

Open Research Online

The Open University's repository of research publications and other research outputs

The teaching and learning of vocabulary: with special reference to bilingual pupils

Thesis

How to cite:

Robinson, P. J. (2000). The teaching and learning of vocabulary: with special reference to bilingual pupils. EdD thesis The Open University.

For guidance on citations see [FAQs](#).

© 2000 The Author

Version: Version of Record

Copyright and Moral Rights for the articles on this site are retained by the individual authors and/or other copyright owners. For more information on Open Research Online's [data policy](#) on reuse of materials please consult the policies page.

oro.open.ac.uk

The Teaching and Learning of Vocabulary
with special reference to bilingual pupils

P. J. Robinson

M7072378

DOCTOR OF EDUCATION (EdD)

20th October 2000

Abstract

The study reported here examines the English language knowledge and performance of bilingual school children of Middle School age in Britain, in particular their acquisition and use of vocabulary. One of the chief premises of the research is that pupils from bilingual minority ethnic backgrounds suffer a major disadvantage while learning from the National Curriculum because they lack the necessary richness of word knowledge, accompanied by the conceptual frameworks expected in learning subjects such as science and geography. Furthermore, it is believed that by raising awareness among teachers and by the adoption of appropriate methods of vocabulary teaching founded on research, the vocabulary learning of bilingual pupils can be greatly increased.

The aim of the study is to identify, describe and evaluate methods of vocabulary instruction currently used and to provide recommendations for suitable methods to be introduced. By means of an action research methodology implemented in a middle school, and with the joint participation of some members of staff and some pupils, classroom data was collected over a two and a half year period from teachers of science, geography and English and their pupils, supplemented with semi-structured interviews with teachers and support staff and conversations with children. These data provided material for a detailed analysis of exactly how individual words develop from first introduction into the pupils' active vocabulary.

Contents	Page
Introduction	1
Chapter One	9
Literature Review	
Introduction	9
Approaches to the study of language	9
Approaches to the study of word meaning	14
A social perspective	16
First language acquisition	20
First language lexical development	22
Second language acquisition	24
Second language lexical development	27
Bilingualism	28
Definitions of bilingualism	30
Types of bilingual acquisition	35
Vocabulary teaching and learning	39
The nature of vocabulary	42
The nature of vocabulary knowledge	43
Vocabulary teaching in EFL and ESL contexts	45
Chapter Two	52
Methodological approach	
Chapter Three	63
Phase one : reconnaissance	
Chapter Four	90
Phase two: dictionaries and dictionary use	90
vocabulary teaching in	
science lessons	102
Chapter Five	125
Phase three: teaching vocabulary in English lessons	
Chapter Six	148
Phase four: teaching vocabulary in the National Literacy	
Hour	
Conclusion	160
References	163

Appendices

Appendix 1	Geography vocabulary and definitions
Appendix 2	Table for dictionary survey
Appendix 3	Worksheet: An Expedition of Discovery
Appendix 4	Worksheet: Cloze procedure
Appendix 5	Worksheet: Cloze procedure
Appendix 6	Tables for diary work
Appendix 7	Examples of diary work

Introduction

The study presented here focuses on the vocabulary acquisition of bilingual pupils in the English educational system and aims to provide a deeper understanding of what learning experiences they face in the National Curriculum and how they can be assisted to achieve their full potential. My interest in vocabulary acquisition and my desire to gain a greater understanding of how the pupils I teach come to understand and use the words which they encounter at school stems from my professional experience as an English language teacher and my post graduate studies in the areas of language development, developmental psychology and curriculum development.

After several years of teaching English as a foreign and second language in government and international schools in Africa and Asia, I returned to England in 1986 and went to work in an ESL unit attached to a comprehensive school. It was the year after the Commission for Racial Equality had produced their report on the education of children from ethnic minority groups (Swann Committee of Enquiry 1985) and a time when many Asian families were voicing concerns that their children, by being segregated in language centres where the teaching focused upon the structural aspects of the English language, were not having access to the wider variety of educational opportunities available in comprehensive schools. A growing social and political awareness of the undesirability of segregation in education and the influence of the, then currently popular, theories of communicative language teaching proposed by Widdowson (1978), Brumfit (1984) and Krashen (1985), which supported activity-based teaching through the target language, made LEAs conscious of the need to re-examine their arrangements for ESL teaching.

Language centres were subsequently closed down throughout the country, and policies to integrate ESL, or bilingual pupils, into mainstream classes were hastily drawn up and implemented by staff, many of whom lacked specialist training, experience or knowledge to properly equip them to support the language and curriculum learning of their pupils. There was, though, little doubt amongst the majority of teachers that the best learning environment for bilingual pupils was in the mainstream classroom alongside

native English speaking peers and their intuitive feelings were supported by research which suggested that English language development proceeds more rapidly when pupils are provided with opportunities to use English in naturally-occurring contexts (Dulay et al.1982, Wiles 1985, Krashen 1985).

During the last decade knowledge about and expertise in supporting the language learning of bilingual pupils has been developed by practitioners, but the current evidence of underachievement amongst minority ethnic pupils suggests that integration and expert teaching do not guarantee that bilingual pupils will be academically successful. What is lacking, suggests Leung (1996), is a theoretical framework of language development which would link theory and practice and highlight a pedagogy appropriate to the specific needs of pupils who are faced with the task of learning both the content of the curriculum and the English language at the same time.

One aim of my research was to contribute to such a theoretical framework an understanding of how bilingual pupils can be helped to acquire the meanings of English words in their school learning. I shall demonstrate how I achieved this aim by drawing on findings from the data to describe some of the teaching and learning processes involved in the acquisition of vocabulary. This is with a view to generating widespread and consistent practice which is conscious of the curriculum and language needs of bilingual pupils and is informed by empirical research on how pupils best learn vocabulary.

It is my belief that the National Curriculum provides insufficient guidance and attaches insufficient importance to the teaching of English vocabulary. The assumption seems to be that vocabulary acquisition will be a by-product of other language learning activities. Consequently, too few opportunities are given to pupils to fully develop understandings of words and, thus, acquire a productive knowledge of a rich and meaningful vocabulary.

The focus of this investigation will be to identify, evaluate and describe the processes involved in the teaching and learning of vocabulary in one multi-cultural middle school.

Rationale: Why Vocabulary?

My interest in exploring vocabulary is motivated, partly by the National Curriculum writers' neglect of this aspect of language and partly by my desire to improve my own practice in teaching vocabulary, as I believe learning the meanings of new words creates and enriches learning experiences. This is a view shared, and endorsed by Sir Randolph Quirk, acknowledged to be a leading authority in the field of English language and co-author of, arguably, the most comprehensive grammar of the language ever written. He wrote the following letter to the Independent newspaper on 5th February 1993.

Sir:

I am dismayed to note the absurdly disproportionate emphasis on grammar in recent discussions of English teaching (reports, 3 February: leader, 4 February). Standard English is not to be defined simply as “grammatically correct English” since this totally ignores the vocabulary, a far more significant component.

The vocabulary of standard English (as our world class dictionaries show) is uniquely rich and finely shaded. This is where teachers can focus attention to greatest effect. Learning new words and meanings is the key to enriched experience as well as to clear and logical thinking.

Yours faithfully,

Randolf Quirk

Fellow, University College,

London, WC1

Teachers and students of foreign languages usually agree that the single most important component of their teaching and learning is the vocabulary of the target language. As Zimmerman (1997) states, “Vocabulary is central to language and of critical importance to the typical language learner” and, in a study conducted by Horwitz (1988), 35% of Japanese university students agreed or strongly agreed that the most important aspect of language learning for them was vocabulary. No matter how advanced a learner’s knowledge of grammar, without the words to express thoughts, ideas and feelings there cannot be any meaningful communication. As many

acknowledge, "...lexical competence is at the heart of communicative competence" (Long and Richards 1997). Vocabulary acquisition is a major task, not only for elementary and intermediate students of foreign languages but also for advanced students who have reached near native fluency.

It must be at least as important for pupils in schools in Britain to acquire a large vocabulary in English, as it is for students learning English as a foreign language. Pupils need to acquire rich and sophisticated vocabularies to communicate socially and academically in varied contexts. Having a large productive vocabulary enhances a pupil's opportunities for learning and it enables them to express their thoughts, and yet the National Curriculum does not place great emphasis on this aspect of education. It often does not seem to be a significant aspect of teachers' planning or delivery of lessons in some areas of the curriculum, even in schools where there are pupils for whom English is a second language. Surprisingly, the lack of vocabulary teaching seems to be particularly evident in English lessons. All this may be because, as Glasersfelds (1989) suggests, the linguistic processes upon which teaching relies is usually simply taken for granted. There is, he states, "...a naive confidence in language and its efficacy." (p.6) It is possible that teachers overestimate pupils' comprehension of the words they use.

It is my belief, shared with many colleagues, both past and present, that the vocabulary of pupils is often insufficient to allow them the greatest possible achievement in the National Curriculum. Tests in a variety of language skills conducted on incoming year five pupils in the school where until recently I worked highlighted vocabulary as the greatest area of weakness. Furthermore, in the same school pupils were frequently unable to complete tasks successfully in the SATs tests and their teachers believed that this was often because they did not understand a key item of vocabulary. More evidence to support this claim can be found from asking pupils to give explanations, participate in discussions and, most particularly, to explain the meaning of a text which they have just fluently read. Frequently pupils struggle with these tasks, appear inarticulate, lose confidence and give up. This is a cause of concern to many teachers, as an inability to be able to use words to express meaning efficiently may have serious implications for

pupils' ability to use language as a resource for constructing knowledge and meaning.

I believe that vocabulary needs to have a more prominent place in the curriculum and that pupils need to be given greater opportunities to construct meanings for words. Pupils need not only to be taught the meaning of words as they arise in classroom work, they also need to be given greater opportunities to develop these understandings and use the words so that they may become part of their productive vocabulary and a basis for further learning. As teachers, we need to develop understandings of the developmental processes involved in learning vocabulary and need to take a 'language-conscious' and 'language explicit' approach to teaching. (Leung 1997)

The teaching of English vocabulary to bilingual or native English speaking pupils and their learning are areas which have received little research attention. Although the public frequently criticise schools for producing inarticulate young people and higher education institutions bemoan the fact that they have increasingly to teach introductory courses in basic language skills, vocabulary still does not feature prominently in the National Curriculum. I believe there is a need for the existing situation in schools to be examined and evaluated so that the processes involved in the effective teaching and learning of vocabulary can be better understood and shared.

My academic study, research and professional interests have always been inextricably linked and motivated by a desire to improve my own teaching. Previous, small scale research investigations carried out on aspects of the teaching and learning of bilingual pupils for my MA degree, enriched and informed my teaching practice. This benefited my pupils and gave me greater professional satisfaction. Similarly, my teaching gave meaning and purpose to the study and a focus for the research.

To the present research reported here, I brought with me an interest in vocabulary, a feeling that vocabulary should be, but wasn't, a prominent aspect of teaching and learning and a determination that the research should have relevance to, and the involvement of those with whom I was working. I

was, therefore, keen to act upon and include in the research, colleagues' concerns about the bilingual pupils' vocabularies.

Being convinced that pedagogical problems are best solved through practitioner research using the experience and the skills of those closest to the problem I hoped to be able to work collaboratively with colleagues as partners in the research. This kind of approach, which directs the available resources at the organisational units that are likely to have the greatest effect on the problem, is described by Elmore (1989) as "backward mapping". He maintains that "...the closer one is to the source of the problem, the greater is one's ability [and desire] to influence it". Thus, he believes in "...maximising discretion at the point where the problem is most immediate" (p.247) i.e. at the lowest level of the implementation process that generates the need for change. It is an approach which can provide a direct response to teachers' concerns and practical problems in the classroom by involving them in the creation of the solution. As Hodson says, "...teachers are seen as *active constructors* and *reconstructors* of their own curriculum knowledge".

In summary, the proposed investigation will seek to describe: -

1. effective teaching strategies which enable pupils to acquire, understand and use subject specialist or key vocabulary; and
2. the processes involved in the teaching and learning of vocabulary by bilingual pupils.

The school setting

The school in which this project was carried out (hereafter referred to as the project school) and in which I worked as an English language support teacher to bilingual pupils was a mixed four-form entry, 9-13 inner city middle school. It provided for approximately 450 pupils and was situated near a large council estate on the edge of the city. It was typical of its kind and was a popular choice for many parents from ethnic minority cultures. During the years in which I worked in the school, from 1995 until shortly before its closure in 2000, the number of pupils from ethnic minority homes steadily increased from 53% to 75%, whilst the number of language and curriculum support staff decreased. The majority of the ethnic minority

pupils spoke Mirpuri Panjabi as their first language and English as an additional language.

The school was equipped to educate some physically disabled pupils and had a large number of statemented pupils. It was also specially resourced for hearing impaired pupils. This variety of educational challenges made it a stimulating environment in which to work and one in which, I believe, the issue of vocabulary teaching and learning was particularly relevant.

The investigation into the teaching and learning of vocabulary described here was carried out during a particularly stressful and troubled time in the history of the school. Shortly after beginning the research in January 1996, the school was informed that it was to be inspected by an OFSTED team the following term in May. At about the same time the local education authority started a process of investigation and consultation over a proposed reorganisation of the authorities' schools which would entail the closure of all middle schools. There followed months of uncertainty until the decision was made that the reorganisation was to proceed. This decision was unsuccessfully contested, and the school was informed that it was going to be closed in July 1999. The staff were informed that the school would be reopened as a primary school with a different staff. This decision was also contested. Encouraged by a successful OFSTED inspection, and the support of many parents, the school petitioned and made a representation to the authority to manage and staff what was to be the new primary school. This was rejected. Some weeks later the authority rescheduled the closure of the school to the following year 2000.

During this time there were also uncertainties about the continued employment of the four language support teachers (of which I was one) funded through Section 11. These uncertainties were never resolved but the number of full time equivalent language support teachers decreased from 2.3 when I joined the school to 1 when the school closed.

These factors were, at times, an intolerable stress on the teaching staff and undoubtedly affected the aims and outcomes of the research project. Although most of the staff remained committed to the aim of the project – to improve the practice of teaching vocabulary to bilingual pupils - their

willingness to participate and contribute rapidly declined with their morale as they became involved in difficult decision-making about the future of their own careers.

Chapter One

Literature Review

Introduction

The conceptual perspective which both influences my professional practice and underpins this study is derived from social constructivist theories of learning, which recognise the integral relationship between language, cognitive development, culture and social interaction. Thus, my background reading has included texts from the disciplines of linguistics, psychology and sociology. In addition, I have considered empirical studies in the fields of language development and vocabulary acquisition in first (L1) and second (L2) languages and issues relating to bilingualism and multi-cultural education.

In this review of literature I begin by briefly tracing the major influences that linguistics has had on the study of language. I then discuss the linguistic approaches to the study of word meaning, by looking first at the rationalist point of view, which attempts to integrate this aspect of language into a formal theory, and then at the opposing empiricist view that lexical meaning cannot be shown to follow rules that predict how a word will be used from any supposed semantic features. I then discuss, from a pedagogical perspective, a more socially orientated approach to the study of language, which has been influenced by Vygotsky, and which, in turn, influences my practice of helping bilingual pupils acquire the meanings of words. I also review theories on first and second language acquisition before considering the role of bilingualism with reference to the pupils who are the focus of this study. Finally, I consider approaches to the teaching and learning of vocabulary.

Approaches to the study of language

Although the methodological approach followed in this study is not based on any specific linguistic theory, there are important concepts and terms that need to be clarified, which are associated with some of the major theorists of the 20th century. Overall, during this period, a development can be traced from viewing language as a formal system to be analysed in its idealized form to seeing it in its social function as a means of communication.

It is generally recognised that modern linguistics and the study of language as an abstract system stems from the work of Saussure in the early part of the twentieth century. Saussure provides a structural framework for understanding the nature of and the relationships between elements of language. Although his model describes the structure of language rather than its use (which is the main consideration of this study) and does not consider the social and cultural aspects of language (as I intend to do), the following concepts have been influential in the field of linguistics and provide a background for the discussion of alternative approaches.

Firstly, Saussure believes that language is a system of conventions or 'signs'. The sign, which he maintains is the central feature of language, comprises the 'signifier' and the 'signified'. The 'signifier' is the linguistic aspect of the sign (the word) and the 'signified' is the non-linguistic aspect or idea. The significance of this concept lies in the arbitrariness of the linguistic sign; the fact that there is no natural or inevitable link between the signifier and the signified, i.e. there is no intrinsic relationship between the combination of sounds or letters which produce a word and the idea which the word represents. Saussure maintains that this principle "...dominates the whole of linguistic analysis of a language." (cited in Culler 1976 p.29)

Although, as Saussure states, the basic element of every language is the arbitrary sign, different language communities have their own conceptual understandings of the world which are reflected in their language. As Culler (ibid) points out, language is not simply a nomenclature for a set of universal concepts which can be readily translated from one language to another.

"Each language articulates or organises the world differently. Languages do not simply name existing categories, they articulate their own." (p.30)

To borrow Culler's examples, the French language combines the concepts 'like' and 'love', which are expressed through the single signifier 'aimer'. Similarly, the English signifier 'to know' combines, in a sense, two conceptual understandings in the French language articulated in the signifiers 'connaître' and 'savoir'.

I believe that this aspect of Saussure's theory is an important consideration when introducing vocabulary and concepts to pupils who do their school learning in English but who use languages from a different cultural framework outside of the classroom. It demonstrates the importance of recognising that the organisation of the world into conceptual understandings within a bilingual pupil's home language community may not be directly transferable to the English-speaking classroom. Nor will the vocabulary of the home language, therefore, necessarily be directly translatable to the English language of the classroom.

Another aspect of Saussure's theory relevant to the present study is the distinction he makes between the internalised grammatical system of language, to which he assigned the term 'langue', and a speaker's manifestations of this system through speech, which he calls 'parole'. For Saussure it is 'La Langue' which provides the essential framework for understanding linguistic structure, not the speech, or 'parole'. Saussure sees the social side of language as residing in 'langue' because it represents the system of rules shared by all speakers. 'Parole' is a matter of individual psychology. Saussure justifies the separation of langue from parole when he states "We are separating what is social from what is individual and what is essential from what is ancillary or accidental" (cited in Culler, p.34) and thereby establishes an important theoretical distinction between the linguistic system, which he saw as the major focus for study, and parole (written or spoken text), which he considered too unreliable for study.

Chomsky also sees language as an abstract and formal system of rules and suggests that the acquisition of the system of rules or 'linguistic deep structure' is biologically endowed rather than learned. He distinguishes this innate grammatical knowledge, which he calls 'competence', from 'performance', the manifestation of that knowledge through words, in much the same way that Saussure distinguishes between langue and parole. Chomsky makes a fundamental distinction between "...*competence* (the speaker-hearer's knowledge of the language) and *performance*, (the actual use of language in concrete situations)" (Chomsky 1965, p.4). He thereby establishes a distinction between knowledge of the language, on the one hand, and the ability to use the knowledge on the other.

Being primarily concerned with scientific investigation, like Saussure, Chomsky urges his readers to consider linguistic theory from the point of view of

“... an ideal speaker-listener, in a completely homogenous speech community who knows its language perfectly and is unaffected by such grammatically irrelevant conditions as memory limitations, distractions, shifts of attention and interest, and errors (random or characteristic) in applying his knowledge of the language in actual performance”.

(Chomsky 1965, p. 3)

Thus, Chomsky disregards the study of performance (or parole), because he feels it is too unreliable, being full of slips of the tongue and lapses of memory. Neither Chomsky nor Saussure attaches the significance to the social and interactive processes involved in language and cognitive development which later researchers recognised and which I shall suggest are crucial in the successful teaching and learning of vocabulary. They do not seem to consider that an examination of ‘parole’ or ‘performance’ may lead to better understanding of how the linguistic system is acquired.

Hymes, (1971, 1972), known for his ethnographic approach to the study of language, developed the concept of ‘communicative competence’ in opposition to Chomsky’s ‘competence’. He finds Chomsky’s concept of competence too restricting as it does not account for either the notion of the ability to use the language or the social aspect of language. He sees communicative competence as a way to “...extend the notion of competence as tacit knowledge from grammar to speaking as a whole” (Hymes 1971, p.16) He uses the term competence as “...the most general term for the speaking and hearing capabilities of a person” (Hymes, 1971, p.16)

So, whilst Chomsky’s view of competence is a precise and narrow concept relating to an individual’s acquisition of “...a system of rules that relate sound to meaning in a certain specific way” which gives the individual “...a certain competence that he puts into use in producing and understanding speech” (Chomsky, 1970, p.184), Hymes opens the concept out to cover a number of different elements which include sociolinguistic factors as well

as grammatical knowledge. He argues that successful social discourse relies upon the speakers' awareness of the social components of their activity i.e. "...in the ways in which speakers associate particular modes of speaking, topics or message forms with particular settings and activities" (Hymes 1972 p.36).

In even greater contrast to the rationalist, individualistic Saussurian and Chomskian approaches, Halliday (1978) rejects the distinction drawn between competence and performance and presents a model of 'language as a social semiotic'. He says:

"If you are interested in linguistic *interaction*, you don't want a high level of idealization that is involved in the notion of competence; you can't use it, because most of the distinctions that are important to you are idealized out of the picture." (Halliday, p.38)

He believes that language should be interpreted "...within a sociocultural context, in which the culture itself is interpreted in semiotic terms - as an information system..." (p.2). Thus, he recognises the importance of social discourse and the paralinguistic contextual features which contribute to meaning in the study of language. Halliday takes what he calls an 'inter-organism perspective' in opposition to Hymes' 'intra-organism perspective' and states that

"...in an inter-organism perspective there is no place for the dichotomy of competence and performance, opposing what the speaker knows to what he does. There is no need to bring in the question of what the speaker knows; the background to what he does is what he could do – a potential, which is objective, not a competence, which is subjective". (p. 38)

The use of these terms in relation to second language teaching causes further confusion as the notion of proficiency is introduced. Stern (1983) explicitly links proficiency with competence when he says "Among different learners at different stages of learning, second language competence or proficiency ranges from zero to native-like proficiency" (p.341). The identification of competence with proficiency has been reinforced by others (Corder 1981, Savignon 1983), and in the second language teaching context the term

'communicative competence' seems to have come to mean the "... 'ability to perform' or 'ability to communicate' in the second language." (Taylor 1988, p. 164) There is, therefore, a danger that these terms have lost any useful distinctive meaning, with communicative competence meaning performance and proficiency used to mean either competence or performance. Taylor (1988) proposes a useful way of distinguishing between competence and proficiency. He accepts Chomsky's competence in its restricted sense and defines proficiency as 'the ability to make use of competence. He adds, "Performance is then what is done when proficiency is put to use." (p.166)

Whilst trying to apply these notions to the teaching and learning of young pupils, I acknowledge that the Chomskian notion of competence is useful as it describes the 'knowledge' or state of knowing that "...provides the basis for actual use of language" (Chomsky, 1965, p.9). The knowledge systems of the bilingual pupils who are the focus of this study may be organised in many diverse ways. Aspects of the knowledge systems of the different languages may be quite separate and pupils may have difficulty locating the part needed and then processing it for communicative purposes. It is doubtful, however, that an entirely idealized version of the target language is a useful basis for the study of second language acquisition.

Approaches to the study of word meaning

Within Chomsky's formal model the vocabulary or lexicon of a language is given a subordinate role in relation to the syntactic component which is an inventory of base forms or morphemes particular to the specific language. However, word meanings are treated at an abstract universal level and are associated with the semantic components of the system. Chomsky attempts to illustrate how meaning could be shown to follow formal rules in the same way as syntax and phonology. Following on from this, Katz (1966) builds his linguistic description of meaning on the premise that the "...essential aspect of communication..." is the "...congruence of speakers' and hearers' thoughts and ideas..." in verbal exchange (p.98) This congruence is not the result of haphazardly shared experience, but can be seen in terms of Chomsky's view of "...innate ideas and principles...that determine...what can be known in what may be a rather restricted and highly organised way" (1970 p.127) This connection of sound and meaning between speakers and

hearers presupposes a set of shared rules governing what can be said and understood in language.

An important aspect of this theory is the belief that there is a "...strong correlation between the form and content of language and the form and content of conceptualisation" (Katz 1966 p.4). This relationship seems to operate in two directions in the description, since a theory of language must analyse the conceptual processes of the mind and, at the same time, the nature of conceptual knowledge can be inferred from the nature of language.

Again, this 'rationalist' view of the mind and its contents sees language and its possible meanings as biologically predetermined according to "...rules for pairing semantic and phonetic interpretations..." (Chomsky 1970 p.123). To equate the rules of meaning with those of grammar involves specifying the 'logical' relations between words and sentences in terms of a formal conceptual language, in the same way that grammatical models can be expressed symbolically, thus avoiding the circularity of natural language descriptions of itself. The semantic component of the theory is a compositional process in which the meaning of a sentence is obtained from the meaning of its constituent words, which are themselves decomposable into semantic 'primitives' expressible in formal terms. The major subcomponent of the semantic theory is a dictionary which contains definitions of word meanings and, indeed, represents the universal conceptual structure of the mind. Word meaning, therefore, becomes the key to "...the discovery of the mental reality underlying actual linguistic behaviour..." (Katz 1966 p.116).

This way of formalising word meaning is in opposition to the empiricists' view of the relationship between language and mind. In the experiments reported by Vygotsky (1962) it is suggested that children are not born with a conceptual apparatus already intact, but both create thoughts and learn to express them through words. Verbal thought is the result of a socio-cultural development by which concepts evolve through a gradual process of abstraction and generalisation. Advanced concept formation, according to Vygotsky (ibid), is seen as a process, guided by the use of words, of abstracting the relevant traits from objects, concentrating on distinguishing properties and grouping those that are maximally similar.

It should be clear, again, for the purposes of this study, with its interest in the development of word meanings by children acquiring a second language through social contact, an empirical approach to understanding the formulation of concepts which words embrace is most appealing.

A social perspective

The more socially orientated approaches to the study of language which have developed over the past twenty years have been influenced by Vygotsky. He emphasized the social-cultural, linguistic origins of conceptual thinking and believed that children's understanding is developed not only through encounters with their physical world, as maintained by Piaget, but also through communicative social interactions between people in relation to that world. He believed that the capacity to learn through instruction is itself a fundamental feature of human intelligence, and that a child's potential for learning is revealed and realized in interactions with more knowledgeable people. Vygotsky argued that human thought is shaped by human language and that

“...the very essence of cultural development is in the collision between mature cultural forms of behaviour and the primitive forms that characterize the child's behaviour” (1981, p.151).

The educational implications are that the ‘collision of behaviours’ occurs within the medium of shared teacher-pupil talk, where knowledge is exchanged and new understandings can develop. Mercer (1994) believes that talk is “...a social mode of thinking...”, and states, “through talking – and listening – information gets shared, explanations offered, ideas may change, alternative perspectives become available”. (p.95) One of the things I shall be looking at in this study is how the meanings of words are explained, shared and developed within the medium of discourse between teachers and pupils.

There are three aspects which come directly from, or which have been influenced by Vygotsky's theory that are particularly relevant to a consideration of the teaching and learning of language and curriculum knowledge to bilingual pupils. They are the ‘zone of proximal development’, ‘scaffolding’ and ‘appropriation’.

Vygotsky (1978) describes the zone of proximal development as

“the distance between the actual development level as determined by independent problem solving and the level of potential development as developed through problem solving under adult guidance or in collaboration with more capable peers” (p.86).

For me, this concept encapsulates two features which are particularly crucial to the development of word knowledge by bilingual pupils, who may only receive support in their English language development whilst in school. It stresses the importance of instruction from teachers and it also suggests that with the right kind of expert support pupils’ learning can develop to higher levels, beyond those which they can achieve independently.

Bruner, influenced by Vygotsky, provides a view of the nature of the instructional process embodied in the zone of proximal development (or ‘potential development’, as Bruner (1991) prefers to describe it), using the notion of ‘scaffolding’. Scaffolding, says Bruner (1978):

“...refers to 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” (p.19).

In this study I shall describe strategies teachers used to scaffold the vocabulary learning through the zone of proximal development and to make it possible for the pupils to develop understandings of words which they could not have acquired independently. One of the features of effective scaffolding is that the difficulty of the task as a whole is kept constant whilst the teacher simplifies the learner’s role by providing graduated assistance, serving the learner “... as a vicarious form of consciousness until such a time as the learner is able to master his own actions through his own consciousness and control” (Bruner 1985 p.24). This kind of assistance is particularly well demonstrated in my data through the use of ‘linguistic frameworks’, which the teachers used and which will be discussed in Chapter 4.

In attempting to identify other important features of effective scaffolding, Wood (1988) suggests the concept of ‘contingency’. This describes the

amount of control in the learning situation that the teacher exerts and involves the teacher in a moment-to-moment assessment of the learner's level of understanding of and ability to do the task in hand, so that the appropriate assistance can be given. Effective scaffolding occurs if, when the learner struggles, or fails, more help is given and when understanding is evident the teacher steps back and gives the learner more room for initiative.

In his study of mothers teaching their four-year-old children, Wood was able to identify five levels of control over the instruction given. In the first category, 'general verbal prompts', mothers suggested an activity but not how to do it. In the second, 'specific verbal instructions', the child was told how to do it. In the third category the mother additionally indicates which apparatus must be used in order to carry out the task, and fourthly the apparatus is physically prepared for assembly by the mother. The fifth category, 'demonstrates', is when the mother demonstrates and completes the task. As the instructions, therefore, become more and more controlling, the child is offered correspondingly less scope for initiative. Contingent control of learning, according to Wood, depends on the teacher's sensitive reaction towards the learner's successes and failures after instruction. Every time a teacher increases the help or control for a learner who is failing or offers less help when a learner succeeds the teacher is deemed to have made a contingent response.

The levels of control that Wood (ibid) describes (the demonstrating, preparing, indicating and the giving of specific and general instructions) provide a useful framework for the teaching of curriculum tasks, particularly those which involve apparatus and actions. Teaching abstract concepts to bilingual pupils with a low level of English language proficiency requires, I believe, that the support and contingent responses should be sensitive, not only to the pupils' cognitive understanding of the task, but also to their level of English language understanding. What is needed, as Leung (1997) points out, is a language conscious and language explicit approach to scaffolding. This investigation illustrates ways in which the learning of one aspect of language development (vocabulary) can be scaffolded.

'Appropriation' is a term first used by Vygotsky's colleague Leont'ev (1981, in Newman, Griffin and Cole, 1989) to describe the process of

acquiring or 'appropriating' understandings through cultural contact or encounters. As Newman et al (ibid) explain, "...the objects in a child's world have a social history and functions that are not discovered through the child's unaided explorations" (p.62). This view relates to Vygotsky's theory that teaching is an essential component of learning.

Mercer (1994) relates the concept of appropriation to an educational context when he states,

"In relation to schooling the most interesting application of the concept will not necessarily concern a learner's relationship with meaningful objects, but rather with concepts and ideas." (p.105)

This study examines how pupils appropriate or acquire understandings of words through their socially mediated encounters with the words in the classroom.

The notion of appropriation is somewhat similar to Bakhtin's concept of 'voices' which refers to the words of others that are contained in the utterances of individuals. Bakhtin (1986) suggests that people's speech "...is filled with others' words, varying degrees of otherness or varying degrees of 'our-own-ness', varying degrees of awareness and detachment". This idea was aptly illustrated as I observed different teachers teaching the same lessons, following the same lesson plans, to their classes. In particular, I saw how in their teaching of the meanings of words the teachers incorporated into their own explanations the definitions which had been produced by a colleague and how, in turn, these chunks of language (or fragments of the chunks) reappeared in the utterances of pupils.

Edwards and Mercer (1987) also share the view that the development of understanding is a communicative accomplishment embodied in classroom discourse. Education, they believe, is the development between teachers and pupils of shared understandings, shared experiences and procedures and a shared conceptual vocabulary. In primary schools the classroom discourse is heavily dependent on a context of physical apparatus and actions. However, Edwards and Mercer (1987) argue that the context is best understood as mental, and state that "for the participants, the context of any utterance is more a matter of perception and memory - what they think has been said,

what they think was meant, and what they perceive to be relevant” (p.66). In my observations during this investigation I examined how, and to what extent, teachers established contexts of mutual understandings with pupils which were specific to the particular items of vocabulary they were introducing.

First Language Acquisition

Studies of first language acquisition provide a framework for considering second language acquisition and the possibility of comparing the two processes. As a teacher of young pupils who start acquiring their second language long before the development of their first language is completed it is important to understand how the developmental processes of first and second language acquisition may influence each other.

While approaches to conceptualising the language system as a whole remain controversial, the developmental sequence through which children normally pass whilst acquiring their first language is well established, though the precise relationships between the stages are open to debate. Moreover, the sequence appears not to be affected by culture or the language to be learned (Lenneberg 1967), so what is known about the acquisition of English as a mother tongue (the language most studied) can be applied to the acquisition of any other language. It seems that all children learn the phonology and syntax of their first language, whatever it may be, by progressing through the same major stages in the same order and at approximately the same age. (Slobin 1973)

The first cooing and crying vocalisations that infants make lead, at around the age of 6 months, to babbling. Oller (1980) identified two types of babbling; ‘reduplicated babble’, where there is repetition of consonant and vowel syllables as in ‘mamama’, and ‘non-duplicated babble’, which is characterised by strings of non repeated syllables as in ‘bamido’. The relationship between babbling and later speech is unclear. Clark and Clark (1977) suggest that there is an indirect relationship between babbling and speech and that babbling provides practice at gaining control over the articulatory tract.

The 'continuity hypothesis' proposed by Mowrer (1960) suggests that babbling is a direct precursor of language. An infant initially produces a wide variety of sounds which are narrowed down to only those that it hears in its own linguistic environment. Harley (1996) identifies two problems with the continuity hypothesis. Firstly, he says that many sounds, such as some consonant clusters, are not produced in babbling and secondly, parents are not selective about reinforcement in babbling. According to Harley, parents reinforce vocalisations indiscriminately.

The 'discontinuity hypothesis' maintains that there is no simple relationship between babbling and later language development. Jakobson (1968) proposes two stages in the development of sounds. Firstly, babbling in which the infant produces a wide range of sounds in no particular order followed by a second stage, in which some of the sounds previously in the child's repertoire disappear. Some of the disappeared sounds may reappear at a later stage in the child's language development. Jakobson argues that it is during the second stage that the child is learning the phonological system of the language to which it is exposed. Children raised in bilingual or multi lingual environments may, according to Arnberg (1987), demonstrate a broader repertoire of babble sounds reflecting their exposure to more than one language sound system.

