requirements from English to Mandarin reveals the extent of her own appropriation in this dimension.

2.2 Alina

Alina's understanding of the rubrics and the performance criteria of learning tasks was entirely dependent upon, and considerably promoted by, her constant interaction with Jean. The amount and range of instructional tasks that she was actually able to complete on her own were very limited, and the extent to which she could appropriate the educational value of these tasks within her conceptual framework of learning activities is uncertain. The translations of her interactions in Mandarin are not delicate enough to reveal evidence of this in any externalised private speech. In the conversations recorded between them, neither girl made any explicit comparisons between their previous and present experience of learning tasks. By November, some of their interactions (Chapter Six, #10) reveal elements of cumulative and exploratory talk in a few areas of learning, which suggests Alina's gradual shift from apprentice to collaborator, and the emergence of some co-construction of meaning. However, her exclusive relationship with Jean and her lack of communicative competence isolated her from the ambient discourse of learning. She did not actively participate in the dialogues between teacher and class, or in the many learning activities where pupils were expected to co-construct meaning through language (Chapter Six, # 6 to 8 being a rare exception). Although she eventually started to participate in some task-focussed interactions, it is unlikely that she would have made much more progress in this dimension of learning even if she had not prematurely left for Taiwan four weeks before the end of the year.

2.3 John

The ethnograph in Chapter Five showed that some of his peers helped John to carry out some instructional tasks, although they had little scope to promote his appropriation of their underlying educational value. They were unaware how little he understood about such matters as the performance criteria into which the rest of the class had been inducted in the first few weeks of the year. It is significant that in his
first few weeks the teacher did not help, or even expect, him to undertake the extensive science and social studies projects that the other pupils were working on. Nor did she explain to him her reasons for not doing so. That she gave him some low-level vocabulary tasks indicates that she might have misjudged his linguistic and cognitive ‘buds of development’. Left largely to his own devices while the other students were working on these projects, John’s private speech indicated that he was bored; he countered this by trying to help them in various ways (Chapter Five, #17). Although he could work on his own - and at times contribute ideas to others - when working on clearly-established individual tasks, he never appeared to appropriate the value attached to the co-construction of meaning, either in teacher-class dialogues or working collaboratively with peers without direct guidance from the teacher. His ability to engage in cumulative and exploratory talk in peer interactions appeared strictly limited, and even as late as the end of November (Chapter Six, #31) he seemed to take group activity as an opportunity for ‘time out’. In this respect, he behaved in the same way as some of his classmates - but unlike them, he never appreciated the limits of such deviant behaviour, and always seemed surprised when his name was written on the ‘assertive discipline’ list. Only at the very end of the year, as revealed in his self-evaluation report (included in Appendix I), was there evidence of his burgeoning appropriation of some of these issues - by which time it was too late for him to act upon this understanding.

2.4 Jack

Because of linguistic factors, Jack had manifestly more difficulty than the other three in obtaining help to understand and carry out learning tasks. As has been noted, only in the final term of the year was he able to benefit from more than casual guidance from his peers in task performance. Jack became quite adept at showing, through monosyllabic and nonverbal means, where he needed help from the two able boys who sat with him. However, despite their good intentions and their sometimes strenuous efforts to help him (Chapter 6, #47 and 48), they were unable to provide more than very basic help even at the end of the year.

He was largely unable, therefore, even to work towards - let alone achieve - the same curricular objectives as his peers. His ability to do arithmetical tasks has been noted -
but no attempt was made to develop his outstanding ability in this area to other maths
tasks suited to his limited English proficiency, nor even consistently to valorise his
work. He was also eventually able, sometimes with much effort and great difficulty, to
carry out routine tasks, such as handwriting, vocabulary (Chapter Six, # 37 – 39) and
spelling. Only in the latter was he engaged in peer interaction in this dimension of
classroom learning (Chapter Five, #7) but this was not systematically developed. The
only occasion he was engaged in a task-related dialogue with the teacher - which
occurred in November (Chapter Six, # 45) - he felt was utterly trivial and boring. The
extent of his involvement in the many collaborative tasks such as the December play-
writing activity (Chapter Six, page 247) was very limited – and his understanding of
their usefulness as educational activities remains an open question. There is certainly
no indication of his appropriation of their importance, for example, in his private
speech or his attempt at self-evaluation at the end of the year.

3. The cognitive dimension

Integral to neo-Vygotskian thinking is the assumption that all learning of higher
mental functions is conceptual. Thus what has been discussed above about the
interactional and the instructional task dimensions may be viewed as aspects of
cognitive development, and this is especially true of those learners who have to
acculturate themselves to new pragmatic and learning task conventions. As was noted
in Chapter Four, it may be reasonable to assume that these other two dimensions
underpin the cognitive. This section will focus on the need of the NESB learners to
appropriate new information and concepts associated with subject areas of the
curriculum. No more than their classmates do these students start with tabule rase.
However, not only do these learners have to operate in a different language, but the
conceptual framework into they are to appropriate new concepts may be radically
different from that which their peers have acquired in their previous primary
schooling.

3.1 Jean

Jean was helped by her friends to achieve the same curricular objectives as some of
her classmates with burgeoning self-confidence. Her growing independence was
evident in her willingness to work by herself - usually after she had satisfied herself that she understood the task requirements by discussing them with a more able peer. Her efforts - although still tentative at the end of the year - to work collaboratively with other pupils and participate in teacher-class dialogues suggest her widening appropriation of the discourse of learning. Likewise, her increasing tendency to seek confirmation of her understanding rather than explicit reformulation – indicates her appropriation of the content of the curriculum. For example, within the area of language arts, such as vocabulary development, it has been shown that she could appropriate concepts such as punctuation (Chapter Five, #4 and Chapter Six, #15) synonymy, antonymy and lexical sets (Chapter Six, # 18). The dialogues with Tilly in October were characteristic of the cumulative and (to a lesser extent) exploratory talk by both girls. Her conceptual appropriation was also clearly manifest during the follow-up interaction with Alina, where - as on many other many occasions - she guided the latter’s cognitive development by reformulating into Mandarin (and *ipso facto* reinforcing) meaning previously constructed in English sets (Chapter Six, #20 and 21). In other curriculum areas, such as science and social studies, exemplification of which has been prevented in this work by constraints of space, Jean was making similar progress. However, it is far from clear to what extent her intellectual ‘buds of development’ were actually promoted in Room 7. For example, like the other NESB learners, Jean’s proficiency in mathematics was well above average for the class when she arrived, but no attempt was made to extend her reach beyond her grasp.

3.2 Alina

The ethnograph in this chapter illustrated that Alina frequently asked Jean to explain terminology and concepts as frequently in the cognitive dimension as in the others. There were many occasions when she sought help in conceptual matters which she might reasonably have been expected to work out for herself (Chapter 5, # 31), although there were indications that her dependence on Jean was beginning to diminish in November (Chapter 6, #10). Her lack of self-confidence may be attributed to personality traits and to her minimal English competence. However, there are also grounds to suppose that the few weeks she spent in Room 7 was a very short time for a young person to appropriate academic matter that was in many ways different from that in Taiwan.
In early November, Alina’s reading age (in English) was deemed to be between nine and ten years on two standardised tests. But this score was based on word-recognition skills, which were greater than her very limited ability to infer meaning from written texts (as revealed in Appendix I). Her listening skills might have been enhanced both from the work that was done in the ESOL Unit and from such input as was comprehensible in Room 7. However, she consistently relied on Jean to translate the teacher’s explanations, and indeed all aspects of the discourse of learning; in this way, she did not need to listen. As frequently noted (for example, Chapter Five, #25 and 26, Chapter Six, #5, 9,13), she was able only minimally to express - orally or in writing - any conceptual understanding in basic mathematical exercises and simple vocabulary tasks. She could certainly not explicate any cognitive needs to the teacher without Jean’s mediation, and it seemed that the teacher was unable to help her in any event. Thus Alina remained heavily dependent on Jean as her more able partner to promote her cognitive development, and was not in any way an independent learner in Room 7.

3.3 John

John’s inept appropriation of key elements of learning in the interactional and task performance dimensions - and the lack of recognition that he needed help in these areas - had a severely detrimental effect on his conceptual development in the cognitive domain. He was initially deprived of the opportunity to work in the social studies project, where his interest, background knowledge and own direct experience of the world could have been used to his own advantage and that of others. This denial, and the occasional curtailment of his attempts to assist others, appeared to demotivate him. He started in Room 7 with a reasonably wide vocabulary range and showed evidence of being able to appropriate new terminology both by reading and listening. However, he was accustomed to a transmission style of teaching in Taiwan and did not appear to realise that the constant interactive dialogue between the teacher and the class was intended to be the primary learning experience in most areas of the curriculum. Hence he did not expect to learn from this discourse and did not attend to it, perhaps waiting to be more explicitly instructed in curriculum matters. Similar was his failure, at the end of November, to appropriate the educational value
of collaborative peer work in, for example, plotting and writing plays within the
language arts stream of the curriculum. On these occasions (Chapter Six, # 30 to 34),
when his peers were working together to co-construct meaning, his irregular
contributions tended to be off-task and disputational. In maths, where his competence
was above the average of the class, he was given as little opportunity as the other
NESB learners to display his knowledge, or to extend his ‘buds of development’. As a
result of these factors, John became bored, restless, and a nuisance to others, thereby
hindering their conceptual appropriation as well as his own.

3.4 Jack
Like Alina, Jack was unable to communicate in English any but his most basic needs;
certainly he could not express cognitive skills such as reasoning or logical thinking.
Unlike Alina, he had no one who could stimulate his higher mental functioning in his
first language. Although he appeared attentive to the ambient discourse of learning
(Chapter Six, # 35, 42, 47), it is evident that much of it was conducted well beyond
his level of understanding. Transcriptions of his private speech in Korean show his
application of intelligence and perseverance in an attempt to appropriate - usually with
reference to a bilingual dictionary - key terminology (Chapter Six, #35, 36, 38, etc.).
His efforts in this direction were hindered by the fact that many key items of
vocabulary were presented to him orally rather than in writing. His own written work
- other than copying - remained firmly at the word level, as did his oral
communication. Even with regard to maths, his ability to demonstrate developmental
progression in his conceptual growth was hindered by severe linguistic constraints.
For example, tasks such as the regular maths problems presented orally by the teacher
in dialogue with the class were largely beyond his ability. No attempt was made to
give these problems to him in a written form, although it has been shown that he
could, albeit slowly, work with written pre-tests. Therefore, without effective
assistance, Jack lacked the linguistic resources to appropriate the conceptual content
of the curriculum.
Note: The need for extra caution

It is difficult to explain precisely why Jack failed to communicate verbally after so many weeks in Room 7. Some of the obvious reasons have been noted in terms of his 'minimal English' starting point, the lack of a first language peer, and his social isolation. But there were circumstances in his personal background which also help to explain his reticence. In March 1999, I visited the school to see how the four pupils were progressing. Jack's new teacher told me that a few days earlier Jack's father arrived unannounced at the school and - after some discussion - took Jack away. He later notified the administration that Jack was returning to Korea with his family and might return to Rosegarden some time later. (He never did.) It transpired that the previous March Jack's mother had decided to leave her husband and brought her two children to New Zealand without informing him of their whereabouts, or the children of her decision in this regard. Only after some months did the father find out that Jack was at Rosegarden, and only then did he find out where his family was living. Those are the bare facts, and their impact on Jack must be a matter of surmise - but it is reasonable to suppose that they would have had a considerable, possibly overwhelming, impact upon his motivation to learn English, make friends or indeed be in Hamilton at all. As much as anything else, this points to the need for caution in making inferences and extrapolations merely from verbal behaviour.
Overview: addressing the research questions

The central problem of this study has been the investigation of how isolated NESB learners may be helped to come to terms with the langacultural demands of the mainstream primary classroom: to paraphrase Willett (1995), to learn to ‘become Kiwi Seventh Graders’. Chapter Three indicated that there has been very little sociocultural research carried out in this area, although reference was made there - and subsequently - to relevant studies. Some of these focussed on individual learners in specifically language teaching contexts (for example, Dunn & Lantolf 1994) and others examined bilingual learners in multilingual schools (notably, Levine 1990 and Bourne 1992).

One of the aims of this thesis was to enable teachers in relatable contexts to reflect more deeply on langacultural issues in their own classrooms. It was for this reason that I chose an ethnographic stance to investigate these issues. The heart of this thesis is the story of how certain learners (NESB and others) in Room 7 appropriated a culture of learning in the course of a school year. Such a ‘tale of the field’ (Van Maanen 1988) has, I hope, made more immediate and vivid the specific context of the study, and enabled the reader not only to understand, but to engage more readily with the events I have illustrated and analysed in the ethnographs. This story, like any other, has been crafted to represent an authorial interpretation of events – and to that extent it is only a partial re-creation of reality. Unlike the author of a fictional narrative, however, I was constrained by the need to respect the facts as they were available to me. Such constraint is an absolute prerequisite of an academic study, and I can affirm that the people in Room 7 are real and the events actually took place as and when recorded in the ethnographs. But my account of events was limited to the classroom and the times that I was able to observe what happened there; I could not, like the writer of fiction, invent what I did not know. Beyond my purview were circumstances which had significant bearing on the classroom learning I was studying. For example, important factors in the pupils’ life outside Room 7 (such as those reported about Jack at the end of Chapter Six) were unknown and largely unknowable at the time. This may suggest a
limitation on the representativity of my account. However, my lack of knowledge of such matters was shared by the staff in the school, for whom much of these students' personal life was also a closed book. Indeed, it can be said that teachers in general understand the need to work with only partial knowledge of the learners in their charge. Recognition of this general truth may in fact serve to strengthen, rather than weaken, the validity of this ethnographic study; ultimately however, as was mentioned on page 50, it is for the reader to judge the credibility of my account.

The account of these learners, and indeed the entire ethnographic methodology, was intended to provide the basis for a critical consideration of the theoretical constructs applied in the investigation in order that further investigation in this area might be assisted. This was stated in Chapter One (page 10) to be the primary aim of this research, where reference was made to 'theory elaboration' (Vaughan 1992). This final chapter will evaluate and refine these constructs by addressing the research questions of the thesis:

- How was a culture of learning developed in a mainstream primary classroom?
- How relevant to this context is the notion of a *zone of proximal development*?
- How were the NESB learners in Room 7 helped to participate in the discourse of learning?
- To what extent can *scaffolding* be applied to peer assistance for NESB learners?
- How did the NESB learners appropriate the culture of learning in Room 7?
- How useful in the notion of *appropriation* to the context of NESB learners in the mainstream classroom?

These questions focus on theoretical and pedagogical implications for non-English speaking learners as may be drawn from the specific circumstances of this study. The chapter - and the thesis - will conclude with a consideration of how useful and relevant the neo-Vygotskian framework adopted in this study would be to further research into how pupils - whether NESB or not - learn in primary classrooms.
1. How was a culture of learning developed in a mainstream primary classroom?

1.1 Review

The microgenetic analysis of classroom interaction in Chapter Four illustrated how a culture of learning in Room 7 was co-constructed through dialogue. In the first six weeks of the year, the teacher worked with a class of previously unknown pupils to establish a common *modus operandi*. This formed the basis for the continuity of learning stressed by Mercer (1995: 68). By the end of this time, her class had a shared identity that was markedly different from that which obtained in Room 6 or Room 8. This was achieved not least by ongoing explicit reference in their long conversations to events which had occurred as part of their shared history, both inside the classroom and outside.

The shared identity also arose from the content of what was being taught and learned. In addition to, indeed essential for, learning within the formal areas of the curriculum was for the class to learn what it meant to be a pupil (Edwards & Mercer 1987; Mercer 1995). The analysis of interactions in terms of Richards & Hurley's (1988) three dimensions of classroom learning showed that the teacher's promotion of her pupils' development in the interactional dimension - the sociopragmatic rules of engagement - facilitated the performance of instructional tasks, which were themselves intended to promote cognitive/academic abilities. In this sense, the present study reflects similar findings to others of younger children, such as those by King (1978) and Willes (1983).

However, the analysis of the teacher's pedagogic dialogues with the class reveals not only the content of what had to be taught and - possibly - learned, but also the *process* by which some of that learning was expected to continue. In this case, the style of Ms Wilkins' discourse may be compared to that of the teacher studied by Bourne (1992). Both teachers saw the class as a 'whole', and inserted pupils into the discourse (Bourne 1992: 293). However, Ms Wilkins appeared to engage in more frequent and longer dialogues with the class as a unity and proportionately fewer interactions with individual pupils. She also encouraged active participation - even initiation - by her pupils when engaged in those dialogues; this may have been due to the fact that the pupils in Room 7 were two or three years older, and hence more mature, than those in Bourne's study. By
thus co-constructing knowledge in whole-class interaction, Ms Wilkins implicitly encouraged the development of intersubjectivity among the pupils themselves in their own interactions. In this respect, the pupils in Room 7, more than those in Bourne’s study (1992: 421), were actors and agents in, not merely the passive objects of, the educational process.

The microgenetic analysis of these peer interactions opened up what Ellis (1999:15) has referred to as 'learning from the inside'. Kelly (1963, cited by Bourne 1992: 421) referred to this as finding out what children are learning when they are not learning what we expect them to learn. The data showed that although pupils may talk off-task, and perhaps with little academic outcome, at times they nevertheless developed both their own and each others' conceptual development. In the first six weeks, much social and experiential learning occurred during peer interaction. In neo-Vygotskian terms, such learning would be within the domain of higher mental functioning in that it developed the pupils' sociocultural competence - a point also made by Yonge & Stables (1998: 68). Although there was evidence in Room 7 of the point made by Bourne (1992: 445) that power and control in peer interactions was constantly challenged, asserted and reasserted, the pupils soon settled into socially cohesive groupings. In the first weeks of the year it seemed that on the whole the girls were much more easily able to settle into collaborative talk than the boys, who tended to be more competitive and disputational. However, as shown both here and more especially later in Chapter 6, some of the boys were also able to work together. The peer interactions within the three dimensions of learning illustrated in Chapter Four showed that those pupils present at the start of the school year listened to each other, took ideas from each other, and checked each other's work (Edwards & Mercer 1987). In this way they built on the teacher’s lead to co-construct for themselves how to become Seventh Graders.

1.2 Pedagogical implications
The most salient pedagogical implication to be drawn from this is that the classroom is a social community, and that teachers may in various ways promote, support or inhibit their pupils' appropriation of the rules of engagement. The pupils’ awareness of these conventions may be manifest in their behaviour, especially their verbal interactions.
The ethnographs in Chapter Four point to the need for teachers to become actively aware of the contours and effects of the discourse in their classrooms. First of all, they might record and analyse how they construct their own pedagogic discourse of control, instruction, explanation, clarification etc. In doing so, they might reflect on whether they are primarily concerned with individuating pupils - creating separate identities - or with developing an environment of inclusive, intersubjective learning. There may be cohesion, or a potential conflict, between the two aims, and they might reflect on how their discourse facilitates or hinders social learning among pupils in the classroom.