The babbling fades as the child begins to produce its first words at around the age of one. Single words are produced at first (sometimes called 'holophrastic speech'). Nelson (1973) found that the first words spoken by children fell into two groups: names for people and things and social expressions such as 'bye-bye'. She identified two groups of children; 'expressive' children who emphasise people and feelings and who speak social words first and 'referential' children whose first words are the names of objects and people. She found that the referential group acquired vocabulary more quickly whereas the expressive group made faster syntactic progress.

Studies of bilingual development show that before the age of eighteen months children acquire words from both languages as if they were part of a single vocabulary. (Arnberg 1987) It is rare, therefore, for children to have, initially, a name for one object or concept in each of its two (or more)

languages. (Saunders 1988) The nature of the bilingual environment in which the child is being raised determines the composition of the developing vocabularies. There is, however, little difference between monolingual and bilingual children in the number of words learned in early childhood. (Arnberg 1987, Taylor 1974).

At approximately two years of age children are combining words to form two- or three-word utterances, sometimes called 'telegraphic speech' because grammatical elements are often omitted leaving only a string of content or meaning bearing words with many of the function words absent. Attempts have been made to describe the rules governing early syntactic development.

Braine (1963) in his study of three children's telegraphic speech identified what he termed 'pivot words': words that were frequently used and which always occurred in the same position in the utterance, usually initial position but sometimes second. 'Open words', on the other hand, were greater in number than the pivot words, their position varied in the utterance and they were used less often. Brown (1973) concluded from his studies that children at this early stage of language development do apply rules but that they are different from the rules which govern adult grammar.

Bloom (1970) suggested that syntactic development needs to be studied in relation to the context and content of children's utterances. This 'rich interpretation' approach acknowledges that children's two word utterances can have multiple meanings which can only be determined from an examination of the context. However, as Harley (1996) points out, attributing meaning to a child's utterance within a particular context is a subjective judgement and an inexact science.

First language Lexical development

One of the most important cognitive-linguistic steps is for the infant to identify what a word is. They have to discover that words make up units of meaning. Peters (1983) suggests that for a child many of the utterances that an adult would recognize and use as comprising a sequence of individual words are treated as unanalysed holistic chunks. She identifies two separate routes in language development, Analytic and Gestalt, relating to the

different communicative needs of pragmatic expression and reference. While some children process the language they hear into its component parts (words) from an early stage, others retain utterances as wholes and employ them as functionally appropriate memorized chunks. "... the speech of certain children often contains formulaic phrases that the child could not have constructed from their constituents" (1983, p.5). Aitchison (1987) believes it unlikely that a child comes to realise that words stand for things much before the age of two. She believes that the ability to symbolise emerges slowly and that children respond to repeated formulaic phrases, particularly if the intonation and stress patterns are consistent, before they make the connections between words. Cooke and Williams (1985) agree that children use a variety of contextual clues, such as parent's gesture, intonation and familiarity with the situation, to interpret what is going on. It is unlikely that they understand many of the actual words before the age of two, rather, they perceive them as a part of the total situation. Reynell (1980 in Cooke and Williams) suggests that children recognise key words in routine phrases and initially associate them with a collection of actions and then, eventually, with the object itself. It seems to be, then, that through the use of contextual cues children are able to respond to words before they are properly able to make connections between the words and their referents.

Numerous studies of carers and babies highlight the following features of adult-infant communication as being significant to the language acquisition process :-

- repetition, often formulaic and frequently routinised
- meaning is highly contextualised, words are accompanied by actions, objects, people
- a limited range of semantic fields is used
- voice patterns are familiar
- child is given intimate and individual attention
- child is given a high level of support and encouragement
- adults use a particular register (parentese) when communicating with infants.

Studies suggest that these features of the first stages of verbal language between infants and their carers are universal. They can also occur in the

communication between native English speakers and second language learners.

Data collected over a number of years in linguistically diverse classrooms where teachers and pupils are sensitive to the needs of bilingual pupils, provides evidence of a similar set of features. For example, in the early stages of second language learning EAL pupils do respond to repeated formulaic phrases particularly when they signal a predictable classroom routine. They use contextual clues when they are made available and can identify key words in longer phrases which they don't necessarily understand. Similarly, they respond to utterances before properly comprehending them. In classrooms where there is a real attempt to meet the needs of bilingual pupils they are often talked to in a particular register and are given a high level of support and individual attention.

Second Language Acquisition

The relationship between L1 and L2 language development remains controversial. Approaches to L2 acquisition such as error analysis, contrastive analysis and interlanguage have tended to emphasise the different route that language development in a second language follows. Krashen (1981) and others, on the other hand, highlight the similarities. Ellis (1985) identifies three aspects of L2 acquisition; 'sequence', 'order' and 'rate of development'. The sequence through which learners pass whilst learning a second language mirrors the sequence of first language acquisition, i.e. from simple vocabulary to basic syntax to the structure of simple and then complex sentences. This, he claims, is a natural and invariant sequence of development through which all, who are engaged in learning a second language, pass irrespective of how they are taught or how they learn. The 'order' in which certain features of language are taught or are learned (for example vocabulary, specific grammatical features) may, on the other hand, vary from person to person, from classroom to classroom.

Studies of the language that learners produce show that there are regularities or patterns of development in second language as well as first language acquisition. Some studies of the early stages of second language acquisition in young learners (Itoh and Hatch 1978, Hakuta 1976, Saville-Troike 1988) and adults (Hanania and Grandman 1977) support the existence of a pattern

of development which begins with a silent period. This is followed by language, which is characterised by formulaic utterances, and structural and semantic simplification.

A widespread belief amongst teachers in linguistically diverse schools in England is the notion first suggested by Krashen (1982) that the 'silent period' is a necessary stage in language learning which enables the learner to develop competence in the second language through listening. It can be compared to the lengthy period of time during infancy when L1 learners listen to the speech sounds in their environment before uttering their first words. However, Gibbons (1985) maintains that a 'silent period' can also signal a state of incomprehension that may impede the second language process. His study of 47 primary school pupils learning English as an additional language in Australia revealed considerable variation in the length of the silent periods and studies by Huang and Hatch (1978) and Saville-Troike (1988) reveal that not all learners do go through a silent period. Saville Troike (ibid) suggests why some second language learners do and others do not go through a silent period. She says the difference may be a result of the learner's social and cognitive orientation. Learners who are 'other directed' do not go through a silent period. They "...approach language as an interpersonal, social task, with a predominant focus on the message they wish to convey' (p.568). Inner directed learners, on the other hand, "...approach language learning as an intrapersonal task, with a predominant focus on the language code' and do go through a silent period (p.568). My observations of bilingual learners learning English through mainstream education concur with Saville Troike's beliefs. I suggest that a silent period is not a necessary phase for all second language learners and has much to do with personality and the social and psychological make up of individuals. Furthermore, I have convincing evidence that the noticing and learning of some aspects of the second language, notably vocabulary, takes place during the silent period.

Formulaic speech, multi-word units or prefabricated chunks of language, as they are variously called, which are learnt as unanalysed wholes, seem to be common in second language acquisition, particularly in the early stages (Ellis 1994). The formulas express certain functions which are

communicatively important to the learner and what is noticeable about them is that they typically contain morphology, syntax and vocabulary that the learner would not be able to construct independently. For example, one of the first phrases I teach to my newly arrived EAL pupils is 'I'm sorry, I don't understand' and they are able to use it appropriately well in advance of their ability to make correct use of the auxiliary verb 'do' and post verbal negation, which the phrase contains, in their creative utterances. The use of formulaic speech seems to facilitate communication in ritualised and predictable situations because it reduces the processing demands placed on the second language learner. Although formulaic speech is a feature in the development of second language learning it is uncertain what role it plays. Wong-Fillmore (1976 in Ellis 1994) and Ellis (1994) both found evidence to suggest that the linguistic information contained in formulaic language is, eventually, analysed into their constituent parts. The information is, thus, released and fed into the learners' knowledge system and can be used to understand and produce creative speech. However, this is not a view shared by Krashen and Sarcella (1978). Although they acknowledge the place of formulaic speech in the development of a second language, they suggest it is unrelated to rule-created speech. They believe that second language learners come to internalise the linguistic system of the second language by attending to input. They acknowledge that the use of routines and patterns is a feature of second language acquisition but that it only plays a small part in the process. I believe pupils do not always know how to attend to input but that they can be taught and encouraged to do so. In my teaching during this research project I observed that by drawing pupils' attention to the constituent parts of multi word units and by explaining the relationships between parts, the words seemed to become more readily available for creative use.

There is much convincing evidence from the literature (for example, see Hanania and Gradman 1997, Pienemann 1980, Ellis 1982), which demonstrates that second language learners' first creative utterances are simplified in much the same way as the early utterances of children learning their first language. *This simplification can be of a structural kind in which grammatical functors such as auxiliary verbs, articles and bound morphemes are omitted. It can also be of a semantic kind in which content words such*

as nouns, verbs, adjectives and adverbs are omitted. According to Ellis (1994) both kinds of simplification occur either because the speaker does not know the linguistic features or because they are unable to access them at the time of need. He thinks that structural and semantic simplification may, therefore, reflect the developmental, sequential processes of language acquisition or of language production. In the case of semantic simplification there is, as yet, little empirical evidence of the kind found in first language studies to support the notion that there is an order in which semantic roles are acquired. However, there seems to be little doubt that structural features of language are acquired in a fixed order and that there is a sequence of developmental stages evident in the acquisition of each feature. For example, there is strong evidence from what is known as the ZISA project. This is a project which studied the acquisition of German as a second language undertaken by Meisel, Clahsen and Pienemann (1981). They found that word order rules and some grammatical features of German are acquired in a definite sequence. Similar acquisition orders and developmental sequences were found in the acquisition of English by Johnson (1985, in Ellis 1994). These research studies focused on naturally occurring, unplanned use of the second language by subjects not learning the language through formal instruction. However, more recent studies have suggested that instructed second language acquisition, displays the same patterns of acquisition as naturalistic learning (Pienemann, in Hyltenstam and Pienemann, M. 1998). Pienemann (ibid) has also considered whether the orders of acquisition can be affected by formal instruction and maintains that, "...provided the learner is at the appropriate acquisitional stage instruction can improve acquisition with respect to a) speed of acquisition, b) the frequency of rule application and c) the different linguistic contexts in which the rule has to be applied" (P.37).

Second language lexical development

Most of the research investigating developmental sequences has been concerned with grammar. There is, however, a suggestion in the literature that there may be some general developmental patterns in the acquisition of vocabulary. For example, Meara (1984), reporting on a study in which he compared the qualitative differences in networks of word associations in native English speakers and English as a second language learners,

speculates that learners may go through transitional stages in the acquisition of vocabulary. Yoshida (1978) investigated the English vocabulary acquisition of a Japanese-speaking child and found that in the early stages of development more nouns were used than verbs. Wode et al's (1992) study of four German children's naturalistic acquisition of English grammar highlighted differences in the acquisition of the vocabulary in the first and second languages. They found that, firstly, the German children's acquisition of English vocabulary was more rapid in the early stages of development than was the case for the development of vocabulary in the first language. They also found that the rate of second language vocabulary acquisition slows down, whereas first language vocabulary acquisition accelerates after the initial fifty words have been learned. Lastly, they found that the kind of overgeneralisation of word meanings which are a normal developmental feature of first language acquisition are not so apparent in second language vocabulary acquisition. They also suggest that second language learners of English learn closed class items like prepositions, articles and pronouns more easily than seems to be the case with learners learning English as their first language. These differences can be accounted for in terms of the greater maturity, background knowledge and cognitive ability of the second language learners.

It seems that the similarities in the developmental processes of first and second language learning are most evident in the initial stages of acquisition. One important difference, however, is that second language learners have access to a previously acquired language system. A key issue in the education of bilingual pupils is the relationship between the two languages and to what extent proficiency in the second language is dependent on the level of competence already achieved in the first language. This issue will be discussed in the following section which looks at the development of bilingualism in social contexts.

Bilingualism

As the pupils who are the focus of this investigation are bilingual, their bilingualism is, clearly, a prominent aspect of the context of the study. In the local authority in which I work (and elsewhere in the country) the term 'bilingual' has been adopted to describe any pupil who is learning English

as an additional language to one already known. It does not indicate a level of proficiency. The development of English by bilingual pupils is, in most cases, indirectly acquired through the teaching of the National Curriculum, because, as previously discussed, there is no provision within the National Curriculum for the teaching of English as an additional or second language.

If bilingual pupils are to fulfil their intellectual potential, it is essential that their bilingualism should be recognised, understood, catered for and supported within school. During Phase Three of this investigation, I explored, with the pupils I was teaching, their own bilingualism in order to understand better the influences of their languages on the processes involved in learning English vocabulary. By building up an understanding of the languages they were exposed to and which they used in their daily lives, a background picture of their language knowledge was established. It provided a context for a description of their vocabulary acquisition. What follows, in this section, is a brief review of the literature on the topic of bilingualism which informed this description.

First, I shall discuss how bilingualism has been variously defined and how it is acquired. It will be seen that the literature reveals some confusion and a lack of clarity and consistency in the use of terms. However, more positively, it also shows a growing recognition that bilingualism needs to be viewed in relation to a variety of factors including social and cultural factors and, as Romaine (1989) indicates, it is best studied as an interdisciplinary phenomenon (p.22)

In the section 'Types of Bilingual Acquisition' I go on to discuss the ways in which bilingualism may be acquired and, in Phase Three of this study, I attempt to describe some features of my pupils' bilingualism relating them to the theories presented here and demonstrating how social and cultural factors influence the acquisition and use of vocabulary in their languages. Finally, in this section, I review the literature which reports on how bilingualism may be acquired and supported within mainstream education and discuss the implications with reference to my own pupils.

Definitions of bilingualism

The literature on bilingualism is extensive, comes from several disciplines and offers a variety of definitions which vary considerably. For example, in the 1950s Weinreich (1953) and Haugen (1953) studied linguistic and sociological aspects of bilingualism. Focusing on speaking and listening, they described linguistic changes which occurred amongst people who had contact with more than one language in America. Other researchers have studied the relationship of bilingualism to intelligence, the psychological factors involved in processing two languages and interference of the first language upon the second language. Although these early studies are interesting, they do not assist in defining the parameters of bilingualism. They have, though, stimulated a body of research which takes a more interdisciplinary approach and considers the bilinguals' use of language within their own speech community and wider linguistic environment.

Definitions of bilingualism can be placed on a continuum between what linguists describe as strong and weak versions of bilingualism and introduce an increasing number of sociological considerations. Strong versions are offered by Bloomfield (1933), who sees bilingualism as the native like control of two languages, and Oestreicher (1974), who defines bilinguals as those who have complete mastery of two languages without interference between the two linguistic systems. These definitions are not particularly helpful, for, as Mackey (1968) points out, absolute mastery of two languages is very rare, a view shared by Fishman (1968), who says that bilinguals are rarely equally fluent in both languages on all subjects. He states

“...to require that bilingualism be defined in terms of equal and advanced mastery is no more justifiable than to require that intelligence be defined as equivalent to genius or that health be defined as equivalent to the complete absence of any dysfunction” (p.122).

He prefers to define bilingualism as “...demonstrated ability to engage in communication via more than one language” (p.122). Baker (1993), who uses the terms ‘maximal’ and ‘minimal’ bilingualism to describe the parameters of the continuum, suggests that Bloomfield’s classic definition is “...too extreme and maximalist.” He questions the ambiguity of the word

'control' and wonders who forms the 'native' reference group (p.7). At the 'strong' or 'maximal' end of the continuum the literature on bilingualism highlights another term 'balanced bilingual'¹ (Lambert, Havelka and Gardener, 1959). This term was introduced to refer to individuals who are fully competent and equally fluent in both languages within a variety of contexts. Although this may be an ideal state, most bilinguals, as Hornby (1977, p.3) and Baker (1993, p.8) point out, are more dominant, i.e. fluent, competent and comfortable, in one of their languages in particular contexts.

At the other end of the scale Halliday, McIntosh and Strevens' (1964, p.75) suggest that bilingualism can be measured on a cline which at one end starts with monolinguals, who, whilst they may only speak one language, have knowledge of and use a variety of registers and styles appropriate to particular contexts. Other weak versions include Macnamara's (1967) definition, which states that even the most rudimentary ability in at least one of the language skills (listening, speaking, reading and writing) in a second language qualifies as bilingualism and Diebold's (1964) suggestion that nominal bilingual skill should be defined as "...contact with possible models in a second language and the ability to use these in the environment of the native language". More usefully, perhaps, he introduces the term 'incipient bilingualism', which identifies the initial stages of contact between, and learning of, two languages. However, as Romaine (1989, p.11) points out, following such definitions may result in people who can understand utterances but cannot produce any in the second language, being identified as bilinguals. In such situations linguists may speak of 'passive' or 'receptive' bilingualism, which is the ability to understand and read a second language without being able to speak or write it. (Baker,1993,p.17)

At the opposite end of the spectrum to the 'balanced bilinguals' discussed above, are those who are considered to have quantitative and qualitative linguistic deficiencies in both languages. The pejorative term 'semilingual' or 'double semilingual' is used to describe this group, who are, according to Hansegård (1975, cited in Romaine 1995), distinguished by small

¹Equivalent but less frequently used terms are 'equilingual' and 'ambilingual' (see Halliday et al 1964, p75) although, as noted by Romaine (1995), Baetens-Beardsmore (1982:9) does make a distinction between the two terms, equating equilingualism with balanced bilingualism.

vocabularies and incorrect grammar in both languages and by their lack of fluency and creativeness and ability to express emotional meanings also in both languages. Hansegård (ibid) introduced the notion of semilingualism whilst studying ethnic minority groups in Sweden and it was evidently supported by Cummins (1979), who used the term to describe some groups of minority ethnic children when he noted,

“there is strong evidence that some groups of minority language and migrant children are characterized by ‘semilingualism’, i.e. less than native-like skills in both languages with its detrimental cognitive and academic consequences.” (p.228).

He no longer uses the term because of the pejorative connotations it holds (Cummins and Swain, 1983, p.31). Skutnab-Kangas (1984) believes the term is more of a political concept and that “...in the scientific debate the word has outlived its usefulness and should go” (p.249). Skutnab-Kangas (ibid) is critical of the term semilingualism because of its negativism and association with immigrant minority groups and expectations of underachievement. She maintains that the term promotes the idea that the underdeveloped linguistic skills are caused by learner deficiency, when the origins may well lie in external societal conditions. She believes that the concept is based unfairly on a comparison with monolinguals and that the tests used to measure competence are insensitive to qualitative differences and rarely measure all aspects of a person’s linguistic competence. She also considers the term insupportable because of a lack of empirical data.

I wholeheartedly accept these reasons for not using the term semilingual. The bilingual pupils I worked with during the study demonstrated that they could be at least as fluent and creative with newly learned vocabulary as their mono-lingual English speaking peers when given opportunities to learn and use words. However, the evidence collected during this research (which, again, will be presented in the report in Chapter 5 of the project) does indicate weakness in general language skills and small vocabularies in both the pupils’ languages. Judging by the progress in English the bilingual pupils can make when teaching is focussed on their language learning needs and on the development of their vocabularies, it would seem that the

weakness in English is caused by a curriculum and methodology which does not properly address the bilingual pupils' needs.

Between the two extreme descriptions of bilingualism Mackey (1968) argues that the point at which an individual becomes bilingual is either arbitrary or impossible to determine. He calls for a broader description which takes into account the degree of proficiency in each of the languages, the different functions the languages perform in the speaker's life, the extent to which the speaker alternates between the languages and the degree of interference of one language upon the other. He also acknowledges the influence that such factors as age, sex, intelligence, memory, language attitude and motivation have on language learning. To this I would add that the contextual factors such as the language learning environment, which includes the quality of positive support and encouragement given to the learner, are equally influential in determining proficiency in language acquisition. I found that pupils' attitudes and motivation towards their own vocabulary development were positively influenced by the specific vocabulary teaching strategies which will be described in Chapters 5 and 6.

Although I think popular opinion probably still favours a 'strong' Bloomfieldian and Oestreicherian definition of bilingualism, their stipulation that the two languages must be 'complete', 'native-like' and 'advanced' is, in an educational setting at least, too vague, too narrow and too unrealistic to be useful. It suggests that each of the bilingual's languages would have to be compared with the language of a corresponding native speaker. However, there do not appear to be any existing frameworks which measure all aspects of, so called, native English speakers' language acquisition which correlate with factors such as age and intelligence and which take into consideration the wide range of registers, styles and regional variations of the native English speaker.

In the recent (1999) National Curriculum Key Stage 2 tests for English, which are age related and designed to assess the reading, writing, handwriting and spelling attainment of native English speaking pupils of varying abilities, three out of a group of seven bilingual pupils who had been supported in their language and curriculum learning gained a level 4, the national average and government target for all pupils. This should

indicate that they are able to read and respond to a wide range of texts and show understanding of significant ideas, themes, events and characters and that they are beginning to use inference and deduction as well as their native English speaking peers. It should also show that they are able to write to the same standard as their native English speaking peers, in a lively and thoughtful way which is appropriate to the purpose and audience and that their vocabulary choice is adventurous and that they can use grammatically complex sentences and can spell and punctuate fairly accurately (National Curriculum attainment target level 4 descriptions). That they are able to achieve all that in a second language is highly commendable; however, it is significant that the English these pupils speak and write displays many non native-like features and so they, presumably, would not be considered bilingual according to Bloomfield and Oestreicher. The problem with their strong definitions is the assumption that the two languages of a bilingual have exactly the same roles to play in the individual's life, making it necessary to be equally proficient in both languages. Certainly, this is not the case with my bilingual pupils, who, as I shall show later, use their different languages to perform clearly distinguishable functions in different contexts.

It is the weak definition of bilingualism which has been taken up in the field of education and is frequently applied to all minority ethnic pupils who have English as their second language. In this context, Diebold's (1961) term 'incipient bilingual' could be a useful way of distinguishing between the minority ethnic pupils whose proficiency in English allows them to achieve success in the national curriculum and those who, because they have had less exposure to English, need tuition in the language and support with curriculum learning. In addition to overall language learning needs, this tuition needs to address the vocabulary learning needs of pupils. It should also be routinely and consistently incorporated into the already well developed methodological approaches to the delivery of the National Curriculum.

Although the term 'semilingualism' is no longer favoured because of its emphasis on the linguistic deficiency of the individual, the concept is, I believe, still worthy of consideration. Unlike Hansegård (1975) and

Cummins (1979), who studied the knowledge and performance in both the languages of the bilingual, and found them both to be underdeveloped, I am only able to assess, first hand, my pupils' English and not their first language, Punjabi. However, during this investigation I have collected sufficient evidence to indicate that English is the pupils' dominant language in an academic context. In addition, data which I shall discuss in Chapter 5 shows that the language which the pupils select most frequently, which performs for them the greatest number of functions in the largest number of domains is English. In most cases, it is the only one of their languages which is being formally taught at school. It is, therefore, particularly worrying that so many are failing to achieve the national average level 4 in English.

Types of bilingual acquisition

The literature on bilingualism describes different ways and different contexts in which individuals may become bilingual. Two languages may be acquired in the same context at the same time; the languages may be acquired at the same time but associated with different contexts and the second language may be acquired informally or by instruction after the first language has been acquired. An important distinction is also made between simultaneous and sequential childhood bilingualism.

Simultaneous bilingualism results when children are exposed to two languages from birth (Padilla and Lindholm 1984) or from early childhood before the age of three years (McLaughlin 1978). This type of language acquisition is likely to be natural, informal and untutored (Baker 1993). Sequential² bilingualism results when one language is learned before the other and the second language may be tutored and may involve conscious learning.

Two important considerations in bilingual acquisition are the age at which the languages are acquired and the context in which they are acquired. The generally held viewpoint which states that the younger an individual begins to acquire more than one language, the more easily and successfully the languages will be learned has been questioned by Singleton (1989), who

² also known as consecutive, successive and achieved bilingualism

believes that the complex relationship between maturational, environmental and psychological factors which influence the language acquisition process make simple statements linking language learning and age simplistic and untenable. As he says,

“...the various age related phenomena isolated by language acquisition research probably result from the interaction of a multiplicity of causes and that different phenomena may have different combinations of causes.” (p.266)

Collier (1987) in her research conducted in linguistically diverse schools in America found significant relationships between rate of first language acquisition, the age of students at the time of initial exposure to the second language and their academic achievement in school. She reports that before puberty the age at which second language acquisition begins is not a critical factor for overall long term academic achievement in the second language.

However, some research evidence does indicate a correlation between age and development of specific linguistic skills. For example, there is extensive support for Lenneberg's (1967) contention that native-like phonological ability is more likely to be achieved by early acquisition of the second language but Fathman (1975) also found that older learners performed better on morphology and grammar. It may be that the greater cognitive maturity of an adult language learner enables them to proceed more efficiently through the early stages of syntactic and morphological development. What may be more significant than age in the acquisition of more than one language is the circumstances in which the language learning takes place.

Romaine (1995) has identified six types of early bilingual acquisition which are characterised by such factors as the native language of the parents, the language of the community and the parents' strategy of using language with the child. She stresses that it is the quality of the language input that is important and that a young child's language development will reflect the emotional bond between parent and child. She maintains that if the child's ties to one parent are stronger, the child will develop that parent's language more quickly. This is a belief I share. In Phase Three of this investigation I shall show how, the quality of the language input and the quality of the

relationship based on mutual trust, respect and a shared interest in developing vocabularies affected the pupils' learning and use of words.

Another distinction in the literature which relates to the different language learning contexts is between compound, co-ordinate and subordinate bilingualism. These categories, first discussed by Weinreich (1953) reflect the degree of semantic overlap between the two language systems within the individual. Compound bilinguals are thought to have a single semantic network or meaning system which is realised through two lexical systems or languages. This type of bilingualism is thought to be the result of two languages being learned simultaneously in the same context as in Romaine's 'Type 1 : One Person-One Language', where parents who have different native languages speak their own language to the child from birth. Thus, the child acquires two lexical representations for the same meaning. Co-ordinate bilinguals, on the other hand, are considered to have two separate semantic systems for the two lexical representations. It seems that this is a result of learning each language in a different context. This type of bilingualism may be typical of immigrant families where the parents share and speak to the child a common language which is different from the dominant language spoken by the wider community. Thus, the child learns one language and one semantic system at home and another language and associated semantic system at school.

In subordinate bilingualism the lexical representations of the second language are believed to be connected to the semantic system of the first language. This type of bilingualism arises when a second language is learned later and with reference to the first language as one might learn a foreign language at school.

From the evidence collected in this study it seems that the variety of bilingualism acquired by the majority of pupils referred to as bilingual in the project school most closely resembles a co-ordinated bilingualism. With little opportunity for the development of cognitive and academic language skills in their first language Panjabi, the pupils are frequently unable to make connections between the semantic and lexical knowledge of both languages. Recent research indicates that the lack of opportunity to fully develop cognitive and language skills in the first language puts pupils who

are acquiring bilingualism through mainstream education taught in the second language at a severe disadvantage.

What is important, however, is that cognitive development is continued in the first language until the age of twelve, the age at which (according to Collier 1989 p.517) language development is largely completed. Children, between the ages of 8-12 years, who have had some schooling in their first language, are most efficient in acquiring English as a second language for academic purposes. It takes this age group 2-5 years to reach average performance in school subjects alongside their native English speaking peers. Similarly, adolescent school children with "...solid L1 schooling..." acquire all aspects a second language efficiently except for the pronunciation (Collier, 1989, p.517). This older age group requires 6-8 years to reach an average grade level in academic achievement.

Collier's findings support Cummins' (1976, 1979, 1981, 1996) argument that cognitive academic proficiency in the first language aids development of cognitive academic ability in the second language. Drawing on the corpus of research from the French immersion programmes in Canada which aim to produce pupils who are bilingual in English (the majority language) and French (a minority language) without loss of academic achievement, he maintains that there must be some minimal literacy development in the first language for cognitive development to transfer readily to the second language and that this minimal "threshold" level significantly aids the process of cognitive and academic language skills development in the second language. Cummins (1996) suggests that there is a 'common underlying proficiency' which describes how literacy-related aspects of a bilingual's proficiency in the first and second language are common or interdependent across languages. This 'linguistic interdependence principle' means that pupils who receive some formal literacy skills based education in their first languages develop a conceptual and linguistic proficiency that is common across languages. These pupils are then able to transfer the cognitive, academic or literacy related skills from the first to the second language. In other words, pupils' underlying conceptual knowledge and understanding of how language works is, at the

very least, as significant in their acquisition of English as the time and age factors.

Further support for the linguistic interdependence principle comes from The Ramírez Report (1991) which compared the academic progress of Spanish speaking children in the USA in three types of schooling which differed in the proportion of time spent on teaching in the majority language English and in the minority language Spanish. The report indicates that Spanish speaking pupils can be provided with “substantial amounts” (p.39) of teaching in Spanish without any loss to their acquisition of the English language and reading skills. It also reports that there is no direct relationship between the time spent learning in English and academic achievement in English. There are many other large and small scale studies reviewed by Cummins (1996) which consistently show that “...strong promotion of bilingual students’ L1 throughout elementary school contributes significantly to their academic success” (p.121)

The majority of bilingual pupils in the project school do not have the opportunity to fully develop their cognitive and academic linguistic skills either in school or at home. They are not literate in their first language and evidence from my data, which is discussed in Chapter 5, suggests that there is very little interplay between the two language and cognitive systems of the bilingual pupils in the classroom.

Having discussed the acquisition of the language systems as a whole and of vocabulary specifically, in first language, second language and bilingual contexts, I now consider, in the following section, the teaching and learning of the specific component of vocabulary.

Vocabulary Teaching and Learning

In spite of the long British tradition of interest in vocabulary learning (Sweet, Palmer, Hornby, West and Cowie from the 1880s to the present day), by the 1980s the dominant view in much language teaching methodology relegated vocabulary to a subsidiary role in acquisition with much greater emphasis placed on grammar and, later, discourse. Since then, however, interest in EFL vocabulary teaching, has greatly increased and as

McCarthy (1990) points out, practitioners now have more to think about and more to draw from.

Computer-aided research has provided much information about how words behave and the relationships they form in real life communication. Psycholinguistic studies have provided further insights into how the mind processes and stores vocabulary and resulting from these sources of information effective teaching and learning strategies for the teaching of EFL vocabulary have been developed. There has been less pedagogical interest, however, in the teaching and learning of vocabulary in the National Curriculum despite the fact that empirical studies have investigated the lexical demands of some subject areas. The findings from these studies could provide a basis for the development of resources and a methodological approach to using and teaching words in classrooms. For example, Vorster² looked at the vocabulary in a total of 48 primary English language school textbooks used in English medium schools in South Africa. The books examined were in five subject areas: maths, science, history, geography and health education. From over a million words the data was reduced to approximately 10,000 word types through the removal of proper nouns, numbers, grammatical items, inflections and derivations. Vorster (ibid) found that approximately 50% of the word types or lexemes occurred fewer than five times and more than 60% occurred fewer than 10 times. Whilst Vorster recognises the value of exposing pupils to a rich and varied vocabulary he questions, as I do, the wisdom of introducing such a large proportion of words by means of single occurrences when, as he says, perfectly suitable high frequency words are available. The data also highlights the small number of words which were 'unique' to each subject area. In the textbooks, these 'unique' words accounted for only 25% - 31% of the word types. Vorster also found a high proportion of the non-unique words were encountered in more than one subject and suggests that this 'cross fertilisation' could be used advantageously by text book writers and, I would add, teachers who are keen to exploit opportunities to develop pupils' understandings of words.

² No date available. See citation in reference section.

Prophet and Towse (1999) have also looked at the vocabulary in science books used in Botswana and in Leeds and Bradford schools. Their interest was in pupils' understanding of 'common non technical words' appearing in their textbooks. They found that the number of these words not understood by all pupils was high but of greatest concern was the very poor performance of the bilingual pupils in the Leeds and Bradford schools. They believe, as other studies have shown (Gardener 1972, Cassels and Johnston 1980, Cameron 1996), that pupils find not only the technical language of science difficult but also the use of 'normal English in a scientific context'. These researchers suggest that teachers assume pupils automatically share their own understanding of the 'non technical' vocabulary or 'normal English'. Whilst my own data and that of Cameron, Moon and Bygate (1996) indicates that teachers spend much lesson time explaining, defining and negotiating shared meanings for scientific vocabulary which is essential to the conceptual understanding of the lesson, the meanings of many other potentially problematic words are glossed. As Prophet and Towse (1999) say, "...far too often science teachers concentrate only on the scientific content of their work on the grounds that it is not their job 'to teach English'..." (p.86). They suggest that teachers need to "...engage in much more language activity" (p. 89). Presumably, they mean the kind of 'language-conscious and language explicit approach' to teaching that Leung (1997) calls for and which I tried during this investigation to develop in my teaching and in my pupils' learning. It is, however, a methodological approach to teaching which requires knowledge outside of the curriculum and which may not have been learned by many teachers. As I shall report, teaching bilingual pupils to be successful in their school learning requires of the teacher knowledge not only of the content of the curriculum but also of the English language system and how it is acquired. It may not be a science teacher's job to teach English but it is certainly the job of all teachers and materials writers to understand how to use English so that the bilingual pupils in the classroom will understand the curriculum content.

The nature of vocabulary

In an attempt to establish a meaning for the terms ‘vocabulary’, ‘word’ and ‘lexical item’ in the context of this study, the nature of vocabulary and what is meant by understanding vocabulary will now be discussed.

The everyday concept of vocabulary is concerned with individual words and their particular meanings. It is a concept dominated by the dictionary and, in the case of second language learners, is often associated with the memorisation of long lists of words.

The concept of a word can be variously defined on a theoretical level but on a general level words can be broadly classified into two groups, content words and lexical words, depending on whether they contain lexical meaning or whether they perform a syntactic function in a sentence. Content words are the meaning carriers; the words that images can be attached to and which can be linked in the brain to networks of meanings. They are the words that can be discussed, explained and defined; the words that can be substituted for other content words. They belong to the following groups, nouns, lexical verbs, adjectives and adverbs. Content words, in single and multi word units, are the kinds of words that this study is concerned with. Function words, on the other hand, belong more to the grammar of the language than to vocabulary (Read 2000). They belong to grammatical categories such as articles, prepositions, pronouns, conjunctions, auxiliaries and hold little meaning in isolation. Their purpose is to provide syntactic structure and to make syntactic links between words. Although pupils’ attention was drawn to function words during teaching, they were not the focus of this study.

Although the research studies on the lexical demands of some curriculum areas discussed above focus on single words (or lexical items) it is recognised that vocabulary also consists of units larger than a word. There are, for example phrasal verbs, compound nouns, idioms, phrases and even whole sentences which are learned as whole units or prefabricated language. Pawley and Syder (1983) suggest that the ability to speak a language fluently is based on knowledge of units of language larger than a single word and which have been memorised as whole units and lexicalised i.e. the whole units when memorised “...constitute single choices, even though they

might appear to be analysable into segments” (Sinclair 1991 p.110). According to Pawley and Syder (1983), “...memorised sentences and phrases are the normal building blocks of fluent spoken discourse, and at the same time, ... they provide models for the creation of many (partly) new sequences that are memorable and in their turn enter the stock of familiar usages” (p. 208).

This phraseological view of vocabulary learning, which allows groups of words as well as single words to be discussed as single units of meaning, has increasingly influenced my teaching of vocabulary. During the early stages of the study the focus was on single words as they were presented in the curriculum. Towards the end of the study more attention was given to the teaching and learning of multi word units of vocabulary as I began to recognise the positive contribution they make to pupils’ fluency in speech and writing.

The nature of vocabulary knowledge

Richards (1976), provides an interesting attempt to detail the different kinds of knowledge a second language learner needs in order to speak in a nativelike way. He devised a list of what he termed ‘assumptions’ which underlie what it means to really know a word. These assumptions are that,

1. the native speaker of a language continues to expand his vocabulary in adulthood, whereas there is comparatively little development of syntax in adult life.
2. knowing a word means knowing the degree of probability of encountering *that word in speech or print*
3. knowing a word implies knowing the limitations imposed on the use of the word according to variations of function and situation.
4. knowing a word means knowing the syntactic behaviour associated with that word.
5. knowing a word entails knowledge of the underlying form of a word and the derivatives that can be made from it.
6. knowing a word entails knowledge of the network of associations between that word and the other words in language.

7. knowing a word means knowing the semantic value of a word.
8. knowing a word means knowing many of the different meanings associated with the word.

(Taken from Richards 1976, p.83)

These assumptions highlight the complexity involved in learning vocabulary but they do not account for other equally important kinds of vocabulary knowledge as Meara (1996) points out. He states, "There is nothing in the list which relates in any obvious way to the problem of active vs passive vocabulary, for instance. Nor is there anything in the list which relates to vocabulary growth or vocabulary attrition. Nor is there anything which relates to the conditions under which words are acquired..."(p.3)

Nation (1990) further developed Richards's framework and included components of receptive and productive vocabulary knowledge (see below). His model, therefore, acknowledges the stage of learning prior to being able to speak or write a word, when a learner can recognise the word when it is spoken or read.

Form

Spoken form	R	What does the word sound like?
	P	How is the word pronounced?
Written form	R	What does the word look like?
	P	How is the word written and spelled?

Position:

Grammatical patterns	R	In what pattern does the word occur?
	P	In what pattern must we use the word?
Collocation	R	What words or types of words can be expected before or after the word?
	P	What words or types of words must we use with this word?

Function:

Frequency	R	How common is the word?
	P	How often should the word be used?

Appropriateness	R	Where would we expect to meet this word?
	P	Where can this word be used?

Meaning:

Concept	R	What does the word mean?
	P	What word should be used to express this meaning?

Associations	R	What other words does this word make us think of?
	P	What other words could we use instead of this one?

Key: R = receptive; P = productive

Nation, 1990 p.31

Nation's framework is descriptive and does not explain the processes involved in vocabulary acquisition. However, it proved to be a valuable support in my teaching of vocabulary in this study. It helped me to appreciate the kinds of knowledge involved in knowing a word and the questions posed provided a framework to which I could refer when planning to introduce new words to pupils. I found that focusing pupils' attention on different components of word knowledge, increased their interest in the word and had a positive effect on productive word knowledge.

Vocabulary Teaching in ESL/EFL Contexts.

In the ESL/EFL literature there are two prominent approaches to the teaching of vocabulary. Each approach is well supported by empirical research in L1 and L2 acquisition and both are worth considering for their potential effect on bilingual learners in mainstream classrooms. One approach is based on the belief that vocabulary is acquired naturally from context and encourages extensive reading to promote vocabulary growth. The second approach recognises that not all second language vocabulary can be acquired naturally from context and promotes explicit instruction of vocabulary.

As it would never be possible to teach bilingual learners in mainstream education all the English words they need to acquire and, as bilingual pupils need to acquire some vocabulary which is likely to be new to their English monolingual peers, an integrated approach to vocabulary teaching informed by ESL/EFL pedagogy could be appropriate to all pupils. Such an approach

could emphasise explicit vocabulary instruction, and the provision of an environment from which pupils could infer meanings of words and add them to their mental lexicons. The theory supporting both these aspects will be considered in turn.

Learning Vocabulary from Context.

There is general agreement in the literature on first language vocabulary acquisition that a very large proportion of the words stored in native speakers' mental lexicons have been acquired incidentally and have not been specifically taught. Much of the evidence for this belief comes from studies, which have attempted to quantify incidental vocabulary growth that can be attributed to reading. Nagy, Herman and Anderson (1985), in a study of seventy average and above average 14 year pupils, found "...unmistakable learning from context from one or a very few exposures to unfamiliar words in natural texts." (p251). The pupils had been given either an expository text entitled "Water Systems" or a mystery story to read. They had then been tested on their understanding of target items of vocabulary which were all low frequency words identified as 'difficult' by "several raters with teaching experience" (p237). Nagy et al conclude from their results that "...a moderate amount of reading, which a teacher can influence, will lead to substantial vocabulary gains." (p252) and that "... in terms of words learned per minute, learning from context is likely to compare favourably with direct vocabulary instruction..."(p252).

Another study conducted by Jenkins, Stein and Wysoki (1984), in which 10 year old pupils were tested on the meanings of words which they had encountered 2, 6 and 10 times in texts which had been especially written to be informative about the target word meanings, also found significant vocabulary learning occurred. Unsurprisingly, the more the target word was read the deeper the level of understanding of that word.

The incidental vocabulary learning hypothesis proposed by Nagy and Herman (1985) claims that vocabulary can be learned by children through repeated exposures to the words in texts. They further emphasise that "incidental learning of words during reading may be the easiest and single most powerful means of promoting large scale vocabulary growth" (1987, p27). Whilst this is encouraging, it cannot be taken for granted that bilingual

pupils in English schools will benefit from reading in the same way. In Nagy, Herman and Anderson's (1985) study the pupils were average and above average attainers. They were, presumably, fluent readers with well developed sight vocabularies, which allowed them to comprehend the text and work out meanings of unknown words correctly. The pupils in this study are below average and studying in a second (or additional) language. Their literacy skills are poor and finding interesting texts of a suitable level in sufficient quantities is difficult.

It is unlikely that the 'substantial vocabulary gains' which Nagy et al speak about would occur when a large proportion of the words in texts which are suitable to the age group and cognitive development of the pupils are, nevertheless, unknown to them.

In a discussion on the importance of having a 'threshold' vocabulary for reading with success in L2, Laufer (1997) points out "by far the greatest lexical obstacle to good reading is insufficient number of words in the learners lexicon" (p31). It is also suggested that reading comprehension is strongly affected by vocabulary comprehension (Stahl 1983).

I agree with Nagy and Herman's (1987) argument that teachers should promote extensive reading. I could not assume, though, that the pupils I teach would incidentally acquire vocabulary as a by-product of reading unless it was part of a literacy oriented programme. Such a programme would have to feature activities which would make pupils pay attention to selected words.

Elley (1989) studied young children in second language literacy programmes and reported incidental language learning and rapid gains in reading and listening comprehension. Elley also found that reading stories to second language learners resulted in significant and long-term vocabulary acquisition. What was common in all these programmes that Elley studied was that the texts were meaningful and highly motivating.

Explicit vocabulary teaching

Traditional approaches to the explicit teaching of vocabulary in EFL classrooms have often seen the main task for the teacher to be the devising

and organizing of lists of words, and for the learner to be the memorization of these words and their equivalents in the first language. This approach is also used in mainstream classrooms in England for learning the spellings and meanings of words. It was common practice in the project school to present pupils with a list of words every week. The pupils were expected to look the meanings of the words up in their dictionaries and learn the spellings. They were then tested on the spellings but not the meanings of the words.

During the 1980s and 1990s a more sophisticated set of approaches to teaching vocabulary has been developed which recognises the greater understanding that now exists of how the mind organizes words (e.g. Aitchison 1987). The main lesson to be drawn from this research is that the mind uses multiple storage systems: words are represented both as individual items and in an assortment of combinations with other words collocationally, as well as being marked with a wide range of associations (semantic, syntactic and phonological). Sökmen (1997) offers a set of principles for vocabulary teaching that clearly reflect this prevailing trend towards diversity of presentation. She recommends the following six pedagogical principles:

1. Build a large sight vocabulary
2. Integrate new words with the old
3. Provide a number of encounters with a word
4. Promote a deep level of processing
5. Facilitate imaging and concreteness
6. Use a variety of techniques

These principles are highly relevant to the present study. Firstly, there is no doubt that having a large vocabulary facilitates further learning. Secondly, if we believe that the human lexicon is “a network of associations, a web-like structure of interconnected links” (ibid p.241), then learners of a second language need to be assisted to make these links between familiar and unfamiliar words. This is particularly important with young bilingual learners who may not have developed in their first language the corresponding abstract semantic connections. The learning of active vocabulary occurs through the integration of new words with old and makes use of pupils’ existing knowledge.

Thirdly, it is important to give learners a rich variety of exposure to new vocabulary. Knowing a word, as has already been stated, involves knowing about its frequency of occurrence, form, collocability, syntactic behaviour, and semantic features (Nation 1990). This complex knowledge can only develop with time and repeated encounters with a word in varied contexts. As I report in Chapter 4 giving pupils many opportunities to practice using words in a familiar context, for example during a science topic, does not guarantee that the full meanings of the words will be developed.

Fourthly, Sökmen suggests that teachers should encourage 'deep processing' of new vocabulary, which takes place when a greater cognitive effort is required to perform a task, such as justifying a choice of word in an exercise or relating word meaning to real world experience. Evidence collected during this project indicates that when bilingual pupils become experienced in thinking about words in different ways the more likely they are to remember the words and the more confident they become in using them.

The fifth principle is based on the 'dual-coding representation' of words in the mind: i.e. both the verbal and visual. The idea of presenting new vocabulary visually is not at all new (the use of realia has been promoted for at least 150 years).

Finally, Sökmen recommends the use of a variety of teaching techniques such as:

- Dictionary work: practising the skills needed for accelerating independent vocabulary acquisition, allowing for individual styles and strategies;
- Word unit analysis: possibly involving etymology and the ability to dissect a word into its component roots and affixes;
- Mnemonic devices: word association, rhyme, visual clues, keywords, etc., which can aid memory; these need to be individually motivated;
- Semantic elaboration: identifying semantic features, a mind-map or other diagrammatic arrangement of lexical or semantic sets;
- Collocations and lexical phrases: awareness-raising activities that can deepen learners' understanding of how words naturally combine;

- Oral production: stimulating the application of new words in the learner's productive vocabulary.

Vocabulary Teaching and The National curriculum for English Key Stage Two

The programmes of study taught during this project were directed by the National Curriculum (Department for Education, 1995)

For Key Stage Two English the following references to vocabulary are made:

- Pupils should be taught to use an increasingly varied vocabulary. The range of pupils' vocabulary should be extended and enriched through activities that focus on words and their meanings (speaking and listening, 3 b)
- Pupils should be taught to use vocabulary that enables the communication of complex meanings (speaking and listening, 3 b)
- Pupils should be taught to use dictionaries, glossaries and thesauruses to explain unfamiliar vocabulary (Reading, 2 c)
- Pupils should be taught to note the meaning and use of newly encountered words (Reading, 2 c)
- Pupils should be encouraged to use their knowledge gained from reading ... to develop ... their understanding of the vocabulary of Standard English (Reading, 3)
- Pupils should be encouraged to make judgements about when a particular... choice of vocabulary is appropriate (writing, 2a)
- Pupils should be taught to distinguish between words of similar meaning, to explain the meanings of words and to experiment with choices of vocabulary (writing 3)

The statements listed here are vague, and, as Crystal (1998) notes, "...highly repetitive, displaying little sense of development or direction" (p7) through Key Stages 1 –3.

The references to pupils being taught to "use vocabulary", "make judgements" about the appropriacy of words and "distinguish between words of similar meanings" suggest an underlying assumption that Key Stage 2 pupils will have a sufficiently well developed mental lexicon and will need only to be taught how to use it effectively and appropriately. No

guidance is given, however, on what vocabulary should be taught or how it should be taught.

From an analysis of words and phrases which refer to vocabulary in National Curriculum documents, Crystal (1998, p13) deduces that the teaching of vocabulary has five aims, which are:

- To increase size of vocabulary
- To improve precision in vocabulary use
- To promote awareness of the way vocabulary is organised
- To develop awareness of use/audience
- To generate interest in vocabulary

He stresses the interdependence of the first three aims and the importance of building networks of words, which are related semantically. He says

“... increasing the range of vocabulary inevitably increases precision, as long as the acquisition of the new item is properly integrated into the existing lexicon and this requires that we recognise the crucial role of structure.” (1998, p14).

Pupils, therefore, need to be taught what words mean in relation to the understandings they have already acquired of other similar words. “the best semantic explanations” states Crystal (ibid. p18) give more information than the bare minimum about a new lexical item, showing how it relates to other items within a semantic field. The implication here is that, as teachers, we should consciously use the kind of pragmatic directions that Clark (1997) suggests assist L1 lexical acquisition. Taking the example of introducing low frequency words to children, Clark (ibid.) says that adults intuitively

“.... in their pragmatic directions about how to relate different meanings to each other ... simultaneously show children how to relate alternate perspectives on the same entity. For instance, *is-a-kind-of* indicates that the second term is subordinate to the first ... *is-a-part-of* identifies parts or properties” (p10).

Clark (ibid.) maintains that young children fail to learn new words or fail to relate them to previously acquired vocabulary when pragmatic directions are not given.

Chapter Two

Methodological approach

The methodological approaches which I have adopted in different phases of this study have been influenced by practical needs, ethical concerns and also theoretical ideas about the relationship between research and practice in the field of education. They have, by necessity, evolved and developed as the research progressed and the focus of the study narrowed. In the initial phases, in which concerns about the teaching and learning of vocabulary were being contextualised and an overview of vocabulary teaching in the project school was sought, an ethnographic approach to qualitative data collection was implemented. This involved researching pupils' records, interviewing teachers and the systematic observation of teachers teaching and pupils learning. These were all procedures in which I worked with co-operative colleagues. However, as the study progressed and interest developed the need to actively involve other participants (colleagues and pupils) in the research process became important and was welcomed. A process developed in which I informed parts of my developing understandings gained from preliminary data analysis and discussed with colleagues their understandings of the teaching and learning of vocabulary in which we were jointly engaged. Thus, the methodological approach became more participatory and collaborative as the research progressed.

Important considerations for me, at all times, were that the methodological procedures should not impinge on other members of the teaching and support staff nor on the daily routines at school; that they could be easily incorporated into my practice as a teacher of bilingual pupils and should assist in the aim of improving that practice as well as generating the knowledge which would underpin the improved practice. In practice, therefore, an approach was needed which was not only suited to the research questions, but which would also be responsive to my needs as a teacher and researcher. I needed an approach which would, therefore, accommodate the progressive focusing as well as possible diversions to other areas of investigation and knowledge which became interesting as I explored the context and experimented with different methods of teaching of vocabulary. As the research was also interested in the wider historical, political, social

and environmental influences on the teaching and learning of vocabulary to bilingual school children, I wanted to be able to study aspects of the context in which the study was embedded as and when they appeared to be significant.

My methodology, therefore, had to have the flexibility to be able to capture, record and analyse the "...multiple perspectives of teachers and pupils..." (E835 Study Guide, p.25) some of which would be concealed in the pupils' private lives, and would require a sensitive approach in order to be ethically appropriate; some of which could be revealed spontaneously during school time. I needed to be in overall control of the project but also wanted to work collaboratively with interested colleagues and pupils when it was mutually convenient and our teaching timetables permitted it. I recognised that, with a full teaching commitment, the data collection would have to be guided, to a large extent, by opportunities as they arose and that this might affect the focus, aims and, therefore, outcomes of the study. As a practitioner first and a researcher second this aspect was inevitable. However, the original aim of investigating an area of concern with a view to improving practice has remained constant. This dissertation reflects the concerns and desires for improvement of actual practitioners and pupils and demonstrates ways in which practice can be investigated and developed in the curriculum. I discuss below the theoretical ideas which have shaped my methodological approach in relation to these practical and ethical concerns.

As a main grade teacher employed specifically to raise the achievement of bilingual pupils, I was aware that the self-appointed role of researcher must not adversely affect my relationships with staff, nor must it hamper the teaching and other duties I was employed to perform. Although the headteacher seemed happy to grant me consent to carry out the project during my working hours, my research was seen as an attempt to further my own professional development, more than a potentially collaborative investigation with colleagues into an area of mutual concern which could benefit all participants. Because of the many anxieties and increased workload which surrounded the planned closure of the school the staff were, quite naturally, focusing on their own uncertain professional futures whilst trying to maintain the high standards of teaching which was acknowledged

in the OFSTED report. I knew I would be able to rely upon some cooperation but appreciated it was unrealistic to expect staff to commit much of their time to a project which was being undertaken within an academic framework that they were unfamiliar with, which was under my control and from which I alone hoped to achieve academic accreditation.

However, an awareness that I was investigating a whole school concern about an aspect of pupils' achievement that had been raised by the staff gave prominence to the belief that some form of collaborative participation by members of staff was desirable in the study, not only to enrich the data but also to fulfil the investigation's aim of improving practice and raising the achievement of the bilingual pupils throughout the school. From a social constructivist perspective, I took the view that knowledge and understandings of the teaching and learning of vocabulary, which were constructed collaboratively through reflective social discourse, were more likely to influence and improve practice within the school than would a model of teaching and learning based on my findings from processes in which participants had not been consciously involved. I considered the research setting as a 'community of practice' (Roth 1999, p.16), where knowledge is not owned by individuals but 'situated' in physical, psychological and social context.

I therefore wanted, not only the teachers' cooperation to collect data in their classrooms, but also access to what Carr and Kemmis (1986) call "...the authentic knowledge of group members [and their] distinctive points of view..." (p.238). I needed to establish relationships with staff that would allow 'symmetrical communication', a term used by Carr and Kemmis (ibid) to mean the kind of social, political and practical discourse in which all participants communicate on equal terms and where all contributions are equally valid. I wanted to study the practice of the participants (the teachers, myself included, the bilingual support assistants and the pupils) in a way which Kemmis and Wilkinson (1998) describe as 'reflexive-dialectical', a process which can lead to change through collaborative reflection on practice within a broad framework. I hoped that through collaborative reflection, understandings of and intentions behind the teaching and learning behaviour could be discussed and analysed. I hoped, too, that this process

would lead to conscious decisions being made by the participants about how to improve the teaching and learning of vocabulary to bilingual pupils throughout the school.

The framework described by Kemmis and Wilkinson allows behaviourist, cognitivist, social constructivist and post structuralist approaches to the study of practice so that individual and group behaviour can be considered objectively from the outside and subjectively from within by taking into account participants' own perspectives. It is an approach which Kemmis and Wilkinson (1998) believe

“...sees the individual and the social, and the objective and the subjective, as related aspects of human life and practice, to be understood *dialectically* – that is mutually opposed...but mutually necessary aspects of human, social, historical reality, in which [each] aspect helps constitute the other.” (p.31).

Thus I wanted a framework which would allow participant and non-participant observation of teaching and learning and the inclusion of the participants own reflections, their “...distinctive points of view...” (Carr and Kemmis 1986 p. 238). This would, I believed, provide data rich in the collaborative interpretations of the participants' behaviour.

The approaches to research described by Roth, Carr and Kemmis and Kemmis and Wilkinson suggest that people's behaviour and actions can be best understood by an examination of the historical, cultural and social influences that shaped them, as interpreted by others and as it is understood and intended by the individuals themselves. It was important to my research that I planned for dialectic exchanges where understandings of these wider influences could develop from 'insider' and 'outsider' interpretations of behaviour observed. I needed to encourage the collaborative involvement of the participating adults and pupils so that my interpretations of their behaviour and performance could be shared with and tested against their accounts.

The sharing of insights with colleagues and pupils interested and involved in the practices of teaching and learning vocabulary would, I hoped, lead to

better understandings of these practices for all participants and create valuable data for further reflection and analysis.

I was aiming for the kind of participation which involves collaborative subjective and objective critical analysis of practices of teaching and learning so that shared understandings could be developed which would pave the way for improved performance. As Kemmis and Wilkinson point out it is "...the willing and committed involvement of those whose interactions constitute the practice [which] is necessary, in the end, to secure change." (Kemmis and Wilkinson 1998 p.22) Research on social practices conducted in this way can be described as emancipatory when the participants become empowered with the knowledge and skills to take control of, challenge and change existing practices.

As a self-appointed researcher I was also very concerned that my teaching of the curriculum should not be adversely affected by my needs as a researcher. For ethical as well as personal reasons the teaching had to be the priority during the working day. Therefore, I needed to use procedures which were unobtrusive in the classroom, sensitive to the needs of the pupils and which would not adversely affect either the teaching and learning of the National Curriculum or the achievement of the pupils. It was of paramount importance to me as a teacher that the pupils' learning was not compromised by allowing the investigation to take precedence over the teaching and, moreover, that the pupils should immediately benefit from any knowledge of the teaching and learning of vocabulary gained during the study.

These concerns about being, simultaneously, a practitioner and a researcher created some tensions throughout the project. I already knew that the National Curriculum does not explicitly address the needs of pupils' learning its content whilst also learning to use English. However, as my understanding of the pupils' vocabulary acquisition grew, the more I felt vocabulary knowledge should have a more prominent place in the teaching of bilingual pupils. Gradually, the confidence which grew from the developing understanding provided a theoretical basis for implementing changes in my own practice.

Another crucial aspect of the investigation was to gain the trust and the co-operation of a specific group of pupils who became the focus group of the study in Phase Three. In order to collect data on the strategies pupils use to learn the meanings of new words, and data which would lead to an understanding of the influences that the pupils' bilingualism had on their English vocabulary acquisition, I needed an approach which would allow me to involve the pupils as active participants in the research process. I wanted the pupils to articulate their understanding of specific learning behaviours and situations. Therefore, I needed to incorporate into my teaching strategies which would enable the pupils to recognise and describe certain behaviours of which they had not, perhaps, been previously conscious. I wanted to be able to share with them my interest in their vocabulary acquisition and the purpose of the investigations so that they could share with me their experiences of learning English vocabulary as bilingual learners. I wanted the same kind of 'symmetrical communication' with the pupils as I wanted with colleagues since as the project developed I realised their "...distinctive points of view..." (Carr and Kemmis 1986 p238) were crucial to the understandings I was trying to establish. However, I also realised gathering such data would, as Winter (1989) points out, "...involve...[me]...in new sets of relations with colleagues and clients" (p.23); in this case, in relations with the pupils which would have a more equal distribution of power than they were, perhaps, used to. A concern not to exploit or experiment on the pupils provided some initial tension, but this disappeared as action was always either justified in the interests of pupils' learning or abandoned.

I knew it would not be difficult to enlist the support of the pupils but again there were practical and ethical considerations. Because of the tensions I personally experienced in combining the teacher and researcher roles I needed to create opportunities to be with the pupils outside classtime; occasions when they would volunteer to attend, that would satisfy their own perceived needs as well as my own research needs. Although my own research needs were at times inextricably interwoven with my professional interest in developing the pupils' learning, I still had ethical concerns about encouraging pupils to share with me their linguistic histories and language practices which might be considered private in their ethnic communities. I

was also uncomfortable with taking time away from teaching the National Curriculum content.

These concerns with research being relevant to the practical interest of teachers, to be flexible, collaborative, participatory and emancipatory, are consistent with the approach to educational inquiry which has come to be known as action research. As there are many descriptions of action research, I set out below the features which distinguish it from other types of research and which are present in the methodological approach taken in this study.

Action research in education is an approach to educational enquiry which originally developed, in the early 1990s, from dissatisfaction with the dominance of educational research which was rooted in the tradition of the natural sciences and experimental methods. It differs from the kind of scientific research known as the 'engineering model' (Study Guide E835), which is characterised by its positivist notions of rationality, objectivity and truth. It is opposed to the kind of inquiry which formulates theoretical questions that are investigated within controlled frameworks usually using quantitative measures for the purpose of generating theory which can then be applied to practice. This form of educational research is concerned more with an accumulation of knowledge rather than the improvement of practice, which was the purpose of my study. The findings of research based on the scientific model are often criticised as being too theoretical and irrelevant to the work of the practitioners, and, as Hirst (1993) comments, when knowledge gained from such scientific research is translated into pedagogy or policies there is a danger that it will be implemented by practitioners who have little understanding of the underlying theoretical knowledge produced by the scientists.

However, it was within this tradition that action research had its origins. Kurt Lewin, an American social psychologist, began to develop his concept of action research in the 1940s by applying scientific procedures to social problems using a process which featured the involvement of participants or practitioners in every phase of the research programme. He developed methods by which people could participate in the systematic or scientific study of their own behaviour and attitudes in a way which was both democratic and collaborative. His framework for action research provided a

structure for practitioners to examine and describe their own professional development in social situations through a spiralling process of collective planning, acting, observing, reflecting, replanning, reacting etc. In the methodological framework which developed during this research project the participants worked together to examine practices in the teaching and learning of vocabulary.

Although Lewin's ideas were embedded within the scientific tradition of research, they influenced American educationalists who were working on such issues as the curriculum, the professional development of teachers and the effectiveness of particular teaching strategies in the 1950s. Their work paved the way for the more 'enlightened' approaches to action research in education in Britain associated with such people as Elliott, Stenhouse, Carr, Kemmis and Weiner (E325 Study Guide). Of the many discussions of action research in the literature I am most influenced by the work of Carr and Kemmis and Stenhouse. Carr and Kemmis (1986) identify three types of action research: technical, practical and emancipatory, and argue that only emancipatory action research is real action research which can transform "...practice into praxis..." (p.237). Praxis they define as informed, committed action as opposed to action which is habitual or customary. They state

"...only emancipatory action research can unequivocally fulfil the three minimal requirements for action research: having strategic action as its subject matter; proceeding through the spiral of planning, acting, observing and reflecting; and involving participation and collaboration in all phases of the research activity." (p.244-5)

These conditions are evident in my methodological approach. The cycles of investigation and action became the subject of critical reflection on action and were followed by more and sometimes changed action. Thus, the systematic study of the many cycles of action became the basis for new knowledge and new teaching and learning strategies.

The concept of collaborative participation was important to the research as the knowledge and views of teachers and pupils were crucial in determining and focussing the cycles of investigation and action. According to Carr and

Kemmis, successful collaborative participation is realised through ‘symmetrical communication’: that is, the kind of social communication between people which values all contributions equally. This was achieved easily with teachers who shared my interest in developing the pupils’ English vocabularies and who were able and willing to give some time to the project. Collaboratively we investigated the strategies we used for introducing and teaching vocabulary within our subjects and the effect of these strategies on the pupils learning.

‘Symmetrical communication’ was also important with the pupil participants because they were holders of ‘authentic knowledge’ and ‘distinctive points of view’ (Carr and Kemmis, 1986. p.238) on the learning of English vocabulary within their own bilingual environments. Rudduck (1989) points out that to be successful in this kind of social or collaborative learning activity participants must be able to “...perceive the nature of the task...” (p.215). The pupils, therefore, had to understand and have a commitment to the purpose of the investigation. This understanding, naturally, took longer to achieve with the pupils than with the teachers, but as will be demonstrated in the discussion of Phase Three, it was achieved. As the pupils’ understanding of the strategies they used grew so did their confidence in their own learning and commitment to the project.

To assist this communication I provided a framework for the pupils to systematically examine, describe and record aspects of their own linguistic behaviour. The primary outcome of these activities was to provide me with contextual information which, it was hoped at the time, would contribute information to the study of the pupils’ vocabulary development. However, the activities were also educationally valuable exercises structured within the requirements of the National Curriculum orders for English. The pupils were encouraged to work democratically and collaboratively in an examination of their language use and language learning within their bilingual environments. I believe their involvement was emancipatory in the research process when their group reflections led to new knowledge and new action.

The methodological framework involved the pupils’ engagement in the spiralling processes characteristic of all models of action research. Through

this involvement they developed language and learning skills and self knowledge. Thus, the pupils' participation in the action of the research process served various purposes. It provided me with empirical evidence from which to develop an understanding of the individual and common linguistic contexts in which the pupils were acquiring English vocabulary. It also provided opportunities for pupils to develop valuable educational and life skills which led to improved self understanding and personal development. Moreover, the 'symmetrical communication' which had been intended as a methodological tool in the research process became a crucial aspect of the classroom context and enhanced the teaching and learning of vocabulary and other curriculum knowledge.

As a practitioner–researcher I am strongly influenced by the concept of reflection. Not only is it a salient underlying feature of all the descriptions of action research in the literature but it is a crucial aspect of teaching leading to professional development. It requires a capacity to be able to appraise the processes and outcomes of teaching and learning as they occur, as well as the ability to examine and critically evaluate, retrospectively, what happened. It also requires the ability to question commonly held assumptions and to move beyond what Dewey (1933, cited in Pollard and Tann 1987) calls 'routine actions', i.e. those actions which are determined by such factors as tradition, authority, habit and institutional definitions and expectations, into what he calls 'reflective action'. Hammersley (1993) points out that Stenhouse presents a similar argument when he states that much teaching is habitual and that what must be developed by teachers are cultural habits that they can defend and justify.

It was Stenhouse who pioneered the concept of the 'reflective teacher' and the 'teacher as researcher' in Britain when he involved teachers in collaborative action research into their own practices during the 1960s and 1970s. Stenhouse's work with teachers seems to have been influenced by his belief, articulated by Hammersley (1993), that people “...are constrained by assumptions and habits built up in the past and that it is the business of education to make us freer and more creative”. For Stenhouse the essential quality needed by a reflective practitioner-researcher is

“...a capacity for autonomous professional self-development through systematic self-study, through the study of the work of other teachers and through the testing of ideas by classroom research procedures” (Stenhouse 1975).

It is the teacher who Stenhouse (ibid) sees as the central agent in the educational enterprise and the ultimate focus of his views on research.

This study is driven by a desire to improve practice in the teaching of bilingual pupils so that their achievements in the National Curriculum are enhanced. Professional self development, as an outcome of self study of other teachers’ and my own practice of working with pupils, is, therefore, a major aim of this investigation.

Chapter Three

Phase one: Reconnaissance

Introduction

The main purpose of this preliminary phase in the investigation was to develop a better understanding of the concerns that staff had expressed to me about the limited English vocabularies of the bilingual pupils. During the previous year, my first year at the school, several colleagues had suggested that the English vocabularies of the bilingual pupils' were too small to allow them to achieve their full potential in the National Curriculum. As the EAL coordinator, there was an expectation that I would investigate their concerns and implement changes in practice which would raise the achievement of the bilingual pupils.

I needed, therefore, to clarify the nature of the concern. I wanted to know what was meant by the use of the term 'vocabulary' and what vocabulary the staff felt the pupils lacked. I needed to gain a clearer understanding of the philosophy and assumptions which underpinned the staff's belief. I also wanted to identify tangible evidence to support their unsubstantiated claims. To put their concerns about the bilingual pupils' poor vocabularies into context, I also needed to construct an overview of how vocabulary was taught in the school, if indeed it was, and how pupils came to understand and use words in meaningful ways.

This initial general exploration of the situation was necessary in order, firstly, to gather the kind of background information which I needed to make sense of the problem, assess the feasibility of the study, determine its aim and narrow its focus, to ensure its relevance and manageability within the context.

Secondly, I hoped that by discussing the concern which had been identified and by making my own interest in the teaching and learning of vocabulary known, I would encourage an active interest in researching the issue, and establish that it was an area of shared concern to which the staff might feel motivated to contribute. My aim was to start the process of reflecting upon how vocabulary was being taught in the school, for, as Hodson (1989)

states, "any programme of curriculum development should start by considering current practice and the [sic] exploring teachers' perception of it". (p 240). For curriculum development to be really successful there is a need to build shared meaning, shared vision and purpose (Rudduck, 1989) and to involve teachers in discussions on content and philosophy (Simpson, 1989). By sharing my related research interests, I wanted to establish, at this early stage of the investigation, the "...atmosphere of mutual trust between all participants..." that Hodson (1989 p.240) also suggests is a necessary condition of satisfactory curriculum development.

Phase one of the investigation took place between January 1997, when I started to formally gather data, and April 1997. A project diary was started with the aim of recording observations, conversations and reflections which I felt would inform the investigation. In particular, I set out during this reconnaissance phase to collect the following data:

- colleagues' views on the teaching and learning of vocabulary
- school records of assessments on pupils
- field notes from observations of vocabulary teaching
- other information relevant to the teaching and learning of vocabulary

In addition, under the 'miscellaneous information on vocabulary' section of the field notebook, interesting data was gathered on the use of dictionaries in the school.

Each of these sets of data and the findings which emerged from them after analysis are described below. How they helped to establish an understanding of the problem and focus the research will be discussed in the conclusion at the end of this section.

Colleagues' views on the teaching and learning of vocabulary

The following research methods were used to examine the teachers' current thinking and their attitudes towards the teaching and learning of vocabulary. They were also used to determine the nature of the teachers' concerns.

- Recording, as field notes, data from informal conversations and formal discussions with colleagues
- Semi-structured interviews with teachers

Field notes on conversations and more formal discussions about vocabulary which took place amongst colleagues were noted. I initiated many of these conversations in an attempt to encourage reflective thought on the subject and share understandings. Some took place informally in corridors and staff rooms whilst the discussions were situated in year group or subject group meetings. I was, therefore, able to collect the views and ideas from staff throughout the school working within different curriculum areas and with different year groups.