As active listeners, they should attend to the discourse of their pupils - not merely to assess the procedural tasks and cognitive outcomes of the formal curriculum, but to notice in what ways, and with whom, and for how long they interact in the social dimension of classroom learning. From such observation they might be able to identify potential peer tutors. They might observe and identify the modes of social thinking which prevail within different, but overlapping, dimensions of classroom learning. They might then actively promote the development of Glynn's (1985) responsive social contexts (RSCs) so that independence and initiative, reciprocal and shared learning, and cognitive and affective feedback can be appropriately structured into group activities.

For the present study the most significant point that emerges in Chapter Four was that the culture of learning in Room 7 was created before the NESB learners were present. Teachers may wish to consider what they need to do when any learner is parachuted, as it were, into alien territory. The inhabitants have established ways of working, and also a modus vivendi, the ground rules of which are well established and to which reference among them need be made only implicitly or allusively. To the newcomer, much of what occurs is culturally unfamiliar. This applies a fortiori to newly arrived NESB pupils, whose educational frames of reference will be very different from that which confronts them. With regard to these, the teacher must create an inclusive langaculture which will be, in Levine’s (1996: 53) words “hospitable to diversity”.

- 269 -
2. How relevant to this context is the notion of a zone of proximal development?

2.1 ZPD as a process between the teacher and class

Chapter Four concluded with the view that while the notion of the ZPD as an event might be framed within the 'dialectic unity of learning and development' (Newman & Holzman 1993), the application of the ZPD as a process to classroom learning was problematic in terms of three essential elements of a ZPD. These were the role of the expert, the identification of the learners' 'buds of development' (Vygotsky 1978:86), and the consequent bridging of the gap. The theoretical implications of these points will be discussed here, firstly with regard to the teacher and the class, and secondly among pupils themselves.

Typical of a primary classroom, there was no problem about the respective roles of expert and novice in Room 7. The expertise of the teacher lay precisely in the manner by which she devised a coherent strategy embracing the three dimensions of learning to inaugurate her class into "mature cultural forms of behavior" (Vygotsky 1981b: 151) within a "shared social reality" (Rommetveit 1985: 187). This strategy was implemented over the period of a year; as was shown in the ethnographs in Chapters Four, Five and Six.

However, this gives rise to the second problem - the analysis of the developmental buds. Rather than conduct a priori analyses presupposed by a ZPD (Vygotsky 1935: 49), teachers make ad hoc assumptions about their learners' existing and potential developmental levels. Such assumptions are a function of a teacher's professional skills and her previous experience of similar classes. They are adjusted heuristically as she comes to terms with the specific ways that a particular class as a whole differs from similar ones in the past. As noted in Chapter Four, Vygotsky himself (1934: 222 and 450) was ambiguous about the relationship between the analysis of a learning context and the development of abilities within it. However, central to the process of a ZPD is the fine-tuning required to identify any narrowing of the gap between the actual and potential development levels of individual pupils. While this may be possible in individualised tuition, to do so for thirty pupils requires more time - and perhaps skills - than the classroom teacher can reasonably be expected to have at her disposal.
The third point arises from this. In order to close the gap posited by the ZPD, the expert has to devise, implement and adjust appropriate guidance strategies and finely-tuned tactics for each learner. While attention to individual learners is at the heart of contemporary primary educational philosophy, there is an inevitable tension in the teacher's strategy between dealing with the class as a whole and with individual pupils within that unity. By aiming for the middle ground, it is likely that the possibility of catering for the needs and abilities of individuals is considerably reduced. Because the three dimensions of classroom learning are interwoven and developed over a long period of time, it is practically impossible to identify any particular moment at which specific conceptual development occurs, and a ZPD therefore bridged.

In summary, the context of learning in Room 7, and probably primary classrooms elsewhere, may contain seeds of ZPDs which could be promoted between a teacher and individual pupils, or carefully selected small groups. However, reflection on the interactions analysed in this thesis leads me to concur with Mercer's point (1994: 104) that the idea of a whole class of learners with a shared ZPD seems to stretch the concept too far.

2.2 ZPD as a process among pupils
Although, as Vygotsky noted (1956: 446), a ZPD might be bridged by collaboration with more able peers, the distinction between expert and novice in peer interactions - especially those in school classrooms - is more ambiguous than the relationship between teacher and pupils. There were occasions illustrated in Chapter Four where assumptions of greater expertise by pupils were refuted by some classmates; this tended to be more evident among boys than girls. Nevertheless, there were also occasions when assistance within all three dimensions of classroom learning was solicited and/or provided. That this occurred was largely due to the social relationships that were established from the very beginning of the school year when the pupils were encouraged to interact with each other. In doing so, the existence of differential degrees of expertise within small groups of pupils could be recognised, and conditions for ZPD as an event thereby created.
Not surprisingly, however, there was less opportunity for the *process* to develop fully. Such help as was provided tended to be focussed on meeting an immediately perceived - and often explicitly requested - difficulty rather than seeking to develop the buds of development of less able partners. This was particularly evident when a simple piece of information was conveyed, or an instruction reformulated, or a specific task modelled. This was because even the more able pupils in Room 7 lacked the skills to effectively analyse the existing and potential abilities of their classmates and then estimate the gap between them. Even most able pupils were naive pedagogues, unable to deploy the wide and flexible range of teaching strategies and tactics required of the expert partner in a ZPD.

In summary, the analysis of peer interactions in Chapter Four indicated that while there was potential for ZPDs to exist among the pupils in Room 7, the completion of the process was unachievable. It is unreasonable to expect eleven-year-old children whose own ability within the dimensions of classroom learning is only relatively greater than their peers to act effectively as pedagogical experts in the articulation of a ZPD. From this it follows that even though most of the pupils in Room 7 were *langacultural* experts in relation to their NESB peers, it is inappropriate to consider that they could promote their learning within fully realised ZPDs.
3. How were the NESB learners in Room 7 helped to participate in the discourse of learning?

3.1 Review

The ethnograph in Chapter Five revealed that classmates were more helpful than the teacher in assisting the newly arrived NESB learners to participate in the discourse of learning. Before considering the pedagogical implications of this, it may be instructive to compare and contrast the four learners by briefly reviewing Jack and Alina, and then Jean and John.

Jack and Alina both started at the stage of ‘minimal English’ and remained at this level during 1998, although it should be noted that Jack spent almost as many months in the class as Alina spent weeks. Therefore, neither could effectively communicate verbally with teacher or peers in English, and it is reasonable to infer that neither could easily comprehend much of the ambient classroom discourse. The extent to which Alina made more langacultural progress than Jack was almost entirely due to Jean’s assistance in Mandarin and their burgeoning friendship. There was much evidence in the ethnograph to substantiate the point made by Davies (1982: 63) that the bonds of Jean’s friendship made the classroom a more predictable place for Alina. In the absence of such friendship and support in his first language, Jack remained for a long time socially and educationally isolated in Room 7. His confusion and frustration were at times very evident - but so too were his strenuous efforts to come to terms with the langacultural environment for himself.

Jean and John entered Room 7 without the severe linguistic difficulties of the other two. Moreover, although initially a cultural stranger to Room 7, Jean had the advantage of previous experience of primary schooling in Hamilton and of the friend there who subsequently inducted her into the langaculture of Room 7. Jean was taken under the collective wing of the clique that this friend had built around her during the first weeks of the year. The ethnograph clearly showed how this group, and Tilly in particular, helped Jean to participate in all three dimensions of classroom learning - matters into which she was later able to initiate Alina. On the other hand, John was left to fend for himself. Based on the scanty information she had been given, the teacher underestimated
his linguistic competence, and denied him early opportunities to work at an appropriate academic level. Like Jack, he was placed at the back of the room and left largely to his own devices - and those of boys unsuitable to be effective peer tutors. When Ms Wilkins did come to appreciate John's linguistic confidence, she failed to take into account the langacultural distance between him and his peers; he simply did not know how to behave appropriately in class. The consequences of this were considered in Chapter Six.

3.2 Pedagogical implications

Firstly, it is clear that inadequate steps had been taken to consider the NESB learners' readiness for entry to the mainstream classroom. There is evidently a need for a fuller analysis of their existing and potential buds of development. Such an analysis would obviously take into account their linguistic competence, and ensure that those at the level of 'minimal English' were given sufficient expert language tuition to enable them to cope more adequately in the mainstream than John and Alina. There is also a need to consider their competence in their first language and other relevant cultural and social factors. Important among these is their educational experience, and how widely this might differ from that in the new school. To be done most effectively, there needs to be some bilingual support, perhaps to translate transcripts from home country schools, interpret during interviews with pupils and parents and to promote better liaison between school and home. An analogy may be made with those pupils with identified 'learning difficulties', for whom an individual educational plan is developed by a team comprising mainstream teachers, specialists (in this case, ESOL teachers), out-of-school advisors, and parents. Such a plan would need to be implemented, monitored and evaluated by a team of those concerned.

One of the key issues considered in such a plan would be the placement of pupils within appropriate classrooms. Not every classroom may be suitable for NESB learners, especially as the increasing tendency to mainstream children with other specific learning difficulties adds to the psychodynamic complexity of the classroom. Similarly, not every mainstream teacher might be expected to cope adequately with NESB learners. For example, given the lack of attention currently paid to the issue in teacher preparation programmes, it might be unwise to place such learners in the hands of newly qualified teachers. More experienced teachers may prefer, or be encouraged, to develop their
skills in catering for one sort of learning difficulty rather than to attempt (and fail?) to deal with all sorts of learners in one room. A number of teachers have worked overseas and/or with particular ethnic groups of learners; such experience should be harnessed and insights thereby gained disseminated. In principle, therefore, NESB learners should be placed in sympathetic environments and indeed in classrooms where there are other speakers of their first language.

One salient point arising from the ethnograph in Chapter Five is that an educational plan for NESB learners needs to take into account is the choice of partners with whom they might be expected to work. It is entirely consistent with current educational philosophy that classroom peers might assist the development of NESB learners in the three dimensions of classroom learning. The group of girls who assisted Jean and Alina did so willingly and fairly effectively; as noted, neither Jack nor John had any firm support from their peers. It should be the responsibility of the classroom teacher to identify suitable working partners for NESB pupils, and not to rely, as apparently Ms Wilkins did, on the children to do this for themselves. It might seem from the data in Chapter Five that girls were more easily able both to seek and offer assistance. However, there were factors other than gender which may modify this impression. For example, John’s personality and langacultural maladroitness may have eventually deterred some of his peers. Also, Jack earnestly sought help from his neighbours, and the ethnograph in Chapter 6 showed that some boys at least were very willing to help Jack within the limits of their competence. It does, however, seem obvious that NESB pupils should be grouped with more able and independent learners who can provide reasonably accurate information and assistance to their less able peers without detriment to their own development. The gender issue may be important in the sense that NESB peers might feel more at ease if asked to work alongside classmates of their own sex, which the children in Room 7 preferred to do anyway. The matter was raised above of first language peers, and the support given to Alina by Jean cannot be undervalued. There is a need, however, to be aware of the possibility of excessive dependency on the one hand, and of hindering the learning of the more able peer on the other.

It is reasonable - and worthwhile - to encourage more able pupils to help NESB pupils - and their value in this respect has been clearly shown. However, if pupils are to be used
as peer tutors they need to be trained, supported and supervised in this role, and not merely left to get on with it - as was shown to happen in Room 7. Even if this were done, it does not obviate the need for direct intervention by the teacher to promote the abilities of NESB pupils inside the classroom. The most significant issue arising from data in Chapters Five and Six was the lack of direct intervention by the teacher to assist the NESB learners; she relied almost exclusively on their classmates to promote their langacultural development. It is here that the notion of a ZPD might most suitably be employed within the classroom. The teacher could draw upon her expertise to identify specific learning issues and devise scaffolding strategies and tactics to guide the learner to attain identifiable learning outcomes within and beyond the specific conceptual problem. Without such expert assistance and care, the langacultural development of NESB learners is likely to be severely hindered.

It may not need to be said that steps such as the above undoubtedly present an additional burden on the work of teachers, and would require often quite major adjustments to their praxis. The pedagogical implications of mainstreaming NESB pupils needs to be recognised by school boards and educational authorities, and appropriate provision made for-service professional development and support.
4. To what extent can scaffolding be applied to peer assistance for NESB learners?

4.1 The criteria reviewed

The point was made in the introduction to Chapter Five that the original, and relatively simple, metaphor coined by Woods et al (1976) has been considerably extended by others, for example by McArthur et al (1990) and Merrill et al (1995). The more elaborated the notion becomes, the less easy it is to apply to naive and untrained tutors such as schoolchildren (and, for that matter, parents). It was for this reason that Mercer's four criteria for scaffolding were applied to the analysis of peer interactions in Room 7. The question that remains is to what extent can the NESB learners be regarded as scaffolded within responsive social contexts in the peer interactions illustrated and analysed in Chapter Five.

The first criterion was that the more able peer seeks to bring about the development of a specific skill, concept or understanding. The specificity of the 'problem' uncovered during peer interactions usually arose spontaneously within the context of learning tasks required of the class in general. Immediate difficulties were often identified by the less able peer - and where this occurred, the first condition of an RSC also applied. At other times, with or without prompting from the NESB learners, peers self-consciously adopted a pedagogic role and sought to bring about specific learning outcomes. Both parties were motivated to bring about learning.

In some cases, the second characteristic of both scaffolding and an RSC was evident - that the learners could not do specific tasks alone, but instead accomplished them with help from more able partners. In their first weeks in Room 7, the respective roles of more and less able partners was evident, uncontentious and sustained. The quality of the help provided varied, as did the relative contributions of the dialogic partners. The ethnograph in Chapter Five showed that some peer tutors went beyond the immediate issue: they helped NESB learners to understand and clarify underlying implications of the surface problems, and work towards resolving them through intersubjective dialogue. As in some of the peer interactions examined in Chapter Four, NESB learners often sought help where it seemed not to be necessary; this was particularly noticeable with regard to Alina. However, even in such cases it might be argued that the very act
of formulating a problem in interpsychological speech may have facilitated a private, intrapsychological, clarification - an issue considered more fully in Chapter Six.

The third criterion of scaffolding is the heuristic use of a ‘ratchet’. Evidence was given that, although they were pedagogically naive, some peer tutors were able to adjust their level of support according to their perceptions of the progress made by their NESB classmates. In doing so, they provided immediate cognitive and/or affective feedback - the final characteristic of an RSC. Connected with this issue is the other characteristic of RSCs - reciprocity and mutual learning. Since peer tutors responded to, as well as provided, feedback it seems clear that meaning was jointly constructed during many interactions. However, it is much more difficult to substantiate from the data the extent to which the understanding of the more able partners was developed within the three dimensions of classroom learning. The extent to which peer tutors make actual learning gains in RSCs is clearly an area where further research would be appropriate.

The final - and most demanding - criterion was that scaffolding should lead towards a more general competence. It is reasonable to infer from the data in Chapter Five that Jean started to make quite considerable progress towards langacultural independence. Alina, on the other hand, remained very largely in a state of instructional dependency on her compatriot, although there were signs of growing self-confidence before her premature departure for Taiwan. In his first weeks, John’s apparent independence masked a pressing need for assistance within the interactional dimension, although he started to make progress in other areas. Jack was seen to achieve but limited general competence, mostly in his growing understanding of classroom routines. It is very difficult to gauge how much development was due to individual effort on the learners’ part, to sheer repetition of classroom practices, to modelling and direct instruction from classmates - or scaffolding by more able peers. It is even more problematic to ascribe a causal relationship between the assistance provided in particular interactions and overall conceptual development. This will be considered in more detail in the next section of the present chapter. What can be said is that - given the lack of direct assistance from the teacher - interaction with their peers in Room 7, and scaffolding from some of the more able, undoubtedly contributed to the development of general langacultural competence of the NESB learners.
4.2 Pedagogical implication

On the whole, it is reasonable to suggest that *scaffolding* may be a useful concept to apply to peer tutoring, provided that the simplicity of the original metaphor is retained rather than more elaborate constructs. The mutual acceptance of respective roles provided motive, and the physical, psychological and temporal proximity of peers the opportunity. However, there is a need to provide appropriate training for, and supervision of, peer tutors to ensure the *means* are effective. This practical constraint, however, does not negate the utility of the notion as a research construct.

Mercer has related scaffolding very closely to the zone of proximal development by saying (1994b: 103) that “it is only when scaffolding of some kind is required can we infer that a child is working in a ZPD”. The data presented in Chapter Five indicate that scaffolding may occur, but this does not necessarily imply the existence of a ZPD. Rather, the microgenetic analysis of interactions between NESB learners and more able classmates reinforces the point made above that the process of a ZPD cannot be fully pursued in peer interactions in a primary classroom. Even if training in peer tutoring were provided, and scaffolding thus made more effective, it would be unreasonable to expect schoolchildren to identify buds of development of their less able classmates, devise and implement an effective strategy, and then evaluate the progress made by the learner. This seems more properly the role of the teacher, and it is difficult to substantiate Vygotsky’s view (1956: 446) that the distance between the actual and potential levels of development of a child - whether or not NESB - can be closed by collaboration with more able peers. Rather than the ZPD, the data has shown the data has shown that scaffolding can be conducted within Glynn’s (1985) model of responsive social contexts.
5. How did the NESB learners appropriate the culture of learning in Room 7?

5.1 Review

As was noted in the introduction to Chapter Six, Vygotsky considered that the process of learning occurs firstly on the interpsychological plane, and secondly on the intrapsychological plane. With due caution, a microgenetic analysis might make it possible to adduce evidence of learning in the speech that occurs between the dialogic partners, and also by the audible manifestation of the individual’s inner speech. The discussion below will consider the evidence of how NESB learners appropriated the ambient classroom culture. It will do so in terms firstly of their engagement in Mercer’s (1995: 104) three modes of social thinking, secondly in their use of private speech.

Before doing so, a comment should be made about Jack, whose verbal repertoire remained severely limited even after seven months in Room 7. So little did he actually say that no reference will be made to him in the discussion that immediately follows. However, it should be noted that he frequently interacted nonverbally, especially towards the end of the year with Gene and Peter. The research design of this investigation did not permit a detailed examination of this behaviour because I chose not to use video cameras to collect data, and my intention not to impose myself on the learners meant that I was unable to observe interactions from close at hand. This points to the need for more research into the nonverbal behaviour of NESB learners, such as that carried out by McCafferty (1998).

5.2 Interpersonal speech

The first of Mercer’s three categories of classroom talk - disputational - reflects competitive and defensive attitudes. As such, it may be suggested that such talk is inimical to reciprocal learning within the instructional task and cognitive dimensions. The data in the ethnographs indicate that Jean and Alina engaged in disputational talk only very occasionally, and then amicably, with each other in Mandarin. The reasons for this could be various. It may be due to the fact that schoolchildren in Taiwan are strongly discouraged from argument. It may be that the specific social relationships in Room 7 inhibited this; Jean never engaged in disputational talk with her more able peers, and neither for a long time did Alina with Jean. It may be a gender issue; as
previously noted, girls tended to assert, contradict and challenge less frequently than boys. It may be a matter of cultural background: Taiwanese girls may not be encouraged to argue with their friends. On the other hand, John was seen quite often in dispute with nearby boys, which may reinforce the gender implication. John never made any close friends in Room 7 and this isolation may have been both a reflection and a function of his more argumentative style. The more assertive and competitive role ascribed to males than females in Taiwanese society may have been a contributing factor. There might, too, have been underlying psychological factors causing him to compete for attention: he was a gifted boy - as indicated by his musical and mathematical abilities and his general knowledge - but these skills were never valorised or properly harnessed. The evidence suggests that John was able to appropriate the value of disputational talk to defend himself in English when he felt threatened.