As a picture of the concern, situated in its specific context, began to emerge, semi-structured interviews were held in March with two senior teachers, the science and geography co-ordinators, and a year five teacher. This was with a view to clarifying my own developing understandings of the issue with staff who seemed particularly committed to developing the project. These interviews took place privately, with the individual teachers responding to questions that I posed. The senior teachers were asked generally to describe the practice of teaching subject specific vocabulary (or 'key words' as they were commonly termed) within their specialist curriculum area. The year 5 teacher, who taught her own class most subjects, was asked to explain how she taught vocabulary across the curriculum. At appropriate times during the interview all three teachers were asked to comment more specifically on the following themes:

- What they meant by vocabulary
- What vocabulary they felt pupils lacked
- The strategies they used to teach vocabulary
- Any difficulties they encountered
- Whether vocabulary was a feature of their lesson planning
- How successfully pupils learnt the vocabulary which they were taught
- How bilingual pupils' class work and homework was marked and assessed

During the semi-structured interviews I tried to maintain a balance between questioning and listening; between steering the talk in directions relevant to the research interest and allowing colleagues to talk about what was important to them. The themes provided a structure for the discourse. My initial aim was to explore the meanings of the terms 'vocabulary', 'limited'

and ‘lack of vocabulary’, which had been used so much in discussions relating to bilingual pupils in the school. I then wanted to establish a common understanding of these terms so that the teaching and learning of vocabulary could be discussed unambiguously.

I was also interested to know whether the teachers’ perception of the bilingual pupils’ limited vocabularies influenced the assessment of their work. The variety of data collected in a range of situations made it possible to capture both the teachers’ commonly-expressed views and their more considered private thoughts.

Findings

This set of data highlighted the following themes:

concerns, that the bilingual pupils’ limited vocabularies

- restricted their access to higher levels of learning
- caused communication difficulties
- prevented them from demonstrating knowledge which they had acquired

subject specific views

- about teaching vocabulary

tensions over

- covering the Curriculum
- developing English language skills within other subject areas.

Concerns

Concern was expressed by the staff that the bilingual pupils’ low proficiency in English and their limited vocabularies prevented their full participation and engagement in lessons and caused communication difficulties in SATs resulting in below average achievement being recorded. These three themes of concern are discussed below.

Restricted access to “high levels” of school learning

It was the opinion of most teaching staff that the lack of English language vocabulary affected the pupils’ ability to learn in school. It was felt that most bilingual pupils were successful in reaching a basic level of understanding in all curriculum subjects but only a few were able to achieve

what they described as 'higher levels of understanding'. Teachers in all subject areas agreed that they concentrated mostly on "getting the basic facts across" and rarely taught a topic in the depth required for average attainment in the national curriculum. The science and geography coordinators agreed that often the learning of the majority of bilingual pupils did not progress much beyond the meanings of the key vocabulary, but that this was probably sufficient "to give pupils a basic grounding in topics" that would be "revisited" in following years. The history teachers were unanimous in their feelings that history was "the most difficult subject" to teach to bilingual pupils with a low proficiency in English language and for them to understand. These were strongly held beliefs which were common to teachers of all subjects in all age groups.

Lack of Participation

Links were made between lack of English vocabulary and the unresponsiveness and lack of participation of many bilingual pupils in class. A significant number of staff commented that many of the bilingual pupils were "monosyllabic" in their responses to teachers and that they had difficulty in providing descriptions and explanations for knowledge which the teachers believed had been understood and were part of the pupils' conceptual understandings.

Performance in the SATs and the National Curriculum

There was a strong feeling that the bilingual pupils "...weren't able to do themselves justice" in the SATs tests because they often didn't understand some of the words in the questions. "...just one new word to them that they haven't seen before throws them completely off track even if it's completely insignificant to the answer..." The science teachers felt that pupils often had conceptual knowledge but not the language with which to express it.

The maths teachers believed that the bilingual pupils made better progress in maths than in other subjects but were concerned, like the science teachers, that their lack of vocabulary and English language development disadvantaged them in national testing because of the large proportion of text in the tests.

The theme of having knowledge but being unable to express it was emphasised by a technology teacher who said that bilingual pupils had difficulty giving verbal or written explanations of knowledge which they were able to demonstrate practically. This theme was reflected by other teachers in all curriculum areas who commented that bilingual pupils were frequently unable to explain texts which they were able to fluently read.

Subject-specific views

It was felt by teachers of science that scientific vocabulary was both difficult to explain and difficult for bilingual pupils to acquire because it was often associated with abstract notions. In addition to listening to explanations and writing definitions of key words the science teachers believed that the pupils acquired the meanings of the vocabulary through activities in which they were required to use the words.

Geography teachers, on the other hand, reported that they did not experience particular problems with geography-specific vocabulary, as the words were often linked to tangible features and, therefore, they said, not difficult to explain. As the geography co-ordinator explained,

“... at this stage [middle school years] you can usually present the key words with a picture or diagram...use it as a label...and give a definition to go with it ...then all they've got to do is learn the new word with the definition...it's the same for all the pupils [i.e. monolingual English speaking and bilingual pupils]”.

There was also the suggestion that many of the resources used to teach geography made explicit links with knowledge that the ethnic minority pupils could be expected to have or which was relevant to their cultural background. Some case studies, for example, were taken from Pakistan.

The biggest concern amongst the English teachers was that the bilingual pupils' small English language vocabularies severely limited the choice of literature they were able to use in their teaching and that, consequently, the pupils were not being exposed to “...a wide choice of vocabulary”. A strong feeling was expressed that bilingual pupils' attempts at creative writing were poor as they did not have “...a big enough repertoire of words...for that kind of activity”. The use of thesauruses and dictionaries along with reading

were considered to be appropriate ways for acquiring such a vocabulary and these activities were encouraged. English teachers said that they gave explanations of words when they were asked for them or when they considered it necessary to clarify meaning when, for example, a story was being read. Some teachers were opposed to the idea of teaching vocabulary “for the sake of it” and “out of context”.

Tensions

“Getting through the curriculum” seemed to be a priority for many teachers and there was some frustration expressed concerning the difficulty of teaching pupils who don’t appear to understand and who were unresponsive. The prevailing view amongst the staff seemed to be that the lack of responsiveness was due to a low level of English language development and in particular to bilingual pupils not knowing “...words for everyday things which we just take for granted”, although other factors, such as personal attitudes and cultural differences were discussed and considered to be relevant.

Although the teachers were aware of their responsibility to develop the English language skills of the pupils alongside the development of curriculum knowledge, they said they had difficulty meeting both the curriculum demands and the language demands of bilingual pupils within lessons. The majority of the teachers (including the English teachers) felt that they lacked the knowledge and skills to adequately meet the bilingual pupils’ language needs. However, despite this acknowledgement that the teaching of bilingual pupils required specialist knowledge and skills, none of the mainstream staff had applied to go on any of the in-service courses designed to assist all teachers to better meet the needs of bilingual pupils. The reasons they offered for not taking the opportunities offered to attend these courses suggested it was not a priority (even though the majority of pupils in the school would be potential beneficiaries of the acquired knowledge). With an allowance of one course per term (which decreased to one per year during the life of the project), the staff chose to attend in-service training courses within their own subject specialisms.

All the staff expressed the view that there was insufficient support for the bilingual pupils in classes and that they experienced feelings of guilt at not being able to meet all of the pupils', sometimes very basic, learning needs.

Assessments of pupils' academic performance

The following records were examined in an attempt to identify further links between the staffs' concerns about the pupils' limited vocabularies and the pupils' achievement in school.

- First school to middle school transfer records

These records were analysed in an attempt to assess how widespread concerns about the bilingual pupils limited vocabularies were. I was interested to see to what extent it might be a prevailing knowledge structure within the school which might be associated with the subject orientated teaching system of the middle school, or whether it was also a concern of teachers of very young learners.

- Year 5 entry tests (Richmond 1996)

These pencil and paper tests are designed to give a detailed profile of pupils' attainment in vocabulary, reading, language, study skills and mathematics.

- SATs test results

Findings

The findings from this set of data highlight that,

- first school teachers shared the view that the limited vocabularies of the bilingual pupils adversely affected achievement
- standardised tests taken in year 5 on entry highlighted vocabulary as the greatest area of weakness
- bilingual pupils were performing well below the national average in the SATs tests

The feeling that many of the bilingual pupils' English vocabularies were too small to fully benefit from the teaching of the National Curriculum went beyond the confines of the project school. An examination of the year 5 pupils' transfer records written by year 4 teachers in a variety of 'feeder' first schools also cited lack of English vocabulary, together with low

English language development and extended periods of absence, as a reason for below average academic attainment.

The overall attainment of the bilingual pupils on entry to the school was low, with only 12% of bilingual pupils scoring above average in standardised reading and mathematics tests. 82% of the bilingual pupils had a reading age below their chronological age.

The results of tests (Richmond 1996), taken by all year 5 pupils on entry to the school in September 1995 and 1996, showed vocabulary as the greatest area of weakness.

The end of Key Stage 2 SATs results for 1996 showed that the bilingual pupils in the school were performing well below the national average. The highest overall SATs results were obtained in science (where the bilingual pupils scored at a level of 71% of the national average) and the lowest overall in English (where scores were only 59% of the national average), as can be seen from the table below. Reading was the weakest aspect of the English tests.

National curriculum test results

Percentage at NC level 4 or above	Bilingual pupils in the school	English	Mathematics	Science
		28.4 (59%)	30.2 (68%)	49.7 (71%)
	National	48	44	70

Teacher assessments of pupils

Percentage at NC level 4 or above	Bilingual pupils in the school	English	Mathematics	Science
		23 (41%)	20.1 (37%)	24.2 (37%)
	National	56	54	64

The science department was later, in May 1997, to be commended by OFSTED as having “many strengths” and “excellent” teaching.

Comparing the teacher assessments with the National Curriculum test results (see below), it can be seen that, for English and mathematics, teachers nationally assess more pupils at level 4 or above than the number who attain level 4 or above in the SATs tests (56:48 in English and 54:44 in

maths). In the project school, on the other hand, in each subject area, the teacher assessments for the bilingual pupils were well below the attainment achieved in SATs (23:28 in English, 20:30 in maths and 24:50 in science), which indicates a consistent pattern throughout the school of teachers having low expectations of these pupils.

The teaching of vocabulary

During the academic year 1996-1997 I was a member of the year 5 teaching team at the school and was supporting the language development and the curriculum learning of bilingual pupils in, mainly, maths, science, geography and English lessons. I had access, therefore, to the classrooms of four year 5 teachers with whom I planned and taught these subjects. For three weeks at the end of the Spring Term during March and April 1997, with permission of the teachers, I observed and recorded in my project diary examples of the teaching and learning of vocabulary, as and when I could.

I focused mainly on geography and science and English lessons. The kind of teaching I was doing in maths lessons meant that I was not able to observe the teaching of other teachers teaching maths.

Given the constraints of my own teaching timetable at the time this was the only sample of lessons that could be included in this phase of the research. However, it was felt that it offered a reasonable cross section of curricular activity within the school. The selection included subjects from the arts and sciences. It provided an opportunity to gather data from a particularly successful department in the school (as exemplified by the SATs results and, later, confirmed by OFSTED). It also provided the opportunity to examine the kind of English vocabulary teaching that was taking place in English lessons.

As the table below indicates, I worked with at least two different teachers in each subject area and, thus, supported the teaching of the same lesson content at least twice, as all the year 5 teachers normally taught the same lessons each week. I was, therefore, able to make observations of a small number of teachers teaching sequences of lessons from three curriculum areas.

As Mercer (1991 p.48) points out, participants who are engaged in social interactions and who know they are being observed may behave differently from when they are not knowingly being observed. However, I felt confident that the observational procedures that I planned would not affect the quality of the data for three main reasons. Firstly, the recording would be discreet and would not cause any disruption to normal practice. Secondly, the teachers were willing participants in the research process and similarly committed to finding ways of improving practice. Thirdly, the observations I made were to be shared with the participants to, in Mercer's words, "...help judge the representative quality of what has been observed and recorded" (ibid, p.48) and, thus, help to ensure the validity of the data.

Although the intention had been to write the field notes in the lessons as observations were being made, I found it was not possible to focus simultaneously on the needs of the pupils I was supporting and my own research needs, without disadvantaging the pupils I was responsible for. My observations were limited mainly to the periods at the beginning and end of the lessons when the teachers were addressing the class as a whole. I made no observations of teachers working with small groups or individuals. Focusing on vocabulary teaching and learning, I made notes of significant practice as it occurred, trying to record such aspects as,

- the vocabulary the teachers taught
- how teachers drew pupils' attention specifically to the meanings of new words
- what teachers said about the words
- how they explained the meanings of words.

This was with a view to analysing how the meanings of the words were conveyed to the pupils, which meanings were conveyed and which words were the focus of extra attention of this kind.

I also noted evidence of pupils' understanding and use of the words that the teachers specifically taught.

Weekly support and observation schedule

Teacher W : 2 English lessons 1 geography lesson 2 science lessons	Teacher X : 1 geography lesson
Teacher Z : 3 English lessons 1 geography lesson	Teacher Y : 2 science lessons 1 geography lesson

After some of the lessons, following a usual routine, informal discussions were conducted with the teachers. In addition to the normal reflection on how well the subject content of the lessons had been understood by pupils I focused discussion on the language content of the lesson and on the teaching and understanding of key words.

The geography lessons I observed were the first three of six lessons on the topic 'Rivers'. Each of the lessons involved the teaching and use of many low frequency, topic specific words, most of which seemed to be new to the pupils. These words were listed in the teachers' lesson plan under a heading 'Key vocabulary'. Attached to the lesson plan was a list of the vocabulary with their definitions. (see Appendix 1)

Topic-specific vocabulary used in each Geography lesson

The words specifically taught are in bold.

Lesson 1	Lesson 2	Lesson 3	Lesson 4
source	waterfall	deposition	deposition
tributary	plunge pool	erosion	erosion
stream	source	load	load
meander	tributary	material	material
channel	stream	waterfall	waterfall
flood plain	meander	plunge pool	plunge pool
mouth	channel	source	source
	flood plain	tributary	tributary
	mouth	stream	stream
		meander	meander
		channel	mouth
		flood plain	flood plain
		mouth	

Some observations were made in a total of 12 science lessons of four teachers (this included one 'cover' teacher and one supply teacher) each teaching a sequence of six science lessons on the topics 'Light' and 'Sound' over a three week period. Although the pupils were exposed to many key words in the lessons (see below), only five items of vocabulary appeared in

the teachers' planning sheets. There were no definitions of these terms given in the teacher's notes.

Topic-specific vocabulary used in each science lesson

The words specifically taught are in bold.

Lesson 1	Lesson 2	Lesson 3
Vibration	Pitch	sound
sound	vibration	pitch
vibrating	sound	vibration
voice box	vibrating	vibrating
elastic band	solid	sound waves
tuning fork	liquid	solid
	gas	liquid
		gas
Lesson 4	Lesson 5	Lesson 6
light source	light source	light source
transparent	transparent	source of light
translucent	translucent	reflection
opaque	opaque	angle
	shadow	

Observations were made in twelve English lessons taught by two different teachers. Four of the lessons focussed on reading scheme work, four on poetry writing, and four on grammar. There were no references to vocabulary in any of the teaching plans.

During the reading lessons the pupils worked in pairs taking it in turn to read to each other and working individually from published reading scheme work sheets. As the pupils' reading ages were generally well below their chronological age, the books they read were usually designed for a younger audience. Both the syntax and the vocabulary were usually easily understood by the majority of pupils. Any difficulties that the bilingual pupils encountered, in addition to the decoding of the words, were contextual.

In the poetry lessons the pupils had to write poems about Spring. This involved a walk in a nearby wood, to 'notice' signs of change since the previous walk in winter. Photographs were taken to compare with those previously taken in winter. Back in the classroom ideas were brainstormed

in groups, then collectively with the teacher writing words suggested by the pupils on the board. These words were then written into the poems.

Although the pupils were given opportunities to work creatively with words there were no observations of explicit teaching by the teachers of new vocabulary. The teachers did not introduce any new words to the pupils although they prompted them to recall as many words as they could from their existing mental lexicons.

The grammar lessons involved the teaching of nouns, adjectives, verbs and sentences. In most cases this involved the pupils copying a definition of the terms from the board or a work sheet. This activity was followed by an explanation from the teacher before the pupils did exercises from worksheets.

Findings

Several findings emerged from this set of data which are first described and then discussed below. Firstly, in brief, it was found in the small sample of lessons observed that,

- there is a quantitative difference in vocabulary teaching in geography and science lessons and in English lessons
- there are similarities in the methodological approach in the teaching of vocabulary in geography and science lessons
- some linguistic devices are used by teachers to communicate the meaning of words
- some vocabulary is explicitly taught and some vocabulary is glossed
- a narrow and subject specific focus of meaning is given to the taught vocabulary
- there is a focus on the meaning of the word rather than the form of the word

Quantitative differences

A striking feature of the data was the absence in the English lessons of practice which could be described as vocabulary teaching. This was in contrast to the geography and science lessons where teachers planned and carried out vocabulary teaching in a systematic way.

Methodological approach used in the teaching of vocabulary

In both geography and science lessons there were examples of vocabulary teaching which followed a similar pattern. The pupils were exposed to vocabulary in similar ways.

In the geography lessons the common procedure used by the four different teachers for teaching the topic specific vocabulary was, more or less, the same in lessons 1 and 2. A printed diagram (from published sources) was stuck to the board. The words were presented as labels next to the appropriate feature on a diagram depicting the course of a river from its source to its mouth. Each word was defined and the feature that the word referred to was described and explained by the teacher with reference to the diagram and the printed word. In some cases the feature was drawn on the board during the explanation. In the third lesson a practical demonstration using a slope, sand and water replaced the diagram and provided the focus for the descriptions and explanations. The definitions were given later in the lesson. After the teacher's expositions the pupils copied the key vocabulary together with definitions from the board into their exercise books. They drew diagrams and labelled them with the key words and completed cloze procedure (gap filling) exercises, which required copying text and selecting an appropriate key word from their glossaries.

The same kind of vocabulary teaching with its pattern of teacher exposition containing definitions, descriptions and explanations well supported with gesture, diagrams and visual aids was observed in the science lessons, although far fewer words were taught. As in the geography lessons the pupils were required to copy the new vocabulary and their definitions from the board into exercise books and they completed similar types of exercises. In both the science and geography lessons the pupils were encouraged to learn the words and their meanings for homework.

Linguistic devices used to communicate the meaning of words.

All the teachers used similar linguistic devices in their oral discourse to construct the knowledge of the words the pupils needed to understand. Within the definitions, descriptions and explanations they made links between the new vocabulary and assumed known vocabulary using

synonymy. They tried to selected words and phrases which they assumed would be easily understood by the pupils as synonyms for the geographical terms, as in the following examples,

“The source of a river is the *beginning* of a river... it’s the *start*”

“a meander” is a geography word for *bend* in a river”

“the river mouth... it’s the *end* the *end* of the river”

“vibration means ...*moving backwards and forwards, to and fro, up and down*”

“a sound wave is a *disturbance of the air*”

Exemplification was used by one geography teacher in an attempt to link some of the geographical features being explained to actual local examples and to the opening pictures of the TV programme Eastenders, which shows the meander in the river Thames around the Isle of dogs.

It was also used by the science teacher who described the meaning of ‘sound wave’ as, a ‘disturbance of air’. Clearly uncomfortable with this choice of words (presumably because she realised that the pupils would not know the word ‘disturbance’) she struggled to provide additional information, which would be assessable to the pupils and came up with,

“...a disturbance of air...like sea waves are a disturbance of water...and a mexican wave ...think of a mexican wave in the football stadium”

Vocabulary taught and vocabulary glossed

Only two science words were explicitly taught and entered into the pupils’ exercise books. However, many of the words used by the teachers had a meaning specific to the context and needed to be understood by the pupils. But they were not explained. For example, the teachers talked about volume, without explaining the meaning. They also used what may have been an unfamiliar pair of antonyms, ‘loud and soft’, to describe volume.

Narrow focus of meaning

All of the geography and science vocabulary was defined, described and explained entirely in relation to the topic and no attempts to link the words with other understandings were observed. For example, no mention was made of the semantic associations between ‘tributary’ and ‘contribute’ and the wider meanings of ‘meander’ and ‘channel’ and ‘mouth’ were not discussed. The words ‘transparent’, ‘translucent’ and ‘opaque’ were defined on the board for the pupils to enter into their glossaries as follows:

Transparent: light passes through
Translucent: some light passes through
Opaque: no light/some light passes through

There was no attempt by any of the teachers to help the pupils understand these abstract definitions, by explaining them in more concrete terms. They had been specifically asked not to talk about transparent objects as objects that one can ‘see through’ and ‘opaque’ objects as those which one cannot see through, by the head of the science department.

What seemed to be important in the teaching of both geography and science was to help the pupils make connections between the geographical and scientific notions and the correct terms for them. They were being taught a concept or were being introduced to an idea or a feature and were being given a word with which to label it. The focus was on subject development and not on English language development.

Focus on meaning rather than form

In the data there are no observations of attempts by any of the teachers to explain the form of the specifically taught words. All of the key vocabulary was initially presented and defined as nouns, although in some cases they were used by the teacher variously as verbs, as in

“...the river *erodes* the river bank here and it *deposits* its load here”

and sometimes as adjectives, as in

“...remember the inside of a meander is the *depositing* side...the outside is the *eroding* side”

The focus of the vocabulary teaching seemed to be on establishing the concept and on labelling it with the appropriate term. When pupils produced semantically correct responses, either in writing or orally, these were usually accepted by the teacher as correct even when they were syntactically incorrect.

Discussion

During the continuous and iterative process of reflection, analysis of the varied data, observation of practice in different curriculum areas and dialogue with colleagues some interesting themes emerged. Firstly, I felt

that the perception amongst the staff that the bilingual pupils “didn’t have the vocabulary” had become part of the prevailing knowledge structure of the school. It was grounded in feelings of frustration brought about, perhaps, by lack of specific training in, and a lack of theoretical and practical knowledge about, teaching English as an additional language. The staff were competent, experienced professionals in the curriculum areas in which they were trained to teach (as the OFSTED inspectors were to acknowledge) and worked hard to adapt and match subject content to the pupils’ curriculum learning needs. However, they were less able to identify and articulate the pupils’ language learning needs and could not specify what vocabulary they felt the pupils lacked. The result was that the pupils were not fully benefiting from the carefully prepared materials and this caused frustration articulated as ‘lack of vocabulary’.

This is not an uncommon situation. Although most teachers are aware that “language teaching is the professional responsibility of all teachers” (National Curriculum Circular 11, 1991), no specific advice is offered to help subject specialists plan and implement schemes of work to meet the language learning needs of bilingual pupils. None of the subject teachers in the project school had been on in-service training courses designed to help them meet the learning needs of bilingual pupils, and they felt insecure talking about language. The ‘knowing in action’ that Schon (1983) talks about as a kind of awareness and knowledge which is constructed by individuals through critical and creative engagement with theory and practice did not include a theoretical understanding of how languages are learned or how they work. The reflection on practice that the teachers in the project school engaged in was usually related to subject curriculum content rather than the language with which the curriculum knowledge was communicated.

Similarly, there is no mention of knowledge of the language with which teachers communicate their teaching in Shulman’s (1999) otherwise comprehensive discussion of the sources and outlines of the required knowledge base for teaching. In this discussion Shulman (ibid) outlines the categories of knowledge that underlie the teacher understanding needed to promote comprehension among pupils. They are:

- (subject) content knowledge
- general pedagogical knowledge
- curriculum knowledge
- pedagogical content knowledge (teachers own special form of professional understanding)
- knowledge of learners and their characteristics
- knowledge of educational contexts
- knowledge of educational ends, purposes, and values, and their philosophical and historical grounds.

Shulman (1999, p.64)

This omission to highlight as essential, knowledge of the linguistic processes upon which teaching relies, endorses Glasersfeld's (1989) view (discussed in the introduction of this report), that we take for granted our ability to communicate the knowledge of the curriculum through language and our pupils' abilities to understand the words we use.

In our reflective discussions the teachers had to rely on their intuitive knowledge of language and they tended to talk about the aspects that are easily understood and easily identifiable. The teachers could readily identify pupils who had 'good' or 'poor' vocabularies but could not specify what either contained.

We agreed together that by 'vocabulary' we meant lexical units consisting of single words and multi-word units that expressed a single meaning and that the main focus of our investigations was on the content words of the language, the 'meaning bearing' words.

What was interesting at this early stage of the study was that despite the staff's concern that the bilingual pupils' vocabularies were very small, the pupils were learning the meanings of new words in the geography and science lessons observed. What is more even the 'new to English' pupils with a low proficiency level of English language were successful in acquiring low frequency, subject-specific vocabulary. This learning was particularly well demonstrated by one pupil from Pakistan in her second term of learning through English as an additional language. Lacking the literacy skills to be able to complete the end of topic test on her own she did

it successfully with me. Using flashcards of the geography terms taught and a diagram of a river she demonstrated that she could,

- match the sound of the word (which I spoke) to its written form (by pointing to the appropriate flash card)
- say and read the word (after it had been spoken by me and correctly identified by her)
- correctly match the word to the feature on the diagram.
- understand the meaning of all the geography terms taught

The learning of these aspects of word knowledge supports conclusions drawn by Schmitt and Meara (1997), who found that first year undergraduate students who were learning and studying in English did not need to know all, or even most, of the basic vocabulary of the English language before learning rarer words at the lower frequency levels. This is encouraging as it legitimises the teaching of ‘new to English’ pupils in mainstream education and the learning of English language through curriculum content. It also demonstrates what can be achieved by focussing on vocabulary whilst teaching subject content.

The lack of oral participation and poor oral responses on the part of the bilingual pupils seemed to be both a concern and a cause of frustration to the staff whose practice was shaped by the belief that knowledge is constructed through socially mediated activity and discourse. There are many reasons why a pupil may remain silent or contribute little orally in class. There are reasons to do with ability, personality, attitude, understanding, pupil-teacher relationship and lack of knowledge of the culturally determined classroom discourse rules, as Cameron, Moon and Bygate (1996) have also suggested. For bilingual pupils, in addition, there may be language related difficulties. Whilst acknowledging the complex web of possible causes, the staff believed that the pupils’ limited English vocabularies were a strong contributory factor to the minimal responses they received from the pupils. This belief supports Cameron et al’s (ibid) view that not having the precise or appropriate vocabulary to express meaning in English can, indeed, hinder a pupils’ participation in classroom discourse. They state, “...differences between the lexis pupils have available and the lexis needed for accurate communication can be expected to lead to various

kinds of communication breakdown.” Reflecting on the findings, it seemed possible that the ‘communication breakdown’ caused the staff discomfort because it affected the normal pattern of teacher-pupil discourse of teacher initiation, pupil response and teacher feedback that is the dominant pattern of classroom discourse identified by Coulthard (1977). The findings suggested that the pupils often remained silent when the response to the teachers’ initiation required a form of a key item of vocabulary which they had not been taught. Talking to pupils individually after they had failed to respond to these teachers’ initiations,

Teacher W: what does the river do to the river bank here

Teacher Y: what is the guitar string doing now

Teacher Y: can you describe what is happening to the air as I blow down the clarinet

it was evident that the pupils had understood the meaning of the teachers initiation and that they had the required knowledge of the topic they were studying to respond correctly. They could even locate the relevant lexical item that the teachers had been seeking. However, they were unable to transform the noun forms (erosion, vibration, vibration) that they had been taught and which they had recorded in their glossaries into the verb forms (erodes, vibrating, vibrating) required, and they remained silent.

This seemed to indicate that the pupils had learnt the conceptual meanings of the vocabulary, which they had been taught, and that they were possibly also aware of the syntactic restrictions of the word forms. It may be that the pupils were aware that the form of the words which they had been taught would not provide a syntactically correct response. The teachers seemed unaware of this possible confusion and may have concluded that the pupils had not yet properly learnt the vocabulary. As teacher Y commented to me during the lesson “they are much slower than the present year 6”.

It was interesting to note that the pupils did not seem to experience the same reluctance to use a syntactically incorrect word form in their writing. This could have been because writing is a more private activity, which does not incur the stress of speaking in front of an audience. In the following examples, taken from pupils’ exercise books as I observed them completing

a cloze procedure exercise, the pupils filled gaps in a text with words selected from their glossaries as instructed.

If you hear a sound something must be *vibration*.

...the guitar string must be *vibration*.

The river *erosion* the outside of the meander...

...and *deposition* its load on the inside ...

It seemed to me that the pupils' focus of attention during these literacy activities was on identifying, selecting and matching a word to the scientific or geographical concept or feature represented in the sentence. The pupils were consolidating the subject knowledge that they had previously acquired and their responses were ticked as correct by their teachers. Although the teachers in most cases (but certainly not always) did also provide the correct form of the word as they marked, they did not discuss or explain the corrected word form. Their concern was clearly that the knowledge that they had taught was accurately labelled. I believe that this emphasis on content together with an over reliance on gap filling exercises limits pupils' opportunities to develop English language skills in general. In particular, it does not give them the opportunity to develop understanding of new words through experimentation and use. They were not required to express the concepts in their own words. Cameron (1996) also suggests that one cause of minimal responses from pupils is demands that are inappropriately low. She says

“Teachers ‘low expectations of pupils’ participation and production seem to be a part of a “vicious circle” in which many pupils may take advantage of the opportunity offered to them to respond at minimal level, thereby reinforcing the teachers’ expectations”. (p 10)

Low expectations of cognitively demanding activity also seemed to be part of the context in which the perceived ‘problem’ of poor vocabularies was embedded.

In the geography and science lessons the pupils’ ‘use’ of the vocabulary which they had been taught a definition for was very tightly controlled by the teachers in the form of closed oral questioning and written cloze

procedures. In the geography lessons, in particular, the pupils were required to demonstrate only that they had learned the word and its definition and could apply it appropriately. When the teachers were questioned about these strategies, which prevented the pupils building and reinforcing their own understandings of words through experimentation, the general consensus of opinion seemed to be that the bilingual pupils “needed a structure”, and that “without the support [they] wouldn’t be able to do it. However, to me it seemed that the ‘support’ was more effective as a management strategy for “getting through the curriculum” than as a means of moving the pupils through their zones of proximal development to more independent and creative forms of learning.

The low expectations which many staff had for the majority of the bilingual pupils are also illustrated by the consistently low SATs teacher assessment given. However, it was encouraging to see vocabulary being taught, learned, remembered and recalled on demand in science and geography lessons but worrying that so very little vocabulary was being developed as part of the English curriculum.

Evaluation

Phase One was successful in that, by gathering a variety of data, I was able to develop an understanding of the context in which the research on the teaching and learning of vocabulary was being investigated. Several themes emerged from the findings, an interest to collaboratively research the issue was developed and some methodological problems were experienced. I was also able to confirm that the topic was worthy of investigation, feasible and certainly relevant to the needs of the bilingual pupils.

The themes which emerged as being particularly interesting to me as a teacher of bilingual pupils investigating vocabulary teaching and learning were that:

- despite the high levels of concern expressed by staff that the bilingual pupils’ vocabularies were small, few opportunities were given to pupils to fully develop the meanings of words
- when the meanings of words were explicitly taught the teaching strategy was to provide a definition of the word
- definitions of words were narrowly focussed on the topic being taught

- no meaningful vocabulary teaching occurred in the English lessons
- dictionaries were little used as a vocabulary learning resource.

Whilst the early work confirmed that the teaching and learning of vocabulary was a complex issue, the research activity which I initiated generated a lot of active interest from some staff members. With them I was able to discuss themes as they emerged and seek respondent validation from individuals whose comments or classroom discourse I had noted.

The methodological problems I experienced concerned the tension I felt between my roles as a teacher and researcher. Frequently, the data gathering distracted my attention away from the pupils I was there to support and had to be abandoned. However, as a preliminary phase in the investigation, sufficient data was collected to make the preliminary findings discussed and the methodological approach was reconsidered for Phase Two.

Dictionaries

Examination of the data revealed a significant number of references to dictionaries and the findings from the analysis of the data are discussed below under the following headings:

- The importance of dictionaries
- Dictionary use
- Teachers' attitudes towards dictionaries

The importance of Dictionaries

It was almost a school regulation that pupils should own and take to each lesson a 'personal dictionary'. No fewer than 3 school documents (the school brochure and 2 letters home) stated this requirement. Moreover, the importance of having one was explained at a meeting with parents of incoming year 5 pupils, and discussed during assembly with pupils, who were encouraged to buy a dictionary from the deputy head teacher in person. Frequent checks on dictionaries were made by form teachers and some subject teachers and it could be a punishable offence not to be in possession of a dictionary at the time. The time given by all staff from the top downwards to emphasising the importance of 'having a personal dictionary' ensured that practically all pupils owned one, and fear of punishment

ensured that those who didn't borrowed a school copy. The school was also well resourced with dictionaries. There were nine different dictionaries in the school library and each year group had a set of 30 dictionaries and a set of thesauruses.

Dictionary Use

Despite the importance assigned to dictionaries throughout the school no observations of teacher-initiated use of dictionaries by pupils are recorded in the data for science and one set of geography lessons. Even the science teacher who started every lesson with a 'dictionary check' was not observed to refer to dictionaries thereafter in the lessons. Most pupils made no use at all of their dictionaries in the lessons. However, there were between one and three pupils in each lesson who were observed to consult their dictionaries several times in each lesson. In each case the pupil was a high achieving and above school average bilingual pupil.

In the set of geography lessons taken by one teacher some use was made of dictionaries. When pupils asked for the meaning of a word they were told by the teacher to either look it up in their glossaries or their dictionaries which they usually attempted to do. There were no observations of these attempts being supported or even followed up by the teacher and so when they failed the pupils usually resorted to copying someone else's work.

Teachers' attitudes towards dictionaries.

Conversations with a total of seven teachers in a year 5 meeting and subsequently in a science departmental meeting about the purpose and usefulness of the dictionaries indicated that the requirement to have a personal dictionary was a whole-school policy, the origins of which were "probably a directive from the top". This 'directive' seemed to be acted upon unquestioningly by staff.

Several themes emerged from the discussions. Firstly, the considered opinion seemed to be that possession and use of personal dictionaries was linked to notions of taking responsibility for one's own learning and being well organised. This was evidenced by the geography teacher's frequent reminders to the pupils to use their dictionaries. The implied message was that it was better to find information independently from dictionaries. The

fostering of independent learning habits within the pupils was highly valued as an educational aim in the school, and there were many procedures designed to help pupils acquire independence operating in the school. As one teacher suggested “its all part of growing up” and another emphasised “...it’s away of helping pupils understand that they must take some responsibility for their own learning”. All agreed that having and using dictionaries was necessary preparation for upper school.