The second of Mercer’s categories - cumulative talk - was engaged in more frequently by all three pupils. John tended to use elements of cumulative speech - often repeating what other pupils said to him - when involved in arguments. The occurrence of cumulative talk was particularly noticeable with the girls. A possible reason is that the mental processing involved in appropriation is more conducive to cumulative talk between NESB learners and native speaking peers than to the other two modes. The complexity of internalising and externalising verbal data involved in appropriation was outlined in section 1.6 of the introduction to Chapter Six. Given the linguistic transformations than have to be undertaken by NESB learners, they might have found it simpler - especially if lacking confidence in their English - to repeat an item just heard than to articulate a retort or counter-assertion of their own. Thus Jean and Alina’s interpsychological speech in English was often marked by repetition, confirmation and agreement-seeking as they built “positively but uncritically on what the other has said” (Mercer 1995: 104). The reciprocal ventriloquation involved in cumulative talk facilitated the articulation of shared understanding among them and reinforced the amicable social context in which they were happily working. It may also be suggested that cumulative talk, by providing contextualised models and natural repetition, is more likely than the other two types of social speech to promote the NESB learner’s competence in English.
It is noticeable that these three NESB pupils engaged in exploratory talk much less often than cumulative talk. But the extent of collaborative work among the pupils in Room 7 was anyway limited. This mode of social thinking is less common in classrooms than exploratory talk because “it cannot be assumed that learners already possess a good understanding and awareness of how best to go about ‘learning together’ in the classroom” (Mercer 1995: 114). Typical NESB learners from Taiwan and Korea have even less experience of working with peers in the classroom, and may therefore be assumed to lack an internal frame of reference for collaborative groupwork. To this conceptual difficulty may be added a psychological constraint: given their accepted status as less able partners, they may have felt diffident about challenging and counter-challenging opinions they heard. More important, given the complex process of code switching in bilingual appropriation, it is very difficult for NESB pupils to make their reasoning ‘visible’ in English, for example by suggesting alternative hypotheses and reformulations (Mercer 1995:104). In this connection, it is interesting to note that Jean worked more collaboratively with Alina in Mandarin than she did with other girls – even Tilly - in English.

In order for NESB learners to participate in, and benefit from, interpsychological speech, they need to be able to initiate interactions with peers, as well as their teacher. An important category of social thinking not suggested by Mercer is that of ‘information seeking’, perhaps because he took its manifestation for granted. This, however, cannot be done with regard to NESB learners, and they should be given specific opportunities and the sociolinguistic means to solicit information, opinions and assistance.

5.3 Intrapsychological speech
It is very difficult to draw any solid implications from the use of private speech by the NESB pupils because there is insufficient evidence available. The two girls appeared to employ private speech hardly at all, or at least very few were identified in their many interactions in Mandarin. Jean did not appear to use it to facilitate any of her interactions in English, with Tilly for example – although there are rare occasions when she used it for self-regulation. This may be because the translations are not delicate enough to show the merging of inter- and intrapsychological speech, or perhaps that ‘thinking aloud’ is not a normal cognitive activity for them. It may also be that the
degree of intersubjectivity these girls achieved – typically marked by easy cumulative speech - obviated the need for private speech as a facilitating mechanism. On the other hand, John and Jack used private speech both to work through conceptual difficulties and to express emotions such as boredom and frustration. For example, they often verbalised the rubric of a task. While this is not usually regarded as private speech, but rather merely subvocalising, the very act of articulating the instructions or key words in English may have served to stimulate their thought processes and/or to enable a transition to the interpsychological plane. It is possible to suggest that the two boys used private speech more often than the two girls because they lacked close friends with whom they could interact easily. John’s private speech - like his social speech - was entirely in English; this was possibly due to his communicative fluency, and indeed it is possible to suggest that it contributed to it. Jack used both Korean and his limited English to work his way through problems, but - not surprisingly perhaps - expressed his feelings exclusively in Korean.

Unfortunately, if inevitably given the limitations of the recording equipment, much of their private speech was inaudible or unintelligible. It is not possible, therefore, to make any sensible comment about the phonological and syntactical agglutination which Vygotsky (1934) suggested was characteristic of private speech. John’s private speech tended to be fully formed - but whether this was due to his personality, to a wish to practise a second language, or some other factor, is difficult to say. There were occasional signs of structural agglutination in Jack’s private speech, for example in utterances featuring predication, but this may have merely been a typical feature of Korean usage. On the whole, where private speech of any of the NESB pupils was discernible, it tended to be marked less by syntactical agglutination than phonological ‘abbreviation’ in terms of reduced volume, pitch and key.
Chapter Seven: Pedagogical and Theoretical Implications

6. How useful in the notion of appropriation to the context of NESB learners in the mainstream classroom?

6.1 Review

It was noted in the Introduction to Chapter Four that, other than some very allusive thoughts about second language learning in formal contexts (1962: 110), Vygotsky never considered the issue which is at the heart of this thesis - the integration of second language speakers into a different culture. At the same time, he did assume that second language speakers, like any other learners, would adjust newly introduced concepts to their existing linguistic, cognitive and cultural framework. This would best take place during, and as a result of, interpsychological speech (Vygotsky 1981b: 163) with an expert. The process of that adjustment – the 'middle link activity' (Leont'ev 1981a: 46) of the learner - has been referred to as appropriation. The question that now arises is whether this is a useful metaphor to employ in attempting to understand the process by which NESB learners understand how to operate in the discourse of learning in the classroom.

Attention will be paid first to extrapolating evidence of appropriation from intrapsychological speech. The evidence in this thesis has shown that the use of private speech in classroom peer interactions is very scarce, and possible reasons for this scarcity have been suggested above. It is likely that any attempt to infer appropriation from intrapsychological speech recorded in naturally occurring interactions – even with very sensitive equipment - will find the same difficulty because of the unpredictability of its rare occurrence. It is possible to suggest that some of this uncertainty might be reduced by monitoring highly controlled settings rather than unplanned interactions. In such situations, such as structured tasks involving teacher and learner, the emergence of private language might be both tactfully stimulated and patiently awaited – and recorded. Data from such interactions is provided in the final appendix to this work (pages 317 -320), but constraints of space have prevented discussion of these events in the body of the thesis. However, even in such dyadic dialogues, the emergence of private speech was negligible. This may have been due to the learners’ lack of linguistic competence in the medium of English. There are also implications arising from the power and status relationship which might inhibit a young learner from verbalising
private speech with a teacher. Perhaps, too, the teacher did not do enough to stimulate the pupil to think aloud. There are also issues of code switching and mixing which complicate the use of private speech in bilingual learners. Even if private speech does occur, the matter of how to interpret the mental processing of others is still problematic. One way to deal with this would be by using protocol analysis to obtain the learner's interpretation either during the interaction or, preferably, afterwards by some means of stimulated recall. At best, however, this would be only a partial solution, because the inherent issues of self-consciousness in verbal analysis would be compounded for NESB pupils by both linguistic and maturational factors. Within the context of normal classroom learning, therefore, it seems impossible to ascertain with even the slightest degree of certainty how or even whether appropriation occurs in private speech.

This suggests that clear evidence for appropriation can only be sought in language used on the interpsychological plane. Conventionally, the assessment of learning has been based largely on the written form – tests and other written tasks. While this means has undoubted practical advantages, there are two major problems. Firstly, even native speakers of English can manifest their learning only partially in written work, and if the assessed work is in English, NESB pupils find it even more difficult to make their learning 'accountable' to use Mercer's (1994b: 104) term. Secondly, and more important, most assessment of written work focusses on the product of the formal elements of the curriculum, rather than the process of learning within all three dimensions of classroom learning. What this thesis has tried to capture is the process of conceptual development not after it has occurred but while it is "in flight" (Vygotsky 1978: 68). One can only seek evidence of the 'middle link activity' of learners by examining the extent of their ongoing participation in interpsychological speech. Mercer has argued that the most useful mode of social thinking in a classroom is that of exploratory talk, and I have suggested that cumulative talk and information seeking are also, perhaps even more, valuable modes for NESB learners. However, the evidence in this thesis suggests that, while she encouraged her pupils to talk together, the teacher did not always create contexts in which pupils could work using language together, nor clearly show them how to collaborate effectively, nor make any specific effort to adapt the activities for NESB learners. Various studies have shown that a great deal of talk among pupils is educationally ineffective without careful planning and guidance by the

The clear implication of the above points is that appropriation can only be considered a useful construct for analysing the learning process of NESB learners if classroom contexts are so constructed to enable them to fully engage in the most valuable social modes of thinking to the best of their ability.

6.2 Pedagogical implications

The question of how to promote the appropriation of NESB pupils in the mainstream is intimately connected with that of the development of classroom learning of the class as a whole. The evidence presented in this study points to the fact that teachers need to consider carefully the connection between language and conceptual development in their classes. If they see a necessary connection between these developments and the interpsychological construction of understanding, they should seek to incorporate interdependent learning in their pedagogy. They might wish to reflect on the affective, gender and cultural implications of different modes of social thinking, and their relationship to effective classroom learning. Such reflection should lead them to review their existing pedagogic strategies, or to devise new ones, to enable them more effectively to transmit of certain kinds of knowledge and skills, and to promote the co-construction of understanding when pupils are able to work together and help each other in responsive social contexts. By thus activating, not merely acknowledging, social learning among their pupils, they are creating classroom conditions conducive to scaffolding the social, procedural and cognitive development of cultural strangers.

Even in such a supportive environment, teachers still need to systematically guide newly arrived NESB learners to appropriate enough understanding to participate effectively in the discourse of learning. Reference has already been made to the need for teachers to be active listeners. Even more than with other pupils, the mainstream teacher should monitor the interactive use of language by NESB
learners, perhaps using checklists to record their (increasing) participation in classroom activities. At any stage, these learners will need help to initiate, sustain and sometimes tactfully terminate interactions with their peers. Where NESB pupils engage in overt heterodox behaviour, such as calling out of turn and moving around the classroom, they need guidance and explanation rather than reprimand. Also, since schoolchildren - especially boys - frequently engage in disputational talk, NESB learners should be sensitively assisted to defend their positions. In part this may be achieved if they engage in cumulative talk which, as noted above, may be linguistically easier for them and more useful in promoting an affective climate of solidarity with their peers – and should also develop their competence and confidence to use English in safe contexts. To this end, they could be encouraged to participate in task-focussed interactions with their friends by repeating points and seeking confirmation of their understanding. Until they are at ease in this form of social thinking, it is unreasonable to expect NESB learners to understand how to operate in the exploratory mode. More than other pupils, the purpose of different sorts of group activities needs to be explained. A first step towards achieving this would be to give task instructions, and key words, in written form; this would provide NESB (and other) learners with readily-available prompts of what is expected.

By thus meeting the need for all learners, whether NESB or otherwise, to be strategically guided in the construction of understanding through talk, the teacher may hope to effect a symbiosis – rather than an osmosis (Levine 1993) - of learning in the classroom. Furthermore, if the contexts for effective interactive learning are carefully selected and the learning activities therein carefully designed and monitored, it may then be possible to adduce the extent of appropriation from the interpsychological speech patterns of the interactants.
7. Conclusion

The main aim of this thesis has been to refine a theoretical framework for investigating the context of learning in a primary school - with specific reference to NESB pupils. These concluding remarks will focus on the utility of the central constructs for researching classroom learning in the light of the interpretations drawn from the evidence in the present investigation.

Before doing so, it is necessary to make a final acknowledgement of the limitations of this study. First of all, it has all the restrictions inherent in case study, and one moreover that has focussed on a single primary classroom with particular reference to four NESB pupils. Secondly, although data was accumulated over an entire school year, the interactions selected for presentation and analysis represent only a fragmented image of the ethnographic reality within Room 7. Also, very little account has been taken of events and circumstances outside the cultural boundary of the classroom; enough has been said, I hope, to indicate the magnitude of these external influences on attitudes and action within the specific setting. Thirdly, qualitative research rests on subjective interpretation of data. The inferences drawn within this study are, of course, intensely personal - although it is hoped that they have been based on sound reasoning and academic rigour. Even though I believe this is the case, I have tried to emphasise my awareness of the fragility of making inferences - especially when attempting to extrapolate meaning from partially heard social and private speech. Despite these limitations I feel that it is possible to make some suggestions regarding the potential utility of the neo-Vygotskian framework which has permeated my thinking over the past few years.

The zone of proximal development

The construct of a ZPD depends crucially on the expertise of the more able partner. I have suggested that the application of analytic and pedagogic expertise is essential if a ZPD is to be effectively bridged through interpsychological dialogue. This presents considerable difficulties to naturalistic research of classroom learning. I have argued that this expertise cannot be expected of young children acting as peer tutors in classroom teaching. I have also agreed with Mercer (1995) that it is unhelpful to apply the
construct to a whole class. In the first place, it is difficult to identify any particular point when a ZPD in a classroom can be said to have been bridged. This is partly because learning in any one of Richards & Hurley’s three dimensions is inextricably interwoven with development (or its absence) in the others. It is also partly due to the practical difficulties of stranding out individual contributions to, and gains from, understanding co-constructed through classroom talk. More crucially, even a skilled teacher cannot hope to analyse the buds of development of thirty pupils and cater for them within a shared ZPD. These points tend to discount Vygotsky’s own tentative views in these matters, although the need to establish actual and potential levels of development remains vitally important as a preliminary to pedagogic action. However, while it is relatively easy, if painstaking, to work towards identifying existing levels of ability, unfortunately the notion of buds of development, while intuitively appealing, is difficult to define in operational terms.

In short, I suggest that if the construct of the zone of proximal development is not one that can usefully be employed with regard to peer tutoring in school contexts. If it applied to naturalistic educational studies, it should be restricted to pedagogic dialogues between teachers and one (or possibly two or three) learners with limited learning intentions over a short period of time. Even here, the issue of analysing developmental levels remains problematic.

**Scaffolding**

The metaphor of scaffolding, like that of the ZPD, rests on the intention and ability to promote learning, but does not require the analytical expertise needed within the ZPD. There is evidence in the data to suggest that the necessary pedagogic skills need not be beyond the grasp of some capable pupils. Such skills of peer tutors might be enhanced if they were given adequate preparation and guidance. Provided that the scope and operational definitions of scaffolding are limited, and set within the framework of Responsive Social Contexts rather than ZPDs, I believe that scaffolding is a useful construct to apply to naturalistic investigation of peer tutoring in normal classroom learning. The main problem lies in the assumption that scaffolding should promote competence beyond the specific task in hand. This issue might be investigated in controlled settings where an appropriate sequence of tasks could be designed and
extension of learning beyond the specific requirements could be evaluated. Evidence for this extension could be extrapolated from the language used within the interaction. This, however, raises the issue of appropriation.

**Appropriation**

This is the most difficult to operationalise of the three central constructs, depending as it does on inferences made from verbal manifestations of internal mental processes. Those verbal manifestations may occur in social (interpsychological) modes of thinking or in audible private speech, revealing traces of silent (intraspsychological) inner speech. The theoretical complexity makes it difficult for researchers to apply to naturally occurring data. These difficulties may be expressed in terms of the scarcity of relevant data, the technical problems associated with recording the data, and the fragility of making interpretations based upon at best indirect evidence. All of these problems have been faced in the present investigation, and it is likely that they would obtain, to a greater or lesser extent, in other naturalistic enquiry into how learning takes place. The question of interpreting the ‘middle link activity’ of the learner remains a fundamental epistemological problem for all educators; that understanding is internalised is assumed, but we still do not know the process by which it occurs. The notion of appropriation – although logically constructed and intuitively appealing - cannot be properly explored without making adjustments to classroom praxis to promote effective co-construction of learning among pupils.

It should be abundantly clear that I have found the neo-Vygotskian framework a fruitful way of thinking about classroom interaction in general, not merely that involving isolated bilingual learners. In doing so, I have been able to enhance my own awareness of the complex social and psychological reality of school-based learning by subjecting the central and supporting constructs to constant comparison and contrast with the data. More than this, I hope to have added to the academic discourse in this field by refining the theoretical framework, and modifying the terms of reference which can be applied. Perhaps the most important contribution in this sense would be to have illuminated, and offered for discussion, the complex interrelationship between language and the various dimensions of classroom learning. As classrooms in New Zealand, and elsewhere, become increasingly multicultural, the discourse of education needs to reconceptualise
the roles, activities and relationships within the classroom. This is particularly the case if importance is attached to the effective co-construction of learning through dialogues between the teacher and the pupils, and by pupils talking among themselves. The culturally specific ways by which learning is co-constructed through talk have considerable implications for every pupil in the class - not merely those who come from non-English speaking backgrounds.
Appendix A. The National Context

1. Demographic changes

New Zealand is, and always has been, a land of immigrants. Maori people arrived in this country from either the Cook Islands or Tahiti "rather more than a thousand years ago" (Biggs 1990: 2). Explorers from Europe first came into contact with Maori in the seventeenth century, although there was no further contact between Maori and Europeans until towards the end of the eighteenth century, when increasing numbers of traders, sealers and whalers were attracted to these shores. European settlers - chiefly from the British Isles, but including other nationalities - started to arrive during the nineteenth. Since 1858, New Zealanders of European descent - 'Paheka' - have constituted the majority of the population (Graham 1990: 52); by 1993 the total proportion of people recording Maori as their primary ethnic group was only 12.9 per cent (Peddie 1993: 26). For much of the present century, Non-English Speaking Background (NESB) immigrants tended rapidly to assimilate into the dominant anglocentric linguistic and cultural environment.