Secondly, it was felt that dictionaries were particularly important for bilingual pupils who were learning the content of the curriculum through English as an additional language. Teachers’ felt using dictionaries would assist vocabulary development.

Thirdly, there seemed to be an assumption that pupils would know how and when to use dictionaries “they’re introduced to dictionary skills work in first school which we consolidate in Year 5”.

Finally, the belief was articulated that by encouraging the use of dictionaries the teachers would be fulfilling, in part, the National Curriculum requirement that all subject teachers should stimulate the development of bilingual pupils’ English language skills.

Discussion

These observations were consistent with my earlier and wider experiences in the school which were that the importance assigned to owning a personal dictionary was not being operationalised by the majority of staff for the purposes of learning vocabulary. There seemed to be a widespread assumption that the pupils would be able to extract required information from a dictionary. I felt that the pupils were not sufficiently skilled in dictionary use and that they were not being specifically taught or widely encouraged to use them. I was also concerned that the information contained in the dictionaries they were using was not easily accessible to the bilingual pupils. In lessons other than English the majority of pupils did not use dictionaries as a resource for vocabulary learning and they were not encouraged to do so by most of the teachers. My own feeling was that the dictionary most pupils owned, ‘The Mini Oxford School Dictionary’, the dictionary that was sold in school, was not an appropriate choice for young

bilingual learners. From my experience of working with the pupils I knew that their attempts at using dictionaries were usually not completely successful as they frequently were confronted with definitions that contained words they didn't know, or several definitions that they were unable to choose between.

These findings raised many questions to do with policy, management, teachers' knowledge, competencies, assumptions and beliefs which were not a priority for investigation at this preliminary stage in the project. However, what did interest me was whether or not dictionaries could become a useful resource for vocabulary learning for bilingual learners in mainstream. I was interested in understanding why some pupils used their dictionaries whilst most didn't, and what they used them for and whether they helped these pupils' vocabulary acquisition. This interest initiated a strand of investigation, which was developed in Phase Two and had an impact on my own teaching of vocabulary, which I researched in Phase Three.

Chapter Four

Phase Two: Dictionaries and dictionary use

Vocabulary teaching and learning in science lessons

Introduction

Phase two of the research ran from April to July 1997 in the following term. As the school prepared itself for an OFSTED inspection which took place at the end of the term, the staff, understandably, were not prepared to commit any time to the research. However, they were willing to co-operate and accommodate me as a researcher in their classrooms. So as not to put undue pressure on my colleagues, I undertook aspects of the investigation which would not require their attention.

During the first half term I investigated further the theme which had arisen during *Phase One concerning dictionaries and dictionary use*. In the second half term I acted on an opportunity which had occurred, because of an organisational change in the school, which provided me with some non-teaching periods. This allowed me to make non-participant observations of science lessons, which I also audio recorded. Being able to focus on the teaching and learning of vocabulary in the science laboratories without the responsibility of supporting pupils at the same time allowed me to collect richer and more detailed data.

Dictionaries

Findings from phase one of the investigation raised questions about the role of dictionaries in promoting the learning of vocabulary by bilingual pupils. The evidence from the data suggested that whilst the staff considered dictionaries to be a useful vocabulary learning resource, and stressed their importance, they did not seem to encourage their use in lessons, other than English. The majority of pupils didn't use dictionaries and appeared not to have developed the necessary skills to use them effectively. I was interested in constructing with the staff ways in which the dictionaries could be better used as a vocabulary learning resource. I wanted the pupils to recognise and benefit from their importance. As McWilliam (1998) stresses

“The important thing to convey to children is that dictionaries are powerful tools-of-trade in language acquisition.” (p.145).

I was, however, unsure about the appropriacy of the dictionary that most pupils owned; the Mini Oxford School Dictionary. I felt there may be factors in addition to lack of support and lack of skill which could be intrinsic to the dictionary, which prevented them from being useful to the bilingual pupils.

This interest in developing strategies which would promote effective dictionary use, coupled with my concern over the appropriacy and usefulness of the dictionary most pupils owned, generated another loop of action in the research. The purpose of this part of the research was to gain a clearer understanding of the potential usefulness of the school dictionary for vocabulary learning by the bilingual pupils. This was so that appropriate practice, aimed at more effective dictionary use, could be developed. In particular, this loop in the investigation addressed the following sets of questions:

- Is the Mini Oxford School Dictionary useful for independent vocabulary learning activity by bilingual pupils?
 - Does it supply the information they need?
 - Is the information presented in a manner, which is accessible to young bilingual learners?
- For what purposes are the dictionaries used by a small number of bilingual learners?
 - Why do they use them?
 - When do they use them?
 - What words do they look up?
 - Where do the words come from?

These questions directed the following action:

- A review of the Literature on dictionaries and dictionary use
- An analysis of the Mini Oxford School Dictionary with reference to the bilingual pupils' learning needs
- Data collection on bilingual pupils' use of dictionaries which included,
 - Focused observation of dictionary users
 - Pupils' own survey of their dictionary use
 - Informal interviews with dictionary users

A Review of the Literature on dictionaries

A review of the literature on dictionaries and dictionary use was conducted to provide a framework of reference for this spiral of the research. It revealed a lot of recent interest, both academic (e.g. Schmitt and McCarthy) and commercial (Cobuild) in the relationship between dictionaries and vocabulary and more general language learning, particularly in the learning of second and foreign languages. However, the interest does not seem to have activated studies of young bilingual learners and dictionary use in mainstream education in England. Nor does this particular learner need seem to be well represented by dictionary publishers.

This review briefly brings together some findings from previous research which have relevance to the present study. I begin by considering types of dictionary and dictionary user. I then discuss the kinds of information contained in dictionaries and the skills needed to use a dictionary with reference to young bilingual learners.

Types of Dictionary

English dictionaries can be categorised by the type and by the audience for whom they were written. There are three main types of dictionary: native-speaker monolingual dictionaries which are written for native English speakers and monolingual non-native dictionaries which are often referred to as 'learner dictionaries' and are written for the EFL/ESL user. The third category of dictionary, the bilingual dictionary, is also intended for the EFL/ESL learner.

Bilingual dictionaries are considered by educationalists to be very useful in the initial stages of learning an additional language, though some researchers believe prolonged dependency may retard the development of the target language. (Baxter 1980, Carter 1998). Research indicates that they are clearly favoured over and used more extensively than monolingual dictionaries by at least some groups of learners. In a survey conducted in Japan by Schmitt (1997) with a cross section of EFL learners from Junior high school to adult students, bilingual dictionaries were found to be the 'most used' learning strategy out of a choice of forty strategies by 85% of the respondents. They were also considered to be the most helpful strategy by 95% of the respondents. Only 35% of the respondents used monolingual

dictionaries. However, it is interesting to note that 77% of the Japanese EFL learners found that the monolingual dictionaries were helpful. This high helpfulness rating is encouraging, as it suggests that learners may more readily accept monolingual dictionary use if they are encouraged to do so. 'Learner acceptance' (Schmitt, p 225) of strategies is considered to be an important criterion for success.

Grabe and Stoller, in their study of an adult English native speaker learning Portuguese from scratch, found that a bilingual dictionary used in a 'consistent and appropriate manner' (Grabe and Stoller, 1997, p 199) appeared to have a beneficial effect on vocabulary learning and reading development. However, this adult appears to have been a highly self-motivated learner with well-developed language learning skills. Their findings, though, do correlate with those of Luppescu and Day (1993), who found that students who used bilingual dictionaries to assist reading comprehension scored better on vocabulary tests. Both studies support the usefulness of bilingual dictionaries for the learning of vocabulary.

The majority of young bilingual learners in the project school do not have literacy skills in either Urdu or Punjabi so would not be able to use bilingual dictionaries. There are, however, a small but increasing number of 'new to English' pupils who are also new to Britain and whose previous education has been in their first language, usually Urdu or Bengali. Although the contexts of the learners reported in Schmitt's, Grabe and Stoller's and Luppescu and Day's research were very different from that of bilingual pupils studying in the English mainstream school, their conclusions are worth considering. They indicate that the bilingual dictionaries that the school has could be a useful vocabulary learning resource with the 'new to English' bilingual learners if they were used consistently, appropriately and with support and encouragement.

There are some studies of native speaker monolingual dictionary use which highlight certain problems for young native English learners and which may be relevant to young bilingual learners as they are presented with vocabulary which may also be unknown to the monolingual pupils. It also seems reasonable to suggest that some of the new English vocabulary that bilingual pupils encounter will have to be linked to new concepts and new

understandings in a way similar to first language vocabulary acquisition. In Phase Three of this study I present some evidence which suggests that bilingual pupils are frequently unable to translate into Punjabi the new English words that they learn and also have difficulty talking in Punjabi about concepts that they have learned in English.

Miller and Gildea (1985) found that fifth and sixth grade students studying dictionary definitions only selected a small portion of the whole definition, the part that they understood, and used that as the word's entire meaning. This tendency to select fragments of a definition as a complete word meaning was supported by Scott and Nagy's (1989) research. They presented fourth and sixth grade students with definitions of words and asked them to judge three types of sentence. One type that used the word appropriately, another type that used the word incorrectly and the third type which was based on a fragment of the word's meaning and inconsistent with the full meaning. Most of the students responded correctly to the appropriate and incorrect sentences 80% of the time. However, they were only able to reject the fragment sentences half the time.

These findings suggest that if definitions in native speaker monolingual dictionaries are not providing the information that native speaker young learners need to make word meanings completely comprehensible, bilingual young learners will experience even greater difficulty. As Carter (1998) states

“Monolingual dictionaries, even comprehensive general purpose ones, are not, however, automatically suitable for use by and with language learners.” (p.151)

Role of Dictionaries in Vocabulary Learning

Although most foreign students of English consider dictionary use to be a valid activity for aiding comprehension and production, there is a feeling amongst some academic researchers that words should not be thought of individually, or in isolation and that dictionaries do not help students contextualise a word's meaning (Bullard 1985, McCarthy 1984). McCarthy (1984) argues that vocabulary teaching should be based on the findings of discourse analysis and the use of naturally occurring language. He suggests that the learning of words as isolated semantic problems to be resolved by

definition should be discouraged. This is a view in harmony with those who consider vocabulary is best learned from context and that the use of dictionaries disrupts the flow of concentration.

Summers (1988), however, takes an opposite view and argues that whilst context is important in deducing meaning of unfamiliar words it only provides a basis for preliminary comprehension of the text or discourse in which the word appears. She says the 'specialised elt dictionary' is "...a powerful tool.... with which to gain a further understanding of the range of new language, leading eventually to accurate production, mainly in writing" (p123), although Carter and McCarthy (1988), commenting on Summers' research, contend that dictionary use appears to result more successfully in comprehension rather than production, (p124).

However comprehension is the starting point which can lead to production. As McKeown (1993) states

"Interaction with a definition.... can be an initiating event in learning a word. The term *initiating event* is used deliberately to stress that a definition is unlikely to promote complete understanding of a word; that must come through repeated exposures to information – rich context" (p17).

These views relate to my own findings in Phase One. The dictionary-like definitions given to the pupils in the geography and science lessons enabled them to understand the words and correctly slot them into spaces in text and dialogue when required to do so. The definitions did not, however, provide what was needed to be able to produce the words independently. When, however, the pupils were taught to use dictionaries and were supported in their dictionary use, the dictionaries, did indeed, become a 'powerful tool' in their vocabulary learning, but only when they were used in conjunction with other strategies which will be described in Phase Three. The usefulness of dictionaries according to Summers (1988) is that they make students think about words beyond the context in which they were originally located. She also argues that dictionaries break down the word's meaning into its constituent parts, and introduce the word's collocates and provide further exposure to the word in other contexts.

Recent views on second language acquisition (Schmidt, 1990) suggest that it is the ‘noticing’ or the conscious attention paid to particular aspects of language and the depth of processing that determine how well it will be learnt and remembered for the future recall and use. The more that information is processed in different ways, especially information which is meaningful, it seems the better it is retained. This suggests that if pupils are taught how to use dictionaries, i.e. how to look up words, locate the appropriate sense, focus on aspects of the word which convey meaning (eg. prefixes and suffixes) and exploit the information from the dictionaries, their vocabulary development will improve. Grabe and Stoller (1997) report that even just

“... the conscious thought involved in deciding whether or not to look up a word was useful for vocabulary retention”. (p112).

The obvious educational implication here is that there is a need for teachers to encourage in pupils a curiosity and interest in words.

The most important aspect of word knowledge, particularly for the bilingual pupils who are the focus of this study, is, of course, its meaning, and the meanings of words in dictionaries are contained in the definitions. Typically, dictionary definitions involve defining an entity by identifying its genus (the class of concepts to which it belongs) and the differentia (the features which distinguish the word from others in the same class). Definitions may also involve the use of synonyms. The focus of the traditional definition is on the identification of features which demarcate the word from other words in the lexical set (Jackson 1989).

In an analysis of American school dictionaries McKeown (1993) identified four kinds of definition which might cause young learners problems and lead them to an inaccurate representation of the meaning or which would not enable them to develop a coherent meaning at all. Of these, three stand out as the most significant. The first category is ‘weak differentiation’, which

“...places the defined word within a broad, easily identified semantic domain but fails to distinguish it within the domain” (p.20).

Secondly, a definition may use defining vocabulary which, while simpler for young users, may bias them towards a literal or physical interpretation of a word rather than a dominant figurative sense (e.g. *disrupt* = ‘break up; split’). Finally, a definition may provide a series of components of meaning that are so disjointed that they fail to add up to a coherent sense.

In the next section I examine the potential usefulness of the Mini Oxford School Dictionary (MOSD) in relation to these ideas and the bilingual pupils’ needs, using McKeown’s list of potential pitfalls and the principles set out above as criteria for evaluation

The Mini Oxford School Dictionary

The Mini Oxford School Dictionary claims to be written for upper primary and lower secondary school pupils between the ages of 10-14 years, the age range of the pupils in the research setting. Its size makes it easily portable by the pupils but the small size of the print is not appropriate for young bilingual learners at the beginning stages of literacy development. Certainly, the print is much smaller than any other print which they experience in school and must make it difficult to locate the words easily. There are approximately nineteen headwords in bold print on each page. In addition to semantic information the Mini Oxford School Dictionary like most dictionaries, provides grammatical information, but differs from adult and many learner dictionaries in the manner in which some of the information is given. It avoids abbreviations, which is beneficial. The word class of each word entry appears in full and in italics after the word, eg. ‘**electric**, *adjective*’. Inflections of all verbs and plurals of nouns are spelt out in full. Instead of using the International Phonetic Alphabet, a phonetic look-and-say system is used to indicate correct pronunciation of difficult words. The word is broken up into syllables and the stressed syllable is given in bold. However, not one out of seventeen pupils I randomly questioned from years 5 and 6 knew the purpose of the pronunciation aid in the dictionary. Direct opposites are given for some words, there are some usage notes and etymologies are given for many words.

The clearest characteristic of MOSD is the brevity of each entry resulting from the reduced range of sub-senses it presents. This is to be expected in a work aimed at the younger reader. Homonyms are distinguished from sub-

senses of polysemous items in the traditional style of numbering, though the significance of the distinction is probably lost on the user.

For a dictionary of this size (with great pressure on space) the decision to include etymological information could be questioned. The fact that it claims to be a school dictionary justifies treating words to some extent academically, though knowing that *jewel* comes from Old French does not add much to the young user's practical knowledge of the word (the bilingual pupil even less so).

One area in which the learner's dictionaries have developed a distinctive style is in the use of examples (these days usually based on corpus data) to illustrate meaning (or usage). While this is clearly more problematic with less experienced language users, the MOSD claims that "many examples of words in use are provided" (p.iv). In fact, on the average page only a minority of entries include an example, and many of those suffer from the common weakness of the example that fails to delimit meaning or which includes incidental vocabulary that obscures the meaning of the headword: *execute* = 'perform or produce something' *She executed the somersault perfectly*. In this respect the dictionary doesn't do much to expose the user to a wider range of contexts or provide suitable collocates.

A further significant feature of modern dictionaries (especially those developed for the non-native user) is the usage note. These can be seen as performing a role equivalent to the classroom teacher answering the learners' questions, and have reached quite sophisticated levels in adult dictionaries. MOSD contains sub-sections of an entry called Usage, which in some cases tackle real issues of language usage, such as the modern-day meaning of *gay*. However, in most cases they go no further than a brief comment, expressed as an imperative: such as, '**guerrilla** USAGE: Do not confuse with *gorilla*'

Overall, the MOSD seems to rely very heavily on the succinct analytical definition, making little use of the wide range of alternative styles of presentation available in current learner's lexicography. In approach, it is very much a work for the native speaker user, and gives no indication that the needs of bilingual school pupils have been considered.

Pupils' Use of Dictionaries

Procedure

Because of timetable constraints my observations were restricted to pupils in whose classrooms I was working. As indicated in the table below, observations were made over a period of two weeks of seven pupils in ten different lessons. The pupils were three Year 7 bilingual pupils in 4 science lessons and four Year 6 pupils; three of them were in the same class and were observed in a total of four science lessons and the third pupil was observed in two tutorial lessons in which pupils usually completed unfinished work from any curriculum area, worked on individual projects or read.

Observation schedule

Number of pupils	Year group	Lesson	Number of lessons observed
3	7	Science	4
3	6	Science	4
1	6	Tutorial	2

The pupils were chosen because they were considered by their teachers to be the most likely pupils to use a dictionary independently. They were above school average pupils. Two of the Year 7 pupils had each achieved level 4 (the national average) in their science and maths SATs the previous year. One of those two had also achieved a level 4 in English.

In order to minimise the difficulties I had experienced in trying to combine my role of practitioner and researcher in Phase One, the pupils I was teaching and the pupils I was observing sat together with me at the same table. This arrangement meant that I could easily see their activities, and I am confident that all their dictionary use in these lessons was recorded. Although I talked to the pupils, I did not initiate any dialogue about their dictionary use, except on a few occasions when it was not obvious to me word had been looked up.

The four Year 7 science lessons were on 'health'. Lessons two and three were entirely practical.

The four Year 6 science lessons were revision for the forthcoming SATs tests. About half of each of the seventy minute lessons were very teacher dominated and took the form of reviewing past papers as a class group with the teacher. The second half of each of the lessons comprised written exercises, some of which were written by the teacher, some came from textbooks. The pupils who completed the exercises, which included all three of the pupils I was observing, were given the opportunity to study some textbooks independently.

Findings

Dictionary use by some year seven bilingual pupils in some science lessons.

Year science	7	Lesson 1		Lesson 2		Lesson 3		Lesson 4	
Pupil A		nutrition	E	kilojoules	E				
Pupil B				kilogram	E			conclusion	
Pupil C									

Key: T – word from textbook, E – word from teacher’s worksheet or boardwork

Dictionary use by some year six bilingual pupils in some science lessons.

Year science	6	Lesson 1		Lesson 2		Lesson 3		Lesson 4	
Pupil D									
Pupil E		eject	T	irreversible	T	occurs	T	deprived	T
		moisture	E			nutrient			
		anchor	T						
		decay	T						
		avoiding	T						
Pupil F		eject	T	starch	E			sensitive	E

Key: T – word from textbook, E – word from teacher’s worksheet or boardwork

The research exercise provided a small example of what words some of the most able pupils in the school look up in their dictionaries. With the exception of the Year 6 lesson one, it can be seen from the table above the bilingual pupils made very little use of their dictionaries. Although with such a small case no conclusions can be drawn, the results did go some way to confirming what I believed to be the norm, that very little use was made of dictionaries.

Pupils' survey of dictionary use

After having carried out my own observations of bilingual pupils' use of dictionaries in naturally occurring classroom situations, I invited Pupils E and F and two other pupils from Year 6, G and H, to conduct a survey of their own dictionary use in school. Again, although the number of pupils sampled is small, it was believed by staff that the four pupils were probably representative of the total number of pupils who independently and consistently used a dictionary. All four pupils were in the top of five sets for English.

At a preliminary meeting I explained to them my interest in finding out how dictionaries were being used by pupils in the school: what sort of words pupils looked up and where the words which were looked up came from.

Together we discussed how this information might be collected in such a way that it would not distract their attention from the teacher and together we drew up a proforma (see Appendix 2) which required only a small amount of writing and some marking.

In anticipation that the pupils' interest and enthusiasm for the project, which they knew they had been especially selected to carry out, might result in a greater number of words than usual being looked up (and looked up only for the purposes of being able to complete the proforma), I decided to monitor their data gathering activities closely for a trial period and for however long it took for the pupils to systematically record only those words that they needed and wanted, for reasons other than the survey, to look up. A new proforma was used every day for five non-consecutive days.

Findings

The data collected from the pupils' surveys was too unreliable to draw any conclusions from. The number of words they collected over a three-week period up to the end of term far exceeded the number of words that they had been observed to record.

Vocabulary teaching and learning in science lessons

Introduction

Because of the difficulty experienced in trying to combine my teaching of the bilingual pupils with observation of the classroom teacher I welcomed the opportunity to carry out some non-participant observation during some periods of non-contact time. It allowed me to concentrate my energy on the issues being investigated without distraction and collect a greater amount of richer data.

I was given access to the classrooms of two teachers who had been particularly interested in the research during Phase One and who were teaching science at the time I was able to observe. This suited the research because it enabled me to build on and strengthen the knowledge already gained on the teaching and learning of vocabulary in one curriculum area. In addition, observing teachers who were similarly committed to improving their pedagogic practice in teaching bilingual pupils, and who had become particularly interested in vocabulary acquisition during the project, provided opportunities for respondent validation, through discussion with the teachers, of the findings and tentative claims I was making. I realised that the kind of collaborative analysis characteristic of participatory action research would not be possible during this particular stage of data gathering, due to the difficulties being experienced in the school which were unforeseen at the beginning of the project. However, I knew that I would be able to seek clarification and the views of the teacher participants when themes emerged.

Findings from Phase One had already identified that in the teaching and learning of vocabulary,

- the methodological approach used in the science lessons observed followed a pattern of teacher exposition containing definitions, descriptions, and explanations which were well supported with visual aids
- pupils listed new vocabulary in glossaries
- pupils' use of the new vocabulary was restricted
- some linguistic devices were used by teachers to communicate the meaning of words

- some vocabulary was specifically taught and some vocabulary was glossed
- a narrow and subject specific focus of meaning was given to the taught vocabulary
- there was a subject specific focus on the meaning of the word
- there was no focus on the form of the word

The purpose of phase two was to collect additional data which would allow further analysis of these themes and others which might emerge. I wanted a richer data bank which would allow more detailed description of the kinds of discourse and linguistic strategies that I had already seen some teachers using in the classroom to help pupils understand and use certain vocabulary. I aimed to capture, in the form of audio recordings and detailed field notes, naturally occurring evidence of the teaching and learning of vocabulary which normally took place in the school's science laboratories.

Because of my interest in the social processes involved in the teaching and learning of vocabulary and in a way characteristic of qualitative research I hoped,

“...to penetrate the layers of meaning and to uncover and identify the range and depth of situations and perspectives”

(The Open University, E835, p.87)

of the study by establishing significant features and recurrent sequences of events in the data. From the data I hoped to develop a framework of grounded theme analysis which could be discussed and developed through practice with colleagues.

I describe below the particular contexts in which the non-participant observations took place and the procedure followed before describing and discussing the findings.

Context

Two pairs of lessons, each 70 minutes in duration, taught by two different teachers, were observed and audio recordings were carried out in the first of each pair.

Teacher A is a science specialist and was teaching a sub-topic about friction, from a larger programme of study on ‘forces’, to a Year 7 class. The pupils had already been introduced to the word and the concept ‘friction’ in Year 6 and were reintroduced to the term and concept in the previous lesson. In the first of the two recorded lessons the teacher spent almost 50 minutes talking to the pupils, recapping and reintroducing previously taught concepts and vocabulary and then introducing the new focus, which was on a “special type of friction, resistance”. The second lesson involved the pupils in the practical activity of measuring air resistance. This involved the building of a ‘buggy’ out of Lego bricks and wheels. They then had to attach to the buggy pieces of card of various sizes, roll the buggy down a ramp and ‘discover’ the relationships between speed and surface area. It was intended that this ‘discovery’ would lead to an understanding of ‘resistance’.

Teacher B is not a science specialist although she is experienced in teaching science to Year 5 pupils. She was observed and recorded teaching the first two lessons in a sequence of five lessons on the topic of electricity to a Year five class. In the first lesson the pupils were introduced to the apparatus and watched the teacher demonstrate the construction of a simple electrical circuit which lit a bulb. The pupils then worked in groups making their own simple circuits. In the second lesson the pupils investigated material which electricity could pass through. This involved setting up a simple electrical circuit as they had done in the previous lesson and introducing into the circuit various materials like metal paper clips and plastic rulers. They recorded observations in a grid and then wrote up the activity following the usual headings, ‘apparatus, method, results, conclusion’, which the teacher had written on the board.

The teachers were accustomed to having other adults (teachers and support assistants) in the classroom with them as they taught, and so I felt confident that my presence would not affect their delivery of the lesson or, subsequently, the validity of the data. Both of the participating teachers were interested in improving their own knowledge of language development and practice in meeting the needs of the bilingual pupils. They recognised the value of the kind of collaborative investigations discussed in Chapter Two on the methodological approaches associated with Carr and Kemmis

(1986), Kemmis and Wilkinson (1998) and Roth (1999) and were not unaccustomed to peer observation and critical feedback. The fact that they may have focused more than usual on how they presented and treated new vocabulary during these lessons that were being recorded was not considered detrimental to the validity of the research. The agreed purpose of the research, primarily, was to improve practice by collaboratively examining, challenging and changing existing practice, and the intention was to discuss with the teachers the effectiveness of the strategies they used to help the pupils acquire the meanings of words.

Procedure

Prior to each of the 70-minute lessons, a cordless radio microphone was clipped discreetly and unobtrusively onto the teacher's clothing. A small transmitter was carried out of sight in a pocket. The recording machine was also placed out of sight at the back of the room. Both teachers said that they were completely unaware of the equipment and that it had not affected their delivery of the lesson. None of the pupils made any comment about the equipment, and I believe that they were unaware that their teacher was being recorded. As I knew the equipment was unlikely to pick up pupil talk I did not feel it was necessary to seek their permission and I did not volunteer any explanations, although I would have been happy to have provided them. I felt that this unobtrusive method was appropriate to the type of data I wished to collect and would, thus, help to ensure validity of the eventual descriptions. The recordings were transcribed on the same day that they were collected whilst the classroom discourse was still vivid in my memory and to ensure greater accuracy.

Both teachers gave me access to their lesson plans and discussed their intentions with me before the lesson began. Teacher A's plans were in a personal notebook and were headed with the word 'Friction'. No key vocabulary was noted. Teacher B was following the shared Year 5 lesson plan written on a proforma on which there was a section headed 'Vocabulary'. In this section the following words were listed: 'circuit', 'cells', 'crocodile clips', 'lamp', 'circuit board', 'leads', 'switch'. These words also represented the equipment that the pupils used in the lesson for their practical work. No definitions of the vocabulary were noted.

During the lessons I sat in an unused corner at the back of the laboratory as a non-participant observer and wrote field notes. As a backup for the recording I tried to provide a context for the speech and wrote down what the teachers were doing as they talked to the pupils. I also tried to record the pupils' reactions and their utterances, as I did not expect the latter to be picked up on the microphone. In addition, I attempted to copy down the board work and record the extra- linguistic features which gave meaning to the speech that was taking place so as to have the kind of data which Geertz calls 'thick description'. (The Open University, E835 Study Guide) Each of the lessons was reviewed with the teacher after it had taken place. I also talked to the pupils during the lesson when they were engaged in activities and at times after the lesson. This was done with a view to gaining an impression of the pupils' understanding of the key vocabulary that was used and introduced during the lessons. Notes on these conversations were recorded in the project diary.

The data comprising transcribed audio recordings and field notes were analysed and then discussed with the two teachers, who also provided clarification, confirmation and correction of some of my interpretations. Having the opportunity to engage in this kind of respondent validation of the data was helpful and made the findings more secure.

Findings

The data provided more evidence to support some findings from the first stage, that teachers, in their teaching of vocabulary in science lessons, focus on meanings which are relevant to the scientific concepts they are dealing with; focus only on the meaning of the word and not on the form; and that the pupils are not very responsive to the teachers' questions about the meanings of words. Furthermore, the data revealed some additional, interesting findings. Present in the two teachers' discourse were recurrent features which seemed to be linked to their teaching of vocabulary. There were examples of,

- repetitions of the key vocabulary
- formal requests for definitions of key vocabulary
- informal requests for definitions of key vocabulary
- teachers' attempts to jointly construct the meaning of words

- teachers' deliberate omission of key words
- definitions given
- linguistic frameworks to scaffold the acquisition of the meaning of words

Repetition of key items of vocabulary

A significant feature of the data was the large number of times that each teacher used the key words of the lesson within her utterances. For example, during two minutes of discourse at the beginning of each lesson Teacher A used the word 'friction' 17 times and Teacher B used the words 'electrical circuit' 15 times. Both of these vocabulary items encapsulated the scientific concepts that were the focus of their discourse. I suggest that making particular words prominent in this way identifies them as important in the context. For some less proficient bilingual pupils the repetition helps to highlight the word as important within a stream of other words that the pupils may not be properly understanding. The strategy of often repeating key vocabulary seems to have a positive effect on learning to recognise the word, but does little to develop an understanding of the word. Speaking to one 'new to English' Year 6 pupil at the end of both of the science lessons, in which she had received no extra teacher support, she was able to tell me that the lessons had been about friction and to agree with me that the second lesson was to do with 'resistance'. She had, it seemed, learnt to say and recognise these words but not necessarily to understand them. Initially, it can be assumed, the word symbolised for her a wide, generalised meaning, which was gradually refined as the experiences with the word in the science lessons increased.

This is a pattern of language acquisition similar to first language acquisition, which suggests that children recognise key words in routine phrases and initially associate them with a collection of actions and then, eventually, with the object itself. (Cooke and Williams 1985) It seems reasonable to suggest from the evidence collected so far that the recognition of a particular word within a stream of speech is a first step in the understanding of the meaning of particular words in the second language classroom.

Formal requests for definitions

Both teachers frequently asked pupils to explain their understanding of key words which arose as they talked to the class. Sometimes the words were those which the teachers knew had been previously taught and which they believed should be familiar to the pupils. In the following three examples from discourse which occurred at the beginning of lessons, it was the intention of the teacher to explore the pupils' understandings from previous lessons and to establish a context for the new work by making links with what pupils had already been taught. In each case the link which they select is an item of vocabulary (force, friction and power) which they ask pupils to explain.

Teacher A : ok...so what is the topic we are learning about weve been learning about all term

Pupils : forces

Teacher A : forces... what is force

Teacher A : what does friction mean

Teacher B : electricity is a form of... a kind of power... what does that word power mean

Sometimes the teachers asked for the meanings of words which they knew the pupils had been exposed to in other curriculum areas. For example, knowing that the pupils did circuit training in PE, she asked,

Teacher B : whats a circuit

In the next example, which is taken from discourse at the beginning of the second year 7 lesson the teacher is outlining part of the task the pupils are to engage in. She knows that the design technology teacher uses the word 'construct' in his lessons and makes a deliberate attempt to draw the pupils' attention to the common vocabulary.

¹ All transcription is faithfully reproduced as heard. It is unpunctuated so as to preserve its character as spoken discourse and so as not to impose too much of my own interpretation. Short pauses and long pauses are indicated by three (...) or six (...) periods. Inaudible utterances are indicated thus ///.

Teacher A : so youre going to be constructing a buggy what does
constructing mean

Sometimes the teachers asked for the meanings of words which they introduced into the discourse and assumed pupils would know from their out of school experiences. For example when explaining how to calculate the degree of air resistance, the teacher wanted the pupils to think of 'speed' in terms of distance and time, and so she asked the following questions,

Teacher A : right so speed is what... tell me somebody.....what exactly is speed.....how do you know how fast your father is driving when you come to school in the morning.....

Pupil 1 : ///look at the...///

Pupil 2 : look at the /// thing

Teacher : and what does that tell you

Pupil 2 : the speed

Teacher : yes.....but what exactly is speed

In the first of the year 7 science lessons the teacher explains that in the following lesson the pupils will have to construct a buggy. She uses the word several times in the apparent belief that the pupils had already a mental construction of the word's meaning. She then asked the question to which she got no response,

whats a buggy

In a similar way, Teacher B tried to invoke pupils' out of school experiences by asking for other words to use in place of the scientific term 'lamp' when she asked,

whats another word for a lamp

These questions I have called *formal requests for definitions* because of their precise and unambiguous wording and authoritative stance/genre which implies that there can only be one right answer. To provide correct responses to these lower order cognitive questions (Cohen and Manion 1989), the pupils had to recall previously learned material, and apply it. As the teachers confirmed when we discussed the data and tentative findings some time after the lessons had taken place, the purpose of these questions

was to focus the pupils on the topic and establish what they had previously learned before moving on. However, in my data from these particular lessons, these questions were rarely successful in providing responses the teachers seemed to want. In each of the examples above, the pupils failed to provide a definition or explanation of their understanding of the word. In most cases they remained silent or gave minimal responses. According to the teachers the pupils had been introduced to the meanings of the words 'friction', 'force' and 'power' in previous science lessons and used the words 'circuit' and 'constructing' in other curriculum areas. The teachers felt that the pupils "ought to know them" (Teacher B).

In addition to the factors which may contribute to minimal responses of bilingual pupils raised by Cameron et al (1996), which have been discussed earlier in this report, it also seemed to me from my data that the pupils didn't remain silent because they didn't know the answers, but because they couldn't frame the answers in the same kind of analytical and scientific framework in which the question had been posed. They may even have found these frameworks intimidating. In the examples of the formal questions testing previously taught knowledge, my observations during the lessons suggested that the pupils were searching their mental lexicons (and in one or two cases their exercise books, although this was frequently discouraged) for a precise definition to match the precise question. I watched and listened to one pupil who quietly rehearsed a definition which he couldn't get right. A need for precise definitions seemed to be encouraged by a number of factors: firstly, by the formal, analytic scientific framework in which the questions were framed; secondly, by the emphasis the teachers generally put on learning the words and definitions in their glossaries and exercise books for homework; thirdly, by the very positive reaction of the teachers when pupils did, occasionally, produce a well-learned and recalled definition. It seemed that the closer the definition was to the teachers' original definitions, the more positive the teachers' reactions, thereby reinforcing the impression that the best responses were exact reproductions of the original definitions. Teacher A at the beginning of both of her lessons also signalled to the pupils the importance of remembering definitions when she gently reprimanded pupils who searched

for the words and definitions in their exercise books in lesson one, by saying,

“...what can you remember what were we talking about last week
friction ok friction what does friction mean who can give me a
definition of friction no I didn't say look in your books”

and in lesson two, when she asked the pupils to spend five minutes testing each other on the meanings of words in their glossaries, she said (modelling the formal type of request for definitions being discussed here)

“ask each other what does force mean friction what does resistance
mean
get your books out check each others definitions”

Interestingly, none of the six exercise books that I looked in had the words ‘friction’ or ‘resistance’ listed in the glossaries, although the words had been defined orally in the previous lesson.