After the Second World War, however, New Zealand gradually ceased to regard itself as a British outpost and paid more attention to its Pacific neighbours. During the 1960s and 1970s - stimulated by a labour shortage in New Zealand and facilitated by improved air services - there was an influx of Polynesian peoples coming from the Pacific Island seeking employment. "In the period 1945 to 1976, the total number of New Zealand residents of Polynesian origin or descent grew from 2,159 to 65,694" (Boyd 1990: 315), representing about 2% of the total population. During the 1990s, the number of arrivals from these countries diminished, although almost 6000 new settlers arrived in 1995 (Statistics New Zealand 1997: 94). In the last decade, successive governments have sought to attract immigrants from Asian countries, notably Taiwan, Hong Kong and Korea; in 1987 the number of immigrants from Asian countries was 2,635, while by 1995 this figure had risen to 17,537 (ibid: 94). In 1999, the total number of immigrants to New Zealand was 31,000 (Department of Labour 2000). Also in recent years there have been smaller, but significant, numbers of non-English speaking refugees admitted to New Zealand; under the Refugee Quota programme, 750 refugees are given access to New Zealand each year. In 1998-9 (Council for International Development 1999:11), the largest groups of refugees came from Somalia (215), Ethiopia (190), Iraq (128), Eritrea (47); and Sudan (33). In addition to these 'quota refugees', hundreds of other refugees enter New Zealand annually as part of the Family Reunification Programme. Also, about 250 refugees a year are admitted out of the two thousand or so individuals who seek refugee status on arrival at New Zealand ports and airports (Lianne Dalziel, Minister of Immigration, radio interview 27/1/00). All of the above new settlers have added to the linguistic and cultural diversity of New Zealand. In this connection, it is worth bearing in mind that over the past thirty years the number of emigrants from New Zealand (chiefly Pakeha and Maori) has exceeded the number of immigrants (Statistics New Zealand 1997: 93). In 1999, there was an excess of 11,000 emigrants over immigrants (Department of Labour 2000).

Quota refugees are given some English language tuition on arrival as part of their six-week orientation to the new country. There are also various possibilities open
to adult refugees to develop their language skills once they are settled into their new homes - for example, by using the $200 training grant allocated to them, or by seeking help from the (voluntary) ESOL Home Tutor Service. With regard to immigrants seeking permanent residence, the principal applicants are required to achieve a measure of English language proficiency, as assessed by IELTS (International English Language Testing System). Other adult family members are expected to achieve the same measured competence in English, or pay a bond which is partially refundable if they meet the standards within twelve months of arrival. However, there is no such requirement for their dependents under the age of sixteen, and once permanent residence status has been granted to their family, they are entitled to enter the school system.

In 1994, there were reported to be over 46,000 NESB students in New Zealand schools (Ministry of Education 1994a: 57) and by 1997 this number had risen to over 68,000 (Ministry of Education 1998a: 93) - approaching 10% of the school population. Half of these students were of Asian ethnic background (ibid: 35), and most of the others were of Pacific Island descent (ibid: 34). Of these 68,000 students, over 5000 were deemed to be at the level of 'minimal English' (ibid: 93). In addition, there were about 5500 full-fee-paying international students in 1997, of whom 72% were enrolled in Years 11 to 13 (ibid: 36). However, until very recently, no specific consideration has been paid to them. For most of this century, the defacto linguistic policy of successive governments and Ministries of Education has been monolingual and assimilationist: all children in state schools were taught through the medium of English and inculcated into anglocentric cultural and educational norms. One experienced New Zealand teacher has stated:

> Although New Zealand secondary schools have had significant numbers of migrant children with limited English for at least two decades, most of these children were Pacific Islanders and their problems with English were largely ignored (Syme 1995: 8).

2. The need for, and absence of, a national languages policy

As the linguistic situation in New Zealand has become more complex, the need has become more pressing for a consistent national languages policy to identify priorities, give direction, and allocate resources. A start in this direction was made by the Ministry of Education when in 1991 it commissioned the New Zealand Languages Policy Project. The ensuing report set out the priorities needed in this area as:

i) the revitalisation of te reo maori - the Maori language
ii) second-chance adult literacy
iii) children's ESL and first language maintenance
iv) adult ESL
v) national capabilities in international languages
vi) provision for services in languages other than English.

(Waite 1992: 18-21)

Robert Kaplan, reporting independently to the Ministry of Education (Kaplan 1993) urged the need for the government - not merely the Ministry of Education - to give direction by:

a) an early statement of symbolic policy
b) the rapid setting up of an independent national language and literacy institute

c) a considerable public information campaign

d) the involvement of a wide range of government agencies in developing policy

e) the establishment of a timetable for policy development and implementation.

Peddie (1993: 7-8) in the second of two reports of a seven-year comparative study of the language situation in Victoria, Australia, and New Zealand, echoed and amplified Kaplan's recommendations. Also, he discussed in much more detail than Waite how a comprehensive languages policy could be articulated at national, regional, systemic and institutional levels (1993: 95-112).

There was a generally positive response from educators and linguists to *Aoteareo: speaking for ourselves*, but for various reasons the need for such a policy has never taken root at the highest political levels. Shackleford (1997: 5-10) suggested two reasons for that failure. Firstly there was inadequate time and preparation given to the design and management of the Aoteareo project. Secondly, as part of the political and economic reforms of the past ten years, central government has sought to reduce, rather than increase, its direct involvement in public services.

In this respect, the situation in New Zealand differs from that across the Tasman. In Australia, where the National Policy on Languages, established in 1987 (Lo Bianco 1987: 22), guarantees students whose first language is not Standard English the right to "specialist ESL or English as a Second Dialect (ESD) instruction [and] some significant continued learning in the first language" (ibid: 88). This guarantee is backed up with specific financial assistance (at present about $A 2,600 per student). The situation in Australia may not be ideal (Corson 1988: 46, Tollefson 1991: 185, Holton 1991: 88), but at least some appropriate provision has been made (Wren & Johnson 1992: 33). In Australia, moreover, the legal obligations of schools towards NESB students is more clearly defined than in New Zealand.

The situation in New Zealand also differs from that in the United Kingdom, where educational authorities have confronted issues regarding NESB learners since the 1960s, when the need for ESOL support – and appropriately-qualified teachers - began to be recognised. During the 1980s, according to Bourne (1989:7), there were three profound changes in educational policy. Firstly, in the recognition of the need to develop bilingual – not merely ESOL – skills within the school system. Secondly, in a reappraisal and redefinition of the mainstream curriculum to take NESB learners into account. Thirdly, in a recognition of the need to negotiate appropriate provision with the linguistic minority groups concerned. As in New Zealand, there is no overall national languages policy. However, explicit policy regarding the education of NESB learners is derived from various sources.: In part, they come from the 1977 European Community Directive on the Education of Migrant Workers, in part from DES reports, most notably the 1985 Swan Committee of Inquiry, and in part from the 1986 transfer of responsibility in for funding educational provision for immigrant learners from the Home Office to
local education authorities. This policy was enshrined in the 1988 Education Act, which “stipulates that all bilingual children in England must have equal access to the attainment targets and programmes of study of the National Curriculum” (Gregory & Kelly 1994: 198). One effect of this has been that at the present time schools are not funded for ESOL withdrawal lessons, but instead may apply for grants from local education authorities specifically to deal with NESB learners in the mainstream. Despite the first of the recent changes in educational thinking noted by Bourne, it appears (Savva 1994: 37) that this provision is merely transitional: support is withdrawn when bilingual children become competent in English, and it is not deemed necessary provide resources to develop and enrich their first language.

3. Educational provision for NESB students in New Zealand

The New Zealand Bill of Rights Act of 1990 does not expressly protect any language, and the 1993 Human Rights Act mentions language merely as a tangential consideration with religion and culture (Knight 1996: 77). The 1989 Education Act provides equal right to enrollment in a state school for students who have special educational needs. In the absence of an explicit educational language policy, Knight argued (ibid: 78), this necessarily includes special language needs. In a similarly oblique fashion, the 1993 Human Rights Act prevents educational institutions, inter alia, from denying access to students on the basis of their cultural or ethnic background, which may be presumed to subsume that of language background. However, as Knight pointed out (ibid: 79), "it is discrimination in access to education, not the content within education, that the Act makes unlawful" (italics in original). He continued:

A minority student who is legitimately enrolled at the school, speaks little or no English, but who receives the curriculum entirely in English, is clearly getting less of a benefit than an English speaking student....... it seems clear that the actual education provided by an establishment is either a benefit or a service. If so, the restriction of access by failing to deliver it in a comprehensible fashion would constitute a breach of s57(1)(c) [of the Human Rights Act]. (Knight 1996: 80).

In short, the legal framework may oblige educational authorities to provide appropriate educational facilities for ESL learners, but does not spell out in what way these services should be provided; this being left to the educational providers.

The New Zealand Curriculum Framework states:

Because English is the common language of communication in New Zealand, all students will develop the ability and confidence to communicate competently in English (Ministry of Education 1996a: 11).

Acknowledging the cultural and psychological importance of students' first language, the same document also states (ibid: 10):

students whose mother tongue is a Pacific Islands language or a community language will have the opportunity to develop and use their own language as an integral part of their schooling.

The framework, however, specifies neither what is meant by ‘community languages’, nor in what ways they might be integrated into the curriculum. In similar vein, English in the New Zealand Curriculum also makes it clear that NESB learners bring valuable language resources and experiences to the
classroom. It adds that "the prior knowledge, first language, and culture of each student should be respected and incorporated in English programmes" (Ministry of Education 1994b: 15). It points out (loc. cit.) that "students from language backgrounds other than English should work towards the same objectives for English as native speakers" although, it adds, "they will approach the objectives differently and may at times be working at different levels from most of the class" (loc. cit.). It is worthy of note that, in the ninety-odd pages which follow this statement giving 'Teaching, Learning and Assessment Examples' (ibid: 44-138), no specific mention is ever made of different routes or levels appropriate to ESL learners, nor suggestions made to teachers about how the planning and execution of their lessons may be varied to take NESB learners into account. A later publication commissioned by the Ministry (Kennedy & Dewar 1997) provided some guidelines for schools, but still did not address in any detail the curricular needs of NESB students in the mainstream (Barnard 1998a). The same may be said of the more recent guidelines published by the Ministry (Ministry of Education 1999a), which provides only very general advice in a chapter of six pages.

4. ESOL provision for NESB students

The need for English language assistance for some of these learners is acknowledged in the curriculum document:

some new learners may need transition time within an intensive English language class as a first step. The transition is best managed, however, by planned immersion experiences in mainstream English classrooms (Ministry of Education 1994b: 15).

The Ministry provides some financial support for the provision of English to Speakers of Other Languages (ESOL) support. Between 1992 and 1997, the Ministry of Education defined five categories of ESL students in schools:

1. Cannot understand greetings, simple instructions, questions or statements in English
2. Able to converse a little in English but has minimal reading or writing skills
3. Adequate oral English but needs reading and writing support
4. Effective oral and written English but needs subject specific support
5. Read, write and speak English competently - needs no additional support. (Atkinson 1992: 25)

Descriptors for the first four categories were provided by the Ministry of Education (1996b) to allow schools to identify and distinguish needs, based upon their own assessment procedures. Principals and boards of trustees of intermediate schools were advised that students in categories 1-3 might attract discretionary funding; in primary schools, only students in categories 1 and 2 attracted such funding. In 1997, this funding amounted to $225 for each NESB school learner towards the cost of ESL tuition in their first half-year in New Zealand, and $75 in each half year thereafter. This compares unfavourably with the financial support provided across the Tasman: as Franken (1995: 7) remarks, this amount "would barely cover the cost of a year's supply of school newsletter for that one student".
In 1998, a change in the system of assessment and funding was announced in the *New Zealand Education Gazette* (Smith 1997). A gross amount is available which could provide an annual maximum of $500 to schools for every NESB student deemed to need English language support for a maximum of three years. There is an additional sum of $500 allocated to schools for each quota refugee student in the first year of residence in New Zealand. The five-point scale was replaced with a more comprehensive and *potentially* more valid set of assessment procedures, which were piloted in a few schools during late 1997 and introduced throughout the country in 1998. According to the *Assessment Guidelines* (Ministry of Education 1998b; 1999b) at an initial assessment, a student who understands only isolated words, and produces little or no oral language, is deemed to be at the stage of 'minimal English' and no further assessment need be made for several months. The linguistic competence of all other NESB students is measured against their native-speaking cohort according to forty five criteria set within the four language skills of listening, speaking, reading and writing. Each NESB student is allocated one of three marks: (3) close to, (2) below, or (1) well below the cohort standard, defined as “students of the same age performing at the normed national level” (Ministry of Education 1999b: 39). Schools are allocated the same amount of funding for each NESB student whose score is at or below 112 - that is, those students who the Ministry considers “have not acquired adequate skills in listening, speaking, reading or writing to function independently in a mainstream class” (Ministry of Education 1999b: 91). The *Assessment Guidelines* add (*loc. cit.*) “students who score above 112 may still require some ongoing assistance in English in a mainstream setting but will not be eligible for ESOL funding”. The new system provides considerably more financial assistance than hitherto, but it is understood that schools need to use the Ministry’s funding as a supplement to their own operational budgets.
Appendix B. The Local Context

In 1996, the vast majority (74%) of New Zealand’s NESB learners were in Auckland schools, with the second largest group (14%) in Lower Hutt, a major suburb of Wellington (Kerslake 1996: 17). At that time, the proportion of NESB students in schools in Hamilton - the fourth largest city in New Zealand with a population of over 150,000 - was estimated at 3%.

To explore some of the local dimensions of the context of NESB learners, a survey of ESOL provision in Hamilton’s primary schools was conducted in 1998 (Barnard and Lata Rauf 1999; Barnard in press). Among other things, the survey elicited information about the number and background of NESB learners, the duties and qualifications of ESOL teachers, and the sort and amount of ESOL provision made for NESB learners. Data was collected from all 34 primary, intermediate and middle schools in the city. It may be noted that a primary school caters for children up to the age of eleven; an intermediate school consists of the two final primary school years - 7 and 8 - catering for pupils before they go on to a high school; and a middle school comprises years 7 to 9 or 10. For the sake of convenience, unless otherwise specified all these schools will be referred to below as primary schools.

1. NESB learners

In the 34 Hamilton primary schools surveyed, 725 students (now 6% of the total school population) were deemed to be in need of ESOL tuition - taken as being at or below the Ministry of Education’s (1999a) assessment benchmark. Almost 75% of these 725 students were the children of permanent residents, about 20% were identified as refugees, and the remainder were fee-paying students. The percentage of NESB learners on school rolls varied: some had as few as 1.5% (four or five learners), others up to 10% (over forty learners).

The ethnic background of these students was diverse. Most of the children of permanent residents came from various Pacific Islands, as well as Taiwan, Hong Kong and Korea. Significant numbers of refugees were Somalis and Iraqis. Fee-paying students tended to be Korean and Taiwanese, but there were also learners from Mongolia, Kiribati and Fiji. Some of these were the children of temporary visitors to New Zealand, others had been sent to New Zealand while their parents remained in their home countries. There was an uneven distribution of fee-paying students: many schools had none, while one had eight. Likewise, some schools had no refugees, while in one school half the NESB learners were Somali refugees (most of the others were the children of Tongan residents). One intermediate school - Rosegarden - had 47 NESB students (out of a total roll of 445) with the following ethno-linguistic backgrounds: Mongolian, Somali, Arabic, Korean, Hindi, Fijian, Chinese (both Mandarin and Cantonese), Farsi, Japanese, Tuvalu, and Kiribati.

Although distribution is uneven, NESB learners are now regularly enrolled in all primary schools in Hamilton; it is clear, however, the label ‘NESB’ brackets together children of considerable diversity, whose only point in common is their perceived linguistic deficiency. This makes it difficult for schools to implement
the Ministry's advice to use and develop their first language (Ministry of Education 1996a: 10) and incorporate into the curriculum the first language and culture of NESB learners (Ministry of Education 1994b: 15). Such principles may be applied where there are reasonably large and homogenous linguistic minorities in a school. However, with few exceptions, the NESB learners in Hamilton schools are isolated: very often there are only one or two NESB learners with the same first language in a mainstream class. This points to the need for schools to recruit teachers who - if not themselves members of these communities - are at least culturally and linguistically sensitive to them, and have appropriate professional qualifications and experience.

2. Teachers and teacher-aides

Of the 34 primary schools surveyed, fourteen had one specialist teacher with ESOL qualifications, and one school had two ESOL-qualified teachers; in addition, two mainstream teachers in other schools were currently following a course. The course most of them had followed was the 300-hour Certificate in TESOL course offered by the local polytechnic. These teachers were assisted by some twenty teacher aides, only a few of whom had any sort of ESOL qualification. In the other twenty schools, responsibility for ESOL provision varied: sometimes one or more mainstream teacher took charge; in other schools the Deputy or Assistant Principal or Special Needs teacher was identified; sometimes a teacher aide was identified, and occasionally no information was given as to who was responsible. Thirty-two teacher aides worked in these schools, of whom only one was reported as having an ESOL qualification. The absence of qualified ESOL teachers reflects the point made by Kennedy & Dewar (1997: chapter 8) that many teachers currently working in New Zealand schools have received very little information about NESB learners during their years of training.

There were two basic ways of providing systematic ESOL support: either by withdrawing the learners from the mainstream for ESOL tuition, or by helping these learners when they are in mainstream classes. On the whole, the ESOL-qualified teachers appeared to spend most of their time in ESOL withdrawal lessons, and teacher aides in schools with such teachers also spent a significant part of their time assisting in withdrawal teaching. In schools without ESOL-qualified teachers, it appears that most of the assistance was provided by teacher aides giving in-class support, although it seems that sometimes teacher-aides withdrew NESB learners for ESOL tuition. Other duties included enrollment, assessment and attendance at parent-teacher conferences. Almost all the ESOL-qualified teachers reported that they took part in the enrollment and assessment of the NESB learners, and most also attended conferences between teachers and the parents of NESB learners. It was very difficult to tell from the data what happened about the enrollment and assessment of the NESB learners in those schools without ESOL-qualified teachers.
3. ESOL provision

All of the schools surveyed provided withdrawal lessons; most did this on a one-on-one basis, but some also taught small groups of up to six pupils. Only in four schools were groups larger than six taught. One reason for such small groups is that many schools had only a few students; for example, ten schools had fewer than a dozen NESB learners, sometimes with different levels of English competence. Schools with larger numbers found it difficult to arrange classes for bigger groups - even if this were considered desirable - because of mainstream timetabling considerations. All schools, except three, reported that they provided in-class support to NESB learners. Most did this both on a one-on-one basis and/or in small groups. Those that indicated otherwise (either one or the other, but not both) tended to be schools with only half a dozen or so NESB learners on the roll. Mostly, it seems, it was teacher aides who provided in-class support, while the ESOL qualified teachers tended to spend their time teaching English in withdrawal lessons.

The schools were asked to estimate the number of hours per week of withdrawal lessons and in-class support provided to a typical student in each of three categories benchmarked according to the results of the Student Assessment Form (Ministry of Education 1999b). The first category was that of ‘minimal English’. The second category consisted of those NESB learners deemed to be well below (with scores between 45 and 80) the standard of the age cohort, and the third category comprised those scoring 112, who were below the standard of the age cohort. Those NESB learners deemed to have ‘minimal English’ received, on average, just over three hours a week of withdrawal ESOL tuition. The range of provision among the schools varied from half an hour in one school to nine and a half hours in another; the most common number of hours given was two and a half in primary schools, and five in middle and intermediate schools. NESB learners in the second category were provided with an average of just over two and a half hours a week, and those in the third just under two hours a week. The major implication to be drawn from these figures is that students with ‘minimal English’ spend 22 out of approximately 25 classroom hours a week in a situation of incomprehensible input.
Appendix C The research setting

1. The school and its pupils

The setting for the present study is an intermediate school in Hamilton – 'Rosegarden'. After several years of declining rolls, and a rather lethargic reputation, there was a change in principal in 1994 and the numbers of pupils, and accordingly staff, increased. In 1998, there were some 450 eleven to thirteen year old pupils in the school, with an increase in the roll expected in following years, to accommodate which new classrooms and facilities were being built. The pupils come from a number of different ethnic groups. In February 1996, the Assurance Audit Report carried out on the school (Education Review Office 1996:1) reported that the ethnic composition of the school's student population was as follows:

- Pakeha 54%
- Maori 22%
- Pacific Islands 4%
- Asian 14%
- Somali 2%
- Other 4%

There has been very little change in this breakdown since this review. With only one or two exceptions, the teachers are Pakeha New Zealanders.