Observing the pupils during this activity it seemed to me that the focus of their attention was on memorising precise wordings of definitions rather than understanding the meaning. For example, one pair of pupils engaged on a sequence of actions in which they repeatedly read aloud a definition for the word ‘force’ from their exercise books then closed their books and chanted it in unison before listening to each other repeating it.

Whilst there may be sound educational reasons for this kind of rote learning of word definitions, which it is beyond the scope of this dissertation to discuss, I would suggest that it has little effect on deepening the pupils’ cognitive understanding of the meanings of the words. It may help pupils to articulate *an* understanding of a word but one which is not necessarily their own and will not necessarily become their own merely as a consequence of memorising definitions. Whilst this may be part of the process of developing general language skills, the memorising and reproduction of large chunks of language which are not properly understood may give teachers a false impression of the pupils’ understandings. However, it may also be the case that the teachers’ widespread underestimation of the pupils’ knowledge, as demonstrated by their consistently low SATs predictions, is related to the pupils’ unwillingness to respond to teachers’ formal requests for definitions when they were not able to remember the precise definitions.

There are many entries in my field notes of pupils' responses to my questions asking them why they didn't respond to the class teachers' formal request for a definition and asking them about the meaning of specific words. Frequently, they said "I know it but I can't say/explain it".

The formal requests for definitions of words not yet properly understood by pupils at best only further signals to the pupils the importance of the words as key vocabulary in the context to which they must attend.

Informal requests for definitions

My data from the four science lessons observed indicates that the formal requests for definitions of words rarely received any response from the pupils. The lack of response usually caused the teachers to rephrase the question, in some cases many times, as the following examples taken from introductory discourse at the beginnings of lesson show. (These examples were continuous utterances by the two teachers. They are presented in this way for discussion purposes.)

- | | |
|-----------------|---|
| Teacher A 1.a) | whats friction |
| b) | whod like to give me an explanation of what friction is |
| c) | offer me an explanation |
| d) | what does friction mean |
| e) | explain it to someone whos never heard it before |
| f) | how would you describe it |
| g) | what would you say it was |
| Teacher A 2. a) | what is force |
| b) | ok what are forces |
| c) | what dyou think of as forces |
| d) | anyone give me any example of a force |
| e) | can anyone give me an example of a force that you use |
| f) | maybe in PE for example |
| Teacher B 3.a) | whats a circuit |
| b) | common think I know you've heard that word before |
| c) | whats a circuit |
| d) | I know mrs ... uses that word when shes teaching you and so does mr.... |

These discourses of gently trying to coax a definition from the pupils seemed to be an attempt by the teacher to make the social environment less threatening and more conducive to pupils' participation during periods of the lesson which were entirely teacher dominated. In the examples above, after the initial formal requests for definitions which seemed to require

predetermined responses (in 1(a), 2(a) and 3(a)) had failed to bring about any responses, the teachers abandoned the formal questioning framework. Instead they adopted an approach which seemed to become increasingly socially communicative and less threatening as it sought the pupils' own understandings of the words. The teachers used the pronouns 'me' and 'you' to personalise the questions and requests. This seemed to provide real possibilities for allowing the pupils to test out their own, sometimes incomplete, understandings of the words, as in utterance 1, when Teacher A asked,

- f) how would you describe it
- g) what would you say it was

and in utterance 2, when the same teacher asked,

- e) can anyone give me an example of a force that you use

The teachers also tried to activate the pupils' imaginations by suggesting imaginary scenarios (Teacher A 1(e)), and they tried to invoke mental images of common understandings in an attempt to provide a different and non-scientific context to which the pupils might link their explanations. For example, Teacher A in 2 (e) and 2 (f) asked the pupils if they could think of a force that they use in their PE lessons and Teacher B in 3 (d) attempted to link the word not only to another subject area but also to other teachers in the school. I believe that the teachers were attempting to construct a more familiar mental context around the words than the scientific context in which the pupils were physically situated. They were "providing bridging between novel and new contexts" and "using analogies to identify similarities between situations" (The Open University, E836 1999, p.92) The intention was to reduce the demands of the situation and the task i.e. to make it easier for the pupils to articulate their own understandings of the words which they had been taught by linking them to a more familiar situation. This intention was confirmed by the teachers in our discussions of the transcripts and findings.

This socially more communicative approach, which I have termed *informal requests for definitions*, had a more positive effect in increasing the pupils' responses than the *formal requests for definitions* but still did not, in my data, bring the level of response from the bilingual pupils that the teachers

wanted. This may have been due to a variety of reasons including underdeveloped classroom discourse skills as identified by Cameron et. al (1996). Equally, the unresponsiveness of the pupils may have been caused by the complexity of the task, for even when the conceptual meaning of a word in a person's productive vocabulary is properly understood, it is not always easy to give an explanation of the word on demand, as many teachers who are put on the spot in classrooms find. The pupils' general lack of responses to the examples above may indicate that some of the explanations of vocabulary which were sought by the teachers had been taught in such a highly topic-specific way and were so tightly bound to a specific context in which they were first presented that the pupils did not realise the wider applications of the words. For example, the work on friction which the pupils had previously studied in Year 6 comprised experiments on the soles of the pupils' shoes to see what kinds of shoe sole created the greatest degree of friction. It could be that the pupils were unable to provide a neat, definitive explanation to answer (and match) the question "what's friction" when their own understanding was perhaps limited to seeing whose shoe could remain motionless on a steep incline for longest.

It is also interesting to note that this aspect of word knowledge, the ability to articulate an understanding or definition of a word, does not feature in the word knowledge framework initially developed by Nation (1990) and reported in Schmitt and Meara (1997).

Joint construction of meaning

In my data, when there was new key vocabulary to teach, or when there seemed to be a perceived need to re-teach the meanings of key words, this was usually done by the teachers attempting to construct the meanings of the words with the pupils.

The teachers spent a significant period of time in the lessons constructing meaning with their pupils in an attempt to establish what Edwards and Mercer (1987) have recognised as 'contexts of mutual understandings'. For them context refers to

“...everything that the participants in a conversation know and understand, over and above that which is explicit in what they say, that contributes to how they make sense of what is said.” (p.63)

It took Teacher A nine minutes to construct with her pupils the meaning of the word ‘friction’ and Teacher B seven minutes to construct the word ‘circuit’ with her pupils so that the words could become part of a shared understanding and a context for the development of the new skills and knowledge. In each case both teachers tried to create links between what the pupils knew and understood already and what they were currently learning.

During the processes of constructing meaning both teachers used a variety of strategies which seemed to be directly aimed at encouraging the pupils’ participation in the construction of the words’ meaning. For example, Teacher A *involved the pupils physically* in the sliding of books and shoes across different types of surfaces and in pushing (and resisting) each other, thereby demonstrating an abstract concept so that the pupils could practically experience the meaning of friction, force and resistance. Further opportunities were given to pupils to experience an understanding of the word ‘resistance’ in a practical way when the pupils engaged in experimental work.

Both of the teachers tried to *provide familiar contexts for the words* in the same kind of way that they tried to frame requests for definitions within familiar contexts. Edwards and Mercer (1987) suggest that “the notion that the context of a discourse is not physical but mental is an essential part of the link between discourse and knowledge” (p.66), and both teachers attempted to evoke a mental context which they believed would be part of the pupils’ previously acquired knowledge and shared understanding and which would demonstrate the link between the key word and its concept. “What matters” say Edwards and Mercer, “is what the participants in the communication understand and see as relevant” (p.66). Drawing on what the pupils might see as relevant, Teacher A asked pupils to imagine themselves on bikes riding down a hill when trying to establish the meaning of the word ‘resistance’, and related friction to the soles of their shoes and the “skiddiness” of the ice in the playground. Teacher B talked about the

athletics track at school and the circuit training they did in the hall when helping the pupils understand the word 'circuit'.

Deliberate omission of key words

There were also examples in the data where the teachers, in their attempt to encourage pupils' oral contributions to the discourse deliberately omitted key words and invited the pupils to supply them, as the following examples illustrate.

In her attempt to elicit the word 'resistance' from the pupils Teacher A spoke the following words:

Teacher A ...to push back er at me what what word might we use to describe what hes trying to do I'm going to push him off something and hes trying to stop me anybody think of any words we might use to describe when somebody tries to stop you doing something like that hes trying to hes trying to

Teacher A I'm trying to push him an hes trying to push back we say hes trying to r come on

In conclusion to a discussion of sports circuits Teacher B said to the pupils,

Teacher B ...ok so we know what circuits are but we're not interested in sports circuits now were going to learn about what kind of circuit what kind of circuit are we interested in here

In addition to deliberately omitting words as a strategy to encourage pupils to participate by supplying the missing key word, in the following example the teacher also establishes a semantic relationship between key words. In this example Teacher A is encouraging the pupils' oral contribution to the discourse within a linguistic framework which eventually links the word 'friction' to its superordinate term 'force' in the lexical set:

Teacher A ...friction is a type of something what is it its a type of well what is the topic we are working on at the moment somebody anybody

Pupil ? friction

Teacher A friction is a type of come on somebody Rahima

Rahima force

Teacher A force its a special type of force well done

Each example in the data of the teacher attempting to construct the meanings of words as a joint activity concluded with the teacher providing a definition of the word. For example, 'friction' was eventually defined as

Teacher A When two surfaces move over one another
 it's a special type of force

Not all vocabulary was treated in this way and allowed to be a focus for the joint construction of meaning. What was significant about the words which the teachers spent a lot of time trying to help the pupils understand was that they were all crucial to the scientific understanding of the lessons. When the words were not essential to the conceptual scientific knowledge being taught definitions were provided readily by the teachers without any attempt to construct meaning jointly with the pupils. The manner in which these definitions were articulated is discussed below.

Providing definitions

There are examples in the data of definitions of words which are readily provided by the teachers without any attempt to engage the pupils in the kinds of discussion described above. In every case these examples were words which contributed little to the cognitive understanding of the scientific concepts being taught but had, nonetheless, a practical significance in the lessons.

For example, the teachers quickly provided definitions as answers, to these, their own questions, which went unanswered by the pupils ,

Teacher A whats a buggy
Teacher A what does constructing mean
Teacher B whats a crocodile clip
Teacher B whats a lamp

And the Teacher B also immediately provided a definition for this question from a pupil who had reached the concluding stage in his writing up of the investigation of materials that conduct electricity. (A framework of words including 'conclusion' had been written on the board for guidance.)

Pupil whats a conclusion

In the questions above, the words 'buggy', 'constructing', 'crocodile clip' and 'conclusion', are incidental to the concepts of 'friction' and 'electrical'

circuits that the teachers are concerned with, and, of course, they are less abstract and, perhaps, easier to explain.

These words could be termed 'technical words'; words concerned with particular curriculum areas. Cassels and Johnstone (1980), Cameron et al (1996) and Prophet and Towse (1999) have all drawn attention to the fact that pupils find not only the technical language of science difficult, but also the use of 'everyday English' used in a scientific context. In Cameron et al's (ibid) research it was found that technical words were explained to pupils by their teachers but that many 'everyday, less technical' words were not'.

The explanations given for the 'technical words' mentioned above were as follows:

- a) Teacher A: a buggy is a very very simple vehicle
its a very very simple moving object so its going to be
a very very simple moving four wheeled object or vehicle
- b) Teacher B : a crocodile clip is its those metal things on the ends of the leads
its just a clip its got lots of teeth like a crocodile and it grips
or holds things between the teeth
- c) Teacher B : conclusion conclusion is what you have learned from doing
this investigation what you know now from having done this
investigation that you didnt know before
- d) Teacher B : [lamp] it's the part that lights up it's the same as a light or a
bulb

In the definition of the buggy and the explanation of a crocodile clip above, the kind of pragmatic directions which Clark (1997) maintains assist children's acquisition of new words are provided by the teachers. The amount of detail in the description is kept to the minimum that the teachers feel is required to highlight the properties salient to the sense they want the pupils to learn.

The emphasis in the definition of 'buggy', that it was a "very very simple" object, seems to have been an attempt to steer the pupils away from any other understandings of what buggies might be, that they had learned from their wider experiences of toys and racing cars seen on television.

Confirming the finding from Phase One, the teacher seemed to be making the definition of the term exclusive to the situation. When one of the pupils commented to another pupil that he thought a buggy was a racing car she directed her discourse to him and explained,

Teacher A: its not really a kind of racing car shh haven't don't
 talk shh it's a very you see a kind of a racing car
 sounds a very complicated thing but a buggy is a
 very very simple thing it's a very very simple
 moving object so its going to be a very very simple
 moving object or vehicle

And then to the rest of the class she reinforced again the highly specific understanding of the word she wanted the pupils to have when she said,

Teacher A: it's a very very simple four wheeled moving object
 to and that that's important because I don't want you
 to spend a lot of time thinking about it being a
 wonderfully constructed thing... what you need to
 do is you'll need to construct a four wheeled vehicle
 that moves efficiently... moves well will travel well
 that's your buggy

Linguistic frameworks

Looking at the first complete definition of a buggy (below) which teacher A gave to the pupils during her introductory discourse, it could be said that she is providing pragmatic directions on the meaning she wants the pupils to associate with the word buggy, by means of a **linguistic framework**. The linguistic framework serves the purpose of simplifying the learning process.

Teacher A: a buggy is a very very simple vehicle
 its a very very simple moving object
 so its going to be a very very simple moving four
 wheeled object or vehicle

What is interesting is that the framework seems to control and stabilise the grammatical complexity of the text, thereby enabling listeners to focus on the development of the conceptual meaning attached to the vocabulary item, 'buggy'. The meaning is developed incrementally. In the first phrase the pupils are introduced to the idea that a buggy is a *simple vehicle*. In the second phrase the idea of vehicle is modified to *object* and a new piece of

important information is added, that it is a *moving* object. Finally, to complete the definition another new piece of information is added, that it is a *four wheeled* moving object or vehicle. The grammatical structure of each of the three statements remains a constant, simple noun/pronoun-verb-adjective-noun pattern, thereby, allowing the listeners to focus upon the 'new' information contained in each statement. The repetition of the first half of each sentence (“...a very very simple...”) reinforces an idea (simplicity) and at the same time signals to the pupils that something new is coming which they will have to add to their developing concept labelled ‘buggy’.

Teacher B did something similar in the second lesson on electricity when she was explaining the meaning of ‘electric current’ to a pupil who had not been present at the first lesson.

In a similar kind of linguistic framework, with its features of syntactic and lexical control, the meaning is being developed incrementally, as demonstrated in the table below.

an <i>electric current</i> is	electricity	moving along the wires	
it's the	power	moving along the wires	
it's the	energy	moving along the wires	in the circuit

The quantity and the type of information which needs to be processed is controlled, which has the affect of lessening the linguistic processing that has to be done by the pupil. It allows the pupils to focus on the meaning of the term being explained. In this example the teacher attempts to convey the two aspects of meaning bound up in the lexical unit *electric current*. The meaning of ‘electric’ is provided through the teacher’s choice of (what I shall call here) synonyms ‘electricity’, ‘power’ and ‘energy’, used one at a time in a sequence of three phrases. The words ‘moving along the wires’ are possibly used to convey the meaning of ‘current’ and are repeated three times. The repetition may be an emphasizing device. However, data collected since these lessons suggest it is also something that some teachers do when they cannot produce a synonym or alternative phrase. The specific scientific context to which the understanding has to be applied (electrical circuits) is removed from the framework at the beginning to reduce the

amount of language that has to be processed, and is reintroduced to the pupil on completion of the explanation in the words “in the circuit”.

This process of reducing, simplifying and controlling the linguistic input that the pupil has to process seems to have the effect of making more prominent the links between word and meaning. It embodies the notion of Vygotsky’s zone of proximal development, in that the pupil, with the teacher’s assistance, is able to achieve a level of learning which would not have been attainable individually. In Brunerian terms, the scaffolding framework keeps the overall difficulty of the task constant but allows the teacher to simplify the learner’s role by providing graduated assistance. There are several examples of this kind of linguistic scaffolding of pupils’ acquisition of vocabulary in the data. Those that were successful and seemed to result in real learning (learning demonstrated to me by the pupils’ renewed confidence and ability to perform the tasks they had been given) contained the following features.

The linguistic scaffoldings,

- contained no redundant language
- created meanings incrementally
- controlled the lexical content by,
 - introducing synonyms
- controlled the syntax by
 - simplifying syntax
 - keeping syntax constant
- featured repetition

Discussion

There was much evidence from the data to support Mercer’s ‘socio-cultural theory’ which describes how knowledge is constructed through discourse. The above examples demonstrate that both teachers worked hard to establish a common vocabulary which would facilitate the communication of the knowledge being taught. The frequency with which key vocabulary was used by the teachers, their readiness to supply definitions of ‘technical vocabulary’ and the great amount of time they spent coaxing the pupils to jointly construct meanings with them, of words crucial to the body of knowledge being taught, and the linguistic frameworks which were

provided to assist the pupils' learning, suggest that the notion of acquiring a shared conceptual vocabulary was an important aim of the lesson. However, just as the evidence for Phase One demonstrated, it was a narrow and subject specific meaning that was taught, although in some cases the teachers did invoke other contexts for the words. Further, the focus was always on the meaning of the word rather than the form and as in Cameron et al's (1996) research, few opportunities were given to the pupils, in the lessons observed, to practise or use the newly acquired words so that they may become part of their productive, rather than merely receptive, vocabularies.

The identification of many discourse strategies frequently used by teachers when helping pupils learn the meanings of unfamiliar words in the sample of data is encouraging. What is also interesting is that the strategies described seem to be domain specific, that is, they do not feature regularly in the teachers' speech out of the classroom or with other adults. However, there was no evidence to suggest in the teachers' planning or from the pre-lesson discussions that we had that the teachers deliberately used a set of strategies when helping pupils acquire the meaning of new words. Indeed, when we discussed the findings some weeks later they were both surprised at the variety of ways in which they had tried to explain and define words. They were particularly interested in the analysis of the linguistic frameworks. We agreed that such frameworks for the teaching of vocabulary to bilingual pupils ought to become a deliberate part of the 'language-conscious and language-explicit approach' that Leung (1997) calls for.

The table on the following page is an attempt to draw together the findings from the Phase One and Phase Two investigations into the teaching and learning of vocabulary. The strategies that have been identified are listed together with the general effects that they seem to have on the pupils' behaviours which influence learning. The possible effects that the particular strategies have on the pupils' vocabulary learning are also noted. Although these behaviours and effects are, in some cases, immeasurable and may seem speculative, they are based on substantial evidence from focussed observations, detailed field-notes and discussions with teachers. Observing

the pupils' reactions to the strategies once I had identified them in the data, observing the pupils using the words and working with the concepts embodied in the words as they engaged in practical activities, analysing the data and the constant iterative movement between participants and data and reflection, provided me, as a teacher experienced in working with bilingual pupils, with the evidence to make the following proposals.

Strategies used in the teaching of vocabulary and their effect on the pupils learning.

Strategy	General effect	Possible effect on vocabulary learning
Repetition of key vocabulary	<ul style="list-style-type: none"> • highlights word as important • positive 	<ul style="list-style-type: none"> • repeated item is noticed • repeated item is remembered • assists assimilation of spoken form of word but not meaning
Formal requests for definitions	<ul style="list-style-type: none"> • reinforces importance of word • signals importance of key word • intimidating • restricts participation 	<ul style="list-style-type: none"> • negative • does not lead from receptive knowledge to productive knowledge
Informal requests for definitions	<ul style="list-style-type: none"> • invites participation • invites engagement in joint construction of meaning 	<ul style="list-style-type: none"> • positive • allows articulation of own understanding which can then be modified by teacher
Construction of meaning with pupils	<ul style="list-style-type: none"> • encourages participation • encourages action • encourages dialogue 	<ul style="list-style-type: none"> • meaning is developed jointly by building upon the understandings pupils contribute • meanings are linked to the word

Provision of familiar contexts	<ul style="list-style-type: none"> • creates interest • enhances motivation • enables links to be made with what is already known 	<ul style="list-style-type: none"> • new knowledge is first associated with, then modifies and develops existing schemata
Provision of topic specific meanings	<ul style="list-style-type: none"> • creates narrow, highly specific and topic related word meanings • assists the understanding of concepts within curriculum areas 	<ul style="list-style-type: none"> • meaning is compartmentalised, embedded within subject specific context • wider applications of word meaning not realised
Use of exemplification	<ul style="list-style-type: none"> • creates interest 	<ul style="list-style-type: none"> • assists learning by making connections
Provision of definitions	<ul style="list-style-type: none"> • provides something tangible for pupils to learn • provides formal summary of jointly constructed meanings 	<ul style="list-style-type: none"> • memorising definitions can lead to learning without understanding
Provision of explanations/descriptions	<ul style="list-style-type: none"> • provides illustration 	<ul style="list-style-type: none"> • word and meaning linked through explanation
Use of synonymy	<ul style="list-style-type: none"> • links word with known words and meanings 	<ul style="list-style-type: none"> • assists storage of word within a semantic group
Provision of linguistic frameworks	<ul style="list-style-type: none"> • reduces the load which needs to be processed 	<ul style="list-style-type: none"> • facilitates learning by reducing amount of linguistic processing
Omission of key words	<ul style="list-style-type: none"> • provides opportunities for pupils to make oral contributions using key vocabulary 	<ul style="list-style-type: none"> • learning strengthened by use of vocabulary

Chapter Five

Phase Three: Teaching Vocabulary in English Lessons

Introduction

The new school year 1997-1998 began with many uncertainties. The school was told it had to lose one of the four language support teachers (of which I was one) and the local education authority informed us that it would have to reduce the number of language support teachers by forty overall. In addition, the LEA had also started to canvas public and professional opinion over the proposed restructuring of its provision of schooling, which would mean the closure of all middle schools if it were to take place.

This had the effect of, not only increasing anxiety, but also creating many temporary teaching situations in the school, which affected some aspects of organisation and long term planning. The implications for the research project were that the approach to curriculum development, through collaborative action as well as collaborative reflective social discourse that I had hoped for, was now, in this particular context, inappropriate. Consequently, I narrowed the scope of the research to an investigation of the teaching and learning of vocabulary which would inform and improve my own practice, in the first instance at least.

Phase Two had been successful in identifying strategies that teachers use to help pupils acquire the meanings of words in, specifically, science and geography, where there are clearly defined sets of vocabulary to be taught. Phase One had identified the English lessons as an area of the curriculum where no specific teaching of vocabulary was being carried out in a planned, systematic or explicit way. I was now interested in further developing the 'practical theory' (Kemmis 1993) so far developed on strategies for teaching subject-specific vocabulary, to see to what extent it could be applied in English lessons, where, apart from the meta-linguistic words associated with the subject, the vocabulary was more unpredictable. I was also interested in adjusting the focus of the investigation so that it included an examination of what happens to words which have been taught and after they have entered the consciousness of the pupils.

The beginning of Phase Three was marked by a decision by senior management to set the Year 5 pupils by ability for English from the second half of the first term. As a result of this exercise I was given a group of seven bilingual pupils (which later grew to ten) to teach for the rest of the year. Having a specific group of pupils to teach, and being able to plan my own lessons independently, made it easier to combine the roles of teacher and researcher. I was also able to engage in real action research which must be, according to Kemmis (ibid) "...research into one's own practice". (p.182) Teaching my own class allowed me as a teacher-researcher to engage in action research and to "...embark on a course of action strategically...monitor the action, the circumstances under which it occurs, and its consequences; and then retrospectively reconstruct an interpretation of the action in context as a basis for future action." (ibid, p. 182) My aim in the action was to make vocabulary teaching a feature in my planning and my teaching of vocabulary explicit with the pupils. I set out to teach the meanings of words and build into lessons multiple exposures to the new vocabulary and opportunities for pupils to use the words. As a researcher I monitored and recorded my actions, the pupils' learning behaviours, their use of the taught vocabulary and the circumstances in which these activities took place. Detailed field notes were written during and after lessons as appropriate. The intention was to collect samples of spoken and written language with a view to examining pupils' use and understanding of the vocabulary which had been taught. I was interested in tracing the taught words to see how pupils' understanding of the words developed. Having already identified some strategies for the initial teaching of vocabulary, I wanted now to focus on identifying the processes which led to learning and use.

In this section I describe, first, the context: the pupils with whom I worked and from whom I collected data and the focus of the teaching. Secondly, I describe the procedure followed, and thirdly, I present the findings, before discussing and evaluating them.

The Context

The pupils in my group were perceived to be, by the teachers who had taught them for half a term, "pupils with poor language skills" (senior

teacher). They all had reading ages between two and three years below their chronological age, and had achieved Levels 1 and 2 in the SATs for Key Stage 1. The pupils were bilingual in English and Punjabi, and six of the original seven had reached a level of fluency in English in which they could fairly comfortably engage in basic interpersonal communication with a sympathetic interlocutor, using a limited range of vocabulary and a simple level of syntax. The seventh pupil was ‘new to English’ having arrived in England during the previous academic year. I taught the pupils for three 70-minute periods a week. The focus of these lessons, as determined by the English co-ordinator, was “well established fiction, focussing initially upon the works of one author.” The purpose of the lessons was to

“...provide the stimulus for a variety of activities thereby creating the opportunity to develop the use and understanding of language in the component mode of speaking and listening , reading and writing.” (School Medium Term Lesson Plans).

Each English group was required to use class sets of books as a basis for the teaching.

The set book I chose was a ‘graded reader’, an abridged version of Robinson Crusoe (Oxford bookworms 2, OUP) because

- it fulfilled the curriculum requirement of ‘well established literature’
- the language content was challenging but accessible with the kind of planned support discussed earlier and based on Vygotsky’s theory of the zone of proximal development and Bruner’s notion of scaffolding
- I thought that the 9-10 year old pupils would enjoy the story
- I thought I could design a varied programme of work around the book which would be challenging, exciting and which would develop ‘listening and speaking and reading and writing skills’
- I thought it would offer good opportunities for interesting vocabulary development
- there were sufficient copies available for the pupils to have one each

In addition, the story was a favourite of mine and my old, illustrated, unabridged version of the book was used as a resource during classwork. As well as providing an opportunity to share my enthusiasm for this

particular literature, the story seemed to meet the pupils' learning needs to study material which was interesting, challenging and fun and my needs as a teacher and as a researcher.

Within a six week programme of English curriculum teaching based on Robinson Crusoe, my planning included some explicit teaching of vocabulary using words directly from the text and words which related to the text and which I introduced. Guided by Sökmen's (1997) set of principles for vocabulary teaching I included activities which were designed to,

- build the pupils' sight vocabularies
- integrate new words with the old
- provide a number of encounters with the taught vocabulary
- promote a deep level of processing
- facilitate imaging and concreteness (i.e. connect visual images to spoken and written words)
- use a variety of techniques

From my analysis of the strategies used by the teachers of science in Phase Two of this study, I recognised the importance of constructing meaning with the pupils. Rather than just delivering definitions of words to be learned, I spent time attempting to relate the new vocabulary to pupils' previously acquired knowledge. The pupils wrote the words and their definitions in their exercise books but not as part of a separate glossary as was the tradition in the geography and science lessons. Instead, they wrote them on the current page in their exercise books so that they formed a visible part of the current knowledge being developed. My planning also realised the need to provide linguistic scaffolds when defining words, which would facilitate the development of meaning incrementally.

My approach to the teaching of vocabulary was influenced by the social constructivist beliefs which underpin all my teaching activities and which are based upon certain views of the learner, the learning process and teaching. These are, in brief, that

- pupils acquire knowledge by being actively involved in their own learning

- their cultural understandings, previous experiences and previously acquired knowledge determine what sense they make of new learning situations
- the construction of knowledge and the intellectual development of pupils is facilitated through social interaction, communication and instruction
- successful teaching is rooted in successful relationships within a social context (as Moon's students pointed out "Pupils don't learn from teachers they don't like") (The Open University, E819 cassette). It is, therefore, the teacher's responsibility to create a social atmosphere which is interactive and non-threatening in which strong relationships, based on mutual trust and respect, can develop.
- successful teaching depends upon good planning which considers pupils' immediate and future needs and takes account of their previous experiences and cultural background
- successful teaching depends upon supportive strategies which are likely to promote success and sensitive responses to pupils' behaviour during the learning process
- learning must be relevant to pupils' interests and needs
- teachers act as organisers of learning opportunities and as enablers in the learning process by providing contingent support.
- it is the teacher's responsibility to help pupils recognise their progress and achievements and understand the significance of their learning

With particular reference to bilingual pupils I can add that

- the best learning environment is within the mainstream context where bilingual pupils are given the opportunity to do the same learning tasks at the same cognitive level as their peers but within a 'language-conscious and language-explicit approach' (Leung 1997)
- pupils acquire and develop English language most easily when it is used for real communication purposes in naturally occurring contexts.

Procedure

Words which I anticipated the pupils would not know were identified at the planning stage. In order to control the research activity during my teaching time I limited the focus of the data collecting activity to ten words which I thought would be new to all the pupils, although the meanings of more than

ten words were taught. Some of these latter words were not new to some of the pupils.

For the purposes of the research I focussed on these words which came directly from the text of Robinson Crusoe,

adventurous	adventure	shipwreck	shipwrecked	survivor
survive				

and these words I introduced to the pupils during the study of the text,

uninhabited	unexplored	isolated	self sufficient
-------------	------------	----------	-----------------

In my teaching of the words I built on the positive outcomes from the teaching of vocabulary I had observed in Phase Two. Thus, my planning for the teaching of vocabulary recognised the need for,

- a lot of exposures to the words
- opportunities to use the words in speaking and writing
- constructing meanings with pupils
- providing familiar contexts for the words
- using examples in explanations
- providing synonyms
- providing linguistic frameworks which allows meaning to be built up incrementally
- presenting and discussing the different morphological forms

In particular, I was anxious to avoid the development of the kind of highly topic-specific meanings of words that the pupils seemed to be acquiring in their geography and science lessons. I wanted the pupils to acquire meanings for words which they could further develop in different contexts. Thus, I deliberately endeavoured to provide within my explanations and definitions examples of the words in a variety of contexts

I also identified specific activities which I anticipated would provide rich data i.e. evidence of the pupils' vocabulary learning as exemplified in their 'free' use of the words. This was because I did not expect that the pupils' routine written work would demonstrate sufficient evidence of the vocabulary learning, as it would have to be heavily structured to meet their general and English language learning needs. Similarly, I could not rely on

being able to always capture their oral contributions for analysis. By identifying the vocabulary I wanted to ‘trace’ and specific activities in which the pupils would work without teacher support, the opportunities for data collection were increased.

Data in the form of audio recordings were collected from the following two activities during weeks five and six after the words had been introduced, explained, defined, discussed and used by the pupils in a number of oral and literacy tasks.

Activity 1

The pupils were invited to imagine that they were preparing to go on an expedition to an isolated, uninhabited and unexplored island in order to survey it and record what they discovered. The pupils’ task was to discuss in groups their preparations for the expedition. I explained that as I couldn’t listen to all the discussions at the same time, I was going to record them and listen to them at home.

After introducing the activity I divided the pupils into two groups of two and one of three. I gave each group a small audio cassette recorder and took them to different, quiet parts of the school where they were alone. I gave each group a worksheet detailing their instructions to help them with the activity (see Appendix 3). I purposely did not read through the worksheet with them as I wanted to maximise opportunities for the pupils to work with the newly acquired vocabulary in, for example, recognising the written form, interpreting and disputing meaning, negotiating, constructing and reconstructing meaning jointly and using the vocabulary in the context of the task. I wanted to measure to what extent the words had become part of the pupils’ lexicons and the appropriateness of their use of the words. The worksheet contained five of the words which had been recently introduced to the pupils (‘isolated’, ‘unexplored’, ‘uninhabited’, ‘self-sufficient’, ‘survive’), and I was hoping to capture data which would provide opportunities to analyse the pupils’ understandings of these words as evidenced in their possible discussion of the meanings, and their use of the words in context. The pupils’ discussions lasted approximately twenty minutes.

Activity 2

After a brief and general discussion about characters, setting and the elements of story-writing that the pupils were familiar with, the pupils were asked to create an adventure story of their own.

They worked in the same groupings and in the same quiet areas as Activity 1 and, when told that they were not being asked to write the story but to tell it, pre-empted me by immediately suggesting that they should audio record their work so that I could listen to it later (they had enjoyed listening to themselves on tape after Activity 1 and were eager to record some more). Activities 1 and 2 produced a total of approximately two hours of recordings which were transcribed for analysis.

The following literacy activities took place during the first two weeks of the following term after a two-week break from school and on four separate occasions.

Activity 3

Pupils were asked to write the meanings for these words, which were written on the board.

adventurous

adventure

shipwreck

survive

survivor

isolated

uninhabited

unexplored

self sufficient

Activity 4

Pupils were asked to write a sentence using each of the words listed.

Activity 5(a)

Pupils were given a cloze procedure exercise (see Appendix 4), which I read to them. The context of the passage was the story of Robinson Crusoe. The pupils were asked to complete the sentences. The activity provided

opportunities for the pupils to use some of the vocabulary listed above but this was not stated and the words were not provided.

Activity 5(b)

After the pupils had completed the written task, I interviewed them individually and discussed their responses to the activity sentence by sentence. The intention was to provide further opportunities for the pupils to reveal their developing understandings of the vocabulary. Although my findings from Phase Two indicated that pupils use the taught subject-specific vocabulary more readily in their written work than in speaking, the words that the pupils used in their geography and science lessons were nearly always provided as part of a set from which they had to make an appropriate choice. The pupil participants in Phase Two also had more developed literacy skills than the Year 5 pupils I was teaching in Phase Three. As my focus was on the pupils' understandings of words as exemplified in their use of the words, I wanted to maximise opportunities for use which could be recorded for analysis.

Activity 6

Pupils were given another cloze procedure (see Appendix 5) which provided opportunities for the same vocabulary to be used but in a completely different context from that in which the vocabulary had been originally introduced and used.

Findings

Listening to the tapes prior to transcribing them was disappointing as they did not appear to contain the kind of data which would lead to a greater understanding of the processes involved in the construction of the meaning of words. I also felt that the tasks had been carried out unsuccessfully and had not sufficiently enhanced the pupils' learning. There were long silences and there was lots of whispering. There was no real discussion in Activity 1, rather the pupils took turns to say their bits in an uncharacteristically controlled way. From a pedagogical perspective I realised that the move from familiar teacher-supported activities to a completely unsupported activity was too abrupt. Similarly, in Activity 2 there was some very well controlled turn-taking which produced some rather disconnected chunks of story, mostly transported from our study of Robinson Crusoe.

However, a closer analysis of the transcripts revealed that the pupils' dialogue was, in fact, focused on the activities and there is evidence in the data of their use of recently acquired vocabulary. An examination of the data to see how the pupils were using the newly acquired vocabulary revealed the following themes,

- a desire to use the newly acquired vocabulary
- a co-operative approach to using the vocabulary
- vocabulary which appeared to be embedded in the context in which it was originally presented
- conceptual knowledge of a word sometimes embracing the meaning of the word's original collocator
- reproducing the teacher's words
- reproducing multi-word units from the text

These themes are discussed below.

Desire to use the newly acquired vocabulary

What was interesting, and heartening to me as their teacher, was the pupils' obvious desire to use the newly acquired taught vocabulary. This desire was demonstrated by many occurrences in the pupils' utterances which were saturated with the words which they had recently learned as the following examples, selected from many, show (the taught vocabulary is underlined).

- P.Ars. ...er they were the land was isolated uninhabited island
- P.Qai. Robinson Crusoe erm ??? he couldn't buy ??? because there was er no shops and erm and erm the island was unexplored uninhabited isolated island
(Activity 2)
- P.Reh. and er there er there ??? no shops so you have to be self sufficient
- P.Aru. you have to be er adventurous and er ???
- P.Reh. self sufficient because there no shops
(Activity 1)
- P.Ans. an it has to be adventure adventure story with shipwreck
- P.Ann. an he is only survive
(Activity 2)
- P.Ars. and er they were no shops and and he was self sufficient

P.Qai. and er Robinson Crusoe he ??? survived and he took took tools
and things from shipwreck
(Activity 2)

What stands out in the transcripts particularly, was the juxtaposition of the sophisticated vocabulary and the poor English grammar. Despite the poor grammar the discussion seemed to progress because the vocabulary encapsulated for the participants the shared understandings on which the discourse relied. Whilst grammar is also very important in language learning the discourse did seem to illustrate the statement by Long and Richards (1997) used earlier that "...lexical competence is at the heart of communicative competence". As Dubin and Olshtain (1986) point out, it may be that having a good vocabulary assists learners to use the knowledge they have of the language effectively and in ways which fit their specific needs.

A co-operative approach to using the vocabulary

In addition to the co-operative turn taking already mentioned, the pupils also seemed in their discourse to support each other's use of the newly acquired vocabulary. I have identified three ways in which they did this. Firstly, they prompted each other's use of the new words, as the following examples show.

P.Ars. Robinson Crusoe hitted the gun on the head and one and the
man got hurted on his head he was alive and ??? and man and
er man er

P.Qai. (whispers) survived

P.Ars. an he has sur survived survived...
(Activity 2)

P.Qai. ...erm then when they conquer me I'll get a gun and kill them
and then I'll er I'll er erm

P.Ars. survive

P.Qai. survive...
(Activity 1)

secondly they corrected each other,

P.Ans. an it has to be adventure exciting and adventurous story with
shipwreck

P.Ann. an he is only survive
P.Ans. and he is only survivor
(Activity 2)

and, thirdly, they developed the discourse by discreetly substituting appropriate newly acquired vocabulary in place of words from their partners' previous utterance,

P.Reh. we would then have good life
P.Aru. and er exciting adventurous life
(Activity 2)

P.Ars. an the an the boat broke in pieces
P.Qai. an we were shipwreck
(Activity 2)

P.Reh. and cannibals came and ate their their meal
P.Aru. terrible meal
(Activity 2)

These prompts and substitutions embody the notion that the development of meaning is constructed jointly through social discourse. They also have the effect of developing and improving the quality of the discourse.

Vocabulary embedded in the context in which it was originally presented

There is also a lot of evidence in the pupils' speaking and written work which illustrates a strong association between the vocabulary and the context with which it was originally introduced. In Activities 1 and 2 the pupils not only bring the recently acquired vocabulary to the two new contexts, but they also seem to import some of the original context along with the words. It seems as though the vocabulary was (at this stage in its development, at least) embedded in the context in which it was first introduced. This is demonstrated in many examples of the pupils' use of the newly acquired vocabulary.

The following examples from the transcripts show how the pupils' concepts of 'survival' are linked with the ideas from the text of 'storms', 'ship wrecks' and being the 'only one' from a group who remained alive. These, of course, were the ideas which were presented in the story of Robinson Crusoe but were not part of the context for Activity 1. In these utterances the pupils are responding to the words which had just been read from the

worksheet, “ Write down the things that you will need to do to survive on the island.”

- survive** a) ‘is when it is a shipwreck and your boat breaks and all your friends die and you are only left’
(P.Ans. Activity 1)
- b) ‘means that you go on ship and all the ???? die and only you alive’
(P.Ars. Activity 1)
- c) ‘a survivor a survivor er means you got to ???? go on the ship and the wind the ship wrecks and then you are survivor you are survivor and the other the other are dead you are only safe and and er that means that the person was safe from bad storm and wind’
(P.Qai. Activity 1)

Clearly, in these examples the pupils had not understood the different context in which the word ‘survive’ had appeared. Consequently, it seems that all the understandings associated with the word ‘survive’ in the original context were transported, unmodified, to the new context.

The same thing seems to be happening in the following examples. The pupils were asked to write a meaning for each of the words two and a half weeks after completing the topic (Activity 3). Again, the pupils drew, almost exclusively, on the Robinson Crusoe context and included in the definition for the word parts of the original context which were not always relevant to the words’ meanings.

- survive** it bes in a shipwreck and you are the only one who can swim then you swim and when you get tired the sea carries you to the shore and then you only survive
(P.Ama Activity 3)
- survivor** who has bin saved on a shipwreck
(P.Aru Activity 3)
- isolated** it means that an island or a house is empty
(P.Ars Activity 3)
- self sufficient** you make your own clothes ??? you make your own food grow your food and find animals
(P.Reh Activity 3)

Conceptual knowledge of a word sometimes embraces the meaning of the word's original collocator

In the data there were examples of words that I taught in which the conceptual understanding that the pupils developed for the word included the meaning of each word's collocator. For example, the vocabulary item 'a survivor' was presented to the pupils in the text with the collocator 'only', as in, "Robinson Crusoe was the only survivor". It became apparent to me during subsequent lessons that the pupils' concept of being a survivor included the idea of being alone, the only one. Despite many subsequent explanations to the contrary their use of the word survivor still contained notions of being the only one. Many of the examples above illustrate this as do these replies to my question during a lesson four weeks after we had finished the topic of Robinson Crusoe.

- Teacher R. what does it mean to be a survivor
P.Reh. it means to be only one alive
P.Qai. it means something terrible happen in your life an you bees and
 only you bes alive
 (fieldnotes)

Reproducing the teacher's words

Another feature of the data is occasions where pupils explain the meaning of the newly acquired vocabulary by reproducing the same words that I had used to either explain or define the word. For example, these pupils wrote the following definitions using the same words that I had spoken. (My words are in italics)

- self sufficient** *do everythings yourself*
 (Aru Activity 3)
 is that *you have to make everything yourself*
 (Ans Activity 3)
 it means that *you have to do everything yourself*
 (Qai Activity 3)
- shipwreck** is when your going to a journey on a ship and your *ship breaks*
 in pieces thats a shipwreck
 (Ans Activity 3)
 That means that the ship been *broken in little pieces*
 (Qai Activity 3)

Reproducing multi word units from the text

There are many occurrences of the pupils using in their speech, and some occurrences of use in writing, multi-word units from the text which contain

the taught word. For example, the word 'adventurous' appears in the text with the word 'exciting', as in "Robinson Crusoe wanted an exciting and an adventurous life". Frequently, when the pupils used the word 'adventurous' they chose to use it with 'exciting', the word which appears next to it in the text. Amongst the examples from the transcripts are,

P.Aru. and er exciting adventurous life

P.Ans. an it has to be adventure exciting and adventurous story

And from my fieldnotes I have in response to my question, "Why do you like the story so much?"

P.Ann. because its exciting and adventurous story

Other examples of multi word units that the pupils frequently used and which were reproduced straight from the text were,

'only survivor'

'the cannibals ate their terrible meal'

(fieldnotes)

They also reproduced variations of multi-word lexical units that I had introduced. One of them was "...isolated, uninhabited island", as, for example, this exchange illustrates:

P.Ars. ...er they were the land was isolated uninhabited island

P.Qai. Robinson Crusoe erm ??? he couldn't buy ??? because there was er no shops and erm and erm the island was unexplored uninhabited isolated island

(Activity 2)

P.Ann. (to another member of staff who had questioned the pupil on his work) robinson crusoe lived on isolated uninhabited island

Another of my expressions (which was spontaneous, not planned use in the first instance) was "cruel and evil cannibals". My field notes confirm that this expression was frequently used. One of the pupils wrote those words as a title for an illustration. The other pupils copied the idea.

Comparing the pupils' responses to Activity 5 and 6 (cloze procedures) confirmed that the pupils had understood the taught vocabulary, could use it appropriately but only in the same context in which it had been introduced conceptually. Their understandings of the words were not, it seemed, sufficiently well developed for them to be able to use the words in other contexts. In Activity 5 (context Robinson Crusoe) most pupils in most cases

provided semantically appropriate words from the newly acquired vocabulary. However, in Activity 6 none of the pupils used any of the vocabulary acquired during their study of Robinson Crusoe although in most cases their responses were semantically meaningful.

Discussion

The findings from this research exercise in Phase Three contributed to the knowledge being developed in this study on the teaching and learning of vocabulary in several ways. To begin with, there was no doubt that the words taught had become part of the pupils' productive mental lexicons. The pupils' understandings of the words taught and their unselfconscious and experimental use of the words suggests that the use of the strategies for teaching vocabulary identified in Phase Two are, indeed, transferable to the English classroom. In fact, the frequency with which the pupils used the words voluntarily in their free speech (unlike in the science and geography classrooms) and encouraged and prompted their peers to use the newly acquired vocabulary, suggested a potential interest in English vocabulary learning amongst the pupils which needed to be developed. It was an interest which had not been apparent in the classrooms which I had observed during Phases One and Two. Reflections noted in my fieldnote diary question the effectiveness of larger classes in developing the kind of social environment and discourse that seems to encourage an active interest in words. Certainly, the discussions that my pupils and I engaged in as we searched for and identified meanings to connect to words contained very many more contributions from the pupils than discussions about word meanings that I had observed in other classrooms. It seems to me that the teaching and learning culture of large classrooms may not be providing bilingual pupils with ideal opportunities to develop their vocabulary. Engaging in the kind of socially mediated discourse which effectively supports the vocabulary development of all individual pupils is problematic, according to Mercer (1994), who suggests that "...the idea of a group of learners with a shared ZPD seems to me to stretch the concept too far!" (p.104) In other words, structuring support so that it meets the individual vocabulary learning needs of thirty or so pupils is not possible at one time.

The findings also highlighted some outcomes of the vocabulary teaching and learning process which further developed a theme from Phase Two. There it was reported that the pupils' use of the scientific vocabulary seemed to be restricted to the specific topic the teachers had deliberately related it to. Similarly, in Phase Three the findings showed that the pupils' conceptual understandings of the new vocabulary were firmly rooted in the context in which they were first introduced (the Robinson Crusoe text) and in which they were being repeatedly used. As a teacher this finding was, initially, disappointing because I had worked hard to try and make pupils aware of the more general meaning of the words I taught. As a researcher, though, it is an interesting finding. It suggests that the bond between a word and the context in which it is originally introduced may be a natural and necessary first stage in the development of its meaning potential. If this is so, there are important pedagogical implications which highlight the need for an approach to vocabulary teaching which allows multiple opportunities for further development of meaning in different contexts. This must be particularly important for bilingual pupils whose exposure to environments where they are likely to take notice of new English words may be limited to school.

The finding that pupils often reproduced explanations for words which I recognised as having originated (often word for word) from me related to the observations made of pupils reciting and practising the teachers' definitions of scientific vocabulary. It was as if the pupils had not yet taken ownership of the meanings of the words sufficiently to be able to choose their own forms of expression. Bakhtin (1986) notes that "our speech...is filled with others' words..." and that these words carry with them "...varying degrees of otherness or varying degrees of "our-own-ness" varying degrees of awareness and detachment" (p89) This suggested a course of action which would not only ensure that the pupils had multiple exposures to and opportunities to use and develop the meanings of the words, but opportunities to construct in their own words the definitions of the words. This was a strategy which was developed in Phase Four.

The Bilingual Context

Working with such a small group enabled strong relationships to be developed between myself and the pupils. This relationship benefited the pupils' learning and informed the research. Towards the end of the first term the pupils started joining me at lunchtimes quite frequently, as I worked in my room. They brought homework, books to read, pictures to colour and questions to ask. After some time they began to talk freely about their lives outside school and what they said provided me with a rich source of knowledge. This knowledge became a resource, a context of mutual understandings between the pupils and me which I could draw upon in my teaching. For example, during work on the Robinson Crusoe text I designed several tasks around the theme 'living without modern facilities¹'. Together we imagined, discussed and wrote about what it might be like without such things as T.V., piped water, takeaways, electricity etc. Some of the pupils who had lived in or visited Pakistan were able to talk authoritatively on the subject and did so with a confidence rarely seen in other classroom situations. Photographs from Pakistan were brought in and shared as were stories about the village life experiences of their grandparents.

It was during these times that I started to talk to the pupils about my general interest in words and also my interest in helping pupils in the school acquire rich productive vocabularies. This obviously made an impact on some of the pupils because at the parent-teacher meeting at the beginning of the next term, family member of three of the pupils made approving comments about the English words that their children had started to use. One parent commented that she had been impressed when her son had said he had to do "appropriate illustrations" (vocabulary which I had taught) for homework, and knew what that meant. Other parents also said how they had enjoyed being included in aspects of the pupils' work. (I had frequently given homework which involved the pupils interviewing family members. For example, in class we had discussed what would be the first things we would do on finding ourselves washed up and alone on an island. The homework required them to find out what family members would do in the same situation.) The positive attitudes displayed by the pupils and their families

¹ 'facilities' is a word which had previously been introduced to the pupils in geography lessons.

encouraged me to further investigate aspects of the pupils' cultural and linguistic environment which might influence their vocabulary and general language development. The following action was carried out.

1. Language dairies were started with the pupils after approval was gained from all the parents.
2. Semi-structured interviews with two bilingual support assistants and one bilingual teacher were conducted.

The procedures which followed each of these actions are outlined below and the findings are then briefly discussed.

Personal Language Diaries

These were used for the pupils to record information about the different languages they were exposed to and spoke and provided the subject matter for classroom discussions. During one year they recorded and we discussed such things as,

- who they spoke to at home and at school
- what languages they spoke to different people
- why they spoke a certain language to a particular person
- how they decided which language to speak
- when they spoke different languages
- what kinds of things they talked about in each language
- which language they liked best
- which language was most important in their lives
- their personal language histories
- words they liked
- strategies they used to help them learn vocabulary
- languages they would like to learn and why
- the language of T.V. and video programmes they watched
- the languages of the written texts they had in their homes
- the languages of their dreams
- the languages of the playground

I provided the guidance and some frameworks (see appendix 6 for examples) for the collection of the information and encouraged the involvement of the pupils' families. This was done in various ways. For example, through the setting of homework which required collecting

information from family members. By direct requests from me, often in the form of a written note sent home with the pupils and sometimes by talking to older siblings in the school.

Semi-Structured Interviews with bilingual support assistants

Three members of the support staff were interviewed on separate occasions during lunch breaks in a private room. The purpose of the interviews was to collect information about the pupils' first language development and particularly their vocabulary knowledge. The interviewees were asked to comment on the following themes,

- how well each of the ten pupils spoke Punjabi
- how the pupils' Punjabi compared with the Punjabi of Year 5 equivalent pupils in Pakistan
- their use of Punjabi for the teaching and support of pupils in school

Field notes were made during the discussions which were guided by these themes.

Findings

The pupils' language diaries were interesting and the general educational benefits which were derived from them were considerable. They were useful in confirming aspects of the pupils' linguistic and cultural lives outside school, which was already understood by staff in school. In addition, thinking about and discussing their bilingual language practices raised pupils' awareness of issues concerning language and provided a focus for their own investigations into their language use. This enabled them to participate with me in the research process and by doing so, their confidence as learners increased.

The language diaries and discussions generated by the work which the pupils did in them identified that the language which the pupils select most frequently, which performs for them the greatest number of functions in the largest number of domains is English (See appendix 7). The pupils informed me that they use English for learning at school and also for school work related activities at home. When older siblings help them with their homework, the language used is English. Most of their conversations with peers and siblings from the same ethnic background is in English both at home and at school. Mothers and grandparents are always spoken to in the

first language but fathers are often spoken to in English. Pupils often act as interpreters for their mothers and engage in the kinds of discourse with professionals that usually only happen between adults, for example, in negotiations with social security departments and in hospitals.

The pupils told me that they thought Panjabi and Urdu were the most important languages in their lives but that they often found English easiest.

Engaging students in research of significant questions in this way provides them with, according to Goswami and Stillman (1987), "...intrinsic motivation for talking, reading and writing and has the potential for helping them achieve mature language skills" (p.1).

Although the data produced from this exercise did not directly inform the research questions it did help to provide a better understanding of the influences of the pupils' languages on the processes involved in learning English vocabulary. By building up an understanding of the languages they were exposed to and which they used in their daily lives, a background picture of their language knowledge was established. It provided a context for a description of their vocabulary acquisition and a context of mutual understandings which I could draw upon in my teaching. Considering the findings of Collier (1987, 1989), Cummins (1979, 1983) and Ramírez et al (1991), who stress the important influence that language and cognitive development in the first language have on the development of academic ability in the second language, I believe raising pupils' awareness of their own language resources is crucial to their learning.

The semi-structured interviews identified two aspects of the pupils' bilingual context which I felt were relevant to their learning of English vocabulary. It has already been suggested in the review of literature on bilingualism that the coordinate nature of the pupils' bilingualism means that they are developing two sets of conceptual understandings and two languages in two very different cultural frameworks. The evidence I collected from my bilingual colleagues suggested that there was very little interplay between the two languages as one might expect there to be in an EFL classroom, where words can be matched to L1 words and

understandings. For example, both of the language support assistants said that they hardly ever use Punjabi in their support of pupils because “it doesn’t work, they just look at you funny”, “they don’t understand, there Punjabi is not good”.

The bilingual staff were not able to articulate exactly why Panjabi did not seem to be helpful in teaching and supporting learning. They implied that the pupils generally had neither the vocabulary nor the understanding in the Punjabi conceptual frameworks on which to draw for their academic learning in an English context. Although I recognise that more empirical evidence is needed to make such a claim, it seemed that the interviewees’ implications supported a suspicion that I had that the pupils’ Punjabi language and its conceptual understandings were not providing a useful resource for the learning of English words. When I began teaching vocabulary to Year 5 pupils, I always asked if they knew the equivalent words in Punjabi. The answer was usually a straightforward ‘no’. Sometimes there would be what looked like a heated debate in Panjabi, but the outcome was always negative.

The second finding from the discussions with the bilingual staff was also a matter of concern to me. Again, all three interviewees were in agreement that the standard of the pupils’ Panjabi was very poor. Although the sample of opinion is too small to draw strong conclusions from, one of the interviewees was convincing, in that she had only lived in Britain for two years and was in a position to compare standards of Panjabi between our pupils and children of the same age in Pakistan. Her opinion was that the latter were more advanced. All three respondents talked about the pupils’ frequent “bad language” in Panjabi and their lack of vocabulary.

The situation that was described (but which requires further investigation) suggested that there is serious underdevelopment in both of the pupils’ languages in relation to their academic and cognitive growth. The same phenomenon of qualitative and quantitative deficiencies in bilingual children’s two languages is described in Cummins (1979) in Canada and by Hansegård (1975) in Sweden. This reinforces my belief that a methodology for the teaching of English vocabulary and other skills is urgently needed as

English is the only language in which the pupils are receiving an academic education.

Chapter Six

Phase Four: Teaching Vocabulary in the National Literacy Hour

Introduction

Phase Four was marked by the introduction of the National Literacy Strategy. It provided an opportunity to apply the understandings gained from the research to the teaching of vocabulary in a new and highly structured situation, which recognised principles for teaching literacy skills which I had identified as important in the teaching of vocabulary. These principles are that teaching should be “discursive... interactive... well paced... confident... ambitious...” (The National Literacy Framework, p.8). My work in teaching vocabulary to bilingual pupils indicated that their learning of vocabulary is most successful when these same principles are applied. That is when the following conditions are met.

- There is high quality discussion in which the teacher stimulates and challenges the pupils and provides explanations, descriptions and definitions when needed and many opportunities for pupils to use the words they are learning.
- The pupils’ contributions are encouraged by the teacher, welcomed and used in the development of further knowledge about the form and meanings of words.
- The lessons are rigorous and well paced as a result of planning which details the vocabulary to be taught and practiced, details strategies to encourage deep processing of information and time for reflection (which might not always give the impression of action).
- Teachers are secure in their knowledge and are well prepared with planned explanations but are also ready to receive and use pupils’ previously acquired understandings.
- Teachers have high expectations of what the bilingual pupils can achieve and the amount of vocabulary they can learn.

To the list of principles noted in the National Literacy Framework I can add another, which is enthusiasm. From experience gained during this study I would suggest that teachers who have an enthusiastic and inquisitive approach to words and their meanings and functions are better equipped to positively influence the lexical development of their pupils.

The National Literacy Framework was introduced to raise standards of literacy. Its focus, therefore, is on the development of reading and writing skills. Whereas the National Curriculum only stated the content of what should be taught, the National Literacy Strategy prescribes the content and the manner in which the content should be taught. Teachers are required to 'instruct' (NLS, p.8). The same organising framework applies to all ages from year one to year six and the teaching must follow a strict formula. It is, as Wragg (1998) comments, "a one size fits all approach".

It was generally welcomed by staff in the project school who were enthusiastic about ensuring its successful implementation. In addition to its underlying principles discussed above, we also valued the strategy's emphasis on scaffolding pupils' learning and modelling procedures which pupils could learn by copying. These are aspects of teaching we considered fundamental for effective learning. However, we had concerns about the inflexible nature of the framework, and the over riding-emphasis which was put upon 'rigour', 'pace', and 'efficiency'. During our training we were told by the authority's literacy advisor, "...you need to keep moving on...if the pupils don't always understand leave it and move on...lessons must be rigorous and well paced...". The notions of rigour, pace and efficiency are important, but so too is the pupils' understanding. The main focus, in the literacy framework, it seems, must be on structure and content. There is little acknowledgement of the differing needs of individual pupils, or groups of pupils with particular learning needs, which may differ from the needs of native English speaking children.

The National literacy Hour

The literacy hour is divided into three main sections. There is half an hour of whole class shared text work followed by twenty minutes of individual work carried out in groups. This is followed by a final whole class ten

minute plenary session where work is shared, reviewed, evaluated and discussed.

The format states that the first fifteen minutes of the “shared whole class teaching” must focus on whole text objectives. The second fifteen-minute period must provide a balance of “focused word work or sentence work” (NLS, 1998 *Framework for Teaching* p.9). The purpose of word level work is ‘...to develop accurate reading and spelling strategies...’ and knowledge of ‘...the morphemic structure of words’ (NLS, 1998 Module 1, Teacher’s Notes. P.8) It has four elements which are,

- phonological awareness, phonics and spelling
- word recognition, graphic knowledge and spelling knowledge
- vocabulary extension
- handwriting

(NLS, Module 1, Teacher’s Notes. P.8)

For Key Stage 2 pupils, the teaching of grammar and punctuation have to be fitted in to this time slot as well. (NLS, 1998 p.11)

This means that time, approximately equivalent to 7½ minutes per day, must be shared between the six specified elements of word level work listed above. This should be a matter of concern to teachers of bilingual pupils, as evidence from this study suggests that the vocabulary development of these pupils benefits from comprehensive explorations of word meanings. The emphasis in the framework is clearly on the technical and grammatical aspects of words rather than on the development of the meanings.

For ‘vocabulary extension’ work teachers are directed to focus on “...investigating, collecting and categorising the meaning of words, recognising them in other contexts and using them in speech and writing” (NLS *ibid*). This assumes that the pupils come to the classroom with already well developed vocabularies which they can learn how to analyse and organise. It does not recognise the bilingual pupils’ need to first learn the meanings of words; a process which can be enhanced by attention to the technical and grammatical aspects of words, but which also requires time spent discussing and negotiating meanings and time for reflection and deep processing of information.

Procedure

During the individual work within the Literacy Hour the teacher supports a different group every day on focussed “guided reading” or “guided writing” activities. During these activities the emphasis must be on scaffolding the pupils’ in order for them to achieve a level of learning beyond that which they would be able to achieve independently.

During the year school 1998-1999 (which we believed would be the final year of the school when we started, but in fact, turned out to be the penultimate year before closure) I taught the Literacy Hour to the fourth of five sets for English in year 6. The class included eight of the ten pupils I had taught in Year 5. Nineteen out of twenty two of the pupils were bilingual (18 Mirpuri-Punjabi and 1 Hindi speaking pupil). The three monolingual British pupils who made up the class all had very specific needs. One was partially sighted, another had an undiagnosed learning disorder and the third was a slow learner.

In order to balance the competing demands of delivering the new curriculum initiative and my own professional and research interests in the teaching and learning of vocabulary, I decided to teach ‘word’ level and ‘sentence’ level work during alternate weeks. This allowed me to plan focused sessions on vocabulary development which were central to the ‘word’ level work but which overlapped with the shared and guided reading activities. The words selected for vocabulary development were introduced during the shared reading activity and came directly or indirectly from the texts studied. During the word level some aspects of the words were discussed, for example their phonological, morphological, syntactic or discursual features. Also during this time an attempt was made to create a jointly constructed definition of the word. The twenty-minute guided reading and writing activities was often a focus for extending the vocabulary work.

Being guided by the research findings from the previous phases I knew I needed to provide,

- opportunities to discuss and construct the meanings of words
- explanations and descriptions of words
- opportunities to analyse word forms
- opportunities to use the new vocabulary in controlled situations
- freedom to experiment with new vocabulary

- frequent opportunities to revisit recently introduced vocabulary

I also planned to provide opportunities to jointly construct definitions of words rather than, as in my previous teaching, supply the pupils with ready made definitions. I wanted to examine to what extent the construction of definitions with pupils, using their words and expressions, but modelled so that it was grammatically correct, assisted their learning of the words.

My pedagogical aim in this phase of the project was to implement the strategies which had been identified as effective in helping bilingual pupils learn vocabulary within the constraints of the NLH. The focus of the research was on identifying some of the processes involved in the successful teaching and learning of vocabulary.

During the year I also continued to share lunch times with some of the pupils I taught. There was a regular group of five pupils, whom I had also taught in year 5, who came almost every day and a few other pupils from my literacy hour class who came less frequently. They enjoyed helping and were largely responsible for creating the 'word wall' in the classroom on which was displayed in large lettering every word that was taught in the literacy hour and its jointly negotiated definition. They were also keen to learn more vocabulary and so, some of the lunch hours were spent doing vocabulary learning activities. These sessions also provided me with data on the teaching and learning of vocabulary.

The data collected during this phase comprised,

- lesson plans with all vocabulary taught noted
- evaluations of vocabulary teaching sessions
- field notes of pupils' use of taught vocabulary
- records of pupils' written use of the taught vocabulary

Findings

The structure of the literacy hour made it extremely difficult to expose pupils to the quantity of new vocabulary which pre-literacy hour teaching suggested they were capable of learning. During a two week period an average of 6 words were explicitly and systematically taught and practised. The total number of words introduced and learned in this way over the year

was 75. Although this figure does not represent all the new words learned by the bilingual pupils it is, nevertheless, a small number of words to have learned in English lessons. When compared to the average increase in vocabulary of 1,000 words a year for native English speaking pupils, it is worrying.

Analysis of the data from the literacy hour and from the sessions held during the lunch hour has identified several processes which appear to have a significant effect on the progress of lexical items from their introduction to automatic use in speech. These are illustrated with evidence from the data in the framework at the end of this section, and are discussed below with reference to that framework.

The processes involved in the teaching and learning of vocabulary have been broadly categorized into three groups.

Firstly, there are processes which introduce meanings of new words to pupils. In my data this happened in three ways. Pupils became aware of an unknown word and requested a meaning, or the teacher introduced new words to pupils. The latter process was achieved in a variety of ways. The words were introduced and discussed as they were encountered in text or discourse or they were introduced before the text was read.

Secondly, processes involved in the analysis of word meaning were identified. This category describes the different processes the teachers and learners were involved in during the development of meaning. In some cases the meanings of words were explained and/or defined for pupils. In other cases the meanings were discussed and negotiated between the teacher and the pupils. In some cases definitions of words were constructed collaboratively by pupils and teachers and written down. Pupils also wrote down definitions constructed by the teacher.

The third category describes the use made by the pupils of the words taught. I use the term 'controlled' to describe the use of the words in oral and written exercises given to pupils which were deliberately designed to practise the new words. The term 'experimental' describes creative but self-conscious or deliberate use of the words, and 'automatic' describes use

where the words used appeared to have been automatically retrieved and processed unconsciously but not necessarily used appropriately.

There were very few examples in the data of *pupils requesting the meanings of words* from me. However, when they did, the meaning they took from my definition was usually quickly learned and used. This seemed to indicate that the words pupils select themselves and investigate have a specific importance, which may only be known to the child. The effect of this specific importance is demonstrated by the speed with which the words are used. For example, I do not know why the pupil asked me one lunch time what the word 'professor' meant, but I was impressed by his instant and confident response to the science teacher three days later, who held up a spring balance and asked the class, "what sort of person might use one of these". The pupil's reply was "a professor". The surprised teacher replied, "Professor of what? Music?", to which the pupil responded again immediately and confidently "professor of weighing things". I have assessed this pupil's use of the vocabulary as 'automatic', because the confidence and speed with which he selected it to respond to the teacher indicated that he had taken ownership of the word and had attached to it a specific meaning.

Significantly, there are no instances in the data of pupils asking me for meanings of words in the literacy hour. This is possibly a consequence of the high emphasis on 'rigour', 'pace' and teacher 'instruction' that the strategy requires. It leaves little time for reflection on what might and might not have been understood.

Words were introduced by the teacher in different ways. This was deliberate during the literacy hour in order to stimulate interest and provide variety within the prescribed daily structure. Sometimes the text that was being studied influenced the method of introduction. My findings tentatively suggest that pupils' learning of vocabulary can be enhanced by teaching them the meaning of a different form of a word which they will then encounter in a text. This method increases pupils' opportunities to engage in positive collaborative construction of the word's meaning and definition. The pupils have ready access to the recently-acquired information they need from the word which was pre-taught. That information enables them to do

the deep processing required for the construction of the meaning of the new form of the word. Schmidt (1990) discusses the ‘noticing’ or the conscious attention paid to particular aspects of a word’s form and meaning, which seems to determine how well a word is learnt. The deep processing that the pupils are able to engage in, together with the sense of achievement when they get a positive result seems to accelerate word learning.

For example, (see table at the end of this section) before presenting a text on the Bermuda Triangle called the ‘Great Unsolved Mystery’, I introduced the words ‘solve’ and ‘mystery’. The meanings of these words were explained and discussed and definitions supplied by me were recorded in their notebooks. On being presented with the text, the pupils were able to use their knowledge of those words, plus their knowledge of prefixes learnt the previous term, to negotiate the meaning of the multi word unit ‘a great unsolved mystery’. Entirely independently (i.e. with no teacher intervention) they jointly defined the phrase as “something which you’ll just never know the answer to”. During the course of the week the pupils had many exposures to the words. Five weeks later there was evidence that for at least two pupils the phrase had become part of their own productive mental lexicons when they concluded a discussion with their form teacher (about a pupil’s shoe that had been found in the toilet) by saying “it’s an unsolved mystery” and “yeah it’s a great unsolved mystery”.

Another example from the same text concerns the teaching and learning of another multi-word unit ‘under surveillance’. Again, before reading the text which contained the words I introduced the verb ‘to survey’. I explained the meaning, we discussed it and I defined it. My fieldnotes record that when we met the vocabulary ‘under surveillance’ in the text, some time was spent discussing the relationship between the two vocabulary items but the pupils were unable to establish a meaning in the specific context. An explanation and definition were given and the pupils were successful in using both vocabulary items in controlled exercises. Three weeks later one pupil demonstrated her understanding of the vocabulary and her ability to use it in a completely different context when she told me that she kept her precious objects under her bed “under surveillance miss”. The manner in which she

spoke and the expression on her face suggested to me that she was experimenting with the vocabulary and testing its appropriacy.

These two examples of experimental and automatic use of taught vocabulary were, I suggest, influenced by the deep level of cognitive processing which resulted after a different form of the word was pre-taught.

The processes for the analysis of word meaning which I have identified require varying degrees of cognitive attention or deep processing in the learning of vocabulary. My data suggests a relationship between the mental processing that the pupils engage in when constructing the meanings of words and the confidence with which the words are used. The greater the involvement and the deeper the analysis of the words' meaning and form, the more quickly the pupils took 'ownership' of them and started to use them in their speech. For many pupils it also seemed to be the case that *collaboratively constructed definitions* which contained their own expressions assisted the learning process. In the teaching and learning context described here it was during the processes of analysis that word forms were also highlighted.

Provision of multiple exposures and opportunities to use the taught vocabulary in a variety of highly controlled and also less structured contexts seemed essential to the pupils' learning of the words. I kept a list of all words taught and exploited opportunities to use them. In an attempt to create a literate environment in the classroom which was relevant to the pupils' vocabulary learning experiences, all the words and their definitions which were often composed by the pupils were written in large letters and were pinned on the classroom walls. It was a well-used and popular resource. Pupils drew my attention to words which I had failed to write up; an indication, I believe, of their increased interest and active involvement in vocabulary learning.