According to the ESOL teacher's records, in 1998 forty-seven of the school's pupils were identified as needing English language support; thirty one of these had been at the school in 1997, and sixteen arrived at various times during the 1998 school year:

<table>
<thead>
<tr>
<th>Nationality</th>
<th>Sex</th>
<th>Dates of Arrival in School</th>
</tr>
</thead>
<tbody>
<tr>
<td>Korean</td>
<td>2 boys 2 girls</td>
<td>16/3 16/3 20/7 20/7</td>
</tr>
<tr>
<td>Taiwan</td>
<td>1 boy 2 girls</td>
<td>4/5 1/7 17/8</td>
</tr>
<tr>
<td>China</td>
<td>2 girls</td>
<td>20/7 23/7</td>
</tr>
<tr>
<td>Hong Kong</td>
<td>1 boy</td>
<td>20/7</td>
</tr>
<tr>
<td>Japan</td>
<td>1 girl</td>
<td>12/10</td>
</tr>
<tr>
<td>Somalia</td>
<td>2 girls (siblings)</td>
<td>18/5</td>
</tr>
<tr>
<td>Solomon Is</td>
<td>2 girls (siblings)</td>
<td>16/2/98</td>
</tr>
<tr>
<td>Fiji</td>
<td>1 boy</td>
<td>13/10</td>
</tr>
</tbody>
</table>

Four of these newly arrived NESB learners were placed by Room 7 and these are the focus of this study.

2. ESOL provision

An ESOL Transition Unit was set up in 1993 to teach English to new migrant high school students, who came to Rosegarden either specifically for ESOL lessons, or else stayed at Rosegarden until they were ready to return full time to their own High School. This unit was separated from the Special Needs Department in 1995, and although is still officially referred to as a transition unit, it now caters only for students enrolled in the school. For the past four years it has been run by a registered and ESOL-qualified teacher, and during 1998 was assisted at various times (that is, when funding was available) by two or three teacher aides; these have no formal ESOL qualifications, but have some experience in this area of work. All the ESOL staff work enjoyably and harmoniously together, and also get on well with the other members of staff. The teacher aides are paid the standard hourly rate of $10, and - in the ESOL teacher’s estimate - the discretionary funding from the Ministry barely covered the cost of paying the teacher aides.
NESB students may be enrolled at the school without the assistance of the ESOL teacher - usually by the Principal or one of the deputies, but sometimes directly by the school office staff. The ESOL teacher has requested that all such students should be enrolled at a time when she can be present, and this sometimes happens. Often, however, the first she knows of a new NESB learner is when a mainstream teacher advises her of the student's presence in the classroom - a matter that causes occasional friction. Within a few days of the arrival of new NESB students, she assesses their level of competence in English according to the guidelines laid down by the Ministry of Education (1998b; 1999b), and then devises as appropriate a programme of ESOL support as she can.

Although the Ministry of Education (1994b: 15) recommends that "some new learners may need transition time within an intensive English language class as a first step", it is not possible for the school to provide a well-organised intensive transitional programme to prepare NESB learners for their experiences in the mainstream. This is largely because of the irregularity of NESB arrivals, their different linguistic and cultural backgrounds, the variation in their English competence, and the different mainstream classes into which they are placed. The major provision of ESOL in the school is by way of withdrawing NESB pupils from their mainstream classes for language lessons in the ESOL Unit. For those pupils deemed to have 'minimal English', this tuition amounts to some four to five hours a week; for those above that level, the hours of withdrawal lessons are fewer - perhaps one and a half hours a week. For the same reasons as stated above, compounded by interruptions in the school-wide curriculum (caused by field trips, camps, sports days, etc.) the ESOL teacher finds it hard to keep a regular timetable and new schedules are drawn up at least twice every term. The ESOL programme was consequently characterised by a lack of overall coherence as well as time. Given the time available - less than five hours a week for the average NESB learner - the amount of tuition was less than adequate to prepare the learners for the mainstream, or to adequately help them while they were there.
Appendix D. Interview with the Class Teacher

1. Summary of interview
(N.B. The names of the teacher and all pupils are pseudonyms)

Dear Ms Wilkins

Please find below a summary of our discussion on 6 August. I would like to assure you that this report will not be shown, nor its contents revealed, to anyone other than yourself. If you have any corrections or additional comment (and I hope you will!!) please make a note on this summary and return it to me. Many thanks for giving your time to me; I really enjoyed our conversation and found what you said really interesting and useful.

There are five learners in your class who attend ESOL lessons, and two others - one from India and the other from China - who are not classified as ESOL and have been on the normal classroom programme all year: these two have no problems at all in the programme. The other five are slower to grasp what's going on because they don't necessarily have the vocab for what you're doing. Having said that, though, they really are very different from each other: Anny and Mary are much quicker, probably harder-working too, than the others and so they catch on a lot quicker. These girls are really very focussed, hard-working and meticulous in their presentation: they probably have a lot of pressure to succeed put on them by their parents.

You seat the children according to the needs of the particular units of work, rather than according to language background, ability or sex. It is true though, that boys tend to work with boys, and girls with girls. The other children help the ESL learners by explaining things; for example, if they've come in and the lesson has already started whoever they're sitting next to will show them what the class is doing. Nevertheless, the coming and going of the ESOL students means that often you have to go over things with them, and this means that you can't spend time with other groups and individuals in the class. Anny and Mary tend to sit together and support each other. Noor and Fatma used to sit together but they don't now because you found that Fatma was relying too much on Noor. Outside the classroom, in breaks, the Somali girls tend to sit with each other - and perhaps Laura - and seem not to want to mix with the other children.

This is Fatma's second year in the class; her problem is mainly the language, but she was very slow to catch on to most of the work because she came with virtually no skills at all. Noor, who is quite quick and catches on fast, came with more skills than Fatma and had had more experience of the New Zealand school system. When the question arose about Fatma repeating the year, you felt that she should stay with you, rather than go to another teacher, because she had developed a close relationship with you, and so although the other children in the class were new, Fatma would have someone she knew.

There are no particular curriculum areas that create problems for the ESOL learners as a whole - in maths, for example, Anny and Mary have had few conceptual problems. But when it comes to written instructions, it's much harder for them because they don't have the English. And they would feel badly if they...
scored say 80% instead of the usual 100. At first, they would never show or tell you, or the other children, when they didn’t understand something, but they have started to recently and you see that as an important sign of their growing confidence to ask questions. By now, half way through the year, they’re well into normal classroom routines and on the whole, the ESOL learners handle the to-ing and fro-ing from the ESOL Unit very well - possibly better than other children would.

Although you’re not quite sure what happens in the ESOL unit, you think that the starting point would be teaching and building on everyday language. Firstly, oral language because it’s not easy to get them to talk in a large group: they lack the confidence. You think it’s important for them, right from the beginning, to spend some time in the mainstream classroom for social contact. But it might be better if they had more intensive English support to develop their language skills more fully. Then, as they progress, the balance could be changed and they would then spend more time in the mainstream and less in the ESOL Unit. Ideally, it would be good for them to be in the class first thing in the morning - for a short time anyway - and then go out, and then perhaps rejoin the class later on. But you realise that there would be timetabling difficulties for the ESOL teachers if everyone thought the same way.

Given the lack of resources, there may come a point at which there are too many ESOL learners in a class. You have a few problem children in your class at the moment: one has a fulltime teacher aide. When you have to deal with those other problems, whether behavioural or learning, you don’t have the extra time to write individual programmes for the ESOL learners any more: you used to give them special reading and maths programmes.

As far as the school as a whole is concerned, it is possible that if the proportion of ESOL children increased there might be problems down the line. You mentioned that some of the children are quite racist and have picked on some of the Somalis. Apart from one small incident a year or so ago, this hasn’t shown itself in the school: most of it seems to be happening out in the community, in the streets, at home.

Looking to the future, If Anny and Mary continue to make the rate of progress they have up till now they’ll be ready in all ways to go on to secondary school. You do worry about Fatma, and even Noor has got a fair way to go. And you think Paul will be lost because he’s making very little progress: he’s quite lazy, and doesn’t have the right attitude. But of course other kids struggle too. It’s got nothing to do with being ESL - it’s a matter of other skills.

With someone like Fatma, there is the problem of her age - despite her lack of progress, she is the right age to go on to secondary school. There is also a lack of contact with the parents. The father speaks very limited English, and you’ve never spoken to the mother. He pops into the school from time to time, for example to drop Fatma off, but they don’t come to any parent meeting, interview or anything like that. This loss of contact is very worrying, but again it’s the same with other parents - many of them don’t bother to turn up either.
2. Transcript of the interview

Interview date 6/8/97 subject Ms Wilkins
The actual interview started about 3.25 on Wed 6/8/97. Lasted about 20 mins
Transcription process started 3.30 6/8/97
Rough transcription (2200 words) completed 9.40 - 7/8/97
Summary report completed (1130 words) 8/8/97 - 90 mins

How many ESL learners are there in your Year One class at the moment?
OK. Mary, Anny, Paul, Fatma and Noor. Five + two declassified and are now on normal classroom programme.
The other two - have they been declassified this year?
No - they're on the normal classroom programme all year.
Where do these come from?
Geni was born in India - came out last year and Tommy's from China.
Do they have any problems in the classroom, those two?
No - not at all.
What sort of difficulties do the others have - Paul, Noor, and Mary - How is it manifested?
Well, er, bearing in mind the individual differences - and they really are very different - Anny and Mary much quicker, probably harder-working too than the others so they catch on a lot quicker. But obviously all of their problems are that they are slower to grasp what's going on and they don't necessarily have the vocab for what we're doing.
By now we're half way through the year - I mean they're into the culture, the routines, and things like that?
Oh, yes.
Do they sit anywhere or do they select each other to sit near?
Uum. I choose by random. Although that doesn't make sense (laughs). It's basically random, except when we're doing a particular unit of work and they might need to sit in a different position. Like at the moment, the middle reading group - which most of them are in, except for the Somalis and Paul - are doing a lot of work on the whiteboard, so they need to be on that side of the room. So today they moved over. But otherwise, Anny and Mary sit together; and they support each other.
They're both Chinese speakers, aren't they?
Yes. And Noor and Fatma are both Somalis - used to sit together but they don't now because I found that Fatma was relying on Noor too much.
Uh-hum. I think that Noor is quite good verbally, isn't she?
Yes she is. She catches on quite quickly.
Do the other children help them at all?
Yes. Mm.
In any particular way?
In any particular way? Just explaining things, or particularly if they've come in and the lesson's already started, whoever they're sitting next to will then say this is what we're doing.
Because they keep coming and going, not only those..
In and out. That's right, yes.
Does that cause any problems for you?
Only that often you have to reiterate. You've got to call them up to the front of the class and say this is what we're doing and over you go again. So you can't be with your withdrawal groups (laughs) However...

**Withdrawal groups?**

Yes, well when you've got to pull others aside and work on a smaller group basis and then individually.

**Are there particular areas of the curriculum that create problems? I mean maths or social sciences or ...that create particular problems for the ESL children because of the language?**

Not really what you'd call problems, no - not problems as such. Erm - certainly not for me. I could see earlier in the year that Anny and Mary had a few problems in that they've got all the maths concepts - they really catch on very quickly - but of course if it comes to written instruction, because they don't have the English it's much harder for them. And they would feel badly if they scored say 80% instead of the usual 100.

**In such an event, what do they do? Do they put up their hand and ask you? Or...**

Usually. That's started more recently. They never used to

_Ah right. So they've got the confidence to ask questions. And that's very important?

Yes - very._

**Otherwise you just had to suss out that they had problems - when they don't volunteer. Would they ask the people next to them?**

No, they wouldn't at that stage. No they were really just like two peas in a pod (laughs).

**Another question about the way they sit; I don't think you do segregate boys from girls...**

No, they're all mixed up - boys and girls, and abilities.

_Take someone like Paul for example. I mean. He will tend to work with boys, or tend to work with girls. On the whole, do girls..._  

Yes. Paul works with boys. Yes, generally it's same sex.

_Uh hu. Do you think - not necessarily with these children - that you may think that they need to be kept back - does that happen?_  

It did happen with Fatma. This is my second year with her. Yes I had her last year.

**Is it language or is it other matters?**

Mainly the language, but she was very slow to catch on to most of the work. She came with virtually no skills at all.

_Would that be true of Noor as well?_  

No - Noor I believe did come in with some skills. Into the New Zealand school system, and she certainly came into this class with some, yes. More than what Fatma had.

_So Fatma had a background of little language and perhaps little education as well?_  

Yeah.

**What do you think they should do when they go to the ESL Unit? What do you think the purpose is?**

Oh, well - I'm not always sure of what they do over there of course - just as they aren't here. But, er, language as we use it every day - what's familiar - and building on that I presume would be a starting point (laughs).

_Spoken language rather than...?_  

Both. The spoken, the oral first. I think they do a fair bit of that.
Yes. But again over there it’s not easy to get them to talk. You can understand it’s not easy to get them to talk in a large group, but...
Easier, but not easy. That’s right.
They’re still very shy.
Yes, lack of confidence.
You’ve got five, six, seven. Do you think there’s a certain point at which there are too many ESL learners in a class, or in a school?
Yes. Given the lack of resources, yes.
The other resources being...?
Well, we’ve got quite a few problem children in this class, and one who has a fulltime teacher aide because of the problems that she has. So of course when I have to deal with those other problems, whether they be behavioural, or learning, that type of thing, I don’t have the extra time for the ESOL. I don’t write individual programmes for them any more, like I used to
Because of the time?
Because of the time. making the programmes work, I just couldn’t do it.
What sort of individual programmes did you use to write then? Reading and maths. With social studies and science they just slotted in. But they’d have their own reading and maths programmes. And I’ve stopped that.
If there were more resources, do you think it would be better to have more time with the children out of here and in there, or perhaps a sort of in-class support doing something like you were doing with a teacher aide? I’d like to see them initially until their skills at English language were much better developed: more ESOL, and just in the classroom - so they’re still getting the classroom for social contact..., still coming here, but for shorter time and then slowly turning it around.
Changing the balance
The balance changing, exactly. If that were the happen, ideally - there are all sorts of scheduling problems - do you think they should come into the mainstream class first thing in the morning, and go out second half, or - how do you think - how do you best be done.? First thing in the morning, or after break?
I haven’t really thought about that, but I’d say it would probably be better that they were in the class in the morning - for a short time anyway, because that’s our chat time, get the little housekeeping bits and pieces done, and then go out, and then perhaps rejoin us later on. But that would be a timetabling nightmare for the ESOL teachers if everyone thought like I do. Because the maths and the English is done in the morning, see.
That’s normal across the school, is it?
I think so, yes.
Well, it is always a question, if you’ve got the resources then deploy them in the most appropriate way, but I can see from my little perspective that pulling them in and out again, it’s disruptive - you know, for everybody.
And yet they handle it very well. (Go on.) Some of these other children just generally if you were pulling them in and out to do this and that, off to the dental nurse, and off to top something else, they’d make a big thing about it. But see most of them now ‘Oh yeah. Time I went.” and off they go.
So - there would be problems if we had more in a class, without any extra resources of whatever sort, but what about in the school? At the moment there are about - in fact there are more than - 16-17% in the school because there’s a new
tranche coming in (that's right). Do you think there's any sort of educational or community problem if there become too many ESL learners in the school? (pause) It's really hard to play that one. There could possibly be problems later on. I know some of the children are quite racist and have picked on (is that right? yes?) the Somalis.

And the Somalis react?
They do. They do. 

_Um. Um. Does that happen in the classrooms, or...

No. No. In fact, I think it was early last year - it might even have been the year before - we only had one small incident in the school. Most of it seems to be happening out in the community, in the streets, at home.

_Uh hu. Perhaps one last question. Do you think - if you look at the girls, and Paul, that you have now - in a year's time they'll be OK to go off to secondary school? Do you think that two years for people like Mary and Anny ...

If Anny and Mai-chaing continue to make the rate of progress they have - yes, I believe they'll be ready in all ways for secondary. I worry about Fatma: I don't think she will be. And even Noor's got a fair way to go. And Paul I think will be lost.

Go on. Why? I mean...

Because he's making very little progress. Most of it's his own choosing - he chooses not to do....

Is he a fairly lazy?
Yes. he's quite lazy, and.... his attitude.

This is one of those issues, isn't it. The language is what identifies them within that... You started off by saying that it's personality and individuals and so on.

Yes they're all different. That's right.

Other kids are lazy and will not do well at secondary school. Do you see...?

They'll struggle too, yeah. It's got nothing to do with being ESL. It's the skills they haven't got.

Now. Projecting Fatma for example. What then? Would you sit down with the parents, or the Principal or something, and negotiate whether she should stay or go or...

Huh. We can only do that so far because the age - the time she's got to go to high school. Dad's English is very limited also. I've never spoken to the mum.

Is that right? Generally it's the fathers who come to...

Yes. The men do the saying.

So when you have a conference, it's the father who comes, or both...?

He's never come to any parent meeting, interview or anything like that. But he has popped in at the odd time, when he's had to bring Fatma to school late, or something or the other.

Is he working, by the way?

The father working? Well I really don't know, but I presume from being at school during the day that he's not - unless he's got as night-time job.

This loss of contact is very worrying, but again it's the same with other parents. Other parents don't bother to turn up as well, but...OK Well, Thanks very much. I hope I'll...Maybe I'll be able to pop in and sit over there and observe things going on.

You're welcome at any time, Roger, not a problem. I don't know if I've been of any help to you, but....
Appendix E. Example of Field Notes

1. Field notes

first day of school - 28/1/98: doc 01/28fn

I arrived at school at about 8.15, and went to Room 7, where I got the recording equipment ready. Before I did this, I briefly asked T if she would agree with Asst Principal to put any late/new ESOL students into her room. She refused, saying she had quite enough already. On immediate reflection, I realised that I couldn't have chosen a worse moment to make such a request; apart from anything else, I caught her on the hop, and within minutes of going to face a class for the first time.

I decided to make a seating-plan of all the students. I completed this after the students came into the room and gave their names to T.

After a very brief introduction, T introduced me and I came to the front of the class and explained what I wanted to do in my research project. I gave them (and T) the letters of information/consent for them to take home for their parents - and themselves - to sign. I sat down, and the T started to give a fair amount of instruction into the school and class rules - assertive discipline, etc. While she was doing this, I checked on the Ss who I assumed to be ESL, and they all seemed to be following the discourse - eyes on T, no fidgeting, etc.