From an analysis of spoken discourse and pupils' written work as well as my field notes collected during the year of teaching vocabulary within the literacy hour and during lunch breaks I have identified some processes involved in the teaching and learning of vocabulary. The table on the following pages is an attempt to show how individual words develop from

first introduction, through a period of analysis into the pupils' active vocabulary.

Processes involved in teaching and learning vocabulary

	introduction		analysis				use		
Vocabulary	Meaning requested by pupil	Introduced by teacher	Meaning explained/defined by teacher	Meaning negotiated by pupil and teacher	Definition collaboratively constructed by pupil and teacher	Word and definition recorded by pupil	Controlled	Experimental	Automatic
'great unsolved mystery'		Before reading text 1. mystery. . . 2. solve. . .	Explained and defined	during reading of text 1. mystery (in context) 2. unsolved mystery 3. great unsolved mystery	Great unsolved mystery	Mystery Solve Great unsolved mystery	In listening, speaking, reading and writing exercises in class. Homework exercise to share with family : report back on unsolved mysteries at home.		5 weeks later. Concluding remarks on discussion about pupil's shoe found in toilet. P1. <i>its an unsolved mystery miss</i> Y6P2. <i>yeah it's a great unsolved mystery</i>
'under surveillance' from text on Bermuda triangle		Before reading text To survey	Explained and defined	Unsuccessful (Explanation and definition given)		To survey Under surveillance	In listening, speaking, reading and writing exercises in class	3 weeks later. In discussing 'Our most precious objects', T. . . and where do you keep it do you have a special place for it somewhere safe Y6P. under my bed under <i>surveillance</i> miss	
provocative		In discussion of character in text	Explained and defined			provocative	Listening and limited speaking, reading and writing	'hes being <i>provocative</i> miss' frequently heard in class. Also heard in playground	(19 weeks later) In defence of friend whilst discussing playground incident Y7P. he wasn't <i>provocative</i> miss

Vocabulary	Meaning requested by pupil	Introduced by teacher	Meaning explained/ Defined by teacher	Meaning negotiated by pupil and teacher	Definition collaboratively constructed by pupil and teacher	Word and definition recorded by pupil	Controlled	Experimental	Automatic
professor	Meaning requested		defined						Same week in science lesson. T. holds up spring balance and asks T. what sort of person might use one of these Y6P: <i>professor</i> T. Professor of what...music Y6P: <i>professor</i> of weighing things
argumentative motivation		A theme from the morning's assembly	✓	✓	✓	✓		(4 weeks later - written) P.Yr 7. My friend Hamza was <i>motivating</i> me to run	

Conclusion

This small qualitative study was motivated by my academic and professional interest in the language development and learning of the bilingual pupils I teach and in raising their overall academic achievement. At a theoretical level my interest is in contributing to the development of an understanding of vocabulary development, which will link theory, generated from empirical research, and practice and highlight an appropriate pedagogy. Building on previous small scale qualitative research projects from which only I had benefited, a major aim of this project was to increase the influence of the research to include the participants as part of the research process so that they too might benefit. The empirical work involved in this study has assisted in forming a grounded view on pedagogy and has influenced the classroom practice of several practitioners.

The main objectives of the study were to identify, describe and evaluate effective teaching strategies and the processes involved in the learning of vocabulary.

Although caution must be used when making generalisations from the study, because of its small size and its focus on a specific context, certain findings are sufficiently revealing to suggest that these objectives have been met.

The main contribution of this study is the identification of strategies for the effective teaching of vocabulary to young bilingual learners and a description of the processes involved in the acquisition of vocabulary. The frameworks, which I have devised, have practical relevance to teachers and are linked to social theories of language and learning theories. I have applied Vygotsky's notion of scaffolding very specifically to discourse and have demonstrated how the provision of linguistic frameworks facilitate learning by reducing the quantity of language needing to be processed. My findings, thus, make an empirical and theoretical contribution to the profession.

The main conclusion from this study is that

- bilingual pupils are enthusiastic and very successful learners of vocabulary when it is presented as part of a planned and structured programme which recognises:
 - the pupils need to engage in the construction of the meanings of vocabulary
 - the pupils' need to process words at a deep level
 - that bilingual pupils need to be given multiple exposures to and opportunities to use the newly acquired vocabulary

In the account of my methodology I stressed the importance of an approach that was flexible, collaborative, participatory and emancipatory. The level of collaborative involvement with other members of staff was not as great as I had first thought it might be, due to the difficult and unforeseen circumstances facing the school community. This undoubtedly affected the aim of implementing changes in practice throughout the school, which would have benefited a greater number pupils. However, the involvement of a small group of pupils in the research process investigating aspects of their own linguistic environments and vocabulary acquisition enriched the study and empowered the pupils. They took an interest in their vocabulary learning and became confident users of sophisticated vocabulary. This was noted by members of staff, including some who had never had any involvement in the project. When asked to explain to other pupils at the beginning of the 1999-2000 school year what they found most helpful in the learning of vocabulary, they said,

P. Reh look at how they are made up
look for clues like prefixes and things
Miss tells us advice what information and give us detail about the word

P. Ans. I like it sometimes when Miss tells us words that we don't have in the dictionary
we highlight the word then miss talks more about it
we use them in our stories

P. Ars. when you first look at it it looks weird and you want to learn it

P. Ann. I like it best when we talk about them

P. Qai. I like it better when we listen to Miss because she gives us examples more detail she tells us about the word like you put it in sentences so we understand and she gives us examples or she give us a syllable

P. Nos. I try to work it out from the text
break them up into bits

I believe these examples from the data illustrate an interest, which developed as a result of the pupils' engagement as participants in the investigation with me into how they best learned the meanings of words.

The flexibility of the methodological approach that I devised allowed me as a practitioner-researcher to develop subsidiary spirals of investigation that interested me and which were highly relevant to my teaching context. Both the investigations into the school dictionary and dictionary use and the pupils' linguistic environments informed the context of the research and gave me knowledge, which influenced my practice.

The main sources of data were the audio recordings and the fieldnotes from the participant and non-participant observations, informal interviews and copies of much of the pupils' written work. This provided rich data for qualitative analysis.

References

- Aitchison, J. (1987) *Words in the Mind*. Oxford: Blackwell.
- Arnberg, L. (1987) *Raising Children Bilingually: The preschool years*. Philadelphia: Multilingual Matters.
- Baetens Beardsmore, H. (1982) *Bilingualism: basic principles*. Clevedon: Multilingual Matters.
- Baker, C. (1993) *Foundations of Bilingual Education and Bilingualism*. Clevedon: Multilingual Matters.
- Bakhtin, M. (1986) 'The problem of Speech Genres'. In Emerson, C. and Holquist, M. (eds) *Speech Genres and other late essays*. Austin: University of Texas Press.
- Baxter, J. (1980) 'The Dictionary and vocabulary behaviour: A single word or a handful?' *TESOL Quarterly* 14 (3):325-36
- Bloom, L. (1970) *Language Development: Form and function in emerging grammars*. Cambridge, MA: MIT Press.
- Bloomfield, L. (1933) *Language*. London: Allen and Unwin.
- Braine, M.D.S. (1963) 'The Ontogeny of English Phrase Structure : The first phase'. *Language* 39:1-13.
- Brown, R. (1973) *A First Language: The early stages*. London: Allen and Unwin.
- Brumfit, C. (1984) *Communicative Methodology in Language Teaching*. Cambridge: Cambridge University Press.
- Bruner, J. (1978) 'The role of dialogue in language acquisition'. In Sinclair, A., Jarvella, R and Levelt, W.J.M. (eds) *The Child's Conception of Language*. New York: Springer-Verlag.
- Bruner, J. (1985) 'Vygotsky: a historical and conceptual perspective'. In Wertsch, J.V. (ed.) *Culture, Communication and Cognition: Vygotskian perspectives*. Cambridge University Press.
- Bruner, J. (1991) audio cassette recorded for course E820, The Open University.
- Bullard, N. (1985) 'Word-based perception: a handicap in second language acquisition?' *English Language Teaching Journal* 39 (1): 28-32.
- Cameron, L. (1996) 'Appropriate Demands: A Key Element in Language Development in Mainstream Secondary Classrooms'. Occasional Paper published by NALDIC.

- Cameron, L., Moon, J. and Bygate, M. (1996) 'Language Development of Bilingual Pupils in the Mainstream'. *Language and Education* 10 (4): 221-236
- Carr, W. and Kemmis, S. (1986) 'Action Research in Education'. In Hammersley, M. (ed) *Controversies in Classroom Research*. Open University Press. 2nd edition.
- Carter, R. (1998) *Vocabulary*. 2nd edition. London: Routledge.
- Carter, R. and McCarthy, M. (eds) (1988) *Vocabulary and language Teaching*. Longman.
- Cassels, J.R.T. and Johnston, A.H. (1980) Understanding of non-technical words in science. London: The Royal Society of Chemistry.
- Chomsky, N. (1965) *Aspects of the theory of Syntax*. Cambridge, Mass.: MIT Press
- Chomsky, N. (1970) 'Remarks on nominalization'. In Jacobs, R.A. and Rosenbaum, P.S. (eds) *Readings in English Transformational Syntax*. Waltham, Mass.: Ginn.
- Clark, E.V. (1997) 'Conceptual perspective and lexical choice in acquisition'. *Cognition* 64.
- Clark, H.H. and Clark, E.V., (1977) *Psychology and Language : An Introduction to Psycholinguistics*. New York: Harcourt Bruce Jovanovich.
- Cohen, L. and Manion, L. (1989) *A Guide to Teaching Practice*, London , Routledge
- Collier, P.C. (1987) Age and Rate of Acquisition of Second Language for Academic Purposes. *TESOL Quarterly*, Vol.21, No.4. pages 617-641
- Collier, P.C. (1989) How Long? A Synthesis of Research on Academic Achievement in a Second Language. *TESOL Quarterly*, Vol.23, No.3 pages 509-531
- Cooke, J. and Williams, D. (1985) *Working with Children's Language*. Bicester, U.K. : Winslow Press.
- Corder, S.P. (1981) *Error Analysis and Interlanguage*. Oxford: OUP
- Coulthard, M. (1977) *An Introduction to Discourse Analysis*, Longman.
- Crystal, D. (1998) 'Sense: the final frontier'. *Child Language Teaching and Therapy* 14 (1):2 -27.

- Culler, J. (1976) 'Saussure's Theory of Language'. In Mercer, N. (ed) *Language and Literacy from an Educational Perspective*, Vol.1.
- Cummins, J. (1979) 'Linguistic interdependence and the educational development of bilingual children'. *Review of Educational Research* 49:222-251.
- Cummins, J. and Swain, M. (1983) 'Analysis by rhetoric: reading the text or the reader's own projections? A reply to Edelsky et al'. *Applied Linguistics* 4:23-41.
- Department for Education and Employment, (1995) *National Curriculum for English Key Stage Two*. London: DfEE.
- Department for Education and Employment, (1999) *National Literacy Strategy: framework for teaching*. London: DfEE.
- Diebold, A. R. (1964) 'Incipient bilingualism'. In Hymes, D. et al (eds) *Language in Culture and Society*. New York: Harper and Row.
- Dubin, F. and Olshtain, E. (1986) *Course Design*. Cambridge: Cambridge University Press
- Dulay, H., Burt, M. and Krashen, S. (1982) *Language Two*. Oxford: Oxford University Press.
- Edwards, D. and Mercer, N. (1987) *Common Knowledge: The Development of understanding in the Classroom*. London: Methuen
- Elley, W. (1989) 'Vocabulary acquisition from listening to stories'. *Reading Research Quarterly* 24(2), 174 – 187.
- Ellis, R. (1985), *Understanding Second Language Acquisition*. Oxford: Oxford University Press
- Ellis, R.(1982) 'The origins of interlanguage'. *Applied Linguistics* 3:207-23.
- Ellis,R. (1994) *The Study of Second Language Acquisition*. OUP
- Elmore, R. (1989) 'Backward mapping: implementation research and policy decisions'. In Moon, B., Murphy. P. and Raynor, J. (eds)
- Fathman, A. (1975) 'The relationship between age and second language productive ability'. *Language Learning* 25:245-266.
- Fishman, J. (ed) (1968) *Readings on the Sociology of Language*. The Hague: Mouton.
- Gardner, P.L. (1972) *Words in Science*. Melbourne: Australian Science Education Project.

- Gibbons, J. (1985) 'The silent period: an examination'. *Language Learning* 35: 255-67
- Glaserfelds, E von (1989) 'Learning as a constructive activity'. In Murphy, P., Moon, B. (eds) *Developments in Learning and Assessment*. E819 Reader 2. London: Hodder and Stoughton.
- Goswami, D. and Stillman, P. (1987) *Reclaiming the Classroom: teacher research as an agency for change*. New Hampshire: Boynton Cook.
- Grabe, W. and Stoller, F.L (1997) 'Reading and vocabulary development in a second language: A case' in Coady, J., and Huckin, T. *Second Language Vocabulary and Acquisition* CUP.
- Hakuta, K. (1976) 'A case study of a Japanese child learning English as a second language'. *Language Learning* 26: 321-51
- Halliday, M., McIntosh, A. and Stevens, P. (1964) *The Linguistic Sciences and Language Teaching*. London: Longman.
- Halliday, M.A.K. (1978) *Language as Social Semiotic*. Edward Arnold.
- Hammersley, M. (1993) 'On the teacher as researcher'. In Hammersley, M. (ed)
- Hammersley, M. (ed) (1993) *Educational Research: current Issues* Vol. 1. Open University/Paul Chapman.
- Hanania, E. and Grandman, H. (1977) 'Acquisition of English structures : a case study of an adult native speaker of arabic in an English-speaking environment'. *Language Learning* 27: 75-91.
- Hansegård, N. E. (1975) 'Tvåspråkighet eller halvspråkighet?' *Invandrare och Minoriteter* 3:7-13.
- Harley, T.A. (1996) *The Psychology of Language, From Data to Theory*. Psychology Press, Hove, U.K.
- Haugen, E. (1953) *The Norwegian Language in America: a study in bilingual behaviour*. Philadelphia: University of Philadelphia Press.
- Hirst, P.H., (1993) 'Educational Theory'. In Hammersley, M. (ed)
- Hodson. D. (1989) 'Towards a Kuhnian Approach to Curriculum Development'. In Moon, B., Murphy. P. and Raynor, J. (eds)
- Hornby, P. (ed) (1977) *Bilingualism*. London: Academic Press.
- Horwitz, E.K. (1988) 'The beliefs about language learning of beginning university foreign language students'. *The Modern Language Journal* 72:283-94

- Huang, J. and Hatch. E. (1978) 'A Chinese child's acquisition of English' in Hatch, E. (ed) *Second Language Acquisition*. Rowley, Mass.: Newbury House.
- Hyltenstam, K. and Pienemann, M. (eds.) (1998) *Modelling and Assessing Second Language Acquisition* Clevedon Multilingual Matters.
- Hymes, D. (1971) 'Competence and performance in linguistic theory'. In Huxley R. and Ingram, E. (eds) *Language Acquisition: Models and Methods*. New York: Academic Press.
- Hymes, D. (1972) 'On communicative competence'. In Pride, J.B. and Holmes, J. (eds) *Sociolinguistics*. Harmondsworth: Penguin.
- Itoh, H. and Hatch. E.. (1978) 'Second language acquisition: a case study' in Hatch, E. (ed) *Second Language Acquisition*. Rowley, Mass.: Newbury House.
- Jackson, H.J. (1989) *Words and their meaning*. New York: Longman.
- Jakobson, R. (1968) *Child Language, aphasia and phonological universals*. The Hague : Mouton.
- Jenkins, J., Stein, M., Wysoki, K. 1984 'Learning vocabulary through reading'. *American Educational Research Journal* 21(4): 767-787.
- Katz, J.J. (1966) *The Philosophy of Language*. Harper and Row.
- Kemmis, S. (1988) 'Action research', in Keeves, J. P. (ed) *Educational Research Methodology and Measurement: an international handbook*. Oxford: Pergamon.
- Kemmis, S. (1993) 'Action Research'. In Hammersley, M. (ed)
- Kemmis, S. and Wilkinson, M. (1998) 'Participatory action research and the study of practice'. In Atweh, B., Kemmis, S. and Weeks P. (eds) *Action Research in Practice*. Routledge.
- Krashen, S. (1981) *Second Language Acquisition and Second Language Learning*. Oxford: Pergamon.
- Krashen, S. (1982) *Principles and Practice in Second Language Acquisition*. Oxford: Pergamon
- Krashen, S. (1985) *The Input Hypothesis*. London: Longman.
- Krashen, S. and Scarcella. (1978) 'On routines and patterns in second language acquisition and performance'. *Language Learning* 28: 283-300.

- Lambert, W. E., Havelka, J. and Gardener, R. C. (1959) 'Linguistic manifestations of bilingualism'. *American Journal of Psychology* 72:77-82.
- Laufer, B. (1997) 'The lexical plight in second language reading'. In Coady, J. and Huckin, T., *Second language vocabulary Acquisition*. Cambridge
- Lenneberg, E. (1967) *The Biological Foundations of Language*. New York : Wiley
- Leontev (1981) *Problems of the Development of Mind*. Moscow: Progress Publishers.
- Leung, C. (1996) *Linguistic Diversity in the 1990s Some Language Education Issues for Minority Ethnic Pupils*. Commission for Racial Equality and Thames Valley University
- Leung, C. (1997) 'Language Content and Learning Process in Curriculum Tasks'. In Leung, C. and Cable, C. (eds) *English as an Additional Language*. NALDIC.
- Long, M. and Richards, J. (1997) 'Series editors' preface'. In Coady, J. and Huckin, T. (eds) *Second Language Vocabulary Acquisition*. Cambridge: Cambridge University Press.
- Lupescu, S. and Day, R. R. (1993) 'Reading, dictionaries and vocabulary learning'. *Language Learning* 43 (2): 263-287.
- Mackey, R. (1968) 'The description of bilingualism'. In Fishman, J. (ed)
- Macnamara, J. (1967) 'The bilingual's linguistic performance: a psychological overview'. *Journal of Social Issues* 23: 59-77.
- McCarthy, M. (1984) 'A New Look at Vocabulary in EFL'. *Applied Linguistics* 5 (1):2-21.
- McCarthy, M. (1990) *Vocabulary*. Oxford: Oxford University Press.
- McKeown, M.G. (1993) 'Creating effective definitions for young learners'. *Reading Research Quarterly* 8 (1)
- McLaughlin, B. (1978) *Second Language Acquisition in Childhood*. Hillsdale: Lawrence Erlbaum Associates.
- McWilliam, N. (1996) *Why are Words Important for Teachers and Children in Multilingual Classrooms?* Dept. of Teaching Studies, Bradford and Ilkley College, Bradford University.
- McWilliam, N. (1998) *What's in a Word: vocabulary development in multilingual classrooms*. Trentham Books.

- Meara, P. (1984) The Study of Lexis interlanguage, in Davis, A., Criper, C. and Howatt, A (eds.) *Interlanguage*. Edinburgh:Edinburgh University Press.
- Meara, P. (1996) *The Vocabulary Knowledge Framework*. Vocabulary Acquisition Research Group Virtual Library. University of Wales, Swansea. <http://www.swan.ac.uk/cals/vlibrary/pm96d.html>. Assessed on 02/12/99
- Meisel, J., Clahsen, H. and Pienemann, M. (1981) 'On determining developmental stages in natural second language acquisition'. *Studies in Second Language Acquisition* 3: 109-35.
- Mercer, N. (1991) (reprinted edition 1995) 'Researching Common Knowledge'. In Walford, G. (ed) *Doing Educational Research*. Routledge.
- Mercer, N. (1994) 'Neo-Vygotskian theory and classroom education'. In Stierer, B. and Maybin, J. (eds) *Language, Literacy and Learning in Educational Practice*. Clevedon: Multilingual Matters.
- Miller, G. A., and Gildea, P. M. (1985) 'How to misread a dictionary'. *AILA Bulletin*, Pisa: AILA (International Association for Applied Linguistics)
- Moon, B., Murphy, P. and Raynor J (eds) (1989) *Policies for the curriculum*. Hodder and Stoughton.
- Mowrer, O. H. (1960) *Learning and Theory and Symbolic Processes*. New York : John Wiley
- Nagy, W. and Herman, P. (1985) 'Incidental vs instructional approaches to increasing reading vocabulary'. *Educational Perspectives* 23:16-21.
- Nagy, W. and Herman, P.A (1987) 'Breadth and depth of vocabulary knowledge: Implications for acquisition and instruction'. In M. G. McKeown and M. E. Curtis (eds) *The Nature of Vocabulary Acquisition*. Hillsdale: Lawrence Erlbaum Associates.
- Nagy, W.E., Herman, P.A. and Anderson, R.C. (1985) 'Learning Words from Context'. *Reading Research Quarterly* 20(2)
- Nation, P. (1990) *Teaching and Learning Vocabulary*. Boston: Heinle and Heinle.
- Nelson, K. (1973) *Structure and Strategy in Learning to Talk*. Monographs of the Society for Research in Child Development, 38 (serial no.149) University of Chicago Press.
- Newman, D., Griffin, P. and Cole, M. (1989) *The Construction Zone*. Cambridge: Cambridge University Press.

- Oestreicher, J. P. (1974) 'The early teaching of modern language, education and culture'. *Review of the Council for Cultural Cooperation of the Council of Europe* 24: 9-16.
- Oller, D.K.. (1980) 'The Emergence of Sounds of Speech in Infancy'. In Yeni-Komshian, G.H., Kavanagh, F.K and Ferguson, C.A. (eds) *Child Phonology* (vol.1.) New York: Academic Press.
- Padilla, A. M. and Lindholm, K. (1984) 'Child bilingualism: the same old issues revisited'. In Martinez, J. and Mendoza, R. (eds) *Chicano Psychology*. Orlando: Academic Press.
- Pawley, A. and Syder, F. H. (1983) Two puzzles for linguistic theory: natively like selection and native like fluency. In J.C. Richards and R.W. Schmidt (eds.), *Language and Communication*. London: Longman.
- Peters, A. (1983) *The Units of Language Acquisition*. Cambridge: Cambridge University Press.
- Pienemann, M. (1980) 'The second language acquisition of immigrant children' in Felix, S. 1980. *Second Language Development: Trends and Issues*. Tübingen: Gunter Narr.
- Pollard, A. & Tann, S. (1987) *Reflective Teaching in the Primary School*. Cassell.
- Prophet B. and Towse P. (1999) *School Science Review*. Vol. 81 (295) p.79-86
- Ramírez, J.D., Yuen, S.D. and Ramey, D.R. (1991) Final Report: Longitudinal Study of structured English immersion strategy, early exit and late exit programs for language minority children. Report submitted to the US Department of Education. San Mateo, CA: Aguirre International
- Richards, J.C. (1976) The Role of Vocabulary Teaching. *TESOL Quarterly* 10, 1 pp77-89.
- Richmond (1996) *Richmond Tests of Basic Skills level 2*. NFER-NELSON.
- Romaine, S. (1989/1995) *Bilingualism*. Oxford: Blackwell.
- Roth, W-M., (1999) 'Authentic School Science: Intellectual Traditions'. In McCormick, R. and Paecher, C. (eds) *Learning and Knowledge*. Paul Chapman Publishing.
- Rudduck. J. (1989) 'Curriculum change: Management or Meaning'. In Moon. B., Murphy, P and Raynor, J (eds)
- Saunders, G., (1988) *Studies in Bilingual Development*. Hillsdale NJ : Erlbaum

- Savignon, S.J. (1983) *Communicative Competence: Theory and Classroom Practice*. Reading, Mass.: Addison-Wesley
- Saville-Troike, M. (1988) 'Private speech:evidence for second language learning strategies during the "silent period"'. *Journal of Child Language* 15: 567-90
- Schmidt, R. W. (1990) 'The role of consciousness in second language learning'. *Applied Linguistics* 11: 129-158.
- Schmitt, N. (1997) 'Measuring collocational knowledge: Key issues and a proposed assessment procedure'. Unpublished draft version. Nottingham University.
- Schmitt, N. and McCarthy, M. (1997) 'Vocabulary Learning Strategies'. In Schmitt, N. and McCarthy, M. (eds)
- Schmitt, N. and McCarthy, M. (eds) (1997) *Vocabulary Description, Acquisition and Pedagogy*. Cambridge University Press.
- Schmitt, N. and Meara, P. (1997) 'Researching Vocabulary through a word Knowledge Framework'. In *Studies in Second Language Acquisition*. 19(1)
- Schon, D.A., (1983) *The Reflective Practitioner: how professionals think in action*. London: Temple Smith.
- Scott, J. and Nagy, W.E. (1989) 'Fourth Graders' Knowledge of definitions and how they work'. Paper presented at the annual meeting of the National Reading Conference, Austin, Texas.
- Shulman, L.S. (1999) 'Knowledge and Teaching: Foundations of the New Reform'. In Leach, J. and Moon, B. *Learners and Pedagogy*. PCP in association with The Open University.
- Simpson, M. (1989) 'School Based and Centrally Directed Curriculum Dvelopment-The Uneasy Middle Ground'. In Moon, B., Murphy, P. and Raynor J (eds)
- Sinclair, J. (1991) *Corpus, Concordance, Collocation*. Oxford: OUP
- Singleton, D. (1989) *Language Acquisition: the age factor*. Clevedon: Multilingual Matters.
- Skutnab-Kangas, T. (1984) *Bilingualism or Not: the education of minorities*. Clevedon: Multilingual Matters.
- Slobin, D.I. (1973) 'Cognitive Prerequisites for the Development of Grammar'. In Ferguson, C.A. and Slobin, D.I. (eds), *Studies in Child Development*. New York: Holt Rinehart and Winston.

- Sökmen, (1997) 'Current trends in teaching second language vocabulary'. In Schmitt, N. and McCarthy, M. (eds)
- Stahl, S. (198) 'Differential word knowledge and reading comprehension'. *Journal of Reading Behaviour* 15:33-50.
- Stenhouse, L., (1975) 'The Teacher as Researcher'. In *Offprints Reader*, E835, Open University.
- Stern, H.H. (1983) *Fundamental concepts of language teaching*. Oxford: Oxford University Press.
- Summers, D. (1988) 'The role of dictionaries in language learning'. In Carter, R. and McCarthy, M. (eds)
- Swann Committee of Inquiry (1985) *Education for All*. London: HMSO.
- Taylor, D. (1988) 'The meaning and use of the term competence in linguistics and applied linguistics'. *Applied Linguistics* 9 (2)
- Taylor, M. M., (1974) 'Speculations on Bilingualism and the Cognitive Network' *Working Papers on Bilingualism* 2:68-124.
- The Open University, (1994) E819 *Curriculum, Learning and Assessment*. audio cassette.
- The Open University, (1994) E825 *Language and Literacy in Social Context*. Study Guide.
- The Open University, (1996) E835 *Educational Research in Action*. Study Guide.
- The Open University, (1999) E836 *Learning, Curriculum and Assessment*. Study Guide.
- Vorster, J. Divide and rule: On the rationalisation of vocabulary teaching. Dept. of Psychology, University of Natal, Durban. (<http://www.und.ac.za/und/ling/archive/vors-01.html>) assessed 15/02/01
- Vygotsky, L.S. (1962) *Thought and Language*. Edited and translated by Hanfmann, E and Vakar, G. M.I.T. Press.
- Vygotsky, L.S. (1978) *Mind in Society*. London: Harvard University Press
- Vygotsky, L.S. (1981) 'The genesis of higher mental functions'. In J. Wertsch (ed.) *The Concept of Activity in Soviet Psychology*. Amonk, NY: Sharpe
- Weinreich, U. (1953) *Languages in Contact*. The Hague: Mouton.

- Widdowson, H. (1978) *Teaching Language as Communication*. Oxford: Oxford University Press
- Wiles, S. (1985) 'Language and Learning in Multi-Ethnic Classrooms: Strategies for supporting Bilingual Students'. In Wells, G. and Nicholls, J. *Language and Learning: an interactional Perspective*. London: Falmer Press
- Winter, R. (1989) *Learning from Experience. Principles and practice in Action Research*. London: Falmer Press
- Wong-Fillmore (1976) Unpublished PhD Study in Ellis (1994)
- Wood, D. (1988) *How Children Think and Learn*. Oxford: Blackwell.
- Yoshida, M. (1978) The acquisition of English vocabulary by a Japanese-speaking child. In Hatch, E. (ed.) *Second Language Acquisition*. Rowley, Mass.: Newbury House.
- Zimmerman, C.B. (1997) 'Historical trends in second language vocabulary instruction'. In Coady, J. and Huckin, T. (eds) *Second Language Vocabulary Acquisition*. Cambridge: Cambridge University Press.

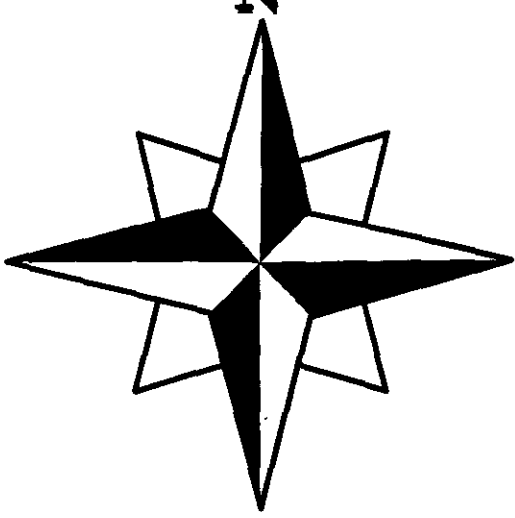
Appendices

Appendix 1	Geography vocabulary and definitions
Appendix 2	Table for dictionary survey
Appendix 3	Worksheet: An Expedition of Discovery
Appendix 4	Worksheet: Cloze procedure
Appendix 5	Worksheet: Cloze procedure
Appendix 6	Tables for diary work
Appendix 7	Examples of diary work

Appendix 1: Geography vocabulary and definitions (page 75)

Key Words

- Source: the start of the river
- Waterfall: a place where river water falls from a high place to a low place
- Erosion: the wearing away of the land by the power of the water
- Transportation: the moving downstream of material (the load)
- Load: the material which the river transports or carries, i.e. the stones, sand, mud
- Deposition: the dropping of the load i.e. mud, sand, stones
- Meander: a bend in the river
- Tributary: a stream or small river which flows into a larger river
- Confluence: the place where two streams/ rivers flow into each other
- Mouth: the end of the river (where it flows into a sea or lake)



An Expedition of Discovery

You must prepare for an expedition to an isolated, unexplored and uninhabited island.

You will be there for six months and you will record everything you see.

You will have to be self sufficient.

- Make a list of things which you will need to take with you.
- Write down what you will need to check out on the island as soon as you get there.
- Write down the things that you will need to do to survive on the island.
- Write a description of how you will explore the island.
What sort of things will you look for?
How will you record your observations?

Vocabulary

Robinson Crusoe wantedlife.

He wanted a life full of.....

There was a terrible storm and the ship he was on was.....

All the sailors drowned except for Robinson Crusoe.

He was.....

He the shipwreck because he was such a good swimmer.

He was washed up onto an island.

He climbed the biggest hill and saw that the island was.....

He could not see any other islands in the sea. The island he was to spend the next thirty years on was.....

Robinson Crusoe became He grew food to eat and made clothes from the skins of wild animals that he caught and killed.

Vocabulary

The new boy stood in the corner of the playground on his own. Nobody went near him.

Nobody asked him to play. He felt very.....

There was greatat playtime when a woman in an ice cream van drove into the playground and started handing out free ice creams.

Hanna Hauxwell sometimes never saw another person for weeks when it snowed. Her farm was in the middle of the yorkshire moors. It was very.....

Asif and Ali are twins. Asif is a quiet boy who likes reading, doing his homework, making models and helping his mum in the house. Ali prefers to be outside. He spends a lot of time exploring on his bike, climbing on the rocks on the seashore and building dens. He is much morethan his brother.

Mr. Brown has dug up the lawn in his back garden because he never wants to have to buy any vegetables ever again. He is going to grow them all where his lawn used to be. He said to his neighbour,
“ In ten weeks time, when all the seeds that I have planted have grown into plants I will be..... in vegetables.”

The languages I use

- Think about the languages you use.
- Think about *where* you use each language.
- Do you use them in different places ?
- Think about *who* you use each language with.
- Do you use different languages with different people ?
- Think about *why* you use one language instead of another.
- Do you use them for different purposes (reasons) ?

When you have had a good think copy the grid below into your diary and complete it.

Languages I use	Where ?	Who ?	Why ?

People I often talk to

People at home	Where	When	What we talk about	Language
Mum Dad	in my shop in his room	most of the time in the evening	Can I work in the shop about my school work and h/w	Punjabi English
Grma	in the living room	after school.	Give my some money. I ask whats to eat. Can I watching	Urdu
brother	in my bedroom	in the evening	About cricket and to tell me some work of my home work which I do not no.	English
Mum	in the living room	after massage	Solering safe out about the aliveing week and pick lunch.	Urdu

21st June

Conversation

Language	Spoken to	Place	Time
English	Sister	bedroom	7:15
Punjabi	Dad	Outside bedroom	7:20
Punjabi	Dad	living room	7:45
Punjabi	Mum	living room	7:45
English	Sister	living room	7:50
English	Sister	outside near corridor driveway	8:00
English	Friend	School	8:10
English	teacher	classroom	8:45

7:15 Said :- are you going to drop me off.
Said :- bye and went to dad's bedroom.

7:20 Said :- hello. and asked if he is going to the toilet. He said no. and I went back to bed.

7:45 Said :- dad could I have my bus money for my dinner money.

7:45 Said :- hello and asked what we are going to eat.

7:50 Said :- hurry up we are going to school.

8:00 Said get into the car because I'm getting late.

8:10 Said :- hello Pakistan lost because of the war.

8:45 Registration :- said yes Mr MacLarty.

Tuesday

of ten
People I frequently talk to

people at home	Where	When	What We talk about	
my mum	living room	mostly at the weekend	mum ask me to do something	work
My big sister her sister? when?	living room	mostly at the weekend	ask what's for dinner. sorting things out for school.	Eng
My big brother	living room	mostly at the weekend	brother ask me to show my book I tell him to sign it.	Eng work
my sister	living room	mostly at the evening	What I did. I tell her what I did.	Eng work
my dad	living room	mostly at the evenings	dad do you what chapter. He says yes or no. he tell me	