For much of this talk, a number of parents (who had been there since the Ss entered) were present and listening, but eventually they drifted out. I noted an Arabic woman who I assumed to be Yorin's mother and caught her just as she was leaving. She was in fact his mother, and told me that they had been in Auckland for 2 years before coming last year to Hamilton, where Yorin had been at Copwood School. Parents had chosen Rosegarden now because of its reputation. There were six children in the family (Y = eldest) and father was studying MBA at Waikato. Briefly discussed issues such as L1 maintenance with her. As I talked to her T led class around the school, and until her return, I completed the class seating plans as well as I could (only 25 out of 36 actually present) and checked the equipment.

A few minutes later, T set up a task where Ss asked each other questions to find out 'who had done x or y.' I checked that this activity was going acceptably - noted that two or three boys immediately went to Yorin and Mark (sitting next to him) to involve them in the activity. The two Chinese Ss - Calum and Tilly - seemed to have no problems at all; later, Tilly came up and asked me if I was Jon's dad. Other Ss also approached me to help them complete their questionnaire. Amah (who had entered the class rather later than the rest) was perhaps not surprisingly not fully engaged; at one point she approached me and asked me a question.

A few minutes into the activity, I beckoned Lorin (whose seat was next to me) and asked him to carry the portable c-recorder with him while asking the questions. He willingly did so, and I checked occasionally on his movements; he seemed to be behaving very naturally, and the small bag he was carrying seemed to attract no
attention from the others. So far so good. After 15 minutes, I relieved him of the equipment, only to find that I had failed to switch the record button!

A few minutes later, the T called the class to order and elicited some information (eg who had answers to all the questions; who had a different respondent for each piece of information), and then told the class that they would continue with this activity later. Now it was break time, and with a final note about behaviour, set them off.

I sorted out the equipment for tomorrow, went off to the conference room and then to the staff room. I left the school at the end of break.

2. Follow-up notes

Positive points
1. I have introduced myself and ‘broken the ice’ with the class, and made them feel that I am, and will continue to be, a familiar presence in the class.
2. Presence in school accepted by staff.
3. So far as I can judge, the equipment seems to be satisfactory - see note 3 below.

Negative points
1. The major problem as I see it is whether in fact the students in the class match up to my ‘ideal’. So far as I can see from the 25 learners in class today, NONE of them are straight off the plane, and none of them (?) are non-speakers of the language.
   
   Yorin - Jordanian = 3 yrs in NZ, one yr at Copwood. Speaks English
   Mark - Kiribati = ? in NZ. Speaks English
   Calum - Chinese + ? in NZ. Speaks English
   Nathan - Fijian
   Tilly - Chinese - at Ham South. Speaks English fluently.
   Amah - Somali - last half year at P’grove. ??English.

   There are still some NESBs to come:
   Harry - Somali
   Sebastien - PNG
   Buna - Tuvalu (already in P’Grove last year)
   Saral - Korean
   Jean - Taiwanese - not coming until next term (This could be an opportunity)

2. Not at all a good idea to have pushed that request for more ESOL kids to MsW just as she was going into class
3. Stupid not to have pushed the record button on the indiv recorder!

Action points
1. Get the class profile from MsW, and transfer relevant data.
2. Try out the equipment again tomorrow in a shared task/group activity - esp the indiv mike - with? Trevor?
3. In field notes, start to focus on indiv ESOL learners – who?
4. Start to transcribe the interactions - especially the indiv recorder.
Appendix F. Examples of Lesson Transcriptions

1. February 10, 1998
Doc code: 02/10 Cl:AD+spell (trans): cf 02/10 f/n

context
0900 All Ps in class in usual places. Someone had written 'Ms Wilkins' in the AD list, and when T came in she immediately noticed it and asked who had done it. No response. She asked for perpetrator to wipe it off. Again, no response. T silently took register, and read at her desk in front of class. Then.....

0908: T: I don’t want any talking. I’m waiting for one person to be honest
One P suggests it was Harry.
T: Did anyone see him do it? Who was in the class the whole time?"
(various small interactions among Ps)
0913: T leaves room (to go to see Harry in ESOL Room). Buna also leaves.
Some general discussion as to who did it.
0915: T returns (followed by Buna)
Na: It might have been someone from another class.
T: You would have seen him. It wasn’t Harry. I have spoken to him and he arrived late. My only concern is that we have a dishonest person in the room. Mark - Name up. (Ma goes and writes name under AD list). Roger - Name up (ditto).
0920: T: Obviously we have a xxx Put up your hand if you’ve heard the story erm of Peter and the Wolf...It’s not quite like Peter and the Wolf. Similar message. Who’s heard that story. Thanks. Hands down Roger. What’s essentially that story about?
Rr. xxx boy kept on saying there was a wolf xxx wasn’t a sheep, and one day the real wolf came and he said it again xxx because they thought he was xxx
T: Right. This situation is a bit different, around the other way, in that the dishonest person in this room ... not going to receive trust. Twenty minutes wasted we’ll make up in your time. It’s unfortunate. So many people being punished because of one person. But I find that very hard to believe - no-one saw anything. So many people xxx . Not a good start to the day (to P I know you didn’t do it because xxx) ... Get out your notebooks, please... Right. No need for a great chatter ... Open up your first page ... xxx OK. On the inside front cover at the top, write today’s date ... On the cover ... Inside front cover
Lorin: Front
T: Cover. That’s right. Cover. Not first page - the top. (To P) No no no - here.) Next to that you’re going to write a number. It’s going to be different for a lot of people. You start with the number of the group level that you’re working on at the moment. And then when you change, go up the next level, you’ll write the date xxx xxx progress. OK. I’ve stapled the groups up there on the board. I will call them out for you and when you hear your name, listen to what group number is, and write that number beside it. OK? Right. 2 Yorin, 3s,...Trevor, Nathan, .... While you’re waiting you’ll see on the whiteboard lists of words, and one’s got a 2 at the top, the other’s got a three. Read through your words. Don’t write them yet. We’ll go over them together. And then I’m going to go over the programme. Fives - we don’t have any fours until this group moves on to them - So fives, both Rogers, Carol,... Sixes, Ella, Arthur, xxxx. Sevens, Alex. Peter, Gene, Sally... And Tilly you’ll be in 8s. There isn’t an 8 up there because you’re going to be working with the 7s today. xxx I know because you weren’t here for the spelling test, so I’m going to have to test you and a couple of other people. All right? xxx I’ll give you a test xxx. OK. Trevor will you please read out list 2 on the board, please.
Tr: (Does so - 10 words).
T: Good Thank you. Erm. Walt - 3, please
Wa: (does so)
T: Thank you. OK Roger - 5.
Rr: (does so - 15 words.)
T: Good. Thank you. What is different about - anyone can put their hand up - December and February. Something a little bit different about those two words. What do you think, Calum?
Ca: xxxthe ends.
T: No, not the ending. Yes?
P: xxx
T: Good. thank you, They start with a capital letter. Why? They're not starting a sentence?
P: Because xxx.
T: Good because it's the name of the month. It's a proper noun. It must have a capital letter. If you spell it without, I'll mark it wrong. Your names have capital letters, so do the names of months. OK - 6, please – Melanie.
Me: (does so).
T: Thank you. And the last one, er, Sally
Sal: (reads aloud list of 20 words).
T: Good. Thank you. xxx your timetable, you'll see you have spelling three times a week
Lo: Three?
T: You do. Take my word for it - you do. On day 1 - it's written up here - you will be given your new lists xxx and up here you will see a spelling timetable, just as there will be a reading and maths timetable, once you are in your reading and maths groups. So at a glance you will know what you're working on on a given day. For example, groups 2 and 3 will start off with Day 1 - OK? - You're all going to start with Day 1 - groups 2 and 3 will start off Day 1 on Monday. So on that day, they will be given their new lists - lists which will be on the board, and they will check them off with me - they write them down, they bring them to me to be checked off so that you know you've read (?) them OK so that you'll know what the words are and you've copied them down correctly. I'll check them off with you and then you do a few minutes silent reading - go over your list. And you learn it for homework. Most of your spelling will be done as homework. Yes Yorin. Day 2 the reading language books - that's the day that you put those words in alphabetical order, you also write a meaningful sentence to show the meaning of the word, and then you learn them for homework. Revise them. So by day 3 when you're working with me I'm going to test you and you'll have some dictation exercises and revise the xx. If you read this in your own time, you'll see that I have written in very big bold letters: Be prepared to stay after school if you haven't done your class- and homework. Xxxx (Noise of airplane) xxx children amazingly make mistakes in their spelling tests and they'll say but I've spent so much time reading them. so much time every night xxx couple of minutes xxx. Revise.
P: What if we get them wrong?
T: You stay at school. You learn them again, and I test you again, and you go hone when you've got them right. OK - So the lesson there, is what? if you don't want to stay after school.
P: xxx
Do your homework. Learn them at the right time. Not hard is it? OK? (Harry returns from ESOL). Harry. You see this list here with 2 at the top. (A: yes?) You are in spelling group 2. OK? So you've got your notebook out. Nathan, will you just show him where to write the date and two please. OK. Copy down your list of words on the first page. What are you always going to start with? Yes?
{:the date
T: Good - thank you. You don't need your names because you've got it on the front cover.
Today's date with xxx When you have completed them, check them that you have copied them correctly, put you hand up and I'll come and check. Right. Thumbs please. You know what to do. Right, thank you
0931. Ps on task
0931. Tape stopped.

2. December 8, 1998
Doc code: 12/08 Ja events (trans): cf 12/08 f/n

context
The day before = class trip to Te Rapa pools and 10-Pin Bowling.
Today is my Pizza lunch for the class. And final class observation.
Ja very interactive with Pe & Ge in this lesson, even with minimal language
9.06 INDIV on Ja
9.08 T refers to Spellathon... no audible interaction involving Jack, although f/in refer to...
9.10 Pe>Ja - much gesturing, as if boxing, and then Ja demonstrates something by twisting his fingers around; Pe nods.
T: Right. Anyone else with money? Hands up ....
More inaudible interaction Ja>Pe (?)
T: Who else? Harry.... Buna... Anyone else? ... Angus? ...
9.15 T: And now you need to listen very carefully... Starting Tuesday, tomorrow ... Top Class events. Most of the events will involve everybody, some will involve .. you will be having your school events, which are., seven ... events....
Ja listens attentively
T: Right. You need a team of .... Right. Who does not know what stilts are? Stilts are
(draws on board and explains.) That OK? Arnold? The idea is that you've got to put your foot up on there and the other one at the same time, and walk, without falling off.... So the idea is that you can eventually, run. Put your hands up if you....
Pe > Ja (inaudible, though Ja mutters, as if to indicate he understands.
T: OK so those people who have been on stilts before and would like...
T: You've been on stilts before?
Pe > Ja (inaudible, though Ja mutters again, to indicate he understands.
Ja (and Pe and Ge) raise hands to volunteer for still race
T: (noting names) ...Who else? At this stage, it is for information only.
9.20 T: Right, the next thing is the four-legged race.
Ja: (to Pe) Four leg?
PH (inaudible, starts to explain - with gestures>
Ge: Isn't it a three-legged race?
Ja: Oh (indicating to Pe that he understands so far)>
T: Not your normal three-legged race...
Pe continues to explain to Ja, and Ja backchannels.
T:... So obviously you're going to be in teams of three... coordination.. Right...
(demonstrates with Jean and Adele). OK. It’s all good fun... You’ve got two tall people, they’re on the outside, or one tall person, and that person... coordination... so the first person>
Ja: Ah (understands?)
Ge: You don't make the middle person jump, you move xxx
T: Put your arms through. OK? So it's a four-legged race>
Ja: mutters in KOR
T: Right, put your hands up...four-legged.
Ja: Four legged (and mutters)
Ja, Pe and Ge raise hands
T: (noting) I’m putting your names down - Jack, Peter Gene.
Ge: Four legged race (and draws/makes a note on a piece of paper)
Pe: Shall we make another group? (?)
Ge: (to Ja)What you do is three people move like one leg at a time, the middle people move like one leg at a time - not both of them. You don't jump, you do like this. (demos)
Ja: OK.
Pee: No, not like that. Like er, it should be like, Oh, that’s three-legged>
Ja: OK. OK. OK.
Ge: That middle person, one leg at a time.
Ja: Tsch. Tsch. Tsch (Making sound as he uses fingers to show understanding)
T: (notes names) ... So those are three lots of three people Thank you...
9.24 T: Right we need to define a (?) Potato Race - and that's a team of 6 people>
Ge: People>
Pee: No that's dumb - potato and spoon
Ja: Uh?
Pee: potato and spoon?>
T: ..No actual potato ...
Pee: Egg race?
Ja: Uh?
T: (draws on board) Right... 1,2,3,4,5,6 people. Right. First person, runs, to the milk bottle, takes the top of the bottle... The next person then has to run up to the milk bottle and place the xxx on top... No, the first person has to put out six bottles in a line...
Ja listens
T (continues to explain the race.) The last person collects all the bottles: Right?
Pe: Are you gonna do this?
T: xxx No., I will try and make it fair ... Right, Yorin, Nathan, Roland, Mark, Arthur, Sharon, Tilly, Gail, Andrea...
9.29 T: Board shoe. Oh, sorry, that's the last race.>
P: Oh, at camp we did it!>
T: Where you've got to coordinate your movements? Right.... You've got to work as a team... So board shoe>
Ja: mutters to Pe
T: Get your team into one line .... You only have two people on the board at the time. You have to, kind of shuffle xxx
Ja: mutters
T: It's a little bit like a xxx
Ja: Board shoe?
T: Nathan, Mark, Arthur (noting volunteers)
Pe bids.
T: Peter
Ja: Board shoe?
Pe> Ja.
Ja: Board?
Ge bids. Then Ja bids.
9.30 T: Arnold, xxx (noting volunteers) Haven't got time for Oohhh. OK.
The obstacle race.
Ja: Sup obs race?
T: Right these people in the xxx take up the challenge... You run, you scramble under a net.
Ja: Oh (understanding?)>
T: Over the obstacle xxx, between the xxx. Then you've got to tag the next people. They take over. And then they've got to do a lap. xxx So you've got two people... You've got to be fit and strong.
Pe: xxx
Ja: Board? (bids)
T: Ah, super-obstacle race? (bids)
Ja: Board?
Ge bids. Then Ja bids.
9.30 T: Arnold, xxx (noting volunteers) Haven't got time for Oohhh. OK.
The obstacle race.
Ja: Sup obs race?
T: Right these people in the xxx take up the challenge... You run, you scramble under a net.
Ja: Oh (understanding?)>
T: Over the obstacle xxx, between the xxx. Then you've got to tag the next people. They take over. And then they've got to do a lap. xxx So you've got two people... You've got to be fit and strong.
Pe: xxx
Ja: Board?
T: Ah, super-obstacle race? (bids)
Ja: Board?
Ge bids. Then Ja bids.
9.30 T: Arnold, xxx (noting volunteers) Haven't got time for Oohhh. OK.
The obstacle race.
Ja: Sup obs race?
T: Right these people in the xxx take up the challenge... You run, you scramble under a net.
Ja: Oh (understanding?)>
T: Over the obstacle xxx, between the xxx. Then you've got to tag the next people. They take over. And then they've got to do a lap. xxx So you've got two people... You've got to be fit and strong.
Pe: xxx
Ja: Board?
T: Ah, super-obstacle race? (bids)
Ja: Board?
Ge bids. Then Ja bids.
9.30 T: Arnold, xxx (noting volunteers) Haven't got time for Oohhh. OK.
The obstacle race.
Ja: Sup obs race?
T: Right these people in the xxx take up the challenge... You run, you scramble under a net.
Ja: Oh (understanding?)>
T: Over the obstacle xxx, between the xxx. Then you've got to tag the next people. They take over. And then they've got to do a lap. xxx So you've got two people... You've got to be fit and strong.
Pe: xxx
Ja: Board?
T: Ah, super-obstacle race? (bids)
Ja: Board?
Ge bids. Then Ja bids.
9.30 T: Arnold, xxx (noting volunteers) Haven't got time for Oohhh. OK.
The obstacle race.
Ja: Sup obs race?
T: Right these people in the xxx take up the challenge... You run, you scramble under a net.
Ja: Oh (understanding?)>
T: Over the obstacle xxx, between the xxx. Then you've got to tag the next people. They take over. And then they've got to do a lap. xxx So you've got two people... You've got to be fit and strong.
Pe: xxx
Ja: Board?
T: We need, also - we need a lilo. Like a xxx, not a proper water bed... a lilo to carry a body across the pool... You got one? Anyone else? ... Right. That's all you need for... We need somebody to provide clothes for xxx>

(RGB checks Ja's tape.)

T: Right. For the xxx relay, you need shorts, T-shirt and a hat. Now what I suggest you do is to make sure the hat can stay on, cos people will be jumping into the water, and hats tend to fly off>

Ge: Ms Wilkins - get a big rubber band, get a big rubber band.

T: xxx

Ge: Ms Wilkins, can't we have a beanie?

T: No, they come off.

Ge: or a balaclava?

T: I don't think a balaclava's such a wise idea... So, for water events, you will be doing that on, Monday.

Ps react.

T: Right. The first heat is the lilo race. Well we don't xxx, the lilo race, there is a piggy-back race - which means that someone is on the back of>

Pe explains to Ja

Ge: is it a shoulder ride, or a piggy-back?

T: No, a piggy-back, not shoulder. Then you have a discus xxx, and the rules are ... dog-paddle relay, and then a seal race>

Ja: Uh?

Pe explains to Ja

Ge: Are you allowed to put your feet on the ground?

T: pardon?

Ge: Are you allowed to put your feet on the ground?

T: xxx Right. ... Triathlon, which is what you are going to be starting on on Tuesday. We need a premier girl and a premier boy, a premier girls' team and a premier boys' team. And then a xxx. So the premiers are... OK, so like one boy will bike, one boy will swim, one boy will run... OK? Now.

(T now explains in some detail how the triathlon will be run.) We need a boy who will do all of these things. We need a girl who will do all of these things... boys' team ... girls' team ...

Ps suggest Rh for premier boy

T: Why are you volunteering Roland?

Pe explains to Ja.

T: Right. All we are looking for at this stage are volunteers>

Ja: xxx - swim, how many metres?

Pe: Seventy.

Ja: Seventy - oh.

T: Right. A boy who's going to do this? (T notes names).

Pe interacts (inaudible) with Ja,

T: Volunteers for the B section; You swim two lengths of the pool - not three., you cycle, you run ...

Ja: xxx (to Pe)

Ge > Ja (detailed explanation) ... one to swim, one to run, one to cycle.

T: Girls team (notes names)

Ja: team - how many?

Ge: three, one to swim, one to run, one to cycle.

T elicits volunteers.... The main idea is ...

Pe: volunteers for himself and Ja.

9.52. T: Can Jack swim?

Ps: Yes!
Appendix G. Room 7, its teacher and pupils

1. The Room

This was well-lit and spacious, permitting various seating arrangements; at first the desks were arranged in serried rows, but after a couple of weeks the first of a number of seating changes was made, allowing students to work, or at least sit, in groups. Pupils entered the room from a vestibule containing toilets, which they shared with the adjoining class. As they entered there is a corridor-space, on the left of which are worktops below the windows. At the back of this small area was a worktable, on which was usually kept a computer. This was where I sat to observe the class and make field notes.

2. The class teacher

Ms Wilkins was a degree-holding teacher in her forties. After teaching for about ten years, she took a few years out from teaching to make some money by selling real estate. However, she returned to teaching because she liked working with children and in 1998 had been at Rosegarden for several years. She appeared to be well-liked and respected by her colleagues - as well as her pupils, with whom she was firm, consistent, and explicitly courteous. During the course of the year, she supervised the work of several student-teachers, who were present for varying periods of time. Also, from time to time the teacher was on sick leave for two or three days at a time, and a number of relieving teachers were called upon to replace her.

3. The pupils

There were usually 31 or 32 pupils in the class, most of whom were Pakeha, with four Maori students and two Maori-Pakeha. The multi-ethnic background of the class may be noted:

a) Calum, a boy born in New Zealand of Taiwanese parents, considered to be of average academic ability - but not deemed to need ESOL provision;

b) Tilly, a (mainland) Chinese girl, who was extremely bright and was promoted into Rosegarden from Year 3 in her primary school, and was therefore two years younger than the average in the class. She was extremely competent in all her English skills, although she has been in the country for only about three years;

c) Nathan, a Fijian boy who had no problems with oral English, but whose reading/writing needed attention, and whose overall academic skills were reckoned to be below average;

d) Yorin, a Jordanian boy of average ability, who had been in New Zealand now for three years and did not attend ESOL lessons;

e) Mark, a boy from Kiribati who had lived in New Zealand for more than three years, was considered to be average ability and competent in oral English, but who attended some ESOL lessons to improve his writing skills;

f) Harry, a Somali boy who had been in New Zealand for about three years; very fluent in oral language and considered to be average in academic ability, but below average in actual performance; he attended ESOL lessons (for about 90 minutes a week) to improve his reading and writing skills;

g) Amah, a Somali girl who arrived at school in the middle of 1997, whose
academic ability was considered to be low; she was deemed to be 'minimal English' and attended ESOL lessons for about three hours a week;

f) Buna, a Tuvaluan girl who arrived at school in the start of 1997 and was deemed to be 'minimal English'; at the end of 1997, it was considered necessary for her to repeat the first year; she attended ESOL for about three hours a week especially with a view to developing her reading skills.

These last two pupils repeated Year 7 in 1998 chiefly because of the lack of academic progress made in 1997 due to their minimal English competence.

Some other (Pakeha) students may be noted:

a) Gail was deemed to need remedial work; she was the only pupil who initially refused to participate in the research (although her parents consented) but changed her mind half way through the first term;

b) Roger was a very disruptive boy, who eagerly sought - and obtained - attention, most of it extremely negative. Although the teacher (and the pupils) tried very hard to manage with him in the classroom, he was removed towards the end of the second term;

c) During the second term, while the above pupil was still in Room 7, another boy joined the class. He was in the room for less than two weeks, when - because of his physical violence to other pupils - he was removed.
Appendix H. The NESB Learners in Focus

1. The learners

1.1 Jack

This eleven-year old Korean boy arrived in Hamilton on 14 March with his mother and younger sister; his father continued to work in Korea. He was enrolled at school two days later, along with another Korean boy who had arrived in Hamilton with him. The latter, a twelve-year-old, was staying with Jack's uncle, who had been resident in Hamilton for a few weeks. On account of their age, they were placed in different year forms. The uncle spoke a little English, but his sister (Jack's mother) knew none. Jack was interviewed by the ESOL teacher, as a result of which she judged that his English was 'minimal': he knew the alphabet, some basic words, and could count up to 20 (after 16, only with some prompting).

He was given a self-access listening task and worked on this by himself in Room 7 for the rest of the morning, while the class proceeded with their normal activities. In the afternoon, the teacher told him to go to the library and find a book about Korea; she gave him a catalogue number, and he found the only book there about Korea. He came back to the class, and read it, showing it to other boys in the class. In doing so, he showed them a picture of hills and had drawn his finger across his throat to indicate dead people. The boys did not exactly know what this had signified, but this was Jack's first noted communication with his peers.

The following morning, the class was engaged in drawing posters for a unit of work on bicycle safety. Jack was sitting at the back of the room next to two boys, one of whom showed his own (labelled) picture. Jack then took out his pencil case and started to draw. For the next 30 minutes, Jack steadily worked on his own sketch, occasionally interacting nonverbally with his neighbours, who seemed very willing to help him, and to make him feel at ease. At one point, the teacher uttered the code-word "Ten" (the signal for pupils to raise their hands and be quiet). Observing this, Jack too raised his hand - an example of how he was starting to learn classroom pragmatics through observation. Soon afterwards, one of the boys took Jack to the teacher to show his work; then latter praised him, and enquired about some of the symbols on his poster; Jack made her understand that they were characters of the Korean alphabet. Later that day, he was given some ESOL tuition and continued working on self-access ESOL tasks, for which one of the boys in the class helped him understand what to do.

On the third day he was active in the maths lesson. As usual, this started with a times-table task and he impressed his classmates by the exceptional speed and accuracy of his answers. The lesson continued with some oral maths problems at which Jack was at a total loss: although his own mathematical knowledge was sound, he did not understand the associated vocabulary. Thereafter, although he attempted to follow the classroom discourse with eye-contact, there was evidently little comprehensible input and occasionally he manifestly switched off and gazed around the room or at the ceiling. His spoken English was restricted to occasional one-word utterances accompanied by gestures, and he was unable to construct sentences. He responded promptly, if nonverbally, to initiations by other pupils, and also initiated some (nonverbal) interactions himself. He seemed able to follow
simple instructions, provided they were addressed directly to him. As regards, written work he was at the copying stage, needing a model closer to hand than the OHT used by the teacher for handwriting practice. He could not read in English, and read a Korean comic book whenever he was not directed to a specific task within his competence. At this stage, he did not bring a bilingual dictionary to school with him.

It is very significant that a few days after his arrival, the class (along with others) attended a three-day annual camp in the bush. The school placed considerable emphasis on this event as a way of social bonding among the pupils, and between pupil and teachers. Jack was unable to attend the camp due to his late enrolment; instead, while his peers were at camp he was given a few extra ESOL lessons in the mornings, and he went home in the afternoons. Thereafter - and for the rest of the year - he spent about four hours a week in the ESOL unit, usually in a group of six or seven other boys. The Easter vacation following a few days after the class returned from camp. The implications of Jack’s being unable to develop his social relationships at this critical moment after his arrival, while incalculable, were probably quite considerable.

1.2 Jean
Jean, a Taiwanese, had spent 1996 in Hamilton at a primary school, living with her mother and a younger and an older sister (the latter had attended Rosegarden in 1996). She had returned to live with her father in Taiwan during 1997 in order to catch up on her studies in her first language. On her arrival at the school on 4 May 1998, she was placed immediately in Room 7; although it was apparent that her command of English was considerably greater than that of Jack, the ESOL teacher did not have the opportunity formally to assess her English competence for several weeks.

In Room 7, she sat at the back of the room with a very supportive group of girls. One of the leading members of this group was Jean’s best friend from her primary school - a Pakeha girl - but she was absent from school for Jean’s first week. Initially, Jean interacted most often in the class with the girl on her left - Tina, a mainland Chinese girl, who thus shared her first language, Mandarin. However, no attempt was made by either girl to communicate in any language other than English, of which Tina was an entirely competent user.

In the lessons observed during the first week, Jean’s competence in English enabled her to follow the general trend of classroom interaction and discourse - which she did attentively with appropriate eye-contact and gaze. At this time, she did not bid for a turn, for example by raising her hand when general elicitations were sought by teacher, even when she knew the answer. Her interactions - especially with Tina, to whom she frequently appealed for help in areas within the social, task performance and cognitive dimensions - explicitly resembled those of novice to expert. All the girls in the group were very helpful in explaining to her what she had to do, and guiding her through task requirements; so, with their help, she was able to undertake the tasks required. She also made frequent use of a computerised dictionary to help her understand unfamiliar vocabulary. The girls she sat with immediately adopted her into their out-of-class socialising and she always spent the morning breaks and lunchtimes talking and playing with them as a full member of their group.
1.3 John

John, a Taiwanese boy, arrived in Hamilton in mid-July with his mother and brother - a year younger than he; his father, a medical doctor, stayed in Taiwan. John was well-travelled, having visited Hawaii, Malaysia and (several times) the USA; his favourite reading during his first week - and thereafter - was an atlas. He was enrolled on the first day of the third term, 20 July, and although the school had expected him to be a non-user of English, the ESOL teacher established that he was able to describe and narrate, using appropriate vocabulary and reasonably accurate structures, and could easily sustain a conversation. In fact, during the ESOL lesson that first morning, John offered to help Jean to interpret the requirements of a writing task. He seemed to be quite at ease in the ESOL room also on the second day, responding to elicitations and volunteering information - and, again, offering help to Jean and other learners there.

In Room 7 later that second morning, he was fully engaged with another pupil in two tasks: one a shared spelling task, and the other a word find; in both cases, the boys worked amicably and collaboratively. There was no indication of a novice-expert relationship; if anything, John’s conceptual knowledge in the specific areas appeared to be greater than that of his classmate. By start of the afternoon lesson, John had introduced himself to various (male) members of the class and was socialising with them quite easily, although he did not join them in out-of-class social activities. During that afternoon, the class were instructed step-by-step in the use of homework diaries. John followed these instructions, verbally checking with his neighbours as to the accuracy of his understanding; at one time, one of them ‘sshhed’ him, and gestured to his ear to indicate that talking was inappropriate at that time. Later, the same boy showed John the science homework listed on the board, but the teacher told John that he need not do any homework; a piece of information which was received by John with some surprise and pleasure. By the third afternoon, he was showing signs of boredom and did not work on the science tasks which occupied the other members of the class. Probably as a result of not having done the preparatory homework, he did not fully understand the purpose and requirements of the work but anyway the teacher did not expect him to do this project. He read desultorily from his atlas, humming to himself, occasionally slumped on his desk. From time to time, he interacted amicably with his (male) peers, but they seemed unable to give him the focus or direction he apparently needed. Her soon, and frequently, showed evidence of boredom and, perhaps as a result, tended to switch off during the dialogues between the teacher and the other members of the class. Like Jack, John was seated at the back of the room among the same group of neighbouring boys.

1.4 Alina

Alina, a Taiwanese girl, enrolled in the school on 17 August, mid-way through the third term. She had just arrived in Hamilton with her family - both parents and a younger brother. Her enrolment form indicated that she ‘couldn’t speak much English’ and the ESOL teacher’s assessment on her first morning categorised her as ‘minimal English’, although she appeared to be able to understand elementary simplified readers. She was placed in Room 7 because it was felt that Jean would be able to help her. On her second day in Room 7, the teacher gave Alina a basic word-recognition test, the result of which indicated a reading age of 7/8. Despite
her very limited English, she only sporadically received ESOL tuition for the first few weeks; after 9 September, she regularly went to the ESOL unit for four hours a week - the same as Jack.

In Room 7, she was seated at the back of the room next to Jean, and was promptly adopted into the girls' social group at break times, although she tended to be a silent member. Jean herself reported that - just as Shelley had assisted her when she first arrived - she helped Alina by explaining school rules, transmitting instructions, clarifying task requirements and elucidating concepts. For this, she invariably used Mandarin. Alina frequently asked Jean (again invariably in Mandarin) for assistance, but did not solicit help from other girls. From the very start, when Jean was absent (for example, in ESOL lessons), the other girls in the group tried very hard to help her. In a maths lesson on the first day, for example, two girls carefully explained and demonstrated concepts of ‘area’ (outside) and ‘perimeter’ (inside). This led to a more refined discussion talk between the two girls, while Al looked on silently. Later the same day, another girl tried to socialise with her by using gestures to indicate, for example, hunger. When not helped by the other girls, Alina tended to gaze at the ceiling; it transpired that she was unable to read easily from the whiteboard and within a few days she started her practice of using Jean’s exercise books as a point of reference. Like all the other learners in focus, Alina was well above average in her maths work. For example, in a times-table test on her fourth day, she finished just after Jean and John (Jack being absent in ESOL) with all her answers correct. In the following elicitation of answers, the teacher called on Jean and immediately afterwards on Alina, who responded tentatively but accurately.
2. Examples of early interactions

The following conversations involving the four NESB learners occurred shortly after their arrival at Rosegarden

2.1 Jack
The ESOL teacher wished Jack to introduce himself to new ESOL teacher-aide on 11/5/98. Jack had been in school since 16/3.

01. T: elicits from Jack - My name ...
02. J: Uh - My name is Jack.
03. T: (cueing) country. I come >
04. J: I come from Korea
05. T: When. When did you come to New Zealand?
06. J: come,
07. T: I came
08. J: I came .. er ... oh ...
09. T: Nineteen
10. J: nineteen, nine, nine, ty eigh (end of interaction)

2.2 Jean
Speaking to a relieving teacher on 11/5. This was one week after her arrival in school.

01. T: Can I see your writing?
02. Je: Yes (shows him book)
03. T: Where are you from Jean?
04. Je: Taiwan
05. T: Taipei? Taiphon?
06. Je: Taiton
07. T: Taiton - in, the south?
08. Je: Er no - in the middle, of Taiwan.
09. T: You've been home for a year?
10. T: Pardon?
11. T: You went home for a year?
12. Je: Yeah
13. T: And where were you at school before that?
14. Je: Copwood
15. T: Ah Copwood, Copwood and then Rosegarden. And you have a sister?
16. Je: Yeah
17. T: And where is she at school?
18. Je: I've got a older sister, and a younger sister
19. T: Ok - and that's your older sister - what school >
20. Je: St. Mary's
21. T: What class?
22. Je: Don't know.
23. T: Fourth form? Third form?
25. T: Third form, xxx. And did you enjoy going home?
26. Je xxx
27. T: Did you find school very different?
28. Je: Yeah
29. T: Hard? Hard work?
30. Je I xxx (don't know?)
31. T: How was your Chinese?
32. Je: erm
33. T: When you went back to Taiwan.
34. Je: I've forgotten some
35. T: Did you? A lot?
36. Je: Yeah (little laugh). Quite a lot.
37. T: Quite a lot. And then how about xxx school when you came back?
38. Je: Erm - I've forgotten quite a lot
39. T: Too (laughs) Good. And are you going to St Mary's after this?
40. Je: Erm I don't know.
41. T: And where's your little sister at school?
42. Je: Copwood
43. T: Copwood. Ah good. Where do you live? Probably a difficult question (?)
44. Je: No - I live just there.
45. T: There? That, that>
46. Je: Er. No, er - there! That way (pointing)
47. T: That way.
48. Je: Yeah
49. T: Which street?
50. Je: Barton. Barton Road
51. T: Ah Barton. Ah yes. And you like living here?
52. Je: Yes.
53. T: Or would you like to go back to Taiwan to live?
54. Je: I'd like to live here.
55. T: Why?
56. Je: Er, er, I don't, know. (laughs)
57. T: You don't know - you haven't decided where you'd like to live?
58. Je: Yeah
59. T: (looks at her work) How neat! You'll have a stamp for that. (Stamps her book)
60. Je: Thank you (end of interaction)

2.3 John

The following conversation occurred between John and another pupil on 22/7/97. This was John's third day in school.

01. Ma: Don't you have any work to do?
02. Jo: No-o, (disappointed tone)
03. Ma: xx-
04. Jo: What? ... What? What's this one?
05. Ma: xxx
06. Jo: I don't know what to do
07. Ma: Come and watch.
08. Jo: OK (goes with Mark to computer - looks at what Mark has on screen) ...And it worth such strange (?)
09. Ma: Oh - I made it strange
10. Jo: (laughs) How did you do it?
11. Ma: xxx
12. Jo: Yeah - this one?
13. Ma: Yeah - I did that one.
14. Jo: Oh. OK.
15. Ma: See? If I go there>
16. Jo: Oh, what's that?
17. Ma: xxx
18. Jo: You (?) might change now ... Whoop. Uh hu! May I help you?
19. Ma: Yeah?
20. Jo: Mm, Maybe I - uh, uh, (as he works keyboard) A U Find Out. What?
21. How (?) What mean How?
22. Ma: How many>
23. Jo: How many>
24. Ma: How many people>
25. Jo: (Reading from screen) people have black or brown hair have black or brown eyes. Uh? Have black or brown eyes?
26. Ma: How many people have>
27. Jo: OK. Next line. ...(Interaction continues)
2.4 Alina

The following interaction occurred between Alina and a teacher-aide (Ka) on 14/9/97, a month after Alina arrived at school. (Her speech was largely, but not entirely, a verbalisation of points she had previously written down).

Ka: So you have written this about yourself, haven't you? (reading) Find a photograph of yourself, and beside it write your name, and age. So your name, your full name is -
02. Al: Ah - Alina Lin.

Ka: Lin. And you have written your address is (reading) Write where you live. Can you read where you live to me?
04. Al: 23 Belfast Avenue

Ka: Write the names of your family and their ages. Now, I can only read English, so can you please read what you have written, to me?
05. A: Ah - that Chinese.

Ka: Yes, that's Chinese, and I can't read Chinese, so you'll have to read it for me. What does it say.
06. Al: Lin E Jong. Er. He's, er, forty four years.
07. Ka: Is that your dad?
08. Al: Yes!
09. Ka: Yes!
10. Al: Al Tu Sung. She's my mum. She's, er forty three years old.
11. Ka: Yes. Right. OK
12. Al: He's my brother.
13. Ka: What is his name?
14. Al: Ah Lin - Ue Chou, and he is, ah, fourteen>
15. Ka: Yes. Good>
16. Al: This is me.
17. Ka: And that is you. So please give your full name and your age.
18. Al: Lin E Ming, I'm eleven years old.
19. Ka: Wonderful! And how many are in your family?
21. Ka: That's right. So now you wrote a sentence about yourself. And it says - can you read it to me?
22. Al: (enunciating clearly) I have black hair and black eyes. I am one three nine>
23. Ka: one hundred>
24. Al: Yeah a hundred an>
25. Ka: Thirty nine>
26. Al: Thirty nine
27. Ka: Centimetres>
28. Al: Centimetres tall, and w>
29. Ka: You weigh
30. Al: Weigh er thirty nine
31. Ka: KG
32. Al: KG. .......(interaction continues)
Appendix I. End-of-year Work by NESB Pupils

1. Oral work

This was one of the ways by which the teacher formally assessed the language ability of each pupil in Room 7 at the end of the year. Each pupil sat with her and read a passage aloud, answered comprehension questions, and attempted orally to complete a modified cloze task on the next part of the text. The texts were differentially graded to be within the assumed grasp of the pupils. All four NESB pupils were given tasks, and the relevant transcriptions are below.

1a Jack - 18 November: text ‘The Old Man Jones Adventure’

01. T: .... The Old Man Jones adventure by K.E. Henderson - OK ...?
02. Ja: “You can do it said Penny. All we need is some,thing to stand on so we can climb over the, fence. The two of them stood there. Pa, pa-ring Peer, peering so the boot of the things of the top of hug old, palm tree. They had done the same things every day for the last week, but they’d never been quite brave>
03. T: Brave
04. Ja: brave enough or enough to go in. Everyone said Old Man Jones was rally mean. Some said he had a, er, to, t-ture, t-ture chamb, chamber, in the ba, basement of his house.
05. T: Good
06. Ja: Christo, pher a friend of his.
07. T: Now, when we come to here, I’d like you to try and work out what word goes in there.
08. Ja: Uh.
09. T: So you might need to read on, and then come back to it.
11. T: OK. The word that you think fits the best.
12. Ja: xxx John trying to xxx the fence. Nobody has>
13. T: Right, just go back to here. Do you know what would go in here?.. What was Christopher trying to do to the plums?
14. Ja: Plum-a ...
15. T: Remember the plum, the plum tree you read about. What was Christopher, that boy, wanting to do with the plums?
16. Ja: Ch, che...
17. T: Do you now what he wanted to do with the plums, why he was, he was looking through the fence at the huge old plum tree... You know what he wanted to do? ... You know what a plum tree is?
18. Ja: No...
19. T: Not sure? OK, you know what a tree is? Yeah. OK. A plum is a fruit. You, you’ll have your own Korean word for it, but usually red, like that, nice and juicy, good to eat, A frui, it grows on a tree. So we call it a plum tree, OK? Now, these boys - they’d been, ah they decided they needed something to stand on, didn’t they, to climb over the fence. But they hadn’t done done that, they’d been looking through, the gaps in the fence at the huge old plum tree. And they’d been doing that, every day, last week, but they’d never been quite brave enough to go in, to go over the fence, and just xxx tree, yeah. What, what do you think Christopher wanted to do with the plums?
20. Ja: Plums...
21. T: Were they his plums?
22. Ja: No. (whisper)
23. T: No. No. Did he want the plums?
24. Ja: Yeah. (whisper)
25. T: So he was, going, wanted to take something that wasn’t his. He wanted to xxx some plums. So he wanted to steal the plums. Now you know what stealing is - taking something that is not yours. Good. OK. Carry on.
26. Ja (reading) Nobody has .... in the scratched on the arm xxx...got scratch on...
27. T: Now, where are we up to? (reading) Erm, but then nobody had believed him. But then he had shown them the>
28. Ja: Shown them the scratches on his
29. T: Yeah good. His arm to prove it. OK. That’s good. Stop there for now. Good. Thank you.
**1b Jean - 4 December: text ‘Firefighters’**

01. T: ...Can I get you to put that (microphone) on, please Jean? Oh! You’ve got one already. Good. OK. You don’t need two then do you. Right. Is it turned on, sweetie?
02. Je: Erm, yes.
03. T: Right, Lovely, What I’m going to get you to do is read me this story about a firewatcher. Do you know what firewatchers are?
04. Je: xxx
05. T: What do you think they are?
06. Je: Um, they are the people who put the fire out?
07. T: Right - like firemen? Yes - very similar. Firewatchers watch, looking carefully for fires - usually over the forests - OK? Then if they see smoke, coming from a fire, they can ring the firemen up and say hey go put it out. So they do the watching rather than the putting out. They help and work in together, with the firemen. OK - this is a story about a man called Lofty Weir, he is a firewatcher - OK? I’ll just get you to read that for me, dear?
08. Je: ... But there are no often fires in the forest. Lofty, is able to spend much of his time doing whatever he feels like. He bakes his own bread and he makes, pickled onions. He also spent a lot of time at, near the work. In the winter months Lofty leaves his tower and works at the forest headquarters, but he really prefers being by himself. He looks forward to the summer and getting back to his tower again.
09. T: Oh, well done. Thank you. Jean, tell me the place where Lofty lives in when he’s doing his job watching out for the fire - what’s that place like?
11. T: Good. Can you describe it to me.
12. Je: Hmm. It’s high and it’s made out of concrete, and it has windows all around his room.
13. T: Good. Why do you think it’s got windows all around?
14. Je: Because he needs to see the forest and see if there is any flames or smoke.
15. T: Good....
16. T: ... Good. What shape do you think that concrete tower would be?
17. Je: Erm. Erm, I don’t know how to say that.
18. T: Do you want to draw the shape for me? Just on the back there - that’d be good.
19. Je: (after sketching). Erm - like this?
20. T: Right - good. So he’d have a really clear view then wouldn’t he of the fire. That’s excellent, yeah. Do you think Lofty likes his job?
23. Je: Erm... Here, he looks forwards to the summer and getting back to his tower again.
24. T: Right. Good. ...
25. T: ...Right. Good. Yeah - well done. Thank you. Do you know what pickled onions are?
27. T: No, I knew that you could read those but you stumbled a bit on the words. Do you know what an onion is?
29. T: OK. Well some people - and they’re very nice - make up a mixture of, vinegar, salt and spices....

**1c John - 24 November: text ‘Melon Road’**

01. T: ‘Melon Raid’ by Betty Hick>
02. Jo: So shall I start it now?
03. T: Yes please.
04. Jo: (reading) Albiewas sick and ti-red of having his melon paddock raided by the local children. They choose (sic) deathly dark night when croaking frog (sic) and whisTling fill the air with sound. Oh those ki (sic) were smart all right. They stayed near the cav, gate where they knew it was (sic) be impossible for anyone up at the house to see them or hear their velvet-soft chuckles and carefree slur>
05. T: Buna, Ade>
06. Jo: ping. Albie would come down>
07. T: Mary, er sorry Jill>
08. Jo: the next morning and instead of finding>
09. T: Do you think you could xxx>
10. Jo: ripe melons he would find trampled vines>
11. T: (to girls) xxx Thank you>
12. Jo: laistered (sic) with piece (sic) of fresh rind and a good, scattering of pipes (sic)
13. T: of - >
15. T: Yeah, pips. What sort of pips?
16. Jo: I dunno!
17. T: Where would the pips have come from do you think?
18. Jo: I dunno what is pips.
19. T: You don’t know what pips are!
20. Jo: Oh.
21. T: Oh, you know when you eat an orange, or a lemon something like that, those little white things inside>
22. Jo: Oh!>
23. T: Like the seed.
24. Jo: Oh, just - >
25. T: Like the seed
26. Jo: Oh.
27. T: Yeah - in an apple, we have very little black pips, browny-black pips.
28. Jo: Like>
29. T: Like the new seed.
30. Jo: Ohh!
31. T: We call them pips.
32. Jo: OK.
33. T: OK?
34. J: OK.
35. T: So that’s a scattering of pips. That’s good, Thank you. We’ll stop there for the time.

Id Alina - 18 November: texts ‘Clean Cuts’ and ‘Bread Strike’
T: That one’s clean cuts. You had that one too? ... Not sure. Give it a go - just that, just that first part...
Al: Mum I called out after I let myself in. Hi George, Mum greeted (greeted) from the kitchen and counted with her purse (?). I went strain, straight to my room and wanted to do my homework for a while. I felt my heart beginning to best faester. Then I was ready. I hold them small cardboard barx very carefully in my righthand and sticked my lovely trolled (towards?) the kitchen Mum was bending over the sink. Her back to me. She had just finished, erm cooking a chicken. What’s for dinner? I asked. What do you think? She asked back, pushing her hand inside the bird. Uh, we had, we had in an accident (?) at school today, I told her. Did you? Yes.
T: Good girl. Well done. Why do you think mum said to the boy, when he said whats for dinner, why do you think she said ‘what do you think’? Why did Mum say that?
04. Al: Erm,
05. T: Did Mum think that he knew what was for dinner?
06. Al: No.
07. T: No? Was there any clue in that story about what there is for dinner?
08. Al: Uh - chicken.
09. T: Yeah, how do you know it was chicken?
10. Al: Erm, ...
11. T: What was Mum doing?
12. Al: Erm... She is finished cooking a chicken.
13. T: Right. So, could the boy see that? Could he see what Mum was doing?
15. T: So he should have known, shouldn’t he.
16. Al: Yeah>
17. T: Yeah. Good. OK. That’s lovely, well done. I’m gonna give you another one here. Do the same with that. It’s about the bread strike.
18. Al: Mm. Mr er>
19. T: Fogarty
20. Al: Fogarty heard about the bread strike first. He told Mr Mac...
21. T: Mr McNaught
22. AI: Mr MacNaught on the way home on the bus. There's going to be a bread strike. Mr Fogarty said. He spoke in a whisper. He was very pleased to be the first to have the news. A bread strike, asked Mr McNart. A bread strike noood Mr, Fogarty.

23. T: Uh-hu. Good>

24. AI: The bakers want more money and new aprons and they're not going to bake any more bread until they get them. Mmm said Mr McNart. No bread tomorrow then. That's right>

25. T: Good. Well done. What do bakers do? Do you know what bakers do - what their job is?

26. AI: No.

27. T: Do you know what a strike is?

28. AI: aah

29. T: When they say that there's not going to be any more bread tomorrow, cos there's going to be a bread strike - so a strike means that they're not going to work. So - no, we're not going to work, because we want more money and new aprons.

30. AI: What's aprons?

31. T: Apron - that you put over your clothing to keep your clothes clean. OK? You know - tied up round the back of your neck, tied up round the back of your waist like that, and it covers your clothing? Mum might wear one when she gets dinner ready. Does she cover her clothing with an apron?

32. AI: xx

33. T: So who, who were the people who were making the bread?

AI: Hmm - Mr Fogarty.

34. T: Mr Fogarty making the bread? Could be. Doesn't actually tell us us that he's not. The bakers are actually people who bake bread. But Mr Fogarty could have been one. We don't know. It doesn't tell us he was not. The bakers are the people who bake the bread. Thank you very much.

2. Written work

Another of the means by which Ms Wilkins checked the progress of her pupils was by their completion of criteria-referenced self-evaluations twice a year. Work on the second of these was done over several periods in the two weeks after Alina left. She was, therefore, unable to do this and Jack never made a written report. The self-evaluation reports of Jean and John are given below, after the teacher's instructions.

In the first of these sessions, Ms Wilkins reminded the class of the first five categories they needed to address. They were then encouraged to brainstorm and discuss their ideas, and work on a draft, which they did for twenty minutes. In a subsequent session, she explained the second set of categories on the self evaluation form as follows:

01. T: OK? Everyone knows what's expected of them in terms of oral and written language goes - if you're not, (put your hands up (none are raised) - reading spelling, handwriting - right, good, OK... These ones here - PE and Social Studies, Health and Science - I want you to do along the lines of... PE - How fit are you? comes from your fitness training... cross country. Attitude - How involved in xxx activities are you? Sportmanship - and generally xxx

02. P: xxx

03. T: Well, the ...ball-handling skills have increased, that's just an example. All right? Maths: the biggie - the tables. Have you actually achieved a hundred percent. If you're one of those people who started off low, and you've now got to a higher level - make a comment on it.

04. P: What do you mean if you do xxx?

05. T: If you're not sure, I will give you your results. xxx If you're one of those people who started off as being good at tables xxx knowledge xxx problem solving. All right? xxx some people went from ten percent to eight per cent, and someone goes from ninety five to ninety six per cent - that's quicker growth. Right? How well do you think you've done. xxx Good. The other three are just very simple comments on your attitude, your xxx - the only exception to that is the Science Fair. If you're one of the four people who made no attempt at the Science Fair, I xxx shall put that on your report xxx... So that's, that's science, that's the only exception. But otherwise, your involvement, the quality of your book work, and xxx. It comes down to knowledge, ability,
attitude. ... (T deals with six or seven questions and comments, and further elaborates...) So the message there is, all work needs to be of a high standard. ... And if you are wise, you'll think about these during your holidays for next year, and the year after, and so on. Set your goals. Work out how you are going to xxx .... Now, any questions? 
06. P: xxx
07. T: Social studies? OK. Your attitude towards other people OK? Your knowledge, and your skills - for example, what was your knowledge like erm, at the beginning of the year. If you're unsure about some of that, you can come to me and I'll xxx.... I don't want you to re-write on those evaluation forms what you might have done.xxx on your reports - general; I don't want "I got none out of ten for xxx"... xxx xxx xxx
08. P: xxx
09. T: You can do, yes. No reason why not.
10. P: xxx
11. T: Well, you put what you think is most central. I'm sure we can xxx All right? Any other questions? (none) Good. OK - make a start!

2.1 Jean
First draft of her self-evaluation form:
Oral language - I think I speak quite clearly, but sometimes when I want to say something I don't know how to say it, so I will have to practise speaking more and think before I speak*.
Written language - I think some of my ideas are good but some are not. And (I think I did my speech quite well, but I still need to pratice more on it - *arrowed bracket to above *) I put a lot of effort in to my written language.
Reading - My reading skills are not very good yet, and I think I have in/mproved a little bit a on library skills, and I put a lot of effort in to it.
Spelling - I think I have put a lot of effort in to my spelling especially on the 'Spellathon, I don't know most of the words on the List B (Spellathon) but I found the meaning of the words in the dictionary, and I put a lot of effort in to it.
Handwriting - I think I have in/mproved quite a lot on my handwriting and I'Il have to pratice more, and I put a lot of effort in to it.
Maths - I think I can do maths quite well, but sometimes I don't understand some maths to I know my times tables. I put a lot of effort in to it.

Final draft of her self-evaluation form:
A. CURRICULUM: Oral language - I think I speak quite clearly, but sometimes when I want to say something I don't know how to say it, so I will have to practise speaking more and think before I speak.
Written language - I think some of my ideas are good but some are not. I put a lot of effort in to my written language.
Reading - My reading skills are not very good yet, and I think I have improved a little bit on library skills, and I put a lot of effort in to it.
Spelling - I think I have put a lot of effort in to my spelling especially on the 'Spellathon, I put a lot of effort in to it.
Handwriting - I think I have improved quite a lot on my handwriting and I'll have to practise more, and I put a lot of effort in to it.
Maths - I think I can do maths quite well, but sometimes I don't understand some maths to I know my times tables. I put a lot of effort in to it.
B. SOCIAL. I have used the 5 c's, and I work well with my friends. sometimes take up challenges too, I think I have achieved some of my goals.
Social studies - I work well with all my friends and I share my ideas with my friends too. I think I did my Commonwealth Games Studies, quite well.
Health - I think I did most of my health studies well. My attitude is good and my knowledge is getting better, I think I did my 'Understanding Changes at Puberty, 'Sun-Smart Studies., & 'Healthy Eating Studies, quite well, and I put a lot of effort in to it.
P.E. I didn't quite do any P.E. this term because I broke my tail/ tail bone and the doctor said I can't do any P.E. untial/ until I recover. but I xxxxx
Science - I think my knowledge is getting better, and I'm interested in science and my attitude is quite good. I put a lot of effort in to it.
Successes I have made this second half year. I have got four more gold cards, and I hope I will get some more gold cards next year.
2.2 John
Final draft of his self-evaluation form:

CURRICULUM

Oral language: I think my Oral Language is quite good, not really because some of the conversation I can't answered the question whom people ask and I think I can do better in my speech, I can think more interesting things to talk, I can talk more softly than I have done now.

Written language: I think my written language is rather good now, but before, I'm very poor at it, like, I didn't know how to use 'in', and 'on', the right way and 'is', 'was', also and I don't know when should I use the capital letter, and when I came here I read learn all of them in ESOL, and I can write them rightly.

Reading: I think my reading is quite good how now, before I came here, I read the book, one page can't be more than five line, but now, I prove my reading, the first book I've read more than ten line is named 'The phantom of Opera', and I continue to read some more interesting book like Sherlock Holmes

Spelling: I think my spelling is quite poor still, because, I didn't like to spell somethings just correct, I didn't like to remember something all the times. but now is better than before, before is extremely poor at it, like 'Autumn', and 'Although', is a difficult one for me, but when I came here, I learn as much as I can, anyway, I'm not good at spelling.

Handwriting: I think my handwriting is good now. Before came here, my handwriting is extremely very VERY poor, but when I came here, I know how to some word like 'X', and 'S', properly, and the most I like in language handwriting, and I live to write word handwriting because I'm good at it now. P.E. I think my p.e. is still, from before to now, Because I didn't practice when I was little and my, P.E. is bad, but not all of them because some of them I'm good at like hiking, swimming, table tennis, bapminton, tennis ... and my love is table tennis, and the school P.E. is softball, hockey ..., so I'm good at some sports but not all.

Maths: I think my maths is really good, because I've learn a lot at / already, but there are some problems, is like decimals, fractions, ... I don't know, what is it, and alots word in maths I don't know what mean is it, so if it tern to Chinese, I will know it very well, because I like times table, in Taiwan, we learn at grade two, and all the maths is easy for me in Chinese.

Social Studies: I think social studies is the most problem I've have, because like Commonwealth game, I've never heard it before, but I still need to know what it is, and it's difficult for me all the times.

Health: I think this parts of things I'm good at in Chinese, but I'm not good at it in English. because some word, I've never heard it before. so is difficult for me sometimes, and somethings, I've didn't even know what it is, but the health is some studies I like, because my father is doctor, I've learn alot from him.

Science: I think I'm quite bad at science, because the science is difficult, when I'm in Taiwan, I've learn a lot of science but I don't like science, and if is use English, it's more difficult for me, and I didn't even like to heard 'science', this word.

SOCIAL

Using the 5'c: I think my using 5'c is not really good because I often didn't listen the instruction, and I didn't think thing careful, and I'm bad at a group, but I would like to take care of someone I like, and I didn't say "shut-up" normal now.

Relating to other people: I think my relating to other is quit bad, because I've do some things silly some times, made other people unhappy.

Getting involved in extra: I think involved in extra is easy for me, and I'm, good at it, at so / like I love to read the book about dinosaurs, stars, I like to play table tennis ... in fact, I don't know why!

Challenge taken up: I think I'm rather poor at some challenges., because sometimes I'm nervous at the difficult, but I like piano, table tennis... the things I'm good at it, I'm very happy to have those challenges. A chien/ chieveement of goal: I think I'm, bad at this one, because I'm not a good goal, in fact, I didn't like the game with goal, except hockey.

SUCCESSES I HAVE MADE THIS SECOND HALF YEAR
The thing I have successes is a lot of spelling and some name in English of maths, and I also know what Commonwealth Games is, and how to sun smart, some knowledges about N.Z., how to make English report, also some knowledges about health, I think I've learnt a lot in social studies.
Bibliography


Barnard, R. C. G. (1998b) NESB students: The need for systematic induction to the learning culture of our schools. Many Voices, 13, 4-7.


Biggs, J. B. (1992) *Why and how do Hong Kong students learn? Using the learning and study process questionnaires*. (Education Papers 14). Hong Kong: The Faculty of Education, University of Hong Kong.


Koffka, K. (1935) *Principles of gestalt psychology.* London:


