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INPUT AND ACHIEVEMENT IN AN ACQUISITION-POOR ENVIRONMENT : VARYING LEVELS OF L2 PROFICIENCY AMONG PRE-PUBERTY MAURITIAN LEARNERS OF ENGLISH

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Thesis submitted for the degree of Doctor of Philosophy
Department of Linguistics and English Language
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May 2003

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ABSTRACT

The aim of this study is to explore the factors leading to variation in English language proficiency levels in Mauritius, an island situated in the Indian Ocean and where English is the official language spoken along with a French-based Mauritian Creole and another second language, French. The impetus for the study were the increasingly lower scores on exit tests, namely the Certificate of Primary Education (the last examination at the end of the Primary cycle), the Cambridge School Certificate (SC) and the Higher School Certificate (HSC) examination since the introduction of universal secondary education in 1976. The study seeks to characterize and compare learners in rural and urban contexts in Mauritius in terms of the extent to which these settings provide opportunities for English language learning. The chief contention of this study is that there exist different kinds of conditions inside and outside the classroom which make available differential opportunities for English language learning. The central concern of this study is, therefore, to find out to what extent and in what ways the nature of classroom and extra-classroom interaction such as home language use other than English differs in rural and urban classes, and the nature of the conditions for language learning that become available as a result of these differences in classroom and extra-classroom interaction. Taking these exposure factors into account, the study then considers what the variation in achievement actually involves in terms of morpho-syntactic competence. The language sub-systems investigated are pluralization, adverb placement, tense formation, passivization, relativization and WH-movement.

The informants are French-based Creole speakers at three levels of education from six different English-medium schools in Mauritius. The method of investigation used for this study was observation and analysis (both quantitative and qualitative) of the interaction inside and outside English classes in both rural and urban settings. In order to develop a framework for observation and analysis of classroom and extra-classroom interaction in terms of the language learning conditions, research literature on first and second language acquisition was examined - this led to a description of the conditions considered necessary for language learning to take place. The investigation into the problem began with the observations in different types of schools in Mauritius, three in

a rural setting and three in an urban setting. The home factors, including further exposure to English and the learners' French literacy were also explored. This study led to the hypothesis that the conditions prevailing in the urban classes are more conducive to language learning than the conditions available in the rural classes. The classes in these schools were then compared in terms of the language learning conditions available in each setting.

This comparison indicated that there are marked differences between the rural and urban contexts in terms of the nature of the opportunities for exposure to language input, the extent of the opportunities available for learners to participate in interaction in English and the nature of the learning environment available inside and outside the school, at home and in the community. There exist opportunities for acquisition beyond the curriculum for urban learners, while for their rural counterparts, there is not much beyond the learning-based curriculum.

These observations led to the hypothesis that the conditions for language learning available in the urban schools are more conducive to language learning than those available in the rural schools. The findings of the study indicate that my morpho-syntactic achievement measurement confirms this hypothesis.

ACKNOWLEDGMENTS

I would like to thank the following people, without whose contribution this thesis would not have been possible: my supervisor, Dr Martha Young-Scholten, for her timely advice and constructive comments; Mr Ramnarain Radhakeesoon and Miss Sunita Bundhoo for their help with statistics; pupils and staff of Rajiv Gandhi Primary Government School, Mahatma Gandhi State Secondary School, Professor Basdeo Bissoondoyal Private secondary School, St Esprit College, Modern College, and Villiers Rene Primary Government School.

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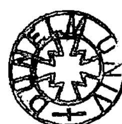
CHAPTER ONE

SECOND LANGUAGE ACQUISITION RESEARCH: KEY CONCEPTS

1.1 Aim and organisation of thesis

The aim of this study is to make a survey of variation in English language proficiency levels in Mauritius, an island situated in the Indian Ocean and where English is the official language spoken along with a French-based Mauritian Creole (MC) and another second language, French. The purpose of my study is indeed to seek answers to some of the questions related to the issue of variation in L2 proficiency among learners coming from an acquisition-poor environment. Much of L2 acquisition literature is predicated on the assumption that the L2 learner comes from a majority language setting, but this study proposes to investigate an acquisition-poor environment in a linguistically under-researched geographical area. This study seeks to characterize and compare learners in rural and urban contexts in Mauritius in terms of the extent to which these settings provide opportunities for English language learning. The chief contention of this study is that there exist different kinds of conditions inside and outside the classroom which make available differential opportunities for English language learning. The central concern of this study is, therefore, to find out to what extent and in what ways the nature of classroom interaction differs in rural and urban classes- which conform to different social backgrounds, and the nature of the conditions for language learning that become available as a result of these differences in classroom and extra-classroom interaction. What factors are associated with achievement among pre-puberty learners of different socio-economic backgrounds with a differential level of exposure to English?

The vast majority of English users across the world learn English as an additional language, and much of the learning takes place at least partly within the formal confines of an English language classroom. English is of course the obvious choice in situations where it is the sole official language of a country or state, or where it is spoken by the majority of people. English has, however, been chosen as the medium for classroom education in many countries as in certain institutions of India, parts of Africa, and



Mauritius where those conditions do not apply. In these countries, pupils receive their education in English even though it is not their first language (L1). This study involves looking more closely at experience and exposure inside and outside the classroom, and at what the variation in achievement involves in terms of morpho-syntactic competence.

Before presenting the study, a note about terminology on the nature of language abilities. Entry into the many areas of language learning is helped by understanding often used terms and distinctions. There exists a range of terms in this area: *language ability, language achievement, language competence, language performance, language proficiency* and *language skills*. Do they all refer to the same entity, or are there subtle distinctions between the terms? To add to the problem, different authors and researchers sometimes tend to adopt their own specific meanings and distinctions. There is no standardized use of these terms (Stern 1992).

Language skills tend to refer to highly specific, observable, clearly definable components. In contrast, *language competence* is a broad and general term, used particularly to describe an inner, mental representation of language, something latent rather than overt. According to Chomsky (1965), competence consists of the mental representations of linguistic rules that constitute the speaker-hearer's internal grammar. This grammar is implicit rather than explicit and is evident in the intuitions which the speaker-hearer has about the grammaticality of sentences. *Language performance* hence becomes the outward evidence for language competence. By observing general language comprehension and production, language competence may be presumed. *Language ability* and *language proficiency* tend to be used more as "umbrella" terms and therefore used somewhat ambiguously. For some, language ability is a general, latent disposition, a determinant of eventual language success. For others, it tends to be used as an outcome, similar but less specific than language skills, providing an indication of current language level. Similarly, language proficiency is sometimes used synonymously with language competence (e.g. Ellis 1985); at other times as a specific, measurable outcome from language testing. However, both language proficiency and language ability are distinct from *language achievement* (attainment). Language achievement is usually seen as the outcome of formal instruction. Language

proficiency and language ability are, in contrast, viewed as the product of a variety of mechanisms: formal learning, informal uncontrived language acquisition (e.g. on the street) and of individual characteristics such as "intelligence". Cummins's (1983) model of L2 proficiency distinguishes between basic interpersonal communication skills (BICS) required for oral fluency and cognitive/academic language proficiency (CALP) which consists of the linguistic knowledge and literacy skills required for academic work.

There is one point of view that says that the best language teachers in the world are those parents or caretakers who provide children with the input that leads them to acquire their L1. After all, *all* children, except those with some severe impairment, successfully acquire their L1 to completion. Whether or not caretakers can justifiably be called 'L1 language teachers', one thing that they do not do is give 'language lessons' – or at least not of the sort that second language teachers traditionally provide. In a tutored environment like classroom learning, the linguistic input is controlled and structured by the teacher and by the materials used. Secondly, language mastery is not always the outcome of L2 learning, and there is a much broader range of language proficiency achieved among L2 learners than L1. The central issue that I address in the present thesis is the role that linguistic input seems to play in L2 achievement in what turns out to be an acquisition-poor environment. In Mauritius, although English is the official language, it is restricted mainly to the classroom situation, and is not even used much in content classes, despite expectations that teachers do so.

The thesis is divided into seven chapters. Chapter One provides a context for the study by reviewing previous research in the field of first and second language acquisition. It addresses the question of how to account for the variation in L2 end state proficiency, given the fact that Mauritian learners are exposed to English before the end of the critical period. Chapter Two looks at features of input suggested as potential explanations for age-related differences in L2 acquisition, and specifically at language mastery in the L2 classroom. Chapters Three and Four shift the emphasis to the language background and the current situation regarding exposure to English in Mauritius. Chapter Five presents the methodology of the study.

The results of the study (Chapter Six) of French-based Creole-speaking learners studying in English-medium primary, secondary and post-secondary institutions in Mauritius indicate lower achievement among learners from rural areas of Mauritian society which belong to lower socio-economic groups, and it is proposed that this is due to their more limited opportunities to extra-classroom input in the prerequisite language skills than the urban areas.

1.2 The Logical Problem of L1 acquisition

Before reviewing research in the field of L2 acquisition, it is useful to look at what has been called the 'logical problem of L1 acquisition'. Research on language acquisition must seek to find out what makes children capable of learning their mother tongues. Linguists are confronted with the task of explaining how it is possible for the child to learn the rudiments of his native language so quickly and so successfully given the nature of the linguistic input. At the onset of the language-learning odyssey, a child has much to determine about the language that he or she hears. At the end of the journey, every normal child has an intact linguistic system that allows him or her to interact with others and express his or her needs. The 'logical problem of language acquisition' concerns how all children come to acquire with ease and complete success a rich and complex body of linguistic knowledge despite their lack of cognitive sophistication and a poverty of the stimulus. The clearest account can be found in Pinker (1994). This view is based on Chomsky's (1965) notion of linguistic competence – an abstract set of rules and representations that is highly specific to language (i.e., differently organized than other mental capacities, such as visual cognition) and an innate component of the human mind. The standard argument is that it is logically impossible for a child to acquire linguistic competence of this complexity through the kinds of exposure to language that children receive in their home environment. Generative theorists consider the experience which the young child has of the target language to be seriously impoverished in a number of ways. It was initially argued that input is degenerate (Chomsky 1965), in the sense that it contains ungrammaticalities and disfluencies which make it an inadequate source of information for language acquisition. The principal argument was that children would find it impossible to distinguish between what is grammatical and what is ungrammatical on the basis of such input. Subsequent

research into caretaker talk, however, has demonstrated that simplified input of the kind most children experience in the early stages of acquisition is far less degenerate than was claimed (Newport, Gleitman, and Gleitman 1977).

However, there are other more compelling reasons than 'degeneracy' for considering the input impoverished. Input seriously underdetermines the final grammar. The child will only be exposed to a subset of the total sentences possible in the target language and has no way of determining whether a given sentence is not possible in the language, i.e., the input does not provide the child with the data needed to determine that certain constructions are not possible. For example, although children do not have information on aspects of syntactic development (e.g. what makes something a subject or object), they invariably choose a computationally complex structure dependent rule (Crain 1991) as in (1a) over a computationally simple structure independent rule as in (1b). (1a) involves movement of the verb in the uppermost clause (i.e. the matrix clause) to the front while (1b) only involves movement of the first verb in a linear ordering of words. Errors such as (1b) have never been attested in the language acquisition literature (both L1 and L2). Children appear to know that sentences such as (1b) are ungrammatical without instruction, or information to the learner that his or her utterance is in some way deviant.

(1) a. Is the book which is on the table dull?
*b. *Is the book which on the table is dull?*

To take some other examples: Consider the sentences in (2).

(2) a. Who did John see?
b. Who did Fred believe that John saw?
*c. *Who did Fred believe the rumour that John saw?*
d. Fred believed the rumour that John saw Bill.

Sentences such as (2a) suggest to the learner that Wh-questions can be formed by moving the Wh direct object to the front of the sentence. Therefore, the learner would be justified in assuming that this rule can be extended to complex sentences such as

(2b) which is grammatical and to other complex sentences such as (2c) which is ungrammatical. However, while children produce sentences such as (2b), they fail to produce sentences as in (2c). In other words, they fail to extend the generalization drawn on the basis of sentences such as (2a) and (2b) that in English, the Wh-direct object is moved to the sentence initial position in forming Wh-questions. Further, this appears to be a problem only for question forms as the statement form in (2d) corresponding to the Wh-question form in (2c) is grammatical.

It may be argued that children do not make errors such as the use of structure independent rules because they have never heard them before. However, this argument fails to explain why children consistently make certain errors even though they have never encountered them before in the input. An example of such errors is the well-attested tendency on the part of children to extend the past tense regular *-ed* ending to past tense irregular verbs, eg., *Goed, breaked, comed.*

White (1981) gives dative alternation as another example. English permits two constructions with many dative verbs, as in these examples:

(3) a. Randy gave a present to Mary [noun phrase (NP) + Prepositional Phrase (PP)].

b. Randy gave Mary a present (NP + NP).

However, other dative verbs permit only the NP + PP pattern:

c. Randy explained the problem to Mary

*d. *Randy explained Mary the problem*

Supposing the child works out that many verbs allow both patterns, how can the restriction on verbs like 'explain' be discovered? Again, positive evidence will not suffice, as the child has no way of knowing that, in time, sentences with NP + NP will not occur. White (1989) and others argue strongly that underdetermination of this kind is the main problem with input.

One way in which this problem might be overcome is if the input provides the child with negative evidence. Logically, there are two kinds of evidence, positive and negative. Positive evidence comes from exposure to the speech of other speakers, but this is not adequate because it underdetermines the final grammar. It follows that if children are to learn on the basis of input alone, they must receive negative evidence, i.e. be given feedback that shows them what is ungrammatical in their sentences. However, L1 acquisition research indicates that children do not typically receive direct negative feedback on the grammaticality of their utterances (Brown and Hanlon 1970). To build their grammars children rely only on information provided by the sentences in the input they are exposed to which indicate what constitutes a possible sentence. They do not build their grammars using corrective information when they have improperly formulated rules. Nor do they receive explicit information from those they interact with on such crucial matters as what constitutes a word, what determines the parts of speech and their various functions, or what defines the inflectional categories. Figuring out this crucial information comprises a fundamental first step before the syntactic rules of the language can emerge. And the child must determine this basic information without explicit help from other speakers. But such indirect evidence is not sufficiently specific to inform learners where exactly they have made an error, whether the failure in communication is the result of incorrect syntax, phonology, morphology or vocabulary. Nor does such indirect evidence indicate what the learner would have to do in order to correct the error (cf. White 1985). This can be illustrated by the general principle of subjacency defining the restrictions that govern how far one phrase can be moved. The principle of Subjacency (Cook & Newson 1996) is stated as follows: ' No movement can move an element over more than one bounding node at a time.' Thus, questions like:

(4) What did Randy think?

(5) What did Randy think his brother had won?

are grammatical because they involve limited movement of the Wh-element (i.e. 'What') from the deep structure object position:

Randy thought ____________.

Randy thought his brother had won ___________.

Sentences like the following, however, are ungrammatical:

*(6) *What did Randy wonder whether his brother would win?*

because they involve movement of the Wh-element over more than one bounding node:

Randy wondered whether his brother would win ____________.

If there is no negative feedback, how do children learn that sentences such as (6) are not possible sentences? The answer is that, with insufficient positive evidence and no negative evidence, they must rely on innate knowledge. The child must be equipped with knowledge that enables the deficiencies of the input to be overcome.

The answer to the logical problem of language acquisition, therefore, lies in the language faculty. This has been proposed to consist of UG (i.e. Universal Grammar, made up of Principles and Parameters that constrain the form of the grammar of any specific language), which assists the child in various ways. First, it ensures that relatively little evidence is needed for the child to determine that a given principle is operative in the target language or to decide which setting of a parameter is the right one. Second, it prevents children from constructing 'wild grammars' (Goodluck 1986). That is, at no point would the child construct a rule that contravenes UG. In this way, the child does not have to unlearn certain types of errors, for which negative evidence would be necessary. Of course, children do produce errors in features like 3rd person – *s* (for example, *'Mommy like cake'*), but these are 'benign' in the sense that they can be unlearned on the basis of positive evidence. Such structures involve language-specific properties and, therefore, are not governed directly by UG. 'Impossible errors' (errors that require negative evidence) do not occur precisely because they are prohibited by UG. There are generalizations in all domains of grammar which are specific to each language and which children learning that language must infer from the input data they receive. When a language-specific rule is hypothesized incorrectly, the child learner cannot rely on explicit negative evidence to reveal that this rule is unacceptable and that

it must be altered in some particular way. First language learners must determine when a rule has been formulated incorrectly and how it needs to be restructured. If the rule is too narrow in that it applies to only a subset of the sentences the rule generates in the adult grammar, the child can revise the rule when he or she notices the additional data of the input. But if the hypothesized rule is too broad in that it generates a greater range of structures than the analogous rule in the adult grammar, the child cannot revise it on the basis of positive evidence provided by the input. The child never assumes that he or she has encountered all possible sentences generated by any rule. Therefore, the lack of confirming evidence in the input for a deviant sentence permitted by one of the child's hypotheses will not be grounds for revising the hypothesis (Pinker 1984, 1987). In essence, then, a language is learnable because the child needs to entertain only a subset of the hypotheses that are consistent with the input data. Without the constraints imposed by UG, L1 acquisition would be at best extremely slow and in some respects, impossible.

1.2.1 What about L2 acquisition?

While a logical problem appears to exist for acquisition of a first language, it has been argued that the logical problem applies to second language acquisition (SLA) as well (White 1985; Flynn 1987; Cook 1988; White 1989), despite lack of complete success by most adult L2 learners. L2 learners, like child L1 learners, have to determine the complex properties of the grammar of the target language on the basis of insufficiently rich and precise input. Cook (1988) and White (1989) claim that like L1 learners, L2 learners possess knowledge of the L2 that they could not have acquired from the input and which must, therefore, have existed within their own minds. In other words, 'the poverty of the stimulus argument applies equally to L2 learning' (1988:176). Cook also argues that imitation, grammatical explanation, correction and approval, social interaction, and dependence on other faculties cannot account for L2 acquisition any more than they can for L1 acquisition. For Cook, the essential difference between L1 and L2 acquisition is that L2 learners already know another language.

There are, however, several other significant differences between first and second language learners and it is these that theorists like Bley-Vroman (1988; 1989) and

White (1989) point to in arguing that the logical problem of language acquisition is somewhat different in the case of L2 acquisition. Bley-Vroman (1988) emphasises the differences between L1 and adult L2 learning, as outlined in the following table:

Table 1.1 Differences between L1 and L2 acquisition (based on Bley-Vroman 1988)

Feature	L1 acquisition	Adult L2 acquisition
Overall success Vs General failure	Children normally achieve perfect mastery of their L1; Success is guaranteed.	Adult L2 learners are very unlikely to achieve perfect mastery; Complete success is very rare.
Variation	There is little variation among L1 learners with regard to overall success or the path they follow.	L2 learners vary in both their degree of success and the path they follow.
Goals	The goal is target language competence.	L2 learners may be content with less than target language competence and may also be more concerned with fluency than accuracy.
Fossilization	Fossilization is unknown in normal child language development.	L2 learners often cease to develop and also backslide (i.e. return to earlier stages of development).
Intuitions	Children develop clear intuitions regarding what is a correct and incorrect sentence.	L2 learners are often unable to give clear grammaticality judgments.
Instruction	Children do not need formal lessons to learn their L1.	There is a wide belief that instruction helps L2 learners.
Negative evidence	Children's 'errors' are not typically corrected; correction not necessary for acquisition.	Correction generally viewed as helpful and, by some, as necessary.
Affective factors	Success is not influenced by personality, motivation, attitudes, etc.	Affective factors play a major role in determining proficiency.

On the basis of these differences, Bley Vroman argues: 'The logical problem of foreign language acquisition becomes that of explaining the quite high level of competence that is clearly possible in some cases, while permitting the wide range of variation that is possible' (1989:49-50).

The question arises as to whether the solution to this logical problem necessitates an innate domain-specific acquisition system. Bley-Vroman's answer is a definite 'no', but other theorists have been more circumspect. On the one hand, Bley Vroman (1988:25) claims:

> The general characteristics of foreign language learning tend to the conclusions that the domain-specific language acquisition of children ceases to operate in adults, and in addition, that foreign language acquisition resembles general adult learning in fields for which no domain-specific learning system is believed to exist.

On the other hand, Ervin-Tripp (1974) emphasises the similarities she found in naturalistic child learners of L2 French and L1 learners:

> We found that the functions of early sentences, and their form, their semantic redundancy, their reliance on ease of short-term memory, their overgeneralization of lexical forms, their use of simple order strategies were similar to processes we have seen in first language acquisition. In broad outlines, then, the conclusion is tenable that first and second language learning is similar in natural situations (cited in Hatch 1978:205).

These two quotations reveal why researchers have reached such different conclusions. Whereas Bley-Vroman concentrates on the outcome of acquisition, Ervin-Tripp focuses on the process. Whereas Bley-Vroman talks about foreign instructed language learners, Ervin-Tripp refers to naturalistic learners. It is also to be noted that Bley-Vroman claims that UG is not operative in second language acquisition, whereas Ervin-Tripp refers to English-speaking children attending school in Geneva, where French was the language of instruction. Ervin-Tripp's observations go back to the time the children arrived and first began being exposed to French. "Some of the children," she notes (1974: 115), "said nothing for many months... My own children began speaking six and eight weeks after immersion in the school setting."

L2 learners appear to tackle the problem of acquiring a language in similar ways to L1 learners. These similarities are most clearly evident in informal learning situations when learners are attempting to engage in unplanned language use. But there are also differences in the ways in which pre-puberty L2 learners go about 'cracking the code', and these become most evident in formal learning situations. The differences between the kinds of learning involved in these two settings are described by McNamara (1973) and d'Anglejan (1978). For example, informal learning typically takes place in contexts where the input is not consciously structured and the primary focus is on message conveyance, while formal learning occurs in contexts where the input is usually carefully organised and the primary focus is on form. Informal learning involves implicit knowledge, while formal learning is likely to involve at least some explicit knowledge of L2 rules.

Formal and informal learning can also be differentiated in the kind of memory learners rely on (Cook 1977). Adult L2 learners have access to a more developed memory capacity than L1 learners and when they can use it (or are required to use it, as in many pedagogic learning activities), differences between the language they produce and that produced by L1 learners occur. However, according to Cook, when they are not able to use it, they will produce language that resembles young children's. Cook (1977), predating Krashen's 'learning-acquisition' distinction, found that when adults were unable to utilize their memory capacity to process relative clauses they behaved in the same way as L1 learners. In another experiment designed to establish the number of digits adult learners could remember in the L2, Cook found that they behaved like native-speaking adults. This led Cook to conclude that when the memory process depends on features of syntax, the same restrictions apply to the L1 and adult L2 learner, but where the memory process is minimally dependent on language, the adult L2 learner exploits his or her general memory capacity. In other words, when L2 learners make use of their special language-learning faculties, the identity hypothesis (i.e. L1=L2) receives support, but when they rely on cognitive learning procedures of a general kind, it does not. Much of the work in L2 acquisition is driven by the notion that first and second language acquisition involve the same processes. This is not to say that differences have not been noted; rather, proposals to account for these

differences have been made with an attempt to salvage the major theoretical claim of L1 and L2 similarities.

As will be discussed below, the Fundamental Difference Hypothesis (Bley-Vroman 1989; Schachter 1988) starts from the belief that with regard to language learning, children and adults are different in many important ways. For example, the ultimate attainment of children and adults differs. In normal situations, children always reach a state of complete knowledge of their native language. In L2 acquisition (at least, adult L2 acquisition), not only is complete knowledge not always attained, it is rarely, if ever, attained. Fossilization representing a non-targetlike (TL) stage is frequently observed. The question of completeness, or non-fossilization, has been discussed by Schachter (1988). She queries whether any adult L2 learner is capable of achieving a mental state comparable to that achieved by a native speaker of the target language. In other words, she sees the adult L2 learner's grammatical competence as different in nature from that of the L1 learner. Schachter (1988) notes that even proficient L2 learners fail to acquire movement rules such as rules relating to topicalisation and adverb placement. The core idea is that for first language acquisition the language module, i.e. UG (Universal Grammar) or the Principles and Parameters of UG can provide an adequate description of the process involved, whereas learning a second language crucially involves general learning mechanisms. That is, inductive learning strategies are essentially operative in the processing of L2 input data, and the construction of the L2 grammar is mediated by mental mechanisms which lie outside the language module.

However, this hypothesis has been challenged by recent experimental studies which suggest that principles of UG constrain L2 grammars much as they constrain L1 acquisition (White 1989; Schwartz 1993; Schwartz and Sprouse 1994; Eubank 1994; Vainikka & Young-Scholten 1994). This alternative view holds that second language acquisition is similar to first language acquisition in all the theoretically important respects : namely, in the role of principles of UG and in the availability of parametric choices. More precisely, the assumption is made that parameter-resetting does take place, albeit in a comparatively delayed fashion, as the parametric values of the first language have already been set. 'Transfer errors' are then accommodated within this approach as reflecting transitional stages in the development of the second language.

Crucially, however, knowledge of the first language or age does not prevent L2 learning from operating under the same principles that L1 acquisition does.

Hilles (1986; 1991) made use of the longitudinal data collected by Cancino, Rosansky and Schumann (1978) in their study of the naturalistic L2 acquisition of English negatives and auxiliaries, by Spanish speakers to test the availability of UG in L2 acquisition. In the 1986 study, Hilles looked at just one learner, Jorge, a 12-year-old Colombian. Hilles hypothesized that Jorge would begin with the L1 setting (+ pro-drop), and subsequently switch to the L2 setting (- pro-drop). She further hypothesized that this switch would co-occur with the emergence of auxiliary, and that it would be triggered by the acquisition of the expletives 'it' and 'there'. Her analysis supported these hypotheses, although Hilles was careful to point out that more evidence was needed before firm claims could be made.

The 1991 study focused on two of the features associated with the pro-drop parameter - the use of pronominal subjects and verb inflection - and sought to establish to what extent the two were correlated over time. In this study, all six of Cancino et al's subjects (two children, two adolescents and two adults) were included, thus allowing Hilles to investigate to what extent age was a factor in the availability of UG. Three of the learners - the two children and one adolescent (Jorge) - manifested a strong correlation between the emergence of pronominal subjects and verb inflection, suggesting that their acquisition was guided by UG. Hilles argues that the developmental sequence these learners followed mirrored that found in L1 acquisition. L1 learners begin with null subjects and uniformly uninflected verbs, and subsequently switch to pronominal subjects once they realise that English is not uniform with regard to verb inflection (see Jaeggli and Hyams 1988). In contrast, the other adolescent and the two adults displayed no such correlation, indicating that they lacked access to UG.

A number of different views relating to the availability of UG in adult L2 acquisition (White 1989) can be distinguished : these are (1) the complete access view, (2) the no access view (sometimes referred to as 'the Fundamental Difference Hypothesis'), (3) the partial access view, and (4) the dual access view.

The complete access view is evident in the 'Parameter-setting Model' of Flynn (1984; 1987). Flynn argues that 'the essential faculty for language evidenced in L1 acquisition is also critically involved in L2 acquisition' (1987:29). However, Flynn also acknowledges a crucial role for the L1. In cases where the L1 and L2 parameter settings are the same, learning is facilitated because 'these L2 learners are able to consult the structural configuration established for the L1 in the construction of the L2 grammar' (1987:30). Where the L1 and L2 parameter settings are different, the learner has to assign new values and, although this is not problematic according to Flynn, it does add to the learning burden. Flynn (1987) hypothesises that where the L1 and L2 have identical settings, the pattern of acquisition of complex sentence structures will correspond to the later stages of L1 acquisition. She also hypothesises that where the L1 and L2 have different settings, the pattern of acquisition will correspond to the early stages of L1 acquisition, as the learners need to first discover the relevant structural configuration in the L2.

Flynn's parameter-setting model rests on the assumption that adult L2 learners have access to the same language faculty as L1 learners. As such it rejects the claim advanced by other theorists that age is a significant factor in L2 learning i.e. that adult L2A differs from child L2A (a detailed discussion of the age issue will follow in Section 1.3). Flynn and Manuel (1991) explicitly address the age issue and conclude that 'it is impossible to argue for a monolithic critical period in L2 learning' (1991:140). They present three arguments in favour of this position.

First, like L1 learners, L2 learners possess grammatical knowledge that could not have been acquired purely on the basis of input. Second, L2 learners possess knowledge that is structure-dependent. Third, they exhibit the same infinite productivity of new sentences as L1 learners. In essence, Flynn and Manuel are asserting that the logical problems of L1 and L2 acquisition are the same.

It is possible, of course, that adult L2 learners may have continued access to UG, while the grammars that they build sometimes manifest properties that violate UG principles. White (1995) refers to this as the 'different competence, same mechanisms' position, which might be considered a weaker version of the complete access position. White

and Genesee (1996) conducted a study to see whether adult second language learners (i.e. post-puberty learners) had access to the following pattern of intuitions that all native speakers of English have:

(7) Who do you want to see?

(8) Who do you want to feed the dog?

(9) Who do you wanna see?

*(10) *Who do you wanna feed the dog?*

where (10) is ungrammatical. Why, despite surface similarities, is (9) considered "OK", but (10) "not OK"? If we formed grammatical intuitions on the basis of analogy, (10) should be "OK". The logical argument goes as follows. The underlying structure for the sentences can be hypothesized as:

(11) You want to see who?

(12) You want who to feed the dog?

According to the theoretical model of Universal Grammar, these underlying forms of *who* are moved to the front of the sentence, leaving behind a trace *t* in the original location:

(13) Who do you want to see t?

(14) Who do you want t to feed the dog?

The rule that reduces "want to" to "wanna" for (14) is blocked by the trace between "want" and "to". According to this analysis, this sort of knowledge is needed in order to find (9) to be "OK" but (10) to be "not OK". The abstractness of this rule makes it unlearnable without some pre-existing knowledge.

Using sentences like these, White and Genesee asked adults who had learned English at different ages to discriminate between grammatical and ungrammatical sentences based on these abstract concepts. Their results were quite striking. Although more adult learners had difficulty in distinguishing between these sentences than did child learners, about one-third of the adults who had acquired these rules showed equivalently high

performance compared to child learners and native speakers of English. Thus, post-puberty learners are capable of learning even these highly abstract rules that are accessible only with specialized language acquisition mechanisms. White advances the argument that one reason why adult L2 learners may sometimes construct a grammar that is not in conformity with UG is because their L1 leads them to misanalyse the input – they do not so much transfer an L1 property as misinterpret the input in terms of expectancies based on their L1.

As noted above, some theorists support a no-access view (Clahsen and Muysken 1986; Bley-Vroman 1989; Meisel 1991). This position rests on two related claims. The first is that adult L2 acquisition is very different from L1 acquisition (See Table 1.1). The second is that this difference arises because, whereas L1 learners make use of their language faculty, adult L2 learners resort to general learning strategies. Not surprisingly, advocates of the no-access position place considerable emphasis on identifying differences between L1 and adult L2 acquisition. Clahsen and Muysken (1986), for instance, compare the acquisitional sequences of German word order in L1 and L2 acquisition and find 'essential differences'. They argue that these reflect the existence of 'learning capacities specific to language' in the case of children and 'acquisition strategies which may be derived from principles of information processing and general problem solving strategies' (1986:111) in the case of adults. In effect, Clahsen and Muysken are arguing that where L1 acquisition requires a linguistic theory, adult L2 acquisition requires a cognitive theory of the kind provided by the Multidimensional Model (Meisel, Clahsen and Pienemann 1981).

The partial-access position draws on the distinction between principles that are parameterized and those that are not. Schachter (1988) raises the possibility that learners have access to linguistic principles but not to the full range of parametric variation. This view makes two assumptions. One is that adult learners will not manifest 'wild grammars' (i.e. they will not produce 'impossible errors') because they are constrained by UG principles. The other is that they will not be able to acquire the L2 values of parameters or principles not instantiated when these differ from the L1. Clahsen and Muysken (1989) also adopt this position, arguing that adult L1 grammars are constrained by those principles that hold for all languages (such as structure

dependency) but do not have access to new parametric options. In accordance with their earlier views, however, Clahsen and Muysken claim that learners are not necessarily stuck with L1 parameter values, as they can develop alternative hypotheses by means of general learning strategies. In some cases, this may result in similarities between L1 and L2 acquisition sequences.

Finally, Felix (1985) has advanced a dual access position. According to his Competition Model, adults have continued access to UG but also make use of 'a general problem solving module', which competes with the language-specific system. Felix claims that the problem-solving system is 'a fundamentally inadequate tool to process structures beyond a certain elementary level' (1985: 51) and that this accounts for why adults fail to attain native-speaker levels of competence. Thus, when learners reach the Piagetian stage of formal operations at the onset of puberty, they develop the ability to use the problem-solving system, i.e. to form hypotheses about abstract phenomena. They are now able to call on two distinct and, in Felix's view (see also Schwartz 1993), autonomous cognitive systems to deal with abstract linguistic information. Adult learners are unable to suppress the operation of the problem-solving module. This 'interferes' with UG, which alone is capable of ensuring complete grammatical competence.

The debate regarding the availability of UG in L2 acquisition is still on. White (1989) claims, however, that there is a growing consensus in favour of the view that UG is available via the L1. The Full Transfer/Full Access hypothesis of Schwartz & Sprouse (1994; 1996) follows the line initiated by White, but takes it and pushes it to the extreme: the whole of the L1 grammar is claimed to define the 'initial state' of L2 acquisition. Vainikka & Young-Scholten (e.g. 1994, 1996) propose, on the other hand, that the learner starts with only lexical projections and then builds structure; for SLA, this means that the lexical projections are transferred from the learner's L1 – and then functional structure is built without reference to the learner's L1. The L2 initial state under Minimal Trees, as Vainikka & Young-Scholten's hypothesis is called, attributes the 'minimal' amount of transfer to the L2 initial state. This is also called Partial Transfer/Full Access (Vainikka & Young-Scholten 1996).

In summary, there are different positions regarding the logical problem of adult L2 acquisition. One is that it is essentially the same as for L1 acquisition. Another is that it is different because L2 learners achieve variable success. A third is that it is different because L2 competence is qualitatively different from L1 competence. These positions have led to different views regarding the role of UG in L2 acquisition.

1.2.2 Learning and Acquisition

In view of the different possibilities regarding the L2 learner's access to the contents of UG, investigations of how people become language users have centred on the distinction between 'learning' and 'acquisition'. If an innate, specialist language module exists in L2 acquisition, one logical possibility is that such innate mechanisms continue to operate during second language acquisition, and make key aspects of second language acquisition possible, in the same way that they make first language acquisition possible. This position has been popularized in the second language learning field by the American applied linguist Krashen (e.g. 1978, 1981, 1982, 1985). Krashen characterised 'acquisition' as a subconscious process which results in the knowledge of a language, whereas 'learning' results only in 'knowing about' the language. Krashen uses the term 'acquisition' to describe the development of a second language which is analogous to the way in which a child acquires his first language, that is 'naturally' without focus on linguistic form, and 'learning' as conscious language development, particularly in formal school-like settings. The basic premise is that language *acquisition*, on the one hand, and *learning* on the other, are separate processes. Acquisition refers to the 'subconscious process identical in all important ways to the process children utilize in acquiring their first language' (Krashen 1985:1), and learning refers to the 'conscious' process that results in "knowing about" language (1985:1). Acquisition is the result of natural interaction with the language via meaningful communication, which sets in motion developmental processes akin to those outlined in L1 acquisition, and learning is the result of classroom experience, in which the learner is made to focus on form and to learn about the linguistic rules of the target language.

The suggestion Krashen made is that L2 development is more like the child's acquisition of his native language. How do children become competent users of their language? Although, as discussed above, there may be some limits on the language that they hear, they are never consciously 'taught it', nor do they consciously set out to learn it. Instead, they are exposed to a considerable amount of the language in situations where they are involved in communicating with an adult – usually a parent – or siblings, etc. Their gradual ability to use language is the result of many subconscious processes. They have not consciously set out to learn a language; it happens as a result of the input they receive and the experiences which accompany this input. Much L2 teaching, on the other hand, concentrates on getting the adult student to consciously learn items of language in isolation – the exact opposite of this process. For Krashen, learning is particularly marked by two characteristics. First, there is *error correction*. When learners make errors, it is normal for the classroom teacher to draw explicit attention to them, and to correct the errors. The second characteristic is what Krashen (1982) calls *rule isolation*. In the language-teaching classroom it is normal for a lesson to focus on one language point. It may be a grammatical item like a particular tense, or a pronunciation point, or some 'rule of use'. The word 'isolation' indicates that in this procedure language points are dealt with one by one, in isolation. It is to be noted that Krashen's acquisition-learning distinction typically refers to adults, not children, as one assumes only adults have reached the stage of formal operations and can try to 'learn' language.

The acquisition-learning distinction is not without its critics (McLaughlin 1978; Sharwood Smith 1981; Gregg 1984). Krashen has been criticized for his vague definition of what constitutes conscious versus subconscious processes, as they are very difficult to test in practice: how can we tell when a learner's production is the result of a conscious process and when it is not? Schwartz (1987) argues, however, that such criticism is misguided because 'acquisition' and 'learning' refer to mechanisms for obtaining knowledge, and are not meant to be automatically observable in the data. A second criticism that can be made is that the apparent difference in terms of the environments in which the two processes occur can be questioned, because there is almost certainly overlap between what happens in a naturalistic setting and a classroom environment. The contrast between these two environments is not the crucial issue.

What is important is the difference between these two: meaningful communication on the one hand, which can very well take place in the language classroom and which will trigger subconscious processes, and conscious attention to form on the other hand, which can also take place in naturalistic settings, especially with older learners who might explicitly request grammatical information from people around them. These experiences suggest that when we attempt to master a language (in whatever environment) we are doing a bit of learning *and* a bit of acquisition.

Despite these difficulties, many find the acquisition-learning distinction a useful one. This contrast has been very influential, especially among second language teachers who see it as an explanation of the lack of correspondence between error correction and direct teaching on the one hand, and their students' accuracy of performance on the other. If there was some kind of internal mechanism constraining learners' development, then it could account for the fact that some structures, even simple ones like the third person singular-*s* in English (*he likes*), can be frustrating to teach, with learners unable to apply it in spontaneous conversation. In Krashen's terminology, learners would have *learned* the rule, but not *acquired* it.

Krashen (1981, 1985, 1989) saw successful acquisition as being very bound up with the nature of the language 'input' which the students receive. In a classroom, this input contains language that the students already 'know' as well as language that they have not previously been exposed to: i.e. the input is at a slightly higher level than the students are capable of using, but at a level that they are capable of understanding. Krashen called the use of such language to students 'rough tuning' at i + 1 and compared it to the way adults talk to children. It must be stated, however, that Krashen probably underestimates the extent to which adult caretakers are sensitive to their children's progress. Wells (1985) provides evidence to suggest that adults step up the frequency of specific linguistic features in their input shortly <u>before</u> their children first use them in their own speech. Caretakers (e.g. mothers and fathers) do not tend to simplify the language in any precise way, however, using only certain structures; rather they get the level of their language more or less right for the child's level of understanding (Newport, Gleitman & Gleitman 1977): there are similarities in the way people talk to 'foreigners'. Perhaps if language students constantly receive input that is

'roughly-tuned' – that is slightly above their level – they will acquire those items of language that they did not previously know without making a conscious effort to do so.

The suggestion made by Krashen, then, is that students can acquire language on their own provided that they get a great deal of 'comprehensible input' (that is roughly-tuned in the way we have described). This is in marked contrast to conscious learning where students receive 'finely-tuned input' – that is language chosen to be precisely at their level. This finely-tuned input is then made the object of conscious learning. According to Krashen, such language is not 'acquired', but 'learned' and can only be used to 'monitor' what the learner is going to say. In other words, whereas language which is acquired is part of the language store we use when we want to communicate, the only use for consciously learned language is to check that acquired language just as we are about to use it. Consciously learned language, in other words, is only available in highly restricted circumstances, as a monitor. According to Krashen, learning does not directly help acquisition.

White (1987) has argued that a considerable part of acquisition is 'input-free'. She claims that certain types of overgeneralizations which learners make cannot be unlearnt simply by understanding input. They require negative evidence (for example, in the form of corrective feedback) which in naturalistic acquisition may not be available to the learner. She also claims that learners are able to go beyond the evidence available in the input, and develop knowledge of target-language rules by projecting from their existing knowledge. Finally, she argues that in the case of some structures (for example, English passive construction), it may be the failure to understand input that leads to acquisition. As she puts it, 'the driving force for grammar change is that input is incomprehensible rather than comprehensible…' (1987:95). White's idea is that failure to understand a sentence may force the learner to pay closer attention to its syntactical properties in order to obtain clues about its meaning.

But it is still necessary to explain why acquisition is not equally successful for all L2 learners, even when they receive apparently identical comprehensible input; 'comprehension is a *necessary* condition for language acquisition but it is not sufficient' (Krashen 1982: 66): something more than comprehensible input is needed.

Learners also need to 'let that input in', as it were. For acquisition to take place, the learner has to be able to absorb the appropriate parts of the input. There can be 'a mental block that prevents acquirers from fully utilizing the comprehensible input they receive for language acquisition' (Krashen 1985:3). This block, called 'the affective filter', might be because 'the acquirer is unmotivated, lacking in self-confidence, or anxious' (Krashen 1985:3). The 'Affective Filter Hypothesis' ascribes variation between learners to their psychological states. If the filter is 'up', comprehensive input cannot get through; if it is 'down', they can make effective use of it. In particular, the reason why younger learners are claimed to be better at L2 acquisition over the long term is that 'the affective filter gains dramatically in strength at around puberty' (Krashen 1985:13). Older learners are cut off from proper access to comprehensible input by the increased strength of the filter. The Affective Filter Hypothesis accounts for the results of research on motivation and social attitudes as well as the role of personality and other affective factors in SLA. Krashen's theories thus suggest that an "acquisition-rich" learning environment is required for language development and that, in an "acquisition-rich" learning environment, the available input is sufficient in quantity, comprehensible, not sequenced grammatically, relevant and interesting and keeps the learner's filter levels low so that they can take in the input.

Although both researchers and teachers would agree that affective variables play an important role in L2 acquisition, Krashen's Affective Filter remains vague and atheoretical. For example, many self-conscious adolescents suffer from low self-esteem and therefore presumably have a 'high' filter. Are they therefore all bad language learners? And are all confident and extrovert adults (with a 'low' filter) good language learners? Clearly not. Moreover, how does the Affective Filter actually work? All these issues remain vague and unexplored. So far, we have discussed two totally distinct 'pathways' to mastery of an L2, which have been called 'acquisition' and 'learning'. This has perhaps left the impression that someone wishing to master a second language follows either one or the other of these two routes. But this is not of course what happens because adult individuals, surely, both acquire and learn, sometimes one or the other, or even a mixture of the two all the time. If a student is living in a country where the target language is spoken, in a situation where there is some pressure to communicate in that language, then it may be that acquisition

becomes the predominant pathway. In Mauritius, English language learning takes place mainly in response to teaching in the classroom (through the conscious study of grammar, etc.), and it is necessary to determine whether such a second language environment provides optimal input for the learner, and allows him or her to acquire or to learn the language, especially when we bear in mind that exposure to English begins at age 6/7. Learners in Mauritius are all exposed pre-puberty to English, and yet many learners do not reach native speaker competence by puberty. In fact, the main concern of this study is to demonstrate that many Mauritian learners live in a setting where they do not have a genuine ability to communicate in meaningful situations, and hence can be compared to adult foreign language learners trying to learn a language. The issue of the variable outcome of learners exposed pre-puberty leads us to the next section, which will deal in detail with the age factor in second language acquisition.

1.3 Age of acquisition and L2 development

It has been widely observed (e.g. Penfields and Roberts 1959) that children from immigrant families eventually speak the language of their new community with native-like fluency. Their parents rarely achieve such high levels of mastery of the new language. Penfield and Roberts argued that the optimum period for language acquisition falls within the first ten years of life, when the brain retains its plasticity. Adult second language learners may become very capable of communicating successfully in the language, but there will always be differences of accent, word choice, or grammatical features which set them apart from native speakers or from speakers who began learning the language while they were very young.

Most studies which have investigated the relationship between age of acquisition and second language development have focused on learners' phonological (pronunciation) achievement. In general, these studies have concluded that older learners almost inevitably have a noticeable 'foreign accent'. But what of other linguistic features? Is syntax (word order, overall sentence structure) as dependent on age of acquisition as phonological development? Do older learners ever achieve native-like mastery of syntax? What about morphology (for example, grammatical endings which mark such things as verb tense or the number and gender of nouns)? One study that attempted to

answer these questions is that of Patkowski (1980). Patkowski hypothesized that, even if accent were ignored, only those who had begun learning their second language before the age of 15 could ever achieve full, native-like mastery of that language. Patkowski examined the spoken English of 67 highly educated immigrants to the United States. They had started to learn English at various ages, but all had lived in the United States for more than five years. The spoken English of 15 native-born Americans from a similarly high level of education was also examined. Their speech served as a sort of baseline of what the second language learners might be trying to attain as the target language. Inclusion of the native speakers also provided evidence concerning the validity of the research procedures. A lengthy interview with each of the subjects in the study was tape recorded.

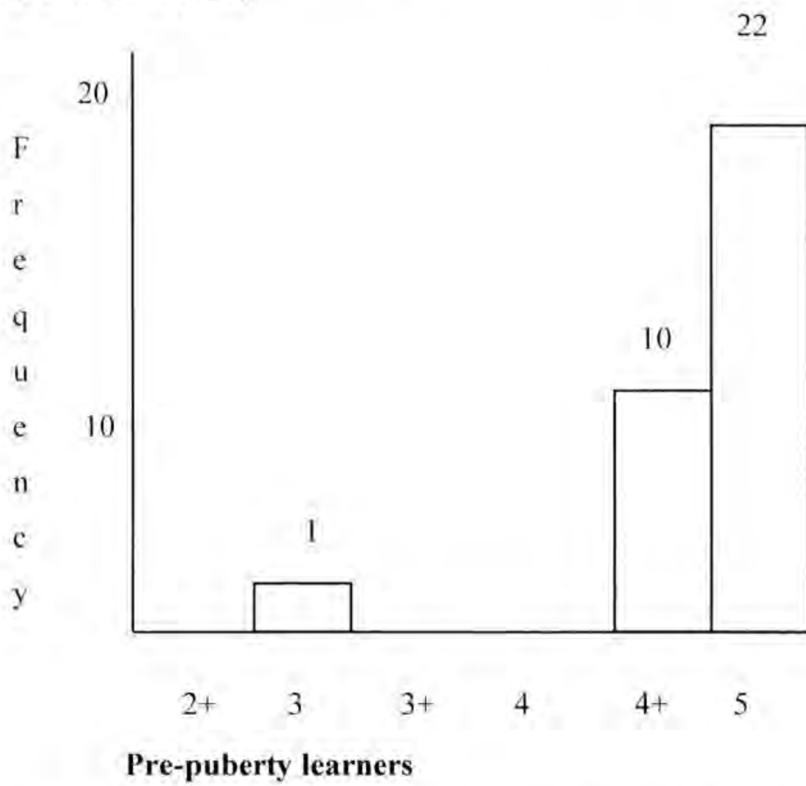
Because Patkowski wanted to remove the possibility that the results would be affected by accent, he did not ask the raters to judge the actual tape-recorded interviews. Instead, he transcribed five-minute samples from the interviews. These samples were then rated by trained native-speaker judges. The judges were asked to place each speaker on a rating scale from O, representing no knowledge of the language, and 5, representing a level of English expected from an educated native speaker.

The main question in Patkowski's research was: 'Will there be a difference between learners who began to learn English before puberty and those who began learning English later?' He also compared learners on the basis of other characteristics and experiences which might be as good as age in predicting or explaining a learner's eventual success in MASTERING a second language. For example, he looked at the relationship between eventual mastery (including that of the phonological component) and the total amount of time a speaker had been in the United States as well as the amount of formal ESL instruction the learner had had.

The findings were quite interesting. Thirty-two out of 33 subjects who had begun learning English before the age of fifteen scored at the 4+ or the 5 level. The homogeneity of the pre-puberty learners seemed to suggest that, for this group, success in learning a second language was almost inevitable (see Figure 1.1). On the other hand, there was much more variation in the levels achieved by the post-puberty group.

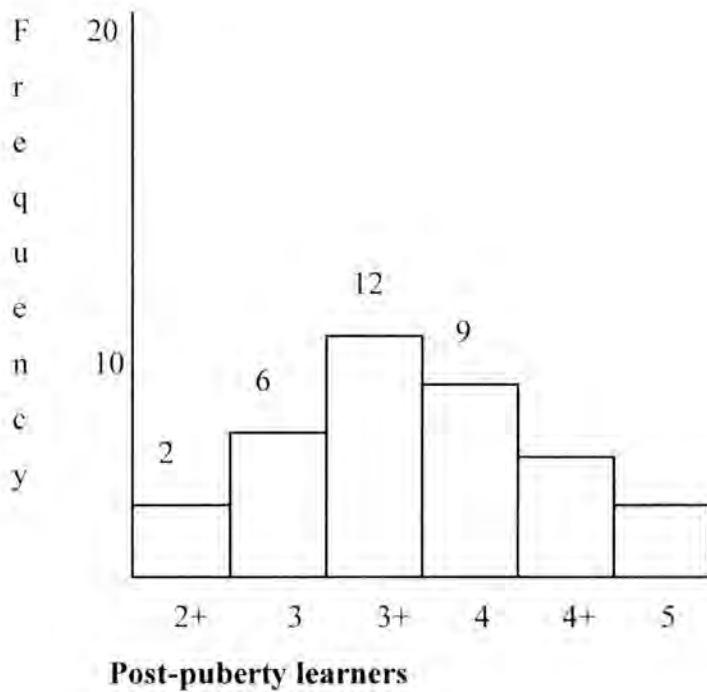
The majority of the post-puberty learners centred around the 3+ level, but there was a distribution of levels (see Figure 1.2).

Figure 1.1 Bar Chart showing the language levels of pre-puberty learners of English (Patkowski: 1980)



Pre-puberty learners

Figure 1.2 Bar Chart showing the language levels of post-puberty learners of English (Patkowski: 1980)



Post-puberty learners

Patkowski's first question, 'will there be a difference between learners who began to learn English before puberty and those who began learning English later?' was answered with a very resounding 'yes'. When he examined the other factors which might be thought to affect success in second language acquisition, the picture was much less clear. There was, naturally, some relationship between these other factors and learning success. However, it often turned out that age was so closely related to the other factors that it was not really possible to separate them completely. For example, length of residence in the United States sometimes seemed to be a fairly good predictor. However, while it was true that a person who had lived in the country for fifteen years might speak better than one who had been there for only ten years, it was often the case that the one with longer residence had also arrived at an earlier age. However, a person who had arrived in the United States at the age of eighteen and had lived there for twenty years did not score significantly better than someone who had arrived at the age of eighteen but had only lived there for ten years. Similarly, amount of instruction, when separated from age, did not predict success to the extent that age of immigration did.

Thus, Patkowski found that age of acquisition is a very important factor in setting limits on the development of native-like mastery of a second language and that this limitation does not apply only to accent. Patkowski's study was primarily concerned with the acquisition of syntax, although he also had the quality of the pronunciation of his subjects rated by native speakers of English. These results gave added support to the critical period hypothesis for second language acquisition.

Of course, this study was concerned with conversational data, and it is well known that non-native speakers can, to some extent, avoid problem areas in free production. More telling, in some respects, are grammaticality judgements where the ability to distinguish between grammatical and ungrammatical sentences in a second language appears to be affected by the age factor (Johnson and Newport 1989).

Johnson and Newport conducted a study of 46 Chinese and Korean speakers who had begun to learn English at different ages. All subjects were students or faculty at an

American University and all had been in the United States for at least three years. The study also included 23 native speakers of English.

The participants in the study were given a grammaticality judgement task which tested twelve rules of English morphology and syntax (past tense, noun pluralisation, third person singular, present progressive, particle movement, subcategorization, auxiliaries, yes-no questions, word order, question formation, use of articles, and use of pronouns). They heard sentences on a tape and had to indicate whether or not each sentence was correct. Half of the sentences were grammatical, half were not.

When they scored the tests, Johnson and Newport found that age of arrival was a significant predictor of success on the test. When they grouped the learners in the same way as Patkowski, comparing those who began their intensive exposure to English between the ages of three and fifteen with those who arrived in the United States between the ages of 17 and 39, once again they found that there was a strong relationship between an early start to language learning and performance in the second language. Overall the correlation between age at arrival and judgement scores was -0.77 (i.e. the older the learners were at arrival, the lower their scores). Far less variation was found in the scores of the 'child' group than in the adult group. Neither the number of years of exposure to English beyond five nor the amount of classroom instruction was related to the grammaticality judgement scores, and although an effect for 'identification with American culture' was found, this was much weaker than that for age. Johnson and Newport noted that before the age of fifteen, and especially before the age of ten, there are few individual differences in second language ability. Older learners will not have native-like language skills and are more likely to differ greatly from one another in ultimate attainment.

This study reveals two aspects of adult performance with which any theoretical account of the critical period must be compatible. Firstly, language does not become totally unlearnable during adulthood. Thus, late learners scored significantly above chance on all of the types of syntactic and morphological rules tested except for determiners and plurals. Secondly, while early learners are uniformly successful in acquiring their

language to a high degree of proficiency, later learners show much greater individual variation. Johnson and Newport (1989: 279) conclude:

> A theoretical account of critical period effects in language learning must therefore consider whether the skills underlying children's uniformly superior performance are similar to those used by adult learners or rather whether adult language learning skill is controlled by a different set of variables.

This study, then, further supports the hypothesis that there is a critical period for attaining full native-like mastery of a second language. A re-analysis of Johnson and Newport's data by Bialystok and Hakuta (1994), however, revealed some serious problems with their interpretation. Bialystok and Hakuta argue that the data show a discontinuity not at puberty but rather at 20, and that there is statistically significant evidence for a continued decline in L2 acquisition well into adulthood.

1.3.1 Age of acquisition: The Critical Period Hypothesis

The relationship between a learner's age and his or her potential for success in L2 acquisition is still the subject of much lively debate. There is a widely-held belief that younger L2 learners generally do better than older learners. This is expressed as the 'critical period hypothesis', according to which there is a fixed span of years during which language learning can take place naturally and effortlessly, and after which it is not possible to be completely successful. Penfield and Roberts (1959), for example, argued that the optimum period for language acquisition falls within the first ten years of life, when the brain retains its plasticity. Penfield, partly on the basis of his scientific work as a neurosurgeon and partly on his personal conviction, found that children before puberty who suffer brain damage in the speech area of the cerebral cortex through accidents, brain tumours, and surgical intervention recover speech better than adolescents or adults. From this capacity of the young brain to compensate for the loss of the speech function, Penfield inferred that the brain of a young child is much more receptive for the development of speech mechanisms than the adult's. This conviction led him to the view that the massive exposure of young children to different languages would be in accordance with the biological timetable. In the Montreal environment in which he lived, he had become keenly aware of the contrast between his own inability

as an adult to learn French and the ease with which his children learnt other languages in the nursery.

Further theoretical support for early language learning could be derived from the 'nativist' view of first language acquisition which has been strongly advocated since the sixties through the writings of Chomsky, Lenneberg, McNeill, and others. Like Penfield, Lenneberg (1967), for example, regarded the years before puberty as a biologically active period of language development. The explanation advanced for the receptiveness to language development was that, up to adolescence, the two hemispheres of the cerebral cortex have not yet acquired the lateralization or specialization of function that characterizes the adult brain. Lateralization is a process whereby each of the two hemispheres of the brain becomes increasingly specialized. It has been known for almost a century (on the basis of Broca's and Wernicke's work) that language is lateralized in the left hemisphere for most people. It has become clear that some visual-spatial abilities associated with language are lateralized in the right hemisphere. Second language learning before puberty was thus given a kind of neurological sanction.

In subsequent years, this neurological explanation of better language learning before puberty was called into question because there is evidence that the cortical lateralization occurs much earlier, i.e., before the age of five (Krashen 1973) and that lateralization does not necessarily imply loss of any abilities (Krashen 1975, 1981). If that is so, the distinction between the presumed ease of language learning before adolescence and subsequent difficulties in language learning could not be accounted for on grounds of neurological changes.

Long (1990) examined studies on the maturational constraints in language development, and concluded that language specific maturational constraints are operative in both child first language acquisition and child second language acquisition and further, that there are critical/sensitive periods during which language learning is successful, after which it is irregular and incomplete. Maturational constraints would therefore explain why adults, but not children, generally fail to achieve native-like ability in a second language. Long discusses the findings of longterm studies on child

and adult second language acquisition which indicate that it is impossible to achieve native-like competence in phonology after the age of six; likewise, the acquisition of morphology, syntax and semantics appear to be difficult starting later than the early teens.

All these theoretical arguments are based on the assumption that children are in effect better language learners than adolescents or adults. They do not constitute proof that this is so nor do they provide concrete evidence of the specific characteristics of such early second language learning and of the differences in the learning process between earlier and later learning.

In their review of the research that has addressed the age issue, Krashen, Long, and Scarcella (1979) conclude that (1) adults are superior to children in rate of acquisition, and (2) older children learn more rapidly than younger children. The study most often cited in support of these conclusions is Snow and Hoefnagel-Höhle (1978). This study investigated the naturalistic acquisition of Dutch by eight to ten-year-old English-speaking children, twelve to fifteen-year-old adolescents, and adults over a ten-month period. The children and adolescents all attended Dutch schools. Some of the adults worked in Dutch work environments, but most of their Dutch colleagues spoke English well. Other adults were parents who did not work outside their homes and thus had somewhat less contact with Dutch than most of the other subjects. The amount of input, it is to be noted, was hardly equal.

The learners' proficiency was measured on three separate occasions, at four to five-month intervals. They were first tested within six months of their arrival in Holland and within six weeks of their starting school or work in a Dutch language environment. What made this research especially valuable was that a large number of different types of language use and language knowledge were measured and analysed.

Pronunciation was tested by having learners pronounce 80 Dutch words twice: the first time immediately after hearing a native speaker say the word; the second time, a few minutes later, they were asked to say the word represented in a picture, without a model

to imitate. Tape recordings of the learners were rated by a native speaker of Dutch on a six-point scale.

In an *auditory discrimination* test, learners saw pictures of four objects. In each group of four, there were two whose names were minimal pairs, that is, alike except for one sound (an example in English would be 'ship' and 'sheep'). Learners heard one of the words and were asked to indicate which picture was named by the word they heard.

Morphology was tested using a procedure which required learners to complete sentences by adding the correct grammatical markers to words which were supplied by the researchers. Again, to take an example from English, learners were asked to complete sentences such as 'Here is one boy. Now there are two of them. There are two ______?

The *sentence repetition* task required learners to repeat 37 sentences of increasing length and grammatical complexity.

For *sentence translation*, learners were given 60 sentences to translate from English to Dutch. A point was given for each grammatical structure which was rendered into the correct Dutch equivalent.

In the *sentence judgement task*, learners were to judge which of two sentences was better. The same content was expressed in both sentences, but one sentence was grammatically correct while the other contained errors.

In the *Peabody Picture Vocabulary Test*, learners saw four pictures and heard one isolated word. Their task was to indicate which picture corresponds to the word spoken by the tester.

For the *story comprehension task*, learners heard a story in Dutch and were then asked to retell the story in English or Dutch (according to their preference).

Finally, the *story telling task* required learners to tell a story which corresponded to a set of pictures they were given. Rate of delivery of speech mattered more than the expression of content or formal accuracy.

The results on the different tasks are presented in Table 1.2. An 'X' indicates that the group was best on this test at the beginning of the year (an indication of the rate of learning), and a 'Y' indicates the group that did best at the end of the year (and indication of eventual attainment).

Table 1.2: Comparison of Language Learning at Different Ages

Task	Child	Adolescent	Adult
Pronunciation	Y	Y	X
Auditory discrimination		XY	
Morphology		XY	
Sentence repetition		XY	
Sentence translation	*	XY	
Sentence judgement	*	XY	
Peabody picture vocabulary test		XY	
Story comprehension	Y	X	
Storytelling	Y	X	

* These tests were too difficult for child learners.

In the Snow and Hoefnagel-Höhle study, the adolescents were by far the most successful learners. They were ahead of everyone on all but one of the tests (pronunciation) on the first test session. That is, within the first few months the adolescents had already made the most progress in learning Dutch. As the table indicates, it was the adults who were better than the children and adolescents on the pronunciation test at the first test session. Surprisingly, it was also the adults, not the children, whose scores were second best on the other tests at the first test session. In other words, adolescents and adults learned faster than children in the first few months of exposure to Dutch.

By the end of the year, however, the children were rapidly catching up or had, in fact, surpassed the adults on several measures (for example, pronunciation, story comprehension, and storytelling). Nevertheless, it was the adolescents who retained the highest levels of performance overall.

Snow and Hoefnagel-Höhle (1978) concluded that their results provide evidence that there is no critical period for language acquisition. However, their results can be interpreted in different ways as well:

(a) Some of the tasks, for example, sentence judgement or translation, were too hard for young learners (aged 3 to 10). They were simply beyond the children's cognitive capacities. Therefore, these results are not evidence against the critical period.

(b) While adults (18 to 60 years) and adolescents (12 to 15 years) learn faster in the early stages of second language development, young children eventually catch up and even surpass them if their exposure to the language takes place in contexts where they are surrounded by the language on a daily basis. In other words, adults and adolescents learn at a faster rate, while children surpass adults and adolescents in eventual attainment. And this means that adults and adolescents resort to other learning mechanisms than the specialized language acquisition mechanisms.

(c) Adults and adolescents can make considerable and rapid progress towards mastery of a second language in contexts where they can get sufficient input on a daily basis in social, personal, professional, or academic interaction.

Studies such as the above provide evidence of more rapid learning on the part of adult and adolescent subjects in the early stages and of younger beginners catching up on and beginning to outstrip their elders after a year or so. This favours the eventual attainment-focused position taken by Krashen, Long and Scarcella (1979), namely, that in situations of 'naturalistic' exposure, while older beginners tend to outperform their juniors – at least in some respects – in the initial stages of learning, in terms of long-

term outcomes, generally speaking, the earlier exposure to the target language begins the better. This line has been widely acknowledged as the one which can probably be characterized as the 'consensus view' (e.g., Long 1990; Cook 1991; Ellis 1994).

Another frequently cited study provides evidence to support the critical period hypothesis. Coppieters (1987) tested 21 highly proficient speakers of French, all of whom had begun learning as adults, and compared their performance on a grammaticality judgment task with that of 20 native speakers. Coppieters notes that it was not possible to distinguish the two groups by errors they made, their choice of lexis, or grammatical constructions, and six of the subjects were also described as having no traces of a foreign accent. The results of the grammaticality judgement test, however, showed clear differences between the two groups, suggesting that despite the native-like performance of the learners in language production, their grammatical competence differed from that of native speakers. One of the interesting results obtained by Coppieters was that the differences between the native-speaker and non-native-speaker judgements were not uniform. Coppieters reports that divergence was less marked in constructions "normally covered by the term UG" and more marked in "functional" distinctions (for example, "passé composé", i.e. present perfect vs. 'imparfait', i.e. past continuous). This result, then, provides support for the claim that adult L2 learners have continued access to UG. Again, though, it is possible to raise methodological objections to this study. Coppieters did not include a group of learners who had started to learn L2 French as children, thus we cannot be sure that the results he obtained reflect age as opposed to some other factor.

Birdsong (1992) replicated this study by administering a grammaticality judgement test to 20 adult English-speaking learners of L2 French, who were near-native in their oral ability, and to 20 native speakers of French. The study was motivated by Long's (1990) challenge to researchers to investigate 'whether the very best learners actually have native-like competence' (1990: 281). Contrary to Coppieters, Birdsong found no evidence of any dramatic differences in the judgements of the non-native speakers and native speakers. A number of the non-native speakers performed in the same range as the native speakers on the grammaticality judgement test. This study, then, suggests that at least some learners who start learning an L2 after puberty achieve a level of

competence indistinguishable from that of native speakers. The question arises as to whether it is possible to maintain the Critical Period Hypothesis if many such learners are found.

In another recent study, White and Genesee (1996) tested high proficiency learners (native speakers of French, described as "near-natives") on certain English structures (e.g., *Wh*-movement and Question-formation) known to be influenced by a critical period. The researchers found no significant differences between these high proficiency speakers and native speakers of English. Therefore, they concluded that native competence is achievable even by postpubescent learners.

The majority of adult L2 learners, however, fail to reach native-speaker levels of ability. All children magically acquire their L1 to a high level of knowledge after a few years. Many L2 learners achieve only a minimal L2 competence after long years of struggle and effort. One goal for L2 acquisition research has been explaining this dismal failure. Selinker (1972) observed that 95% of L2 learners fail to achieve 'absolute success in a second language'. Learners who begin learning as children in general reach higher levels of L2 ability than those who start as adolescents or adults. This question has been addressed in research that has compared the level of proficiency reached by L2 learners who began as children with that of learners who began as adults.

As far as instructed second language learning is concerned, the consistent finding which has emerged from studies of the results of primary/elementary school second language programmes to be discussed below (e.g., Burstall, Jamieson, Cohen & Hargreaves 1974) is that pupils who are given early exposure to a second language and are then integrated into classes containing pupils without such experience do not maintain a clear advantage for more than a relatively short period over pupils who begin to learn the language only at secondary level. The apparent discrepancy between such evidence from school-based studies and evidence from naturalistic studies can, however, probably be related to the blurring effect from mixing beginners and non-beginners in the same classes (Stern 1976; Singleton 1992) and can, in any case, readily be accounted for in terms of gross differences in exposure time between naturalistic and instructed learners.

As far as the latter explanation is concerned, a period of, say, five years of exposure to a second language environment would in most circumstances involve a very great deal more exposure to the language than five years of formal second language instruction, where the target language is treated simply as one school subject among many. Thus, if the amount-of-exposure variable is held constant, the concepts of 'initial advantage' and 'eventual attainment' in a formal instructional setting need to be associated with much longer real-time periods than in a largely informal exposure situation. Singleton (1989:236) has estimated that more than 18 years would need to be spent in a formal instructional setting in order to obtain the same amount of second language input as seems to be required for older learners' 'initial advantage' to begin to disappear.

One might argue that the major difference between classroom and non-classroom learning are the limits of the input. The amount of information a learner receives outside the classroom may in fact be greater than what a learner receives in a classroom. Within the language classroom, however, the negative evidence provided by the teacher may be at times indirect (as in (15) below), but may also be direct (as in instances of direct correction, e.g. '*That's not right, you should say it like this...*'), whereas the major type of negative evidence in a naturalistic environment is indirect.

(15) NNS: It is necessary to 'pirsuade' students.
Teacher: It is necessary to 'what'?
NNS: to 'pirsuade'
Teacher: I'm sorry I don't understand the word.
NNS: to 'pirsuade', you know, 'convince'
Teacher: Oh, persuade, you've done a lot of reading, that's how it is spelled (Gass 1990:41)

Outside of the classroom one rarely gets explicit correction of an utterance, though there are certainly some fundamental similarities to the structure of the input which cannot be overlooked. In both situations the input is, in some sense, controlled for the learner. In an untutored environment, direct talk to a learner may be controlled through modification of the input (that is, slower rate, limited vocabulary, limited range of

syntactic structures etc.) (Hatch 1983); and the interactional structure of talk (that is, clarification requests, comprehension checks, negotiations of meaning etc.) (Long 1981). In a tutored environment, the linguistic input is controlled and structured by the teacher and by the materials used. Because of these modifications in talk directed to learners, Gass (1990) argues that in neither situation are learners confronted with the full range of grammatical structures nor lexical richness of the target language. Since Mauritius is not an acquisition-rich environment despite the official status of English, as we shall see, it is the study of the classroom environment which will be more helpful in understanding the process of learning English in the academic setting.

1.3.2 L2 Learning in Primary Schools

Krashen's acquisition-learning distinction claims that the adult learner has two ways of attaining the ability to perform in an L2 – tacit (or subconscious) acquisition and conscious learning. In this connection, a number of studies have investigated the relative effects of starting L2 in the primary school as opposed to the secondary school on the levels of attainment. In the first decade or two after World War II, the introduction of foreign languages in the elementary school (FLES) in the USA, of primary school French in Britain, and similar developments in other countries were part of a widespread search for ways of improving the effectiveness of language education by taking into account the timetable of language development in childhood. Several early language teaching experiments were undertaken during that period. But little was done to ensure that these experiments were systematically planned and carefully evaluated.

Two UNESCO-sponsored international meetings, held in Hamburg in 1962 and 1966, were intended to promote research on early language teaching and on the effectiveness of an early start (Stern 1967,1969). These meetings brought to light encouraging observations and reports of experiences in early language teaching. They demonstrated the feasibility of an early start in school systems and showed that young children responded to second language teaching in a positive way, but the 'superiority' of an early start over a later start was not proved. The advantages of an early start received further support from the successful Canadian experimental programmes in 'early immersion' (Lambert and Tucker 1972; Swain 1978), where members of a majority

group (native speakers of English) were educated through the medium of French, the language of a minority group. Immersion settings ensure a plentiful supply of input that has been tailored to the learners' level and is therefore comprehensible. These experiments suggested that under certain circumstances the early start can be advantageous; young children appear to be remarkably responsive to language education in a 'natural' setting of language use of the kind offered by language 'immersion'.

But even here the evidence is not absolutely conclusive in favour of the younger learner. Comparisons of 'early' and 'late' immersion (Genesee 1978; Swain 1981) found that late immersion groups of children who had had only a two-year immersion at grades 7 and 8 (i.e. age 12 and 13) in Canadian schools reached levels of achievement in their second language (i.e. French) which at the grade 9 level (i.e. age 14) were comparable to grade 9 early immersion children, that is children who had been 'immersed' for eight or nine years, i.e., since kindergarten.

The British project on Primary French, undertaken between 1964 and 1974 (Burstall, Jamieson, Cohen and Hargreaves 1974) constituted in effect a major longitudinal study on the question of earlier versus later second language learning. Its goal was to find out whether a start in a second language at the age of eight was practically feasible in the British school setting and whether it offered any special advantages over a start at the age of eleven (i.e. later pre-puberty), the customary age for transition to secondary education. Most of the classes (76 per cent) had one French lesson daily which varied in length from 20 to 30 minutes: the remaining classes had four or fewer French lessons per week (1974:199). In this ten-year enquiry, undertaken by the National Foundation for Educational Research (NFER), the progress of three cohorts of eight-year olds, approximately 17,000 children, was systematically assessed at regular intervals over a period of five to eight years. These experimental groups were compared with two types of control groups; one group was composed of children who at the time of testing were of the same age as the experimental children, but who had started French at the usual age of eleven, that is three years later; and the other control group was composed of students who were older than the experimental children at the time of testing, but who had had an equivalent period of years of exposure to French.

Since the introduction of French into the primary school curriculum inevitably reduced the time available for other school activities, the possibility arose that this reduction in the experimental pupils' 'opportunity to learn' (measured in terms of the time made available to the pupil for the learning of a given task) might be sufficient to exert a detrimental effect on their acquisition of the basic skills of literacy and numeracy. The results of the enquiry did not indicate that the introduction of French exerted any significant influence on achievement in other areas of the primary school curriculum (1974:42). They showed that teaching a foreign language in the primary school was feasible and did not affect achievement in other school subjects. But, secondly, on the question of whether it offered any special advantages, the results were less clear. The comparison with those children who had started a language later did not, on most measures, show that the early starters were overwhelmingly better. The early starters maintained, after two years, a certain but diminishing superiority in speaking and listening and, after four years, only for listening. Those who had started later and therefore had less time to learn were equal or superior on other measures, especially in reading and writing tests. The authors of this study saw in these results evidence that the theory of the advantages of an early start was a 'myth'. If there is any advantage at all for the early start, they argued, it is only that it allows more time for second language learning. On the age issue, they claimed, if anything, older learners are more efficient learners, because they bring to the learning task more learning experience and greater cognitive maturity. These findings and, above all, the interpretations that have been put upon them by the investigators have been questioned (for example, Buckby 1976; Spicer 1980). The poor results of foreign language teaching to young children were, for example, attributed to the teaching materials which relied heavily on audiolingual principles, involving many repetition exercises, and reading aloud. Thus, the debate on the relative advantages of early or late second language learning has gone on unabated (Stern 1982).

Carroll (1969, 1975) has argued on the basis of measured L2 achievement in formal educational settings that amount of exposure is the most important variable in the acquisition of an L2. Given that young learners will over the course of their school career have more time to acquire the L2, he suggests that an early start to L2 education

is desirable. In his view, "the amount of competence one achieves is largely a matter of time spent in learning, rather than the actual age of starting" (Carroll 1969: 63). Corroborating evidence for greater emphasis on adequate time for language learning rather than on the age issue per se was offered in the Evaluation of Educational Achievement (IEA) eight-country study of learning French as a second language (Carroll 1975). This enquiry made it possible to compare the effect of different patterns of language instruction including different starting ages. The results of this investigation with regard to the age issue were interpreted as follows:

> The data of the present study suggests that the primary factor in attainment of proficiency in French (and presumably, any foreign language) is the amount of instructional time provided. The study provides no clear evidence that there is any special advantage in starting the study of a foreign language very early other than the fact that this may provide the student more time to attain a desired performance level at a given age. In fact, the data suggest that students who start the study of a foreign language at relatively older ages make somewhat faster progress than those who start early. (Carroll 1975:276)).

The recommendation that came out of this investigation was that foreign language instruction should be planned in such a way as to allow students to have the necessary amount of instruction they need to achieve whatever level of competence was thought to be desirable at a given stage in their education. It is clear from the persistence of low achievement in Mauritius (see Chapter Four) that these ideas need to be taken on board by educators and policy makers in Mauritius. Genesee (1978), for his part, argues that, even though older learners may be more efficient, early immersion beginning in kindergarten provides a greater overall opportunity for language learning, and therefore has the potential of producing a higher level of L2 proficiency over the long term. According to Genesee (1978: 153):

> The combined advantages of extended time and opportunities furnished by early instruction probably make it more conducive to attaining the higher levels of second language proficiency, provided that full advantage is taken of them through effective pedagogy.

For Swain (1981), the time issue in L2 acquisition is intimately bound up with the sociocultural circumstances in which the L2 is acquired and with the nature of the L2

skills that are being considered. Referring specifically to French immersion programmes, Swain notes that in an early immersion programme at the elementary level, there is more time and opportunity for spontaneous use of the L2 than in a late immersion programme. Immersion students tend to have less rigid ethnolinguistic stereotypes of the target-language community, and place greater value on the importance of inter-ethnic contact. These advantages are evident in 'disadvantaged' as well as 'advantaged' children. Evaluation of the different kinds of programmes shows that in general, total immersion produces better results than partial immersion, and also that early immersion does better than late. She anticipates that "early immersion students will have a greater functional range in using the second language than the late immersion student" and that "early immersion students will be more fluent and will feel more comfortable and at ease using the second language than late immersion students" (Swain 1981: 10).

Harley (1986) investigated the levels of attainment of children in French bilingual programmes in Canada. She focused on the learners' acquisition of the French verb system, obtaining data from interviews, a story repetition task, and a translation task. She compared early (i.e. 6-7 years old) and late (i.e. 14 – 15 years old) immersion students after both had received 1,000 hours of instruction. Neither group had acquired full control of the verb system, but the older students demonstrated greater overall control. However, the early immersion group showed higher levels of attainment at the end of their schooling, a result that may reflect the additional number of years' instruction they had received rather than starting age.

Collier (1987), too, found that older ESL learners (ages eight to eleven) outperformed younger ESL learners (ages five to seven) in second language. Collier attributes this finding to Cummins's (1981) observation that for older children the academic skills they had 'acquired in their L1 transfer to the L2 and [thus] the process of SLA and L2 literacy occurs at a faster rate than for younger children' (Collier 1987: 619). Interestingly enough, the twelve- to fifteen-year-olds in Collier's study did less well than both younger groups, a finding which would appear to contradict Cummins's explanation. Collier, however, proposes that the drop in the adolescents' scores may specifically be due to the schools' greater demands on students at the secondary level.

The results from these studies do not support the claim that children's attainment is greater than that of adolescents/adults. One possible explanation for this is that formal learning environments do not provide learners with the amount of exposure needed for the age advantage of young learners to emerge.

There is abundant evidence that individuals generally do not achieve a native-like accent in a second language unless they are exposed to it at an early age. Some researchers have argued that, although this is true, it is not necessarily true that adult learners cannot achieve native-like proficiency in phonology. For example, Neufeld (1979) argued that he was able to teach second language learners to perform like natives on certain tasks after specialized training. It is quite likely that improved teaching techniques can improve learners' proficiency quite dramatically, but performance on limited tasks is not equivalent to consistent performance in naturalistic situations. After all, it is much easier to mimic someone else's voice over the phone well enough to fool someone in a brief message than to fool them during a long conversation.

There is a general consensus that older individuals cannot reasonably hope to ever achieve a native accent in a second language. Patkowski (1980: 462) discusses the 'Conrad phenomenon', named after Joseph Conrad, the native Pole who learned English at the age of 18 and became one of the greatest English novelists. Patkowski cited the following remarks by Kurt Vonnegut: "The writing style which is most natural for you is bound to echo the speech you heard when a child. English is the novelist Joseph Conrad's third language, and much that seems piquant in his use of English was no doubt colored by his first language, which was Polish." Patkowski took this as an indication that Conrad's language was not native-like.

In a recent work, Birdsong (1999) presents a number of possible explanations to account for the fact that most adults do not (or cannot) become fluent in a second language. Among them are the following:

1. Loss of (access to) the language learning faculty. Successful language learning cannot take place after puberty because there is a loss of innate learning

strategies.

2. Loss of neural plasticity in the brain. As a person ages, there is a progressive lateralization of cerebral functions. The consequence of this and other cerebral changes is that the neural substrate needed for language learning is no longer fully available later in life.
3. Maladaptive gain of processing capacity. Processing and memory capacities change as a person matures.
4. "Use it, then lose it." This is essentially an evolutionary argument. Once humans use whatever innate circuitry is available to them at birth, there is no longer any need for it and the circuitry is dismantled. If one doesn't use the innate faculty, it will atrophy with time. In other words, it is a slow loss rather than an all-at-once dismantling.
5. Learning inhibits learning. In the connectionist models of learning, language learning involves accumulating and strengthening associations. Thus, the strength of associations from the native language (or other languages known) might interfere with the possibility of formulating and strengthening new associations.

1.3.3 Some general conclusions

The body of research that has addressed the age issue is quite enormous. Not surprisingly, commentators have arrived at different conclusions. One of the reasons for the lack of consensus on the age issue is undoubtedly the difficulty of comparing the results of studies that have employed very different methods. There are longitudinal studies based on groups of learners with the same starting time (for example, Snow and Hoefnagel-Hohle 1978) and also longitudinal studies based on groups of learners with different starting ages (for example, Burstall 1975). The studies have also varied in how they have measured learning. In some cases, performance measures based on samples of planned or unplanned language use have been used. In others, the grammaticality judgements of learners of different ages have been examined (for example, Coppieters 1987), while in still others native speakers have been asked to rate the performance of mixed groups of learners and native speakers in terms of how

'native' their use of the language is (for example, Scovel 1981). It is not surprising, then, that the results obtained by these studies fail to agree.

Despite this, some common ground is emerging:

1. Adult learners have an initial advantage where rate of learning is concerned, particularly in grammar. They will eventually be overtaken by child learners who receive enough exposure to the L2. This is less likely to happen in instructional than in naturalistic settings because the critical amount of exposure is usually not available in the former.

2. Only child learners are capable of acquiring a native accent in informal learning contexts. Long (1990) puts the critical age at 6 years, but Scovel (1981) argued that there is no evidence to support this and argues simply for a pre-puberty start. Singleton (1989) points out that children will only acquire a native accent if they receive massive exposure to the L2. However, some children who receive this exposure still do not achieve a native-like accent, possibly because they strive to maintain active use of their L1.

3. Irrespective of whether native-speaker proficiency is achieved, children are more likely to reach higher levels of attainment in both pronunciation and grammar than adults.

These general conclusions provide substantial support for the existence of at least a sensitive period for L2 acquisition. The distinction between a 'critical' and a 'sensitive' period rests on whether completely successful acquisition is deemed to be only possible within a given span of a learner's life, or whether acquisition is just easier within this period. The conclusions also lend some support to Long (1990) and Seliger's (1978) proposal that there may be multiple critical/sensitive periods for different aspects of language. The period during which a native accent is easily acquirable appears to end sooner than the period governing the acquisition of a native grammar.

Even among those researchers who agree that age-related differences in SLA exist, there is disagreement as to the explanation for such differences. We have already looked at the cognitive explanation provided by Bley-Vroman (1989), namely that child SLA and adult SLA might actually involve different processes; the former utilizing an LAD (language acquisition device) as in L1 acquisition, the latter employing general problem-solving abilities (See Section 1.2.2). We have also explored the neurological evidence produced by Penfield and Roberts (1959) and Lenneberg (1967) to show that the left and right hemispheres of the brain become specialized for different functions around puberty (see Section 1.3.1). The issue of whether the age at which individuals begin to be exposed to a second language plays a role in gaining mastery of an L2 has not only theoretical importance (whether an innate language faculty continues to function beyond a particular maturational point), but also relates to very practical considerations, especially in the Mauritian context where children are exposed to English much before the critical period. If children are better at learning second languages than adults, the policy of teaching English from primary schools in Mauritius should have tangible benefits. As will be demonstrated, however, although English is proclaimed the official language of instruction in Mauritius, there is a huge discrepancy between official declaration and actual practice in language policy. In many cases a flexible situation, where teachers choose to use the Mauritian vernacular (i.e. Creole) or resort to a lot of code-switching, is the result, thus limiting the role of English in oral communication. Yet there is also variation in achievement due to extra-linguistic factors that may either affect learning or acquisition.

1.4 Research on Learner Variables

There are, in addition to age, a host of other factors which have been advanced to explain differential success among L2 learners, to explain why some acquire a second language with facility while others meet with more limited success.

1.4.1 An affective and social basis for age differences

That affective factors may act as an intervening variable (a filter) that impedes L2 acquisition in adolescents and adults has already been noted in connection with

Krashen and Felix's formal operations hypotheses. Others accord a more central role to such factors in predicting an overall (initial and in the long-run) advantage to child L2 acquisition.

Schumann (1975), for example, examines a number of affective variables such as culture shock, instrumental and integrative motivation, empathy, and ego-permeability, and concludes that such variables "may be as important as or even more important than neurological maturation in accounting for difficulties in adult second language learning" (Schumann 1975: 230). According to this argument:

> ......in children, the initiating factors are generally favourably tuned or at least sufficiently neutral so that when exposed to the target language, the child's cognitive processes will function to produce language learning. In adults, however, the development of firm ego boundaries, attitudes and motivational orientations which is concomitant with social and psychological maturation places constraints on the initiating factors such that they may block or at least inhibit the cognitive processes from operating on the target language data to which the adult is exposed. (Schumann 1975: 231-32)

Subsequently, Schumann (1978) put forward an "acculturation" model for L2 acquisition in which he stresses social factors (e.g. social dominance patterns, group integration strategies, enclosure, cohesiveness, cultural congruence) equal in importance to affective ones in determining the degree to which an L2 is acquired. Together, he regards social and affective factors as "the major causal variable" in L2 acquisition. He proposes that "any learner can be placed on a continuum that ranges from social and psychological distance to social and psychological proximity with speakers of the TL (target language), and that the learner will acquire the second language only to the degree that he acculturates" (Schumann 1978:29).

Schumann proposed the acculturation model as a means of accounting for the failure to progress of one of the six learners studied by Cazden, Cancino, Rosansky, and Schumann (1975). Whereas the other five manifested considerable development over the ten-month period of the study, Alberto did not advance in most of the structural areas investigated, for example, negatives, interrogatives, use of copula 'be', and verb auxiliaries (Schumann 1978). Alberto's lack of development could not be satisfactorily explained by either cognitive development, as he demonstrated normal intelligence, or

age, as many older learners achieve satisfactory levels of L2 proficiency. Schumann noticed that Alberto's speech manifested very similar properties to those found in pidgins, leading Schumann to argue that similar processes of pidginization were at work. Just as pidgins have been noted to develop in contact situations that call for functionally restricted communication, so learners like Alberto appear to fossilize because they too have a limited need to communicate in the L2. According to this view, learners fail to progress beyond the early stages of acquisition because they require the L2 for only the communicative function of language (basic information exchange), and not for the integrative function (social identification) or the expressive function (the realization of personal attitudes) (Smith 1972). It was the similarity between Alberto's learner language and pidgins that led Schumann to propose acculturation as the primary causative factor.

Schumann's proposals are important for the present study because they try to provide an explanation for the widely perceived differential success of Mauritian L2 English learners. Schumann's Acculturation Theory places social considerations at its centre, and his proposals are a significant attempt to address the neglected social side of second language learning. When there are no actual contacts between Mauritians and the target language community speakers, the model of integration is hardly relevant, particularly for classroom learners who have no contact with the L2 culture except through their teacher, who is a non-native speaker and whose experience of the L2 culture is through the media, or through the stereotypes in their own culture. Mauritian students never see successful L2 users in action and so have no role model to emulate other than the native speaker, which they will very rarely match or meet. In these instances, the L2 learner does not feel an affinity with the target language community – which does not exist locally, or which is thousands of miles away. An immediate consequence of this psychological and social distance from speakers of the target language community is that it results in a diminished amount of input.

One factor which often affects motivation is the social dynamic or power relationship between the languages. That is, members of a minority group may have different attitudes and motivation when learning the language of a majority group than those of majority group members learning a minority language. Even though it is impossible to

predict the exact effect of such societal factors on second language learning, the fact that languages exist in social contexts cannot be overlooked when we seek to understand the variables which affect success in learning.

The extent to which learners acculturate depends on two sets of factors which determine their levels of social distance and psychological distance. Social distance concerns the extent to which individual learners become members of the target language group, and therefore, achieve contact with them. Psychological distance concerns the extent to which individual learners are comfortable with the learning task and constitutes, therefore, a personal rather than a group dimension. With regard to the situation in Mauritius, it's these variables that result in more or less exposure in the classroom and outside the classroom. It is certainly true that, according to Schumann's hypothesis, social factors all conspire to result in second language learners who do not get sufficient input. Schumann describes the progression of the learner's language system towards the target language as a process of decreolization and, according to him, the degree of acculturation - "social and psychological integration of the learner with the target language ....group" (Schumann 1978:29) - determines the extent of the learner's linguistic achievement. This suggests that for a learner to adjust his grammar in the direction of the target language, his contact with the target language group must provide him with enough motivation, communicative need, opportunity and corrective reinforcement.

The Acculturation Model thus illuminates the nature of the affective factors and the communicative needs which cause the creative construction process to take place. It seems to suggest that the language learning process may be retarded if the learner does not feel a pressing need to communicate which motivates him to engage in interaction with native speakers and thus to create language learning opportunities for himself. However, as stated in Section 1.4.2, there is little empirical evidence to support Schumann's proposals.

The various social and psychological factors which Schumann identifies as important are described in Table 1.3. The social factors are primary. The psychological factors mainly come into play where social distance is indeterminate (i.e. where social factors constitute neither a clearly positive nor a negative influence on acculturation).

Table 1.3: Factors affecting social and psychological distance (based on Schumann 1978)

Factor	Description
Social Distance 1. Social dominance	The L2 group can be politically, culturally, technically, or economically superior (dominant), inferior (subordinate), or equal.
2. Integration Pattern	The L2 group may assimilate (i.e. give up its own lifestyle and values in favour of those of TL group), seek to preserve its lifestyle and values, or acculturate (i.e. adopt lifestyle and values of TL group while maintaining its own for intra-group use).
3. Enclosure	The L2 group may share the same social facilities (low enclosure) or may have different social facilities (high enclosure).
4. Cohesiveness	The L2 group is characterized by intra-group contacts (cohesive) or inter-group contacts (non-cohesive).
5. Size	The L2 group may constitute a numerically large or small group.
6. Cultural congruence	The culture of the L2 group may be similar or different to that of the TL group.
7. Attitude	The L2 group and TL group may hold positive or negative attitudes towards each other.
8. Intended length of residence	The L2 group may intend to stay for a long time or a short time.

Psychological distance

1. Language shock	The extent to which L2 learners fear they will look comic in speaking the L2.
2. Culture shock	The extent to which L2 learners feel anxious and disorientated upon entering a new culture.
3. Motivation	The extent to which L2 learners are integratively (most important) or instrumentally motivated to learn the L2.
4. Ego permeability	The extent to which L2 learners perceive their L1 to have fixed and rigid or permeable and flexible boundaries and therefore the extent to which they are inhibited.

In the light of the above factors, a learning situation can be either "good" or "bad" (Schumann 1978). An example of a "good" learning situation is when (1) the L2 and TL groups view each other as socially equal, (2) both groups are desirous that the L2 group assimilate, (3) there is low enclosure, (4) the L2 group lacks cohesion, (5) the group is small, (6) both groups display positive attitudes towards each other, and (7) the L2 group envisages staying in the TL area for an extended period. Several "bad" learning situations are possible, as many of the social variables permit three-way alternatives. Also, different learning situations manifest degrees of "badness" in accordance with the extent of the overall social distance.

1.4.2 Little Empirical Evidence

The test of any model is whether it is supported by the results of empirical research. When researchers are interested in finding out whether an individual factor such as motivation affects L2 learning, they usually select a group of learners and give them a questionnaire to measure, for example, the type and degree of motivation. The learners are then given a test to measure their L2 proficiency. The test and the questionnaire are

both scored and the researcher investigates whether a learner with a high score on the proficiency test is also more likely to have a high score on the motivation questionnaire. If this is the case, the researcher usually concludes that high levels of motivation are correlated with success in language learning. A similar procedure can be used to measure the effects of intelligence on L2 learning through the use of IQ tests.

Although this procedure seems straightforward, there are several difficulties with it. The first problem is that it is not possible to directly observe and measure qualities such as aptitude, motivation, extroversion, or even intelligence. These are just labels for an entire range of behaviours and characteristics. Furthermore, because characteristics such as these are not independent, it will come as no surprise that different researchers have often used the same labels to describe different sets of behavioural traits.

For example, in motivation questionnaires, learners are often asked whether they willingly seek out opportunities to use their L2 with native speakers and if so, how often they do this. The assumption behind such a question is that learners who report that they often seek out opportunities to interact with speakers of the second language are highly motivated to learn. Although this assumption seems reasonable, it is problematic because if a learner responds by saying 'yes' to this question, it not only suggests that the learner is highly motivated, but also that the learner has more opportunities for language practice in informal contexts. Because it is usually impossible to separate these two factors (i.e. willingness to interact and opportunities to interact), researchers may be criticized for attempting to present these characteristics as independent.

Another factor which makes it difficult to reach conclusions about relationships between individual learner characteristics and L2 learning is how language proficiency is defined and measured. To illustrate this point, let us refer once again to the personal characteristic of motivation. In L2 acquisition literature, it is not uncommon to find that while some studies (Gardner and Lambert 1972; Gardner 1985) report that learners with a higher level or type of motivation are more successful language learners than those with lower motivation, other studies (Skehan 1989) report that highly motivated learners do not perform any better in proficiency tests than learners with much less

motivation to learn the second language. One explanation which has been offered for conflicting findings is that the language proficiency tests used in these studies do not measure the same kind of knowledge (Cummins 1983). That is, highly motivated learners are found to be more successful in some studies because the proficiency tests measure oral communication skills. In other studies, however, highly motivated learners are not found to be more successful because the tests are primarily measures of grammatical knowledge. Results such as these imply that motivation to learn a second language may be more related to particular aspects of language proficiency than others. In this connection, it is significant that Cummins (1981) distinguished two types of proficiency. Basic interpersonal communication skills (BICS) are the skills required for oral fluency and sociolinguistic appropriateness. They are 'basic' in the sense that they develop naturally as a result of exposure to a language through communication. Cognitive/academic language proficiency (CALP) consists of the linguistic knowledge and literacy skills required for academic work.

Finally, there is the problem of interpreting the *correlation* of two factors as being due to a causal relationship between them. That is, the fact that two things tend to occur together does not necessarily mean that one caused the other. Research on motivation is perhaps the best context in which to illustrate this. Learners who are successful may indeed be highly motivated. But can we conclude that they became successful because of their motivation? Is it not also plausible that their success heightened their motivation? In fact, it is very difficult to show with certainty that the correlations that are found between learner characteristics and success in second language acquisition are indicative of a one-way causal relationship. It seems more likely that, at least for some of these individual differences, the characteristic may contribute to success, but success also contributes to the enhancement of characteristics such as motivation, risk-taking behaviour, or even performance on tests which measure aptitude for language learning (Wesche 1981).

1.4.3 Motivation and Attitudes

There has been a great deal of research on the role of attitudes and motivation in second language learning. The overall findings show that positive attitudes and motivation are

related to success in second language learning (Gardner 1985). Unfortunately, the research cannot indicate precisely how motivation affects learning. That is, we do not know whether it is the motivation that produces successful learning or successful learning that enhances motivation, as noted above. Are learners more highly motivated because they are successful or are they successful because they are highly motivated? (Skehan 1989).

Motivation in second language learning is a complex phenomenon which can be defined in terms of two factors: learners' communicative needs, and their attitudes towards the second language community (Gardner and Lambert 1972; Gardner 1985). We have already looked at Schumann's Acculturation Theory to show the notion of integrative motivation and its importance. If learners need to speak the L2 in a wide range of social situations or to fulfil professional ambitions, they will perceive the communicative value of the second language and will therefore be motivated to acquire oral proficiency in it. Likewise, if learners have favourable attitudes towards the speakers of the language, they will desire more contact with them. On the other hand, we should keep in mind that an individual's identity is closely linked with the way he or she speaks. It follows that when speaking a new language, one is adopting some of the identity markers of another cultural group (Gardner and Clement 1990).

1.4.4 Personality

A number of personality characteristics have been proposed as likely to affect L2 acquisition, but it has not been easy to demonstrate their effects in empirical studies. As with other research investigating the effects of individual characteristics on L2 acquisition, different studies measuring a similar personality trait produce different results. For example, it is often argued that an extroverted person is well-suited to language learning (Naiman, Fröhlich, Stern and Todesco 1978). However, research does not always support this conclusion. There are two major hypotheses regarding the relationship between extroversion/introversion and L2 acquisition. The first is that extroverted learners will do better in acquiring basic interpersonal communication skills (BICS). The rationale for this hypothesis is that sociability (an essential feature of extroversion) will result in more opportunities to practise, more input, and more success

in communicating in the L2. The second hypothesis is that introverted learners will do better at developing cognitive academic language ability (CALP). The rationale for this hypothesis comes from studies which show that introverted learners typically enjoy more academic success, perhaps because they spend more time reading and writing (Griffiths 1991).

There is some support for the first hypothesis. Strong (1983) reviewed the results of 12 studies which had investigated extroversion or similar traits (sociability, empathy, outgoingness, and popularity). He shows that in the eight studies where the criterion measure was 'natural communicative language' and which, therefore, provided an indication of BICS, six of them showed that extroversion was an advantage. The second hypothesis has received less support. Strong's survey of studies that have investigated the effects of introversion on 'linguistic task language' (i.e cognitive academic language ability) reveals that less than half report a significant relationship.

In general, the available research does not show a clearly defined relationship between personality and L2 acquisition. And, as indicated earlier, the major difficulty in investigating personality characteristics is that of identification and measurement. The confused picture of the research on personality factors is due in part to the fact that comparisons are made between studies that measure communicative ability and studies that measure grammatical accuracy or knowledge of linguistic rules. Despite the inconclusive results and the problems involved in carrying out research in the area of personality characteristics, many researchers (Ehrman, 1990) believe that personality will be shown to have an important influence on success in language learning. This relationship is a complex one, however, in that it is probably not personality alone, but the way in which it combines with other factors that contributes to second language learning.

1.4.5 Intelligence

A link between intelligence and second language learning has been reported by several researchers (Genesee 1976). Over the years, many studies using a variety of IQ tests and different methods of assessing language learning have found that intelligence levels

were a good means of predicting how successful a learner would be at language learning. Furthermore, some studies (Oller & Perkins 1978; Genesee 1976) have shown that intelligence may be more strongly related to certain kinds of second language abilities than others. For example, in a study with French immersion children in Canada, it was found that while intelligence was related to the development of French second language reading, grammar, and vocabulary, it was unrelated to oral productive skills. Ekstrand (1977) also found low-level correlations between intelligence and proficiency as measured on tests of listening comprehension and free oral production, but much higher correlations when proficiency was measured by tests of reading comprehension, dictation, and free writing. These findings suggest that intelligence is more related to those second language skills which are used in the formal study of a language (i.e. reading, language analysis, writing, and vocabulary study), but that intelligence is much less likely to influence the way in which oral communication skills are developed. Therefore, intelligence seems to be a strong factor when it comes to learning second languages in classrooms, particularly if the instruction is formal. When the classroom instruction is less formal, however (i.e. more communicative), so-called 'intelligence' (as measured by IQ tests) may play a less important role. It is clear that this brings into focus, once again, the acquisition/learning distinction (i.e language module vs general cognitive structures), whereby it may be necessary to identify various sub-domains within the mind (White 1989; Schwartz 1993), including UG and general *learning* procedures or strategies that relate to peripheral grammatical features and vocabulary.

Genesee's findings lead towards another perspective. Perhaps IQ correlates not with L2 learning ability, but with ability to profit from certain types of instruction. Perhaps, someone has to be intelligent to succeed in learning languages when using particular methods. This idea was investigated by Chastain (1969). He compared IQ scores with the achievement results of students learning an L2 by two different methods. One of these was the popular method of audiolingualism. At its basis is the behaviourist view that language learning is a question of habit formation, in which the 'mind' has no role. The other method was 'cognitive code' in which learners are expected to understand grammatical explanations and to learn rules; so it might be said that the method involves exercise of the intelligence. Chastain found that the more intelligent learners

did well in cognitive code classes, but that there was no such correlation for the audiolingual classes (where intelligence did not seem to relate to success).

1.4.6 Aptitude

One might argue that language aptitude is simply due to intelligence in general, and is a subset of IQ. Carroll (1981:84) defines general aptitude as 'capability of learning a task', which depends on 'some combination of more or less enduring characteristics of the learner'. Aptitude has largely been ignored in second language studies that focus on differential success in language learning. In studies where it has been included, aptitude has been shown to be an important differentiating factor. In fact, Skehan (1989: 38) states that " aptitude is consistently the best predictor of language learning success."

The 'aptitude' factor has been investigated most intensively by researchers who are interested in developing tests which can predict how successful a language learner will be. The most widely used aptitude tests are the Modern Language Aptitude Test (MLAT) (Carroll and Sapon 1959) and the Pimsleur Language Aptitude Battery (PLAB) (Pimsleur 1966). Carroll is the originator of what Skehan called the "standard 'four component' view of language aptitude" (1989: 26):

1. Phonemic coding ability. This is an ability to discriminate among foreign sounds and to encode them in a manner such that they can be recalled later. This would certainly seem to be a skill involved in successful second language learning. When Carroll talks about 'coding' material, this suggests how not just the ear but also the brain is involved. Gardner and Lambert (1972: 289) describe this same ability in similar terms as 'a higher cognitive skill in which the individual actively seeks to impose a meaningful code on ... material'.
2. Grammatical sensitivity. This is the ability to recognize the functions of words in sentences. It does not measure an ability to name or describe the functions, but rather the ability to discern whether or not words in different sentences perform the same function. It appears logical that skill in being able to do this helps in learning another language. In this connection, Gardner and Lambert

(1972) observe that grammatical sensitivity correlates with grades in *all* areas of academic achievement, not just L2 learning. This brings us back to the notion of 'general intelligence'; for, although grammatical sensitivity is clearly a language-related concept, Gardner and Lambert are suggesting that it has relevance to non-language areas. The implication is that L2 learning and other sorts of learning are somehow linked together.

3. Inductive language learning ability. This is the ability to infer, induce, or abduct rules or generalizations about language from samples of the language. A learner proficient in this ability is less reliant on well-presented rules or generalizations from a teacher or from materials.
4. Memory and learning. Originally this was phrased in terms of associations: the ability to make and recall associations between words and phrases in a native and a second language. It is not clear whether this type of association plays a major role in language learning, but memory for language material is clearly important.

Skehan (1989; 1998) questions the appropriateness of separating grammatical sensitivity and inductive language-learning ability. He suggested that these be combined into one ability: language analytic ability.

The general claim that language aptitude constitutes a relevant factor in L2 acquisition entails, in Carroll's (1981) view, a number of more specific claims. The first is that aptitude is separate from achievement. Carroll argues that they are conceptually distinct and also that they can be distinguished empirically (by demonstrating that there is no relationship between measures of aptitude and measures of proficiency at the beginning of a language programme, but that there is a relationship at the end of the programme). Achievement and proficiency tests measure 'how well you have done'. An aptitude test looks at 'how well you would do'. It has a strong predictive element to it .Second, aptitude must be shown to be separate from motivation. On this point, however, there is some disagreement, as Pimsleur (1966) treats motivation as an integral part of aptitude. Carroll argues that research by Lambert and Gardner (e.g., 1972) has consistently shown that aptitude and motivation are separate factors. Third, aptitude must be seen as a stable factor, perhaps even innate. In support of this claim,

Carroll refers to studies which show that learners' aptitude is difficult to alter through training. Fourth, aptitude is to be viewed not as a prerequisite for L2 acquisition (as all learners, irrespective of their aptitude, may achieve a reasonable level of proficiency), but as a capacity that enhances the rate and ease of acquisition. What is implied here is that second language learning is much more an accomplishment of memory for text than of the analysis of text. That is, much more is memorized than is broken into parts and subjected to rule formation and/or generalizations. According to Carroll (1973: 5), it is the 'rate at which persons at the secondary school, university and adult level [will] successfully master a foreign language.' Notice that this definition accepts that everyone can learn; it is just that some people do it *faster* than others.

Finally, Carroll argues that aptitude must be found to be distinct from general intelligence. He refers again to research by Lambert and Gardner which has shown that aptitude and intelligence measurements are not related. There are doubts about this claim, however. Pimsleur considers intelligence an important part of aptitude. Oller and Perkins (1978) have also argued that verbal intelligence is a major factor as it is needed to answer tests of the kind used to measure aptitude and language proficiency and thus is a common factor to both. In contrast, although finding significant correlations between scores on a verbal intelligence test and a test of foreign language proficiency, Skehan (1990) argues that there are clear differences between them.

Is there such a thing as an aptitude for L2 acquisition that is separate from general cognitive ability? This idea would be appealing to the Chomskyan way of thinking, because – at least as far as the L1 is concerned – acquisition is not seen as intimately connected with general cognitive growth.

Obler (1989), in a study of CJ, one exceptional learner who had a record of 'picking up' languages with great rapidity and ease, concluded that 'generally superior cognitive functioning is not necessary for exceptional L2 acquisition' (1989:153). CJ was a native speaker of English who grew up in an English-speaking home. His first true experience with a second language came at the age of 15 with formal instruction in French. CJ also studied German, Spanish and Latin while in high school. At age 20, he made a brief visit to Germany. CJ reported that just hearing German spoken for a short

time was enough for him to 'recover' the German he had learned in school. Later, CJ worked in Morocco where he reported learning Moroccan Arabic through both formal instruction and informal immersion. He also spent some time in Spain and Italy, where he apparently 'picked up' both Spanish and Italian in a 'matter of weeks'. CJ had a native-like proficiency in his second languages learned post-pubertally. Evaluated by native speakers of the different languages spoken by CJ, he was reported to have remarkable ease and speed of language acquisition, including lack of foreign accent.

Obler gave him a series of tests to assess his general intellectual functioning and examine some specific cognitive functions that might be expected to be associated with exceptional second language aptitude. Although the tests were primarily aimed at measuring memory and language abilities which might be particularly relevant to L2 acquisition, other areas of assessment included abstract reasoning and visual-spatial functioning. It is interesting that CJ's memory was not exceptional across the board. However, his verbal memory was exceptional both for English passages, and for acquiring verbal codes. Moreover, his performance was quite good on tasks requiring the perception and completion of formal patterns, whether the stimulus was abstract visual symbols or the relationships between series of words (as long as the relationship was formal and not semantic). Obler (1989:153) concludes that:

> CJ's exceptional verbal, in contrast to his visual memory and his overall average intellectual ability, would at least raise the possibility that exceptional verbal memory would be found strongly linked to L2 talent in other individuals as well.

Smith and Tsimpli (1995) also provide strong evidence for the idea that there is such a thing as an aptitude for L2 learning that is separate from general cognitive ability. They have studied the case of Christopher, a savant who was brain-damaged at the age of six weeks, but who had extraordinary skills in reading, writing and communicating in any of fifteen to twenty languages. Language aptitude cannot therefore be examined simply on the basis of the most common measurement of intelligence, IQ scores.

Many of the factors in this chapter cannot be affected by the teacher. Age cannot be changed, nor can aptitude, intelligence and most areas of personality. As teachers cannot change them, teaching has to recognize the differences between students. Much

L2 learning is common ground whatever the individual differences between learners may be.

In societies where the L2 is in actual use, L2 learning in the world outside can be meaningfully compared with L2 learning inside the classroom. The issue of whether learning in the classroom is better than a naturalistic setting hardly arises in the Mauritian context since few L2 learners there have the option of deciding between learning in a classroom or outside. In this connection, there has been considerable interest in the role of the linguistic environment on the grounds that the opportunities for learning which it affords constitute a major determinant of acquisition. The linguistic environment for L2 acquisition may be thought of in many ways, but perhaps most fundamentally in terms of the positive and negative evidence speakers and writers provide learners about the target language. Chapter Two will therefore investigate the role that input plays in L2 acquisition. One central issue that I address in the present thesis is the question of how to account for the variation in English language proficiency among Mauritian learners. Can the fact that they are exposed to input in and through English before the end of the critical period - and also after it closes- provide an account?

CHAPTER TWO

INPUT IN SECOND LANGUAGE ACQUISITION

2.0 Input : Opportunities for exposure to target language

Language input is considered suitable when it is available in large quantities, is varied, is comprehensible and is of real communicative value. The role played by such input in language learning, as evident from the research literature related to it, is presented below.

The main focus in my study will be on quantity of input, but the 'type' of input is also important. Language acquisition occurs when there is adequate exposure to language input data. For the process of grammar construction to take place, it is also necessary that this input data has sufficient structural and functional variety. Observational studies of first and second language acquisition in natural settings indicate that language development is actually retarded when adequate quantities of varied input data are not available. Theories of second language learning also indicate that language learning takes place when rich and varied input data is available. Input may come in written or spoken form. In the case of spoken input, it may occur in the context of interaction (i.e the learner's attempts to converse with a native speaker, a teacher, or another learner) or in the context of non-reciprocal discourse (for example, listening to the radio or watching a film).

A general distinction can be made between 'natural' and 'educational' settings. The former arise in the course of the learners' contact with other speakers of the L2 in a variety of situations – in the workplace, at home, through the media, at international conferences, in business meetings, etc. There will be some learners who experience the L2 entirely in natural settings and others whose only contact with it is in educational settings. However, many learners will be exposed to the L2 in both natural and educational settings.

Krashen (1981, 1982) and Bialystok (1978) were concerned with the role of formal instruction in L2 development and it was this that led them to apply the distinction between 'implicit' and 'explicit' knowledge. The distinction between these two types of knowledge underlies Krashen's Monitor Theory, which is the first and, in many ways, the most central of his five hypotheses (namely (1) the acquisition – learning hypothesis, (2) the natural order hypothesis, (3) the input hypothesis, (4) the monitor hypothesis, and (5) the affective filter hypothesis). Krashen (1981, 1982) claims that learners possess an 'acquired system' and a 'learned system' which are totally separate. The former is developed by means of 'acquisition', a subconscious process which arises when learners are using language purely for communication. The latter is the result of 'learning', the process of paying conscious attention to language in an effort to understand and memorize rules. It is clear that the acquisition/learning distinction mirrors the implicit/explicit distinction, a point that Krashen himself acknowledges (1982:10).

One might assume that the learning that takes place in natural and educational settings is different in nature (Krashen 1982, 1985). Krashen's acquisition-learning distinction points to the two ways in which knowledge of an L2 can be developed. As argued earlier, the former takes place subconsciously as a result of understanding what has been said (or written) in communication, and clearly corresponds to informal learning. The latter, which involves conscious attention to linguistic forms, corresponds to formal learning. In natural settings, informal learning (i.e. acquisition) occurs. Knowledge in these settings is activated for use by means of primary processes which are utilized when learners wish to engage in unplanned discourse (see Chapter One). Only positive evidence in the form of primary linguistic data – the same input which drives L1 acquisition – is able to build the acquired grammar. In contrast, the formal learning environment is one where the language is taught to second or foreign language learners. In this case, the focus is on structure – i.e. it is 'about' the language, and is aimed to build knowledge about, rather than knowledge of the language itself. The teacher's goal is to see to it that students learn the vocabulary and grammatical rules of the target language. Formal learning is thus held to take place through conscious attention to rules and principles and greater emphasis is placed on mastery of 'subject matter' treated as a

decontextualized body of knowledge. The goal of learners in such courses is often to pass an examination rather than to use the language for daily communicative interaction.

The correlation between informal learning and natural settings on the one hand, and formal learning and educational settings on the other, is at best only a crude one (Krashen 1976). Adult learners in natural settings often resort to conscious learning and may deliberately seek out opportunities to practise specific linguistic items they have studied, as Lennon's (1989) study of advanced German learners of English in Britain demonstrates. Ioup (1995) conducted some research with two English-speaking subjects who learned Arabic as a second language in their adult years in an Arabic-speaking environment. She compared the performance of their two subjects, one of whom was entirely untutored in Arabic and the other received extensive formal instruction, on a range of tasks – speech production, accent identification, translation, grammaticality judgement and interpretation of anaphora. It transpired that the differences between these two learners were marginal, both attaining levels of performance close to native norms. This prompted Ioup to consider the hypothesis that for those few second language learners who are able to achieve native-like proficiency, formal instruction may not be a prerequisite. However, she treats this hypothesis with caution, observing that her untutored subject in fact engaged in a certain amount of self-tuition through the taking and continual revision of notes about the grammar, lexis and phonology of Arabic and that she welcomed and exploited the negative evidence provided by corrective feedback. One might also add that Julie had an 'exceptional' talent for learning languages, which Skehan (1998:211) claims is 'qualitatively different from simply high aptitude'.

Conversely, learners in classrooms may not be required to treat the language as 'subject matter', but instead be given opportunities for acquisition. As d'Anglejan (1978) has noted, the correlation between educational settings and formal language learning depends on the pedagogic approach. In the case of the 'traditional' approach (characterized by the explicit teaching of the language), there may be few opportunities for informal learning. But in the case of 'innovative' approaches (e.g. immersion bilingual programmes in Canada), informal learning is not only possible but is actively

encouraged. Indeed, the strongest argument for communicative language teaching and 'content-based' second language instruction (Brinton 1989) comes from research in second language acquisition. Much research suggests that a necessary condition for successful language acquisition is that the "input" in the target language must be understood by the learner (Krashen 1985). Since input which will serve for language acquisition must also contain new elements to be acquired, comprehension is accomplished with the help of cues from the situational and verbal contexts. There is, therefore, no necessary connection between setting and type of learning. However, the social conditions that prevail in natural and educational contexts may predispose learners to engage in informal or formal learning strategies. For example, as McNamara (1973) has observed, it is rare that teachers and learners participate in the spontaneous, meaningful interchanges that are characteristic of 'street' learning. Lightbown and Spada (1993) argue that learning a second language in a natural acquisition context or 'on the street' is not the same as learning in the classroom. In the following table (Table 2.1), they present a comparison of natural and formal or instructional settings:

Table 2.1: Comparison of natural and instructional settings
(From Lightbown & Spada 1993:71)

Characteristics	Natural acquisition	Traditional instruction
error correction	-	+
learning one thing at a time	-	+
ample time available for learning	+	-
high ratio of native speakers to learners	+	-
variety of language and discourse types	+	-
pressure to speak	+	-
access to modified input	+ or -	+

A plus (+) marks the presence of the characteristic in the left-hand column, while a minus (-) marks its absence

Table 2.1 summarizes the differences between natural and instructional language learning settings. In natural acquisition contexts,

(i) Learners are rarely corrected. If their interlocutors can understand what they are saying, they do not remark on the correctness of the learners' speech. They would probably feel it was rude to do so.

(ii) Language is not structured step by step. In communicative interactions, the learner will be exposed to a wide variety of vocabulary and structures.

(iii) The learner may be surrounded by the language for many hours each day. Some of it is addressed to the learner; much of it is simply 'overhead'.

(iv) The learner encounters a number of different people who use the target language proficiently.

(v) The learner may observe or participate in many different types of language events: brief greetings, commercial transactions, exchanges of information, arguments, instructions at school or in the workplace.

(vi) Learners must often use their limited second language ability to respond to questions or get information. In these situations, the emphasis is on getting meaning across clearly, and more proficient speakers tend to be tolerant of learners' errors that do not interfere with meaning.

(vii) Modified input (i.e. speech adjusted in a number of ways) is available in many one-on-one conversations. In situations where many native speakers are involved in the conversation, however, the learner often has difficulty getting access to language he or she can understand.

Learners in traditional instruction differ from natural learners in that :

(i) Errors are frequently corrected. Accuracy tends to be given priority over meaningful interaction.

(ii) Input is structurally simplified and sequenced. Linguistic items are presented and practised in isolation, one item at a time.

(iii) There is limited time (usually only a few hours a week) for learning.

(iv) There is a small ratio of native speakers to non-native speakers. The teacher is often the only proficient speaker the student comes in contact with.

(v) Students experience a limited range of language discourse types (often a chain of 'Teacher asks a question/Student answers/Teacher evaluates response').

(vi) Students often feel great pressure to speak or write the second language and to do so correctly from the very beginning.

(vii) When teachers use the target language to give instructions or in other classroom management events, they often modify their language in order to ensure comprehension and compliance.

Not all language classrooms are alike, as we will see in Chapter Six. The conditions for learning differ in terms of the physical environment, the age and motivation of the students, the amount of time available for learning, and many other variables. Apart from the general assumption that learning in natural and educational settings is very different in nature, it is commonly claimed that natural settings lead to higher levels of L2 proficiency than educational settings. Schinke-Llano (1990:216), for instance, claims that 'second' language acquisition results in native-like use of the target language, while 'foreign' language acquisition does not. This assumption is also evident in the 'year-abroad' built into university level foreign language education in many European countries, and the growing popularity of 'home-stay' programmes among Japanese learners. The aim of these is to provide foreign language learners with opportunities for informal learning, so that they can reach higher levels of oral proficiency.

There is some support for this position. d'Anglejan (1978) reports that Canadian civil servants freed from their jobs for as long as a year to improve their L2 proficiency in French in intensive language classes did not generally become fluent in the L2, despite a strong motivation to learn. d'Anglejan suggests that one reason for this was the absence of any opportunities for contact with native speakers. In contrast, Vietnamese immigrants in California who were placed in occupational settings after a short training programme proved highly successful. Fathman (1978) found that 12- to 14-year-old ESL learners in the United States achieved a higher level of oral proficiency than EFL

learners of similar ages in Germany. The ESL learners' speech was rated higher in fluency than in grammaticality, while the opposite was true of the EFL learners. Interestingly, however, the ESL learners were much less certain about their ability to speak English than the EFL learners, perhaps because they were using a different yardstick to measure themselves against. Gass (1987) conducted a comparative study of ESL/EFL learners and also of Italian as a second language (ISL) and as a foreign language (IFL). This study took the form of sentence – interpretation experiments using bilingual subjects in a within-subjects, cross-language design. That is, speakers of different languages are asked to identify the function of different cues in both L1 and L2 sentences that have been designed to reflect both the coordination and competition of cues. For example, they may be asked to say which noun is the agent of an action in acceptable sentences like 'The boy is chopping the log' and in semantically unlikely sentences such as 'The logs are chopping the boy', where the animacy cue is in competition with the word order cue, but the agreement cue is in coordination. The study then compares the responses of learners with different language backgrounds. Focusing on such sentence interpretation strategies, Gass found no difference between the EFL/ESL groups, but a significant difference in the case of the IFL/ISL. Gass notes that sentence interpretation in English is unproblematic because it rests primarily on one type of cue (word order), whereas in Italian it is more problematic because several cue types (word order, inflectional, and pragmatic) are utilized. In other words, for native Italian speakers of English, the sensitivity to strategies of interpretation was rather straightforward, but for learners of Italian the situation was much more complex with more interacting factors to reckon with. Thus, 'foreign' and 'second' language learners will manifest no differences where relatively simple learning targets are involved, but will differ when the targets are more complex. Complex rules cannot easily be taught, and classrooms do not offer sufficient input for them to be learnt naturally.

In this connection, Long (1996) argues that failure to learn is due either to insufficient exposure or to failure to notice the items in question, even if exposure occurred and the learner was attending. (A learner could attend carefully to a lecture in an L2 and still fail to notice a particular linguistic item in it). Long (1997) argues that given adequate opportunities, older children, adolescents and adults can and do learn much of an L2

grammar incidentally, while focusing on meaning, or communication. A focus on meaning alone, however, (a) is insufficient to achieve full native-like competence, and (b) can be improved upon, in terms of both rate and ultimate attainment, by periodic attention to language as object. In classroom settings, this is best achieved not by what Long (1997) calls *focus on forms,* where classes spend most of their time working on isolated linguistic structures in a sequence predetermined externally by a syllabus designer or textbook writer. As opposed to *'focus on forms'* , Long (1997) refers to *'focus on form'*. Focus on forms may cause tension and anxiety and prevent input from being attended to. In fact, it has been observed that in the traditional approaches to language teaching - as is the case with the rural schools in Mauritius (see Chapter six), use of isolated and decontextualized words and sentences, the lack of a two-way flow of information, the lack of personalized and directed input results in learners paying less attention to language to which they are exposed. Rather, during an otherwise meaning-focused lesson, and using a variety of pedagogic procedures, learners' attention is briefly shifted to linguistic code features, in context, when students experience problems as they work on communicative tasks, i.e., in a sequence determined by their own internal syllabuses. Focus on form refers to how attentional resources are allocated, and involves briefly drawing students' attention to linguistic elements (words, collocations, grammatical structures, pragmatic patterns, and so on), in context, as they arise incidentally in lessons whose overriding focus is on meaning, or communication, the temporary shifts in focal attention being triggered by students' comprehension or production problems. The purpose is to induce what Schmidt (1993) calls *noticing,* i.e., registering forms in the input so as to store them in memory. This is the opposite position to that taken by Krashen (e.g. 1985, 1989), VanPatten (1988), and others who have denied there is any evidence of beneficial effects of a focus on form, at least in the early stages of language learning. Krashen has claimed that adults can best learn an L2 like children learn an L1, subconsciously (i.e. incidentally, without intention, while doing something else) and implicitly (via subconscious abstraction of patterns from input data), while attending to something else (meaning). Attention to (and understanding or awareness of) linguistic forms is neither necessary nor beneficial.

It is by no means certain, however, that naturalistic settings lead to high levels of proficiency - even oral proficiency. Fathman (1978) observes that there was considerable variation in the levels achieved by the ESL learners in her study, suggesting that some at least were not so successful. Schinke-Llano's claim that 'second' language learning by post-puberty learners is characterized by native-speaker levels of ability is very doubtful. Gass observes that 'most learners, be it classroom or non-classroom learners, do not attain complete mastery of an L2' (1990:37), and queries whether native-language proficiency is ever possible for adults - a point taken up in Chapter 1 when the role of age in L2 acquisition was examined. Longitudinal studies, such as those reported by Schumann (1978), Schmidt (1983), and Hilles (1986,1991) also show that learners in natural settings often fall far short of native-language proficiency.

Using a case study approach, Schumann (1978) documented the progress of a number of L2 learners over a period of time. He found that one learner in particular failed to develop his grammatical competence, despite explicit instruction. In accounting for this failure, Schumann found that his subject did not identify with or particularly want to fit into the target society or culture. He also used the data to support his "pidginization hypothesis", which sees fossilization within the individual as analogous to the development of pidgins. Just as pidgins have been noted to develop in contact situations that call for functionally restricted communication, so learners like Alberto appear to fossilise because they too have a limited need to communicate in the L2. According to this view, learners fail to progress beyond the early stages of acquisition because they require the L2 for only the communicative function of language (basic information exchange), and not for the integrative function (social identification) or the expressive function (the realisation of personal attitudes) – (see Smith 1972). It was the similarity between Alberto's learner language and pidgins that led Schumann to propose acculturation as the primary causative factor. In other words, Alberto's social and psychological distance from speakers of the target language appeared to Schumann to constitute a more likely explanation. Social distance concerns the extent to which individual learners become members of the target language group and, therefore, achieve contact with them. Psychological distance concerns the extent to which individual

learners are comfortable with the learning task and constitutes, therefore, a personal rather a group dimension. Schmidt (1983) investigated over a 3-year period the development of communicative competence in ESL of a Japanese L1 speaker who was living and working in Hawai as an artist. Schmidt sought to explore the relationships between social and interactional variables in the acquisition of communicative competence, and he took as his point of departure the earlier work of Schumann. One of his aims was to broaden the research agenda beyond its preoccupation with morphosyntactic development, and he therefore utilized Canale and Swain's (1980) four-component model of communicative competence. This model specifies grammatical, sociolinguistic, discourse and strategic competence as the basic elements constituting a user's overall competence. Schmidt presented evidence to suggest that Wes, his subject, was an individual with low social and psychological distance from the target culture. He was therefore, in a sense, the opposite to Schumann's subject. Schmidt drew on a range of data, including taped monologues and dialogues, fieldnotes, tables of morphosyntactic items, and interviews. Schmidt demonstrated that despite Wes's low psychological and social distance, his grammatical competence shows little evidence of development over the 3 years that Schmidt collected his data.

2.1 The effects of formal instruction on L2 Learning

If naturalistic settings do not necessarily lead to high levels of proficiency for adult L2 learners, the question that arises is, "Can second languages be taught?" Or, as Long (1983) puts it, "Does second language instruction make a difference?" It is perfectly natural and proper to ask whether L2 learning is the same inside the classroom as outside. One extreme point of view sees the L2 classroom as a world of its own. Whatever it is that students are doing, it is quite different from the 'natural' ways of learning language. Some teaching methods exploit deliberately 'unnatural' L2 learning. Focus on form, described in the previous section, for instance, exploits the general cognitive (i.e., non-language-specific) and/or problem-solving processes rather than making use of the 'natural' processes of the language faculty. At the opposite extreme is the view that all L2 learning, or indeed all language learning of the first or second language, is basically the same (see Flynn 1984, 1987; White 1989, 1996). The

classroom, according to this view, at best exploits this natural learning, at worst puts barriers in its way.

Whereas the claim that there are two types of knowledge is not controversial, Krashen's insistence that 'learned' knowledge is completely separate and cannot be converted into 'acquired' knowledge is (e.g. Gregg 1984; McLaughlin 1978, 1987). This position has become known as the 'non-interface position' which emanates from the learning/acquisition hypothesis of Krashen's Monitor Theory and the modularity of mind (see also Schwartz 1993). Krashen argues that 'acquired knowledge' can only be developed when the learner's attention is focussed on message conveyance, and that neither practice nor error correction enables 'learned knowledge' to become 'acquired'.

Bialystock's (1978) theory of L2 learning allows for an interface between explicit and implicit knowledge. According to this theory, implicit knowledge is developed through exposure to communicative language use and is facilitated by the strategy of 'functional practising' (attempts by the learner to maximise exposure to language through communication). Explicit knowledge arises when learners focus on the language code, and is facilitated by 'formal practising', which involves either conscious study of the L2 or attempts to automatise already learnt explicit knowledge. In these respects, Bialystok's theory is the same as Krashen's. It differs, however, in allowing for an interaction between the two types of knowledge. Formal practising enables explicit knowledge to become implicit, while inferencing allows explicit knowledge to be derived from implicit.

It should be noted, though, that whereas Bialystok saw her theory as clearly 'cognitive' in nature, Krashen drew more directly on linguistic concepts, in particular Chomsky's notion of innate linguistic knowledge. However, the distinction between implicit and explicit knowledge, which is central to Krashen's thinking, is a cognitive one. Explicit knowledge has been defined in different ways, but in SLA research it is generally used to refer to knowledge that is available to the learner as a conscious representation. Learners may make their knowledge explicit either in everyday language or with the

help of specially learnt 'technical' language. They may, for example, be able to explain the error in sentences like:

*(1) * The London is my favourite city.*

by saying ' "the" is not used with the names of cities' or they may do so with the help of grammatical terminology, as in 'proper nouns like "London" do not take a definite article'.

If explicit knowledge involves more conscious operations, implicit knowledge, on the other hand, refers to a process which takes place naturally, simply and without conscious operations. Schmidt (1990) points out that there are two types of implicit knowledge, formulaic knowledge and rule-based knowledge. The former consists of ready-made chunks of language. Rule-based implicit knowledge consists of generalized and abstract structures which have been internalized. In both cases, the knowledge is intuitive and, therefore, largely hidden; learners are not conscious of what they know. It becomes manifest only in actual performance.

We have already seen in Section 1.2 ('The Logical Problem of First Language Acquisition') that negative evidence is typically not available to the L1 learner, whereas the adult L2 learner may have access to both corrective feedback and to explicit grammatical information. Assuming for the moment that the provision of negative evidence is indeed beneficial to L2 learning, two theoretical positions are tenable. One is that negative evidence enables learners to acquire grammatical properties that would otherwise be lost because they do not have continued access to learning principles. This is the view that White (1991) adopts. She provides evidence to attempt to show that adverbial placement rules in L2 English, which are typically not acquired by learners whose L1 lacks them, can be successfully learnt through formal instruction. The claim is that negative evidence triggers the resetting of a parameter to its L2 value.

White's studies have examined the role of formal instruction in the context of communicative language teaching (i.e., when opportunities for communicating in the L2 are supplemented with grammar lessons). For instance, White (1991), investigating the

effects of instruction on adverb placement, examined whether it was successful in eliminating this error made by French learners of L2 English:

*(2) *John kissed often Mary (SVAO).*

Jean embrassa souvent Marie.

and in teaching these learners to use adverbs between subject and verb, a position not allowed in French:

(3) **Jean souvent embrasse Marie (SAVO).*

John often kisses Mary.

White argues that structure (3) is learnable through positive input (i.e., through primary linguistic data), but that elimination of the adverb placement error requires negative evidence such as that provided by formal instruction because the learners could never be sure that such sentences were not possible. In such cases, negative evidence in the form of grammar lessons or corrective feedback is required. The subjects in White's study were 11 and 12 year-old francophone learners of English as a second language (ESL) in Quebec, Canada. On entering this programme, the children were beginners with very little knowledge of English. In addition, they had very little contact with English outside the classroom. In these intensive programmes, five months of the academic year were devoted solely to ESL instruction, with the emphasis on communicative language teaching, and little use of form –focused instruction or error correction.

Five classes (ranging in size from 25 to 30 students per class) participated in this study, two at the grade 5 level (average age 11 at time of testing) and three at grade 6 (average age 12). The study involved two experimental conditions: an adverb group, consisting of one grade 5 and two grade 6 classes (82 children in all), was assigned to be taught certain aspects of English adverb placement; a question group, consisting of one grade 5 and one grade 6 class (56 children in all), was not taught adverb placement but was given alternative instruction in question-formation, in order to make sure that they would not be disadvantaged by lack of familiarity with the kinds of activities used to test knowledge of adverbs. The assumption was that this group would in fact receive plenty of positive evidence of adverb placement possibilities in their normal classroom input.

In addition, there was a control group of 26 children (average age 10 and 11) who were monolingual native speakers of English given the same test battery.

The results of the experiment showed that the groups specifically instructed on adverb placement came to know that SVAO was not a possible English word order. They made significantly greater gains in accuracy in a number of tasks such as grammaticality judgment task and a sentence construction task in comparison to the question group. The question group could not work out the relevant properties of adverb placement in spite of further exposure to English. In other words, positive evidence alone (as supplied in the intensive communicatively-based ESL programmes) did not allow the learners to arrive at certain properties of the L2. However, White argues, it is very likely that the knowledge gained was conscious rather than unconscious, and that it never became part of the learner's underlying interlanguage grammar. Indeed, a follow-up study, conducted exactly one year after the original teaching, suggests that most of what the children learned about English adverb placement was not retained in the long-term, i.e. that the instruction did not have lasting effects on their internalised competence.

The assumption that negative evidence is necessary for parameter resetting here, however, neglects the possibility that there is positive L2 input to show that the L1 value must be incorrect (Schwartz & Gubala-Ryzak 1992). For example, input like *'Mary often watches television'* shows that the verb has not raised past the adverb, hence that English is not like French. Schwartz acknowledges that negative evidence can result in the learning of grammatical knowledge, but argues that there is no mechanism that can 'translate' this knowledge into input of the type required by UG. This can be related to Krashen's distinction between acquisition and learning. In support of this position, Schwartz and Gubala-Ryzak reanalyse the data from White (1991) in order to argue that, while the learners were clearly successful in temporarily eliminating an incorrect adverbial placement rule, they achieved this without restructuring their interlanguage grammars. Schwartz (1993) has, indeed, argued that instruction that includes negative evidence has little impact on forms within UG anyway, since it will change (temporarily) only language behaviour and not IL grammars.

Generative theorists (e.g. Chomsky 1981; Fodor 1983; White 1981) claim that speakers possess a language module that is independent of other cognitive systems such as those responsible for perception, problem-solving or memorization. The evidence cited in support of this claim comes from the highly abstract, specific, and precise nature of the principles and parameters of UG. As Cook (1988) points out, 'to defeat the argument involves explaining how each and all of these principles could have been acquired from experience or from other faculties' (1988:71). The generative argument is that no such explanation has been or can be given. In so doing, generative theorists are at pains to acknowledge that the explanation they themselves provide is only a partial one. The claim is only that 'UG plays a central and vital part in L2 learning, but there are many other parts' (Cook 1988:189).

There could be aspects of the language module not covered by UG as it has been formulated. It has been proposed, notably by Fodor (1983), that the mind is not a uniform system but rather contains, in addition to a largely general-purpose central processing system (responsible for such functions as memory, belief, reasoning, etc.), a set of autonomous systems or modules that function largely independent of one another. For Fodor, language is one such module, as it is for Chomsky (e.g., 1986). For our purposes, it is enough that a modularist position sees language knowledge as a separate module from, for example, general knowledge of the world, and hence sees language acquisition as essentially different in character from the acquisition of real-world knowledge, including knowledge 'about' language.

Given that the merits of consciousness-raising among adult L2 learners (e.g., Krashen 1985; Schwartz 1993) have been questioned, to propose classroom instruction aimed at promoting attention to form may seem surprising. It is, indeed, generally assumed that the acquisition of language by young children occurs incidentally as a by-product of communication without deliberate intention to learn the language for the purpose of mastering it (Schmidt1990). This does not mean, however, that teachers contribute little to classroom language learning.

In one of the first reviews of the literature on formal instruction, Long (1983) considered a total of eleven studies that had investigated whether learners who received formal instruction achieved higher levels of proficiency than those who did not.

Regarding the role of formal instruction in L2 proficiency, Long's conclusion was that 'there is considerable evidence to indicate that SL instruction does make a difference' (1983: 374). He considered a total of eleven studies that had investigated whether learners who receive formal instruction achieve higher levels of proficiency than those who do not. He claimed that the studies suggested that instruction was advantageous (1) for children as well as adults, (2) for both intermediate and advanced learners, (3) irrespective of whether acquisition was measured by means of integrative or discrete-point tests, and (4) in acquisition-rich as well as acquisition-poor environments.

On the basis of his studies, Long claimed that his findings were damaging to Krashen's position on formal instruction (namely, that instruction does not contribute directly to 'acquisition' and should be limited to a few 'learnable' rules). Krashen (1985:28-31) responded by arguing that the studies did not in fact show an advantage for formal instruction per se, but only that learning in a classroom was helpful for 'beginners', who found it difficult to obtain the comprehensible input they needed from natural exposure outside the classroom. In this respect, it should be noted that Weslander and Stephany (1983) reported that it was the beginners who benefited most from formal instruction in their study. To refute Long's conclusion that the studies also showed formal instruction was advantageous for advanced learners, Krashen argued that the subjects in some of the studies had been wrongly classified as 'intermediate' and 'advanced'. In a response to this, Long (1988) pointed out that his other main conclusions (i.e. (1), (3) and (4) above) were also problematic for the Input Hypothesis.

These studies are based on comparisons of the relative effects of formal instruction and exposure. However, many learners experienced both together. It is conceivable, therefore, that what works best is some form of combination of the two.

Savignon (1972), in a frequently cited study of communicative language teaching, studied the linguistic and communicative skills of 48 college students enrolled in French language courses at an American university. The students were divided into three groups, all of which received the same number of hours per week of audiolingual instruction where the focus was on the practice and manipulation of grammatical forms. However, the 'communicative group' had an additional hour per week devoted to communicative tasks in an effort to encourage practice in using French in meaningful, creative, and spontaneous ways; the 'cultural group' had an additional hour devoted to activities, conducted in English, which were designed to foster an awareness of the French language and culture through films, music and art; and the 'control group' had an additional hour in the language laboratory doing grammar and pronunciation drills similar to those which they did in their regular class periods.

Tests to measure learners' linguistic and communicative abilities were administered before and after instruction to see if there were any significant differences between groups on these measures. The tests of 'linguistic competence' included a variety of grammar tests, teachers' evaluations of speaking skills, and course grades. The tests of 'communicative competence' included measures of fluency and of the ability to understand and transmit information in a variety of tasks, which included: (1) discussion with a native speaker of French, (2) interviewing a native speaker of French, (3) the reporting of facts about oneself or one's recent activities, and (4) a description of ongoing activities.

The results revealed no significant differences between groups on the linguistic competence measures. However, the 'communication group' scored significantly higher than the other two groups on the four communicative tests developed for the study. Savignon interprets these results as a support for the argument that second language programmes which focus only on accuracy and form do not give students sufficient opportunity to develop communicative abilities in a second language. Her study, then, suggests that a combination of formal and informal instruction aids the development of linguistic and communicative language skills in foreign language learners.

Communicative language teaching programmes seek to replace some of the characteristics of traditional instruction with those more typical of natural acquisition contexts. Krashen, who is not directly associated with communicative language teaching, has developed theories which are compatible with the principles of CLT. Krashen sees acquisition as the basic process involved in developing language proficiency and distinguishes this process from learning. Acquisition refers to the unconscious development of the target language system as a result of using the language for real communication. Learning is the conscious representation of grammatical knowledge that has resulted from instruction, and it cannot lead to acquisition. It is the acquired system that we call upon to create utterances during spontaneous language use. The learned system can serve only as a monitor of the output of the acquired system. Krashen and other second language acquisition theorists typically stress that language learning comes about through using language communicatively, rather than through practising language skills. As suggested earlier by Lightbown and Spada's (1993) comparison of natural and instructional settings, an exclusive emphasis on accuracy and practice of particular grammatical forms in the classroom situation does not mean that learners will be able to use the forms. Not surprisingly, this type of instruction does not seem to favour the development of fluency and communicative abilities. In communicative language teaching classrooms (Savignon 1972), we may find the following features :

(a) There is a limited amount of error correction, and meaning is emphasized over form.

(b) Input is simplified and made comprehensible by the use of contextual cues, props, and gestures, rather than through 'structural grading' (the presentation of one grammatical item at a time, in a sequence of 'simple' to 'complex').

(c) Learners usually have only limited time for learning. Sometimes, however, subject-matter courses taught through the second language can add time for language learning.

(d) Contact with proficient or native speakers of the language is limited. As with traditional instruction, it is often only the teacher who is a proficient speaker. In communicative classrooms, learners have considerable exposure to the second language speech of other learners. This naturally contains errors which would not be heard in an environment where one's interlocutors are native speakers. Although learners cannot provide each other with the accurate grammatical input that native speakers can, learners offer each other genuine communicative practice which includes negotiation of meaning. For example, learners will ask each other or their teacher for clarification, confirmation, repetition, and other kinds of information as they attempt to negotiate meaning.

(e) A variety of discourse types are introduced through stories, role playing, the use of 'real-life' materials such as newspapers and television broadcasts, and field trips.

(f) There is little pressure to perform at high levels of accuracy, and there is often a greater emphasis on comprehension than on production in the early stages of learning.

(g) Modified input is a defining feature of this approach to instruction. The teacher in these classes makes every effort to speak to students in a level of language they can understand. In addition, other students speak a simplified language.

Supporters of communicative language teaching have argued that language is not learned by the gradual accumulation of one item after another. They suggest that errors are a natural and valuable part of the language learning process, and argue that it is better to encourage learners to develop fluency before accuracy. Teachers who follow the communicative approach are encouraged to allow learners to use language freely, to provide substantial amounts of comprehensible input, and not to worry about the production of perfect utterances. Learners learn to treat *language instruction* as separate from *language use*. This is line with Krashen's Monitor Model: that learners would simply store metalinguistic information about the language in one metaphorical place, and interlanguage rules, developed in interactive contexts, in another.

Research in intensive ESL classes with young francophone learners has shown that

teachers who focus learners' attention on specific language features during the interactive, communicative activities of the class are more effective than those who never focus on form, as in communicative language teaching, or who do so only in isolated "grammar lessons" (Lightbown 1991; Lightbown and Spada 1990; Spada and Lightbown 1993). Spada (1986) sought to establish whether there was any interaction between type of contact and type of instruction. She investigated the effects of instruction and exposure on 48 intermediate-level adult learners enrolled in an intensive six-week ESL course at a Canadian university. The tasks she looked at included a grammar section which consisted of 40 discrete-point multiple-choice items in which the criterion for selection was the grammatical form of a particular structure. She found that although type and amount of contact appeared to account for variation in some aspects of the learners' proficiency before the effects of instruction were considered, it did not account for differences in the learners' improvement during the course. Overall, instruction was more important than exposure in accounting for differences in the learners' L2 proficiency. She also found evidence of an interaction between the type of instruction that different groups of learners received and commented:

> … contact positively accounted for differences in learners' improvement on the grammar and writing tests when the instruction was more form-focused, and negatively accounted for differences on those measures when the instruction was less form-focused (1986:97)

In other words, those learners who had access to both formal instruction and to naturalistic input in the form of exposure to English outside the classroom showed the greatest gains in proficiency. As Spada (1987:133) commented, 'attention to both form and meaning works best' for adult L2 learners.

In general, there is support for the claim that formal instruction helps adult learners (both foreign and second) to develop greater L2 proficiency, particularly if it is linked with opportunities for natural exposure obtained in communicative language teaching. Foreign language learners appear to benefit by developing greater communicative skills, while second language learners benefit by developing greater linguistic accuracy. There are, however, reasons for exercising caution in interpreting the studies that have been

done. One problem is that such studies do not take account of individual differences in learners. Fathman (1978) found that the informal learners in her study who attempted to engage in unplanned language use varied in English oral proficiency much more than the formal learners who evolved in contexts where the input is usually carefully organized and the primary focus is on form, leading her to suggest that some were skillful at learning informally while others had difficulty. Similar points have been made about differences in the ability of formal learners. Skehan (1989) proposes that there are two types of foreign language learners, analytic and memory-orientated. Whereas some learners are grammatically sensitive and demonstrate finely-tuned inductive language learning ability, others are strong on memory and 'chunk-learning'. The experience of L2 learners who vary greatly in their abilities to acquire their second language thus contrasts with that of L1 children who, given a normal upbringing, are successful in the acquisition of their first language. Though my subjects are within the critical period, they can be compared to adult (foreign) language learners who require genuine communicative ability in the language in a setting where the focus is on the teaching of language 'forms', as stated earlier.

With regard to formal instruction directed at cognitive goals, perhaps the most serious problem, however, is that many of the studies on effects of formal instruction make no attempt to ascertain what took place in the name of 'instruction'. They simply equated formal instruction with the number of years spent in the classroom. As a result, we do not know for certain whether the instruction was form-focused or communication-orientated. We cannot be sure whether the classroom learners did better than the naturalistic learners because of formal instruction or because of access to comprehensible input.

On the other hand, a number of studies have investigated the effects of specific types of formal instruction on learners' ability to produce specific linguistic features accurately. Pica (1983;1985) produces evidence to suggest that some grammatical features such as the production of simple morphemes like plural or third person 's' are performed more accurately if learners have access to formal instruction. She distinguished three acquisition contexts in her work: naturalistic, instructed and mixed, the last being a

combination of classroom instruction plus natural exposure in the target-language environment. Eighteen adult native speakers of Spanish learning ESL whose learning histories placed them uniquely in one context were identified. There was a total of six subjects per context, with the subjects in each cell representing a fairly wide range of L2 proficiency, as defined by the stage each had reached in his or her acquisition of ESL negation (*No* V, *don't* V, aux-neg, and analysed *don't*).

Pica first performed a supplied in obligatory contexts (SOC) analysis of nine grammatical morphemes, elicited through audiotaped conversations with the researcher, in the oral production of learners from the three language-learning contexts. This revealed morpheme orders which correlated highly with each other and with a 'natural order' previously established by Krashen (1977), suggesting some basic similarities in SLA, regardless of context.

While the SOC morpheme rank orders for all groups correlated strongly with one another, Pica noted that there were considerable differences among the groups in the case of certain morphemes in terms both of the ranks they occupied and the SOC percentage scores on which the ranks were based. For example, the instruction-only group scored 19 percentage points and one or two ranks higher on plural -s than the mixed and naturalistic groups, respectively, and 38 per cent and 41 per cent higher than the naturalistic and mixed groups on third-person singular -s. Pica notes that both these morphemes have transparent form-function relationships ('easy grammar' in Krashen's terms), and suggests that it may be precisely in this area that instruction has its greatest effect.

Pica next conducted a target-like use (TLU) analysis of the same morphemes, which involves looking not just at accurate suppliance of elements in obligatory contexts, but also at target-like and non-target-like suppliance of the elements in non-obligatory contexts. What the TLU analysis revealed was a number of differences between the three groups, with the greatest differences obtaining between the instruction-only group and the other two. Pica found that learners who had never received formal L2 instruction tended to omit grammatical morphemes, such as *-ing* and plural *-s*, whereas

classroom learners (and to a lesser degree, and in later stages, mixed learners) showed a strong tendency to overapply morphological marking of this kind.

Overapplication errors consisted of two types : (1) a small number (2 per cent of the total errors for classroom learners, and 1 per cent for naturalistic learners) of overgeneralization errors, involving suppliance of regularized irregular morphemes in obligatory contexts (e.g. 'He buy*ed* a car yesterday'); and (2) errors of overuse of morphemes in non-obligatory contexts (e.g. 'He *lived* in London now', 'I don't understand*ing* these people'). While both naturalistic and instructed learners made errors of these kinds, the frequency of such errors in instructed over uninstructed learners was significantly higher at almost all proficiency levels. Mixed learners performed like naturalistic learners at lower proficiency levels, but became more like instructed learners at higher levels of proficiency. Further, while instruction-only subjects used the plural *-s* form significantly more often than subjects in the other two groups, the naturalistic group tended to omit target-like noun endings and to use a free form quantifier instead (*two book, many town*), a production strategy which, Pica notes, is observed in many pidgins and creoles.

On the basis of these results, Pica draws the following conclusions : (1) similarities (e.g. common morpheme difficulty orders) across the three learner types support the idea that a great deal of L2 acquisition depends upon learner, not environmental, or contextual, factors; and (2) instruction affects L2 production/performance (a) by triggering oversuppliance of grammatical morphology and (b) by inhibiting (not preventing altogether) the use of ungrammatical, even if communicatively effective, constructions found in pidgins. Pica (1983:495) concludes that 'differing conditions of L2 exposure appear to affect acquirers' hypotheses about the target language and their strategies for using it'.

Lightbown, Spada and Wallace (1980) studied the effects of half-hour grammar lessons over two to six years of formal study on the accuracy with which 175 French speaking school learners of English (EFL) judged sentences to be grammatical. The subjects,

grade 6, 8 and 10 (i.e. ages 11, 13 and 15) students in Quebec, were asked to circle the errors in a sentence and write the correct form. The study focused on these morphemes:

(1) Plural |s|

(2) Possessive |s|

(3) Third person singular |s|

(4) Contractable copula |s|

(5) Contractable auxiliary |s|

(6) Be, used for expressing age (e.g. I am six years old)

(7) Prepositions of location (They are going to school)

The test was given three times, the first two administrations being only two weeks apart after the treatment, the third coming five months later, after summer vacation. In between administrations I and II, the rules used on the test were reviewed in class. Lightbown et al. report some improvement from time I to time II - the review in class resulted in a modest but noticeable 11% improvement for grades 8 and 10, compared to 3% for a control group which did not receive any instruction in the morphemes, and a 7% increase for the 6th graders (no controls were run for the 6th grade). In the third administration, five months later, scores fell back to a level between administrations I and II (between 3% and 11%).

Krashen (1982) concurs with Lightbown et al.'s interpretation that 'improvements on the second administration were based on the application of knowledge temporarily retained at a conscious level, but not fully acquired'. The results of administration II show just how temporary learned knowledge can be. Pienemann (1984) found that the gains which one learner made in the accurate use of the copula in German as a result of instruction began to disappear after as little as one week. White (1991) found that gains in the correct positioning of adverbs were largely lost five months after the instruction.

However, other studies have found that the effects of instruction are durable. Harley (1989), for example, retested her subjects in mostly quasi-experimental classroom studies comparing groups of learners left to acquire structures incidentally with groups

for whom the target structures are made more salient in some way (e.g., by error, correction, rule statements, etc.). Three months after the instruction, she found that the learners' improved ability to use French 'imparfait' and 'passé composé' as evident in an immediate post-test, had not only been maintained but extended even further. White, Spada, Lightbown and Ranta (1991) found that increased accuracy in the formation of questions evident in the same learners that White (1991) had investigated did not slip back to pre-instruction levels. In fact, the learners were still improving some six months later.

What explanation can be given for these mixed results? One possibility that seems very plausible is that advanced by Lightbown (1991). She notes that whereas learners had few opportunities for either hearing or using adverbs once the period of instruction was over, the same was not true for questions. Questions occurred frequently in the classroom input. Also, the intensive ESL learners asked many questions themselves, and so were able to obtain continuous feedback on their ability to perform them accurately. Lightbown suggests:

> ... the findings of these experimental studies can be interpreted as showing that, when form-focused instruction is introduced in a way which is divorced from the communicative needs and activities of the students, only short-term effects are obtained.

In other words, for the effects of instruction to be lasting, learners need subsequent and presumably continuous access to communication or input that utilises the features that have been taught. Although other factors (motivation, literacy, social class, etc.) may sometimes work in favour of instructed learners, the differences may at least partly be because the attention-focusing devices increase the saliency of otherwise problematic items and cause learners to focus on form (i.e. to attend to language as object during a generally meaning-oriented activity).

Although this is an attractive explanation, it does not appear to account fully for the results of all the studies mentioned above. It is reasonable to assume, for instance, that the structures investigated by Lightbown et al. (1980) - various -s morphemes, copula

'be', and locative prepositions - and that investigated by Pienemann (1984) - copula 'be' - are frequent in classroom input and that opportunities for producing them were available to the learners. Yet the effects of instruction directed at these features tended to disappear. It would seem, then, that other factors are involved.

We can only speculate at what these factors might be. One possibility is the nature of the linguistic feature itself. Lightbown (1991) notes that whereas questions are developmental in the sense that their acquisition occurs at a particular stage of learners' overall development, adverbs may be variational, i.e. they may or may not be acquired by individual learners at a given stage of development. Developmental features may be less susceptible to influence by input.

A second possibility, not incompatible with the one above, relates to the learner's perception of a grammatical feature. Morphemes such as copula 'be' and -s are not very salient. Thus, although they occur frequently, they may not be easily perceived in continuous speech. These features may also not be seen as very important by learners. Whereas they contribute relatively little to successful communication, structures such as questions and the distinction between 'passé composé' and 'imparfait' may be considered more important for message conveyance. If learners are motivated primarily by communicative need, then they will probably retain only those features that they perceive to be important for communication, as suggested by Meisel, Clahsen, and Pienemann (1981). Only if learners are motivated to acquire native-speaker norms, as a result perhaps of a desire to become integrated into the target-language culture, or as a result of an instrumental need to pass an examination that places a premium on grammatical accuracy, will they retain features that from a purely communicative point of view are redundant (Lambert and Tucker 1972). According to this view, the durability of instructional effects is closely linked to the nature of the learner's motivation. It should be noted that these explanations are subtly different from the one Lightbown has advanced. Whereas Lightbown emphasizes opportunity for hearing and using a structure, these explanations suggest that such opportunity constitutes a necessary but not sufficient condition to ensure retention of learnt grammar - the learner needs both to

be able to perceive structures in the input and also requires a reason for remembering them.

Other studies have indicated that formal instruction has an effect on accuracy in planned but not in unplanned production. 'Unplanned' language use means when the task did not encourage learners to attend consciously to the target structures. This is consistent with Krashen's claim that 'learned' knowledge is completely separate and cannot be converted into 'acquired' knowledge. Krashen argues that 'acquired' knowledge can only be developed when the learner's attention is focused on message conveyance, and that neither practice nor error correction enables 'learned knowledge' to become 'acquired'. Furthermore, he claims that utterances are initiated by the 'acquired' system, and that the 'learned' system only comes into play when learners 'monitor' the output from it. Monitoring is possible when learners are focused on form rather than meaning and have sufficient time to access their 'learned' knowledge (Schwartz 1993).

The finding that formal instruction only works where planned language use or learned knowledge is concerned (Schumann 1978; Kadia 1988) bears out Krashen's claim that formal instruction is only useful for monitoring. Schumann found that his learner (Alberto with Spanish as L1) did not improve the accuracy with which he spontaneously produced English negative structures after a period of instruction, but that he did show a significant improvement in an imitation test. Before the teaching, Alberto's negatives were 22 per cent (23/105) correct in spontaneous speech, chiefly due to the occasional appropriate use of *don't*, and 10 per cent (7/71) correct in elicited utterances, when Alberto was asked to negate affirmative sentences presented by Schumann. After instruction, elicited negatives, where Alberto was monitoring his output, improved to 64 per cent (216/335) correct, but spontaneous negatives were slightly worse, at 20 per cent (56/278) correct. Alberto's lack of development could not be satisfactorily explained by either cognitive development, as he demonstrated normal intelligence, or age, as many other learners achieve higher levels of L2 proficiency with negation. As discussed above, Schumann noticed that Alberto's speech manifested very similar properties to those found in pidgins, leading Schumann to argue that similar processes of pidginisation were at work.

Another study which has indicated that formal instruction has an effect on accuracy in planned but not in unplanned production is that of Kadia (1988). She studied the effects of 40 minutes of one-to-one instruction on a Chinese learner's acquisition of ditransitives (for example, 'I showed him the book') and phrasal verb constructions such as 'I called him up'. She concluded:

> ... formal instruction seemed to have very little effect on spontaneous production, but it was beneficial for controlled performance (1988 : 513).

It should be noted, though, that not only the instruction in Kadia's study was inadequate, but also the structures investigated by Schumann and Kadia are complex and typically acquired late.

On the other hand, there is some evidence to suggest that formal instruction can have a deleterious effect. Felix (1981), in a study of 34 children studying L2 English in their first year of a German high school, found that drilling in negatives involving the auxiliary 'doesn't' led to errors in declarative sentences such as the following:

(4) *Doesn't she eat apples*

Here, 'doesn't' has replaced the normal 'no' as a pre-negator. Negation involves a series of forms or structures which learners use en route to mastering the target language form (Dulay, Burt, and Krashen 1982). These interim forms are indicative of the developmental stages that learners pass through on the way to target language competence. Initially, negative utterances are characterised by external negation. That is, the negative particle (usually 'no' but sometimes 'not') is attached to a declarative nucleus:

(5) a. *No very good*
b. *No you playing here*

A little later, internal negation develops; that is, the negative particle is moved inside the utterance. This often coincides with the use of 'not' and/or 'don't', which is used variably with 'no' as the negative particle. 'Don't' at this stage is formulaic as it has not been analysed into its separate components 'do' and 'not'.

(6) a. *Mary not coming today*
b. *I no can swim*
c. *I don't see nothing mop.*

A third step involves negative attachment to modal verbs, although this may again occur in unanalysed units initially:

(7) a. *I can't play this one*
b. *I won't go*

In the final stage, the target rule is acquired. The learner has developed an auxiliary system and uses 'not' regularly as the negative particle (i.e. the use of 'no' with verb is eliminated). Negative utterances are now marked for tense and number, although not always correctly:

(8) a. *He doesn't know anything.*
b. *He didn't said it.*
c. *She didn't believe me.*

Felix's study, then, shows how the natural route of acquisition – or at least their performance – in L2 English negation can be changed through formal instruction.

Eubank (1987) also found evidence of unique negative structures in the production of tutored adult L2 learners of German. German differs from English because negation with full verbs follows object NPs and some adverbs in the sentence. He found the following sequence in their development:

(9)	I	II	III
	Neg X	S Neg	Internal Neg
	nein hier	*ihr harr ist schwartz nicht*	*die ah Mann hat keine Heft*

Stages in classroom L2 learning of German negation by six learners (from Eubank, 1987)

Stages I and III are familiar, except in so far as they depend on German negation rules. But Stage II is peculiar. The learners have decided incorrectly to put a negative at the end of the sentence, that is, *Sentence + Negation*, getting such ungrammatical sentences as "Das ist gut Kaffee nicht" (that is good coffee not) and "Der Mann hat Mund nicht" (the man has mouth no). Eubank argues that this is a product of the classroom situation, due in part to the pressure on students to talk in 'complete' sentences. In other words, when asked to perform beyond their level, learners simplify and unusual errors occur.

A study by Pienemann (1987) also suggests that premature instruction can have a deleterious effect by inducing avoidance behaviour. He provides evidence to show that three adult classroom learners of L2 German tended to avoid using the present perfect, preferring modal + verb structures because these gave them a greater chance of conforming to target-language norms, as the main verb consists of the unmodified infinitive. According to Pienemann, the present perfect is acquired late. He suggests that the avoidance was the result of being forced to produce this structure at an early stage. However, developmental features, once acquired - through instruction or through naturalistic exposure, constitute stable interlanguage rules. In contrast, the acquisition of variational features, such as copula, may be more amenable to input but such forms may continue to be unstable in the learner's interlanguage and so easily atrophy. Pienemann's hypothesis is that instruction will have an effect on acquisition only if the learner has reached the stage where he is 'ready' to incorporate the new rule or structure into his linguistic system.

Lightbown (1983) showed that francophone learners overlearnt progressive - ing as a result of teaching. They overgeneralised it, using it in contexts that required the simple form of the verb, which they had used correctly prior to the instruction. Pica (1983) also found evidence that instruction can trigger the oversuppliance of a number of regular morphological features such as past tense -ed and progressive -ing. Weinert (1987) and VanPatten (1990) also provide evidence to suggest that instruction can impede acquisition of negatives in L2 German and clitic pronouns in L2 Spanish respectively. In all these studies, the reason given for the failure of the formal instruction is that it distorts the primary linguistic data available to the learner and thus prevents the normal processes of acquisition from operating smoothly. Studies which show that the 'natural' route of acquisition can be positively altered by formal instruction would help to challenge Krashen's (1982) 'non-interface hypothesis' that 'learning' does not become 'acquisition' (see Section 1.2.2). It could also be that one is observing a performance effect reflective of 'learned' language knowledge, and that the learners still go through 'natural' stages.

Formal instruction might impede acquisition in another way - by making learners too conservative. Felix and Weigl (1991) asked first year German high school students of L2 English to judge sentences such as the following:

(10) That John will win the race everyone expects.

(11) For him to pass the test would be a surprise.

(12) Who did he see pictures of?

All of these sentences are marked in some way: (10) and (11) do not follow canonical word order and (12) displays prepositional stranding. The results showed that all the learners, irrespective of the number of years of instruction, tended to judge these grammatical sentences as ungrammatical. Felix and Weigl suggest that these marked structures are typically not taught (and in that case, the learners do not have access to UG), and that the latter followed the strategy 'if it hasn't been taught, you better believe it's wrong'. In this case, then, formal instruction made learners 'overly cautious'. It is,

however, not at all clear that native speakers would judge all the sentences above as grammatical, since the study did not include a control group of native speakers.

What general conclusions can we come to on the basis of the research which has investigated the effects of formal instruction? There is sufficient evidence to show that formal instruction can result in gains in accuracy. If the structure is 'simple' in the sense that it does not involve complex processing operations and is clearly related to a specific function, and if the formal instruction is well-planned, it is likely to work. However, if the instruction is directed at a difficult grammatical structure which is substantially beyond the learners' current interlanguage, it is likely that it will only lead to improved accuracy in planned language use, when learners can pay conscious attention to the structure. It will either have no effect on accuracy in unplanned language use or may result in idiosyncratic deviations as learners resort to alternative processing operations.

This evidence strengthens Krashen's (1982) position that formal instruction does not contribute to the development of the kind of implicit knowledge involved in linguistic competence. No matter how much the learner practises, explicit knowledge cannot be converted into implicit knowledge. Krashen does accept, however, that formal instruction can contribute to the learning of explicit knowledge, although he sees this as a limited role because only rules that are formally simple and deal with meanings that are easy to explain can be 'learned'. Most rules have to be 'acquired'. Krashen also claims that explicit knowledge is of limited value because it can only be used in 'monitoring' when the learner is focused on form and has sufficient time.

Krashen (1981) proposes that passive exposure to linguistic input that is comprehensible is the main variable necessary for language learning. Others such as Long (1981, 1983) claim that rather than input per se, it is the input accessed through active interaction and negotiation which causes learning. Still others like the Canadian researchers Harley and Swain (1984) hold that it is only when there is an opportunity to use the language received through the input as output in production, that actual linguistic proficiency can be attained. Harley and Swain (1984) agree that the "comprehensible input" of Krashen is certainly a necessary factor but they do not consider it to be sufficient by itself for

grammatical development and productive control of the language by the learner. For them too, the process of language learning begins with exposure to "comprehensible input" but this by itself is not sufficient for acquiring target-like proficiency. In addition to comprehensibility of input, mastery of the language requires the learners to be involved in productive activities which would lead them to use the forms for "Comprehensible output" in meaningful situations. According to Swain (1985), the linguistic elements necessary for comprehension of the meaning of language are reorganised through a syntactic processing into the intended meaning only when one wants to produce it in output. Whereas comprehension of the language input can take place simply by attending to the meaning of words, production can focus the learners' attention to the formal features of the language, and can make one notice the syntactic item. The important issue here is that it is while attempting to produce the target language that the learners may notice that they do not know how to say (or write) precisely the meaning they wish to convey. In other words, the activity of producing the target language may prompt second language learners to recognize consciously some of their linguistic problems. It may bring to their attention something they need to discover about their second language (possibly directing their attention to relevant input). The following example, taken from the think-aloud session with a grade 8 immersion student while he is composing, is illustrative.

(13) La dé...truc...tion. Et la détruction. No that's not a word. Démolition, démolisson, demolition, demolition, détruction, détruision, détruision, la détruision des arbres au forêt de pluie (the destruction of trees in the rain forest). (Swain & Lapkin 1995*)*

In this example, the student has just written "*Il y a trop d'utilisation des chemicaux toxiques qui détruissent l'ozone.*" (There's too much use of toxic chemicals which destroy the ozone layer.") In this think-aloud, we hear him try to produce a noun form of verb he has just used. He tries out various possibilities (hypotheses), seeing how each sounds. His final solution, "*la détruision*", is nontargetlike, but he has made use of his knowledge of French by using the stem of the verb he has produced and by adding a French-sounding suffix. This example is revealing, because the incorrect solution allows us to conclude that new knowledge has been created through a search of his own

existing knowledge. His search began with his own output, which he heard as incorrect. In her study with Canadian French immersion students, Swain (1985) found that the comprehension of meaning precedes the comprehension of the form, and contended that the necessity for producing the language as output may be the trigger that forces learners to pay attention to the syntactic means necessary for expression of the speaker's intended meaning. Swain (1985) argued that learners need the opportunity for meaningful use of their linguistic resources to achieve full grammatical competence. She argued that when learners experience communicative failure, they are pushed into making their output more precise, coherent and appropriate. She also argued that production may encourage learners to move from semantic (top-down) to syntactic (bottom-up) processing. Whereas comprehension of a message can take place with little syntactic analysis of the input, production forces learners to pay attention to the means of expression. In other words, learners need opportunities for 'pushed output' (i.e. speech or writing that makes demands on them for correct and appropriate use of the L2) in order to develop certain grammatical features that do not appear to be acquired purely on the basis of comprehending input. Swain's case rests on the different psycholinguistic requirements of comprehension and production; whereas successful comprehension is possible without a full linguistic analysis of the input, correct production requires learners to construct sentence plans for their messages. There is, however, little direct evidence to support Swain's 'comprehensible output hypothesis'.

The necessity of using language as output in order to be able to learn it is confirmed by others. Gass (1988) holds that production may be the factor that forces learners to a sophisticated analysis of grammar. When learners engage in interaction, once the message is clear, it seems to leave the interlocutor free in the following discourse to pay attention to the form, which makes them aware of the grammatical input necessary to develop syntactic knowledge of the language.

A number of applied linguists today believe that consciousness raising is important for language learning. Schmidt and Frota (1986) report on some evidence concerned with the process they call 'noticing'. They observe Schmidt's own learning of Brazilian Portuguese. He kept a diary of his own learning, together with tapes of input and output.

Diary and taped data were compared at intervals, and the conclusion is that he and his fellow researcher 'found a remarkable correspondence between my reports of what I had noticed when Brazilians talked to me and the linguistic forms I used myself '(p.140). This leads to the conclusion that 'conscious processing is a necessary condition for one step in the language-learning process, and is facilitative for other aspects of learning'. According to this argument, instruction works by helping learners to pay selective attention to form and form-meaning connections in the input. It provides learners with tools that help them to recognize those features in their interlanguages which are in need of modification. Swain (1995) has also hypothesized that, under certain circumstances, output promotes *noticing*. This is important if there is a basis to the claim that noticing a form in input must occur in order for it to be acquired (Schmidt 1990, 1992). There are several levels of noticing. Learners may simply notice a form in the target language due to the frequency or salience of the features themselves, for example (Gass 1988). Or, as proposed by Schmidt and Frota (1986) in their "notice the gap principle", learners may notice not only the target language form itself but also that it is different from their own interlanguage. Or learners may notice that they cannot say what they want to say precisely in the target language (Swain 1995).

In this connection, an important aspect of second language learning concerns metalinguistic awareness. Bialystok (2001) uses the term 'metalinguistic' to refer to three different entities: knowledge, ability, and awareness. *Metalinguistic knowledge,* in her view, is the explicit representation of abstract aspects of linguistic structure as distinct from knowledge of a particular language, such as how to form past tense or how relative clauses are constructed. Her definition of *metalinguistic ability* is a compromise between two positions. One view is that it describes the capacity to use knowledge about language as opposed to the capacity to use language. The contrasting position is that metalinguistic ability cannot be isolated from linguistic ability. The term *metalinguistic awareness* implies that "attention is actively focused on the domain of knowledge that describes the explicit properties of language" (2001: 127). Bialystok goes on to argue that with these three considerations, 'metalinguistic' is a potentially important concept in explaining the acquisition and use of language. Moreover, for her, it has clear relevance for understanding L2 development. According to Bialystok, metalinguistic knowledge is

constructed from language acquisition and applied to L2 acquisition precisely because it is explicit and universal. In her words,

> Second-language learners need not relearn the fundamental principles of language structure because these are already known from the metalinguistic knowledge that grew out of first-language acquisition (Bialystok 2001: 127).

The definition of metalinguistic awareness focuses the problem of language processing on the concept of attention. And this brings us to the issue of 'consciousness raising' which is frequently used to refer to any attempt to focus the learner's attention on a specific target structure, i.e. as a synonym for formal instruction (Sharwood Smith 1981). In this sense, language practice activities also involve consciousness raising. In a later article, Sharwood Smith (1991) suggests a better term might be 'input enhancement'. He argues that we can only know what we do with input, not what effect our attempts have on the learner (i.e. whether the input actually raises consciousness). However, the term 'consciousness raising' is preferred here in acknowledgement of its wide currency. Rutherford and Sharwood Smith (1985: 274) define 'consciousness raising' as the 'deliberate attempt to draw the learner's attention specifically to the formal properties of the target language'. This is a highly inductive technique where the learners are, for example, given a text and asked various questions designed to draw attention to a structure e.g., the passive.

Pedagogical rules constitute a tool for facilitating selective attention. The question arises as to whether learners are capable of learning such rules. A study by Seliger (1979) suggests that the conscious rules that learners learn as a result of instruction are often anomalous. Different learners ended up with different versions of the same pedagogical rule (in this case the difference between 'a' and 'an'). Sorace (1985), in a small-scale study of learners of L2 Italian, also found that the learners reformulated the rules they had been taught and that, as a result, the rules were clearly inadequate both as 'linguistic' and as 'pedagogic' rules. However, Sorace suggests that the ability to actually verbalize a rule occurs only as the final stage of metalingual development, and thus represents 'an advanced specialized form of it'. Sorace (1985: 244), in fact, identifies three stages in the development of conscious metalingual knowledge: subjects

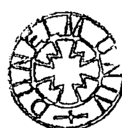
are (1) unable to identify errors in correct sentences, (2) able to identify and correct errors but not to state the grammatical rules concerned, and (3) are able to identify and correct errors, and also to state the grammatical rules. It is possible, therefore, that the conscious rules learners develop are sufficient, even at an early stage, to act as 'acquisition facilitators' by focusing learners' attention on 'critical attributes of the real language concept that must be induced' (Seliger 1979: 368). Young-Scholten (1999: 1) argues that the study of how metalinguistic awareness develops in L1 acquisition can help support 'proposals that the second language learner must consciously attend to, notice or be aware of the form of utterances rather than just their meaning in order for their interlanguage grammars to undergo development'.

It is possible that many adult learners will fail to develop high levels of grammatical competence no matter what the instructional conditions. d'Anglejan, Painchaud and Renaud (1986) conclude their study of the effects of intensive mixed instruction (teaching that combined form-focused work with more communicative activities) on adult immigrant learners of L2 French in Canada as follows:

> It is both disappointing yet challenging to discover that after 900 hours of formal instruction, the vast majority of the subjects have attained proficiency levels which at best can be described as minimal (1986: 199).

In other words, there may be limits to what is achievable through classroom learning for the simple reason that there are limits regarding what most learners are capable of achieving under any conditions. Certainly, White's (1991) finding that the beneficial effects of instruction on adverb placement wore off over time would lead to such a conclusion. It is possible, however, that formal instruction may produce better results with learners who possess better literacy and metalinguistic skills than the learners in these studies. Metalinguistic knowledge or memorized utterances do not directly alter the structure of the learner's interlanguage, they can play an important role by permitting the learner to produce useful input to his or her own system (Lightbown 1998).

It is clear that in order to achieve full competence, learners must rely primarily on comprehensible input (Krashen 1982). The issue is, then, not whether instruction should



provide access to language as used in the communicative exchange of meaning, but whether it should *also* seek to draw learners' attention to specific linguistic properties. To quote Young-Scholten (1999: 7):

> If adult second language acquisition is fundamentally different from first language acquisition (e.g. Bley Vroman 1989) and the learner cannot make use of the same subconscious mechanisms which guide first language acquisition, then of course there is no alternative but to attempt to engage other abilities in the task of mastering a second language, however ill-suited these abilities may be for the development of linguistic competence.

Formal instruction, then, is best seen as facilitating natural language development rather than offering an alternative mode of learning. It is not clear what kind of instruction works best but focusing learners' attention on form(s), and the meanings they realize in the context of communicative activities, results in successful learning.

Up to now, we have concentrated on theorizing about L2 acquisition in terms of the development of language within the individual learner, in response to an environment defined narrowly as a source of linguistic information. Issues related to sociolinguistics, or the study of language in use, have not been the main focus of empirical research in L2 acquisition studies, and are not central to thinking about second language learning. The next section will identify those strands within contemporary sociolinguistics which have an influence on the field of second language learning. They will more precisely consider the impact of social factors on L2 proficiency, with a view to determining what underlies the variable achievement in English of Mauritian school children and adolescents.

CHAPTER THREE

SOCIAL FACTORS AND THE STATUS OF ENGLISH IN MAURITIUS

3.0 The analysis of the social context of L2 learning

In this Chapter, I shall present a more in-depth examination of social factors, then a full overview of the status and history of English in Mauritius, and their effect for English language teaching in the island. While many discussions about learning a second language focus on the role of age (see chapter 1) and input (see chapter 2), much less emphasis is given to the contextual factors (e.g. social) that might affect L2 learning, particularly with regard to pre-puberty L2 learners in EFL situations. A sociological perspective can be considered particularly important for the analysis of the social context of language learning. The social context of language learning can be regarded as a set of factors that is likely to exercise a powerful influence on language learning, so it is necessary to take note of such contextual factors in analysing a given language learning situation. Language is used for communication by members within society, and the socio-psychological theories consider language learning as more of a social process which takes place within the conflicting pressures of this society, determining relationships between individuals and groups.

There has been a general awareness for some years of these environmental factors, and several research studies have examined some of the possible relationships. In a plan for research on language teaching, Carroll (1967, 1969) identified a number of background variables to take into account in conducting language teaching research. The factors singled out by Carroll include linguistic factors, i.e., the characteristics of the new language to be learnt in comparison with the language of origin. Sociocultural factors that bear upon motivation, such as the relative social status of the first language and the second language, the instrumental value of the second language, the cultural values of the second language, and political factors should be considered; they lead to the kind of interpretation of the relative status of the first and second language in accordance with Schumann's acculturation theory (1978). Other aspects to bear in mind are the social opportunities for contact with the second language and the opportunities for acquiring the language offered in the school.

Sometimes environmental factors declare themselves very distinctly, at other times they are much more difficult to identify. For example, in the British study *Primary French in the Balance* (Burstall, Jamieson, Cohen, and Hargreaves 1974), the investigators found a high correlation between achievement in French and the socio-economic status of parents:

> For pupils of both sexes in each group of primary schools, high mean scores on the Listening, Reading, and Writing tests coincide with high-status parental occupation and low mean scores with low-status parental occupation (p. 24).

According to this study, this result confirms a general pattern of school achievement in Britain. The explanation offered is that the home influences motivation and thereby indirectly affects achievement, as will be seen in Chapter Six where my questionnaire data will be presented:

> ... children with parents in higher-status occupations receive greater parental support when they approach new learning experiences than do those with parents in lower-status occupations (p. 31).

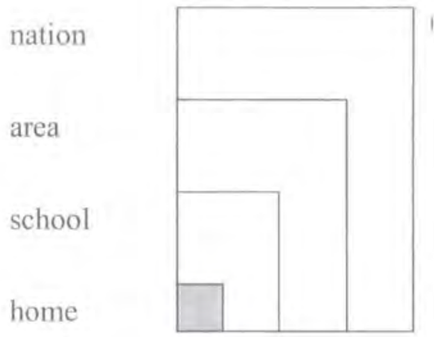
This pattern of results is accentuated as students proceed through the educational system. Another interesting environmental influence, noted in the same study, is suggested by the fact that children in the south of England, which is geographically closer to France, take a more positive view of learning French than children in the more distant north (p. 133-4; 160).

The question of the relationship between the social milieu and language learning in the school setting has become particularly acute in studies on bilingual or multilingual schooling. Here the results are puzzlingly contradictory. In Canada, bilingual schooling appears to be outstandingly successful, while in other countries, in Ireland or in the U.S.A, for example, educational failure has sometimes been attributed to bilingual schooling. Thus, Spolsky, Green, and Read (1974) ask 'how does one understand the success of a home school language switch for English children in Montreal, and its failure for Navajo children on the Reservation?' (p.2). Equally, Paulston (1975), attempting to account 'for contradictory data' argued 'that

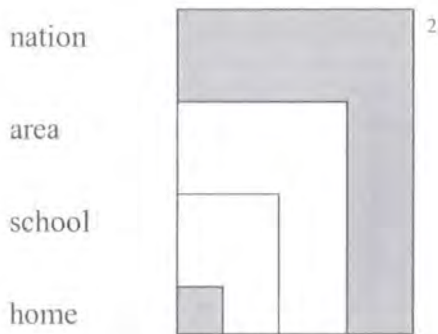
we can begin to understand the problems and questions of bilingual education only when we see bilingual education as the result of certain societal factors...' (p.4). Cummins (1984), a bilingual education theorist, contributed two hypotheses. His "developmental interdependence" hypothesis suggests that learning to read in one's native language facilitates reading in a second language. His "threshold hypothesis" proposes that children's achievement in the second language depends on their mastery level of their native language and that the most positive cognitive effects rest on a high development of both languages. Cummins's hypotheses were interpreted to mean that a solid foundation in native-language literacy and subject-matter learning would best prepare students for learning in English. Krashen (1996) is one of the most prominent and influential authorities promoting the hypotheses of Cummins. He insists that children who are educated in their native language for several years form a secure foundation for L2 learning and academic success. As will be seen in Chapter Six, my own data support this conclusion with regard to school children who transfer their skills in French to English.

In order to study these environmental influences, students of bilingual education have looked more closely at the relationships between language in school and the social environment. Two schemes have been developed; they are designed to analyse bilingual schooling in its context. A typology of bilingual education, proposed by Mackey (1970), shows the intricate varieties that may occur when we relate the language of the school to the home, or nation (Figure 3.1). Mackey identifies nine different ways of arranging the language curriculum in school leading to no less than ninety different patterns of interaction between home, school, area and nation. The details of the scheme need not concern us here, but if we apply Mackey's categories to language learning in general, it shows in simple and clear terms how different social variables interact with language teaching and learning.

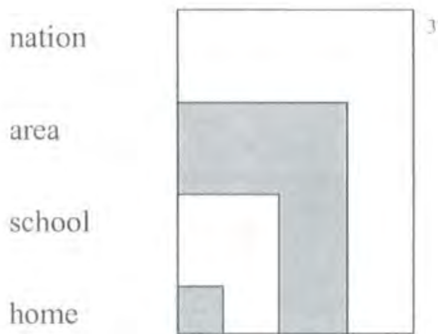
Fig. 3.1 Mackey's typology of bilingual education



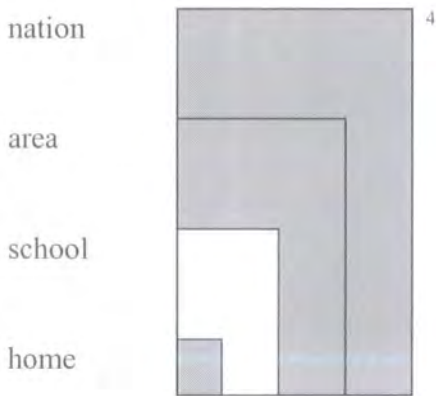
1. The school may be located in a place where the language of neither the area nor the national language is that of the home.



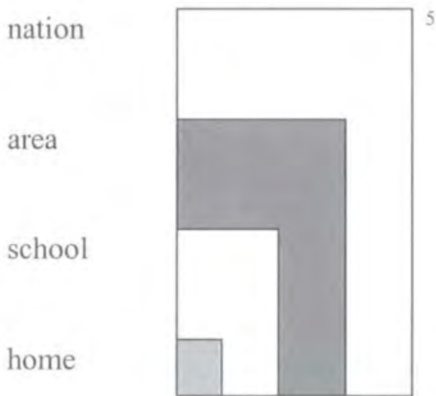
2. It may be in a country where the language of the home but not that of the area is the national tongue.



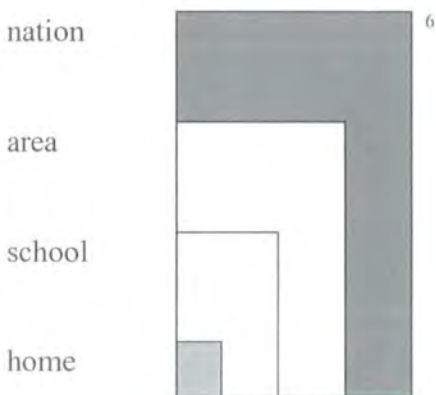
3. Conversely, the language of the area and not of the nation may be that of the home.



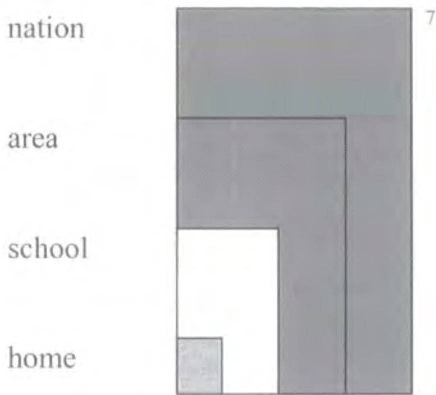
4. Both area and national language may be that of the home.



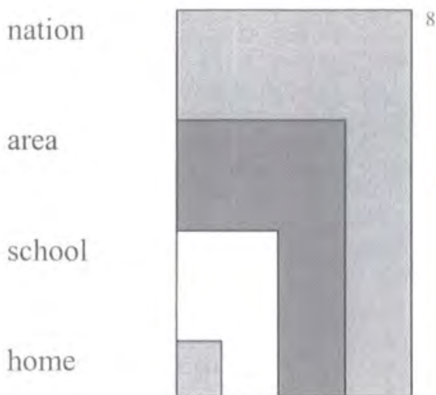
5. The national language may not be that of the home but the area may be bilingual, with both the home and national languages being used.



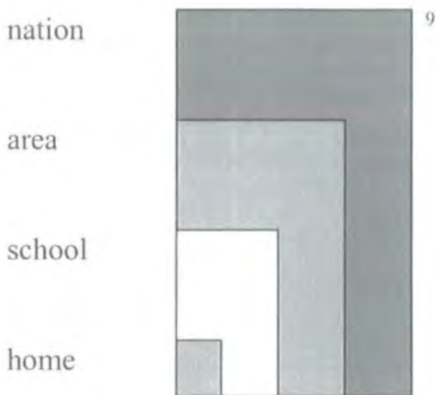
6. Conversely, the country may be bilingual and the area unilingual.



7. Both the area and country may be bilingual.



8. The area may be bilingual and the national language may be that of the home.



9. Finally, the country may be bilingual and the area language that of the home.

In the Mauritian situation, if the national language (which is Creole) is substituted by the official language (which is English), it will be seen that, for most rural learners, the language of the area (i.e. Creole) and not of the nation (i.e. English) is that of the home (see Schema 3), whereas for the urban learners, scheme 4 fits their description as the languages of the nation and area (which include both English and French) coincide with those of the home. These will be presented after the linguistic situation in Mauritius is discussed later in this chapter. The most obvious contextual factor against which to view second/foreign language learning is the language situation. Some countries or regions in which languages are taught are linguistically relatively homogeneous, for example, Germany, France, Britain. In these countries, language learning takes place against a fairly uniform language background and students are likely to have many language learning problems in common. On the other hand, a uniform language environment which creates among students the illusion of universal unilinguality as a normal state of affairs can lead to resistance to second language learning.

Other language situations, including Mauritius, are much more complex. For example, in the West Indies, Standard English (or French) is learnt in school against a background of varieties of an English-based or French-based Creole. This situation is further complicated if, against this background, another foreign language, such as Spanish, is learnt. In India and Mauritius, second languages are learnt in a sociolinguistic context of many languages and dialects. This has the advantage that students approach language learning on the basis of experience with different languages and varied language contacts in their own environment, but the diversity of language backgrounds in the language class may complicate the teaching task.

Closely associated with the language situation are sociolinguistic and sociocultural factors in the learning environment. They are the social organisation of the community and the different groups that constitute the society, its social classes and occupational, ethnic, cultural, and religious groups. Mackey's model draws attention to "language difference" between different social groupings, noting that we must be equally aware of socio-economic and sociocultural differences which may manifest themselves in different attitudes to language in general, to particular languages, to social or regional dialects, to bilingualism, and to second language learning and

which then become crystallized in status differences between different languages. Particular languages are sometimes held in either high or low esteem because of economic, political, or cultural values associated with them. Sometimes these views about languages reflect rational arguments about the merits of the language concerned, based on a realistic assessment of the value of different languages for a particular community; at other times, they express common stereotypes about the target language. Students, therefore, frequently come to language learning with positive or negative attitudes derived from the society in which they live, and these attitudes in turn influence their motivation to learn the second language. In this connection, according to Schumann's Acculturation Model which was established to account for the acquisition of an L2 by immigrants in majority language settings, a learning situation can be "bad" or "good" (Schumann 1978). An example of a "good" learning situation is when (1) the L2 and TL groups view each other as socially equal, (2) both groups are desirous that the L2 group assimilate, (3) there is low enclosure, (4) the L2 group lacks cohesion, (5) the group is small, (6) both groups display positive attitudes towards each other, and (7) the L2 group envisages staying in the TL area for an extended period. Several "bad" learning situations are possible, as many of the social variables permit three-way alternatives. Also, different learning situations manifest degrees of "badness" in accordance with the extent of the overall social distance which determines how much individual learners become members of the target-language group and achieve contact with them.

Relationships between socio-economic or sociocultural factors and language learning, however, cannot be treated as self-evident. Studies have sometimes found very clear associations, but at other times these relationships were far less evident. Thus, the IEA (International Association for the Evaluation of Educational Achievement) study of French categorically states that "the student's socio-economic status as such is not a relevant consideration in foreign language achievement" (Carroll 1975:213).

On the other hand, as was already pointed out, the British study, "Primary French in the Balance", found a consistent relationship between socio-economic status and achievement in French: "high mean scores tended to coincide with high-status parental occupation and low mean scores with low-status parental occupation"

(Burstall 1975:392). This association reflects different social attitudes to learning French in different strata of British society, which seem to indirectly affect the achievement of pupils.

3.1 Social factors and academic achievement

All factors for good achievement in school show a strong correlation to the elements held to determine socio-economic status. An individual's social class is typically determined by means of a composite measure that takes account of income, level of education and occupation (See Table 5.1).

Many studies have been undertaken in an effort to identify the main determinants of scholastic achievement. Some have analysed a large number of school-based studies and agree that school matters and can have powerful effects on achievement. Other researchers have established that the home background variable is an important determinant of levels of achievement. But the growing consensus is that the home environment and school environment are so bound up together that it is imperative to have a real understanding of one with the other. School effects have, however, been studied more in developed countries than in developing ones.

The influence of the home and the different aspects of the home environment have always been known to be important. Schonell (1942) believed that scholastic 'backwardness' amongst normally intelligent pupils is much more associated with deprived home environment and traumatic emotional experiences. Watts (1944) stated that favourable home conditions in the early years of children give background and meaning to what is read.

The Plowden Report (1967) found that the most striking feature in the home environment is the large part played by parental attitudes. Parental attitudes appear as a separate influence because they are not monopolised by any class. Many manual workers already encourage and support their children's efforts to learn. Schools can exercise their influence not only directly upon children but also indirectly through their relationships with parents.

Bloom (1976) wrote that the home, especially in the age period of about two to ten, develops language, the ability to learn from adults, and some of the qualities of need of achievement, work habits, and attention to tasks which are basic to the work of the schools.

Tooney (1976) reviewed 11 studies to demonstrate that in several countries (Britain, U.S.A., Canada and Australia) about 50% of the variance in scholastic attainment is accounted for by home background variables, which consisted largely of linguistic stimulus and literacy of the home, the extent to which the home provided materials, information and ideas directly relevant to school learning, the parents' aspirations, interest and concern for and encouragement of the child's education, etc.

Literacy at home impacts on people's daily lives in innumerable ways. Where language minority members are relatively powerless and underpriviledged, literacy is often regarded as a major key to self advancement as well as empowerment. It is important to note that literacy education for language minority students is often in a majority language (e.g English language literacy in the U.K and the U.S.A; English in parts of Africa as an official or international language). The mismatch of school and home literacy expectations and practices may be tragic for the child. The child is caught between two literacy worlds, two versions of appropriate literacy behaviour, and in the middle of a clash between home and school concepts of literacy (Baker 1996:304).

Heath's (1983) ethnographic study of children in two neighbouring communities demonstrates how contrasting life experiences eventually lead to different levels of school achievement. Heath shows how the types of language use working class black children experience at home differs from that found in the classroom and thus puts them at an immediate disadvantage in comparison to white children, where there is greater congruity between language use at home and at school. For example, 'no one lifts labels and features out of their contexts' and 'no one requests repetitions' (1983:353) in the black children's homes, whereas this is common in the classroom. Conversely, the black children are encouraged to create 'highly imaginative stories' at home, but not in the classroom. Heath's detailed analysis supports Labov's (1969) earlier contention that it is 'difference' and not 'deficit' that is at the root of many of

the language problems black children face at school. Although neither Labov nor Heath were concerned with L2 learning, their arguments are of obvious relevance to this study.

Whereas in industrialised countries much is known about the relationship between school factors and pupils' achievement levels, less is known about school effects in developing countries, more so as the educational conditions between developed and developing countries differ.

Fuller (1987), reviewing 80 multivariate studies, states that developing countries present theoretically different conditions; the school is often a novel institution, operating in social settings where written literacy and formal socialisation are relatively recent phenomena. Therefore, even schools with limited material resources appear to have a stronger impact on academic achievement, independent of the pupil's family background.

In Fuller's review of 60 school effect studies in the developing countries, they consistently show that school factors do influence achievement, namely material inputs especially those related to the instructional process e.g. ratio of textbooks available to students in the classrooms, quality of teachers, especially years of tertiary and teacher training and teacher verbal ability.

3.2 Social class and second language development

These findings bring us closer to the question of this study – what is it that contributes to or impedes achievement in pre-puberty second language (L2) learning?

Why, one may ask, have the attempts to establish literacy through schooling been so successful, whereas second language teaching has been far less so? One reason may be that in the case of literacy the efforts of the schools – because of the importance attributed to literacy in society – have usually been sustained over many years. Another is that many social transactions in our daily lives demand reading and writing. The skills once acquired are constantly in use inside and outside the school setting. L2 learning, on the other hand, has generally been provided at a slower pace

and usually without the intensity and urgency of a literacy campaign. Moreover, an L2 taught in school is frequently not used outside the language lesson. Where an L2 is taught because it has to become the language of instruction (as in Mauritius) or because it is the language of the environment, as for example French or English have been in some countries, the L2 has tended to be learnt more successfully. The social use that is likely to be made of an L2 has bearing on language learning. Therefore, in order to understand why language learning is not successful in school, it is equally important to look outside school and to ask: what importance does society attribute to the L2 and what does this translate into in terms of teachers' competence required, outside exposure opportunities, and textbooks, etc. available? The answer to that question lies less in a declaration of the value of L2 learning than in the uses to which the L2 is put. The success of language teaching is dependent upon major forces in society, such as the role, or perception, of languages in that society. It is, in this connection, that social factors have a major impact on L2 proficiency, though probably they do not influence it directly. Social factors help to shape learners' attitudes which, in turn, influence learning outcomes. Social factors also determine the learning opportunities which individual learners experience. The learners' socio-economic class, among other variables, may affect the nature and the amount of the input to which they are exposed.

There is evidence of a relationship between social class and L2 achievement. Burstall (1975; 1979) found that for both male and female primary and secondary school learners of L2 French, there was a strong correlation between socio-economic status and achievement. Children from middle-class homes regularly outperformed those from working-class homes. There were also class-related differences in the learners' attitudes. Working class children tended to drop French after their second year in secondary school, while middle-class children were likely to continue. Olshtain, Shohany, Kemp and Chatow (1990) investigated the levels of proficiency in L2 English reached by 196 grade 7 (i.e. age 12) learners in Israel. The learners were divided into an 'advantaged' and a 'disadvantaged' group on the basis of socio-economic status. Olshtain et al. found that the two groups differed significantly in L1 (Hebrew) cognitive academic language proficiency (CALP), which consists of the linguistic knowledge and literacy skills required for academic work, and that a number of measures of this correlated significantly with L2 English achievement.

One interpretation of this result was that the 'advantaged' children were better at learning English in a classroom setting because they had a more developed L1 CALP. Interestingly, variance in the 'advantaged' group was not attributable to differences in self-reported attitudes and motivation, whereas in the 'disadvantaged' group it was. Overall, though, L1 CALP explained much more of the variance in L2 achievement than did motivation and attitudes. Skehan (1990) also reports moderate correlations between the family background of 23 secondary school children in Bristol and both language learning aptitude and foreign language achievement in French and German, with middle-class children again outperforming lower-class. Skehan suggests that these relationships may reflect the learners' underlying ability to deal with context disembedded language, thus bearing out Olshtain and her colleagues' main conclusion.

A study by Grosjean (1982) shows how social factors have an impact on the life of two children, similar in their linguistic profile but cast apart on every conceivable social dimension. Both are eight-year-old bilingual children living in the same American city. One, a girl, was born in the United States and is the daughter of academic parents who decided at her birth to use their different native languages with her (Swedish and English) and to encourage her Swedish development through conversation, books, and travel. The other, a boy, was born in Haiti and immigrated to the United States when he was five years old. The social circumstances of his life prevented him from having much encounter with English. Both children entered school in the same year. The outcomes of their experiences were markedly different – the girl succeeded and the boy failed.

A more recent empirical study has been conducted by Oller and his colleagues (Oller, Eilers, Pearson, Gathercole, Cobo-Lewis, and Umbel 1997) who examined how socioeconomic status affects language and cognitive development of Hispanic children in Miami. They studied over 950 children at three grade levels, representing two socioeconomic classes, and attending two different kinds of schools, English immersion and two-way bilingual. A particularly interesting result emerged from an interaction between SES and the language of assessment. In general, the high SES bilinguals did better on English measures than the low SES bilinguals, but the low SES bilinguals did better on Spanish measures than the high SES bilinguals.

However, those were temporary results from the early and intermediate stages of language acquisition. By about the fifth grade, all the children had caught up to the levels enjoyed by the more advanced group in that language. As systematic as these results appear, Gathercole (in press) is cautious about their interpretation. She argues that the pattern is likely caused by the amount of exposure each group has to each language and not by some inherent advantage in being middle-class. If that were the case, then it would be expected that the middle-class bilingual children would score higher on tests in both languages, not just English. In Miami, the researchers point out, high SES children are more likely to have greater exposure to English than low SES children, and low SES children may in turn have a greater proportion of their linguistic input in Spanish.

These results indicate that social class is not an insurmountable barrier to L2 proficiency. The view that children from more disadvantaged backgrounds progress more slowly and more effortfully was demonstrated in a study by Hakuta, Butler, and Witt (2000). The latter argue that a large part of the literature on second language acquisition consists of case studies of individual children and adults who are immersed in another language. This follows on the successful research paradigm of first language acquisition that productively built on a cumulative base of diaries and records of small numbers of children followed in great detail (Brown 1973). Many of the second language studies are of children from priviledged backgrounds, such as the daughter of a Japanese visiting scholar to Harvard that Hakuta (1976) documented in the early 70s. Hakuta et al (2000) sought primarily to examine the question of how long it should take children to acquire a level of proficiency in the school language that allows them to function and thrive in an academic environment. They tested children in two school districts that had high proportions of nonnative English-speaking children. The two districts also differed in their socioeconomic standing, one being more middle-class (district A) than the other (district B). In district A, the more affluent of the two, the study included all the children who had been designated LEP (limited English proficiency) when they entered kindergarten and were between first and sixth grades at the time of testing. This sample included 1,872 children. In district B, a sample of 122 children in grades one, three, and five were selected according to the same criteria, namely, that they entered the school district in kindergarten and were designated LEP. Assuring that all children entered

the school district in kindergarten controlled the age at which English was introduced. If there are any effects of age on the ability and success of learning another language, they were not influencing the results of Hakuta et al's study. Minimally, then, the study provides a means of assessing the length of time it took children to reach levels of English that were comparable with native speakers. As a secondary issue, some insight into the role of social class could be gleaned.

The results for the two districts were comparable although the "learning latencies" were different. In district A, children's test scores were compared with the norm achieved by the native English-speaking students in the same district. By the end of grade four (representing five years of schooling), over 90 percent of the LEP students had achieved oral English proficiency that was comparable to their native-speaking peers. The range of time needed to arrive at this level was two to five years. Academic English proficiency took longer; the 90 percent criterion was not reached until the end of grade six and the range of time needed was four to seven years. The tests used in district B compared children's performance to native-speaker norms rather than to classmates in the school district. The LEP children in this board had a more difficult time reaching criterion and the gap between their performance and native speakers actually widened throughout the period examined. In grade three, they were about one year behind the norm in various reading measures, but by grade five they were two years behind. Many differences between the districts, however, prevent a direct comparison of these achievement levels. The researchers argue that some of the factors are economic levels, types of programmes available, and nature of the tests used. The authors (2000: 13) state, however, that socioeconomic effects on L2 learning are evident, stressing the fact that "we have known that SES is a powerful factor in predicting student achievement in traditional content areas, such as reading and math, regardless of whether they are language minority or native speakers of English.... It now appears certain that SES is powerful in predicting rate of English acquisition."

All these studies examined L2 achievement in second/foreign classrooms. Their results mirror the general finding that children from lower socio-economic groups are less successful or take more time than those from higher groups, but they do not suggest that the disadvantage in language learning shown by lower status groups is

inevitable. Holobrow, Genesee, and Lambert (1991) report on a study of partial immersion involving kindergarten and grade 1 pupils in Cincinnati (USA). They found no difference in either French listening comprehension or oral production in children from different socio-economic ethnic groups:

> ...the working-class and black students were able to benefit from the second language experience as much as middle-class and white students. In other words, the disadvantaged students were not disadvantaged when it came to second language learning (1991:194).

One possible reason for this is that the immersion programme placed greater emphasis on BICS (i.e. Basic Interpersonal Communication Skills). The researchers suggest that 'the development of oral/aural interpersonal communication skills in a second language do not appear to be dependent on individual differences of a cognitive, linguistic and ... social nature.' In other words, where BICS are concerned, social differences in learners have no effect.

The results of the studies investigating social class and L2 learning suggest that middle-class children achieve higher levels of L2 proficiency and more positive attitudes than working-class children when the programme emphasises formal language learning. This may be because they are better able to deal with decontextualised language. However, when the programme emphasizes communicative language skills, the social class of the learners has no effect.

As one of society's main socializing instruments, the school plays a powerful role in exerting control over its pupils. It endorses mainstream, and largely middle-class, values and language. Children who do not come to school with the kind of cultural and linguistic background supported in the schools are likely to experience conflict. This is true even of working-class children belonging to the dominant culture, but even more so for children of ethnic minority background. The economic returns from schooling are in general much greater for those who are advantaged, i.e. middle and upper classes because schools measure success in terms of mastery of Standard English (or whatever the accepted language of society is). Thus a mismatch between patterns of language in the home and those expected in schools may make the latter a difficult and strange experience for different social and cultural groups. Some

children are more literacy-ready than others, and therefore have a greater potential for achievement.

3.3 The gender factor

The gender factor will also be considered in this study as one of the factors which influence attitudes held by different groups of learners and which lead to different levels of L2 proficiency. a distinction is often made between 'sex' and 'gender'. The former constitutes a biological distinction, while the latter is a social one. A number of sociologists currently prefer the term 'gender' because it places the emphasis on the social construction of 'male' and 'female'. As Labov notes, "there is little reason to think that sex is an appropriate category to explain linguistic behaviour" (1991: 206), and so it is necessary to posit some intervening variable (i.e. the distinct roles assumed by the different sexes). The term 'sex' is used here to reflect the way in which the variable has been typically measured in SLA research (i.e. as a bipolar opposite).

Research shows that female learners generally do better than males at L2 learning. They are more open to new linguistic forms in the L2 input and they will be more likely to rid themselves of interlanguage forms that deviate from target-language norms. Burstall (1975), for example, investigated sex differentiation in her longitudinal study of some 6,000 children beginning L2 French at eight years old in English primary schools. She reports that the girls scored significantly higher than the boys on all tests measuring achievement in French throughout the period of the study. Boyle (1987) reports on a study of 490 (257 male and 233 female) Chinese university students in Hong Kong. The female students achieved higher overall means on ten tests of general L2 English proficiency and in many cases the differences were significant.

A number of studies suggest that females have more positive attitudes to learning an L2 than males. Burstall, in the study referred to above, notes that low-achieving boys tended to drop French to a significantly greater extent than low-achieving girls from the age of 13 onwards. Furthermore, the girls displayed consistently more favourable attitudes towards learning French than did the boys. Gardner and Lambert (1972)

also report that female learners of L2 French in Canada were more motivated than male learners and also had more positive attitudes towards speakers of the target language. Spolsky (1989) found that girls learning L2 Hebrew in Israel (a majority language setting) demonstrated more favourable attitudes to Hebrew, Israel, and Israelis than boys. One study (Ludwig 1983) found that male learners were more instrumentally motivated (i.e. more motivated to learn the L2 for purely functional reasons), while another (Bacon and Finneman 1992) reported that female learners of L2 Spanish at university level had the stronger instrumental motivation.

It is not easy to find clear-cut explanations for these results, nor, perhaps, should any be attempted at the present time. The explanations that follow are speculative in nature. One obvious explanation for females' greater success in L2 learning in classroom settings is that they generally have more positive attitudes. This, in turn, may reflect their employment expectations. Girls may perceive an L2 as having significant vocational value for them. It is possible that general differences, associated with male and female 'culture' are also involved. Maltz and Borker (1982) suggest that girls are more likely to stress co-operation and that they learn to deal sensitively with relationships, whereas boys emphasize establishing and maintaining hierarchical relations and asserting their identity. The female 'culture' seems to lend itself more readily to dealing with the inherent threat imposed to identity by L2 learning. Another possible explanation is that females benefit from more and better input as a result of their superior comprehension skills, which some, but not all, studies have reported. There is some evidence that females are more sensitive to input (Gass and Varonis 1986). Gender is, of course, likely to interact with other variables in determining L2 proficiency.

The choice of particular languages in the curriculum, the relative emphasis to be placed upon different languages, and the general emphasis laid on language learning are largely determined by factors beyond the immediate environment (Cooper 1989). Among these is often an almost implicit interpretation of historical and political forces in the wider community or nation. In wartime or in other periods of political upheaval or social unrest, these historical and political influences become more noticeable. For example, in Western countries the teaching of German as a foreign language has fluctuated from great popularity before World War I and in the period

of the Weimar Republic to almost a complete eclipse during World War II. These changes reflect changing attitudes towards another country. Shifts in the emphasis on French, English, German, Spanish, Portuguese, Russian, or Dutch as second languages throughout the world have mirrored the ups and downs of political and economic power and prestige.

If second language teaching, to a certain extent, is a way of creating language contacts between linguistic communities, the geographical distance between these communities may also have some bearing on language learning (Stern 1986). The need for learning French in Canada may be expressed more strongly in Ontario, close to Quebec and other French-speaking areas, than in the more distant province of British Columbia. Even within Ontario, teachers in predominantly English-speaking areas stress the difficulties created by the distance from French-speaking parts of the province. In France, which borders on Germany in the north-east, Italy in the south-east, Spain in the south, and Britain in the north-west, these differences in geographical locations are reflected in the emphases in language provision in the school. German tends to predominate in the north-east, Italian in the south-east, Spanish in the south, and English in the west and north. The British Pilot Scheme (Burstall et al. 1974) found that geographical distance between the north and the south of England was reflected in differences in language achievement.

Yet, the geography of the situation must not be interpreted too mechanically. Ease of communication has served to overcome geographical distance to some extent but in spite of that, it makes a difference whether a second language is used within or close to the environment in which the language is learnt or is only available at increasing distances from it. The distinction that is often made between "second language" and "foreign language" is primarily a distinction between the geographical settings in which the language is used and the sociolinguistic and sociocultural implications of these settings for language teaching and learning. In the second language situation where the language is used within the environment in which it is learnt, teachers and learners have immediate and regular access to opportunities of language use. The second language finds support in the social milieu. In the foreign language situation, the environmental support is lacking and therefore has to be compensated for by special pedagogical measures (Smith 1981).

In general, it is probably less the geographical distance as such that affects learning than how the language is perceived by teachers and learners. These perceptions are usually more influenced by cultural and sociolinguistic assumptions that are current in the speech community in which learning occurs than by purely geographical factors. In short, in assessing a language teaching situation, it is important to ask whether the second language is available within the learning environment or, if not, at what distance from the learning environment it is; and to assess what bearing the geographical distance is likely to have on the perceptions of learners and teachers.

The final aspect to consider in the analysis of the context of language teaching is the educational framework in which the teaching normally occurs. The circumstances under which languages are taught may be varied. This can be seen from the IEA studies of 'The Teaching of English as a Foreign Language in Ten Countries' (Lewis and Massad 1975). In the ten countries, the beginning age of compulsory education ranged from five years to eight years, and the period of compulsory schooling from four years in Thailand to nine years in Belgium, Germany, Finland, Israel and Sweden. Countries differed also in the way they organized schools and distinguished between elementary/primary and secondary schools. Sweden was the only country that did not distinguish between elementary and secondary schools up to the age of sixteen. In Italy, the transfer from the primary to the secondary school occurred at ten; in Chile, Hungary and Thailand it was as late as fourteen. Some countries introduced an intermediate or 'observation' period between elementary and secondary schooling. Most countries distinguished at the secondary stage between academic (classical, humanistic and scientific) programmes, and vocational (technical, commercial, or agricultural) programmes. Great differences occurred between total amounts of school time for secondary education; they ranged from 960 hours annually in Chile to 1544 hours in Israel in academic schools, and from 832 hours in Chile to 1740 in Finland for vocational schools. Consequently, there is simply more teaching time available for language study in some countries than in others.

From the point of view of language teaching and learning, the concept of social context can be seen to be of great importance. In addition, for language learning, it is

important to relate language to society, because languages are taught and learnt to establish contact and communication across language boundaries. In concluding this part of our study, it is interesting to reflect that sociolinguistics and other social sciences have a major role to play in second language pedagogy, profoundly influencing the substantive quality of language programmes and the provision of languages in a speech community.

As Judd (1987:15) notes, simply by teaching English as a second or foreign language, we are 'directly or indirectly implementing a stated or implied language policy as well as actively promoting a form of language change in our students.' In some countries, policies regarding the teaching of English may be based in part on a desire to restrict knowledge of the language to an elite, while in others the study of English may be promoted as a basis for achieving political unity or economic development. In either case the choice of who is or is not allowed to learn English is often made within the political arena, with teachers playing a key role in carrying out the policy. Because English has been afforded official status in former British colonies, such as Mauritius, knowledge of the language has become an essential qualification for obtaining many government positions and therefore individuals are anxious to study English for economic betterment.

In discussing the language planning of post-colonial multilingual developing nations, Fishman (1969) distinguishes three types of nation. In the first type, 'A-modal nations', countries which have an oral rather than a written tradition, language choices are made with the goal of achieving political unity through language planning. Often such countries select a language of wider communication such as English as an official language while they seek to standardize the indigenous language by means of 'corpus planning', which is undertaken to develop a language so that it can have more functions in a society. According to Fishman (1969:113), the decision of A-modal nations to use a language of wider communication as an official language and to promote the Western-style training of an elite are typically justified 'by the basic need to obtain and retain as much tangible aid, as many trained personnel, and as much influence abroad as possible in order to meet the immediate operational demand of nationhood... language selection serves nationism (i.e. the

very operational integrity of the nation)'. Many developing nations such as Cameroon and Mauritius exemplify this situation.

The second type of language planning context, which Fishman terms 'Uni-modal nations', is characterized by the use of an indigenous language with a literary tradition alongside a language of wider communication which is often left over from a period of colonial rule. Language planning in these countries involves replacing the language of wider communication with an indigenous language as a way of developing a national identity. An example of a Uni-modal nation is Tanzania, where the promotion of Swahili as the language of wider communication is viewed as essential to the development of a sense of national pride and unity.

Finally, in 'Multi-modal nations', a number of languages, each with a literary tradition, exist side by side. In such instances, since there is competition among various languages for official recognition, compromises have to be made in designating an official language. An example of Multi-modal nations is India, which has several indigenous languages and has designated both Hindi (an indigenous language) and English (a foreign language of Wider Communication) as official languages.

3.4 The L2 environment: The language situation in Mauritius

Now we turn to the Mauritian situation. Our aim here is to examine the L2 environment in Mauritius in order to isolate the factors which might determine the variation in the acquisition of English as a second language, and then return to the classroom situation.

3.4.1 What is a 'Second' language?

But first a clarification of the meaning of the term 'second' language as it is used in the Mauritian context is necessary here. A second language is any language acquired later than the native language. This definition deliberately leaves open how much later second languages are acquired. A child may acquire more than one language more or less simultaneously, or may acquire one of the languages after the other (i.e.

consecutively). In the first instance, Swain (1972) has referred to the development of bilingualism as a first language. McLaughlin (1978) suggests that acquisition of more than one language up to age three should be considered simultaneous (i.e. L1A). In the second case, the child may be said to acquire a second language in early childhood after age three, after the first language has been established.

A conceptual distinction has to be made in the use of 'second' as opposed to 'foreign' language. In the case of 'second' language acquisition (Stern 1986), the language plays an institutional and social role in the community (i.e. it functions as a recognised means of communication among people who speak some other language as their mother tongue). A second language, because it is used within the country, is usually learnt with much more environmental support than a foreign language whose speech community may be thousands of miles away. In contrasting 'second' and 'foreign' language there is consensus (Stern 1986) that a necessary distinction is to be made between a non-native language learnt and used within one country to which the term 'second language' has been applied, and a non-native language learnt and used with reference to a speech community outside national or territorial boundaries to which the term 'foreign language' is commonly given. A second language usually has official status or a recognised function within a country which a foreign language has not.

3.4.2 English in Mauritius: ESL, EFL or EIL?

It is customary (cf. Moag 1982, Platt, Weber & HO 1984) to apply the following broad terms to situations in countries as well as to individual speakers, as in the case of English.

ENL English as a native language (or English as a mother tongue or first language);

ESL English as a second language;

EFL English as a foreign language.

In recent years another category has been added, subdividing EFL into EFL proper and EIL (English as an international language). This means that English is referred to as EIL when used among non-native speakers and EFL when used by non-native speakers talking to native speakers.

Many parts of Great Britain, North America, or Australia, for example, have homogeneously English-speaking populations for whom English is a native language and a language of dominant and preferred use; in short, English as a native language ('ENL' or L1) can clearly be identified. English as a second language ('ESL' or L2) refers to English-using situations in which English is the language of public life for speakers of other languages at home. The term thus embraces at least two very different traditions: those who have moved to an English-speaking country but continue to use their own L1 at home (e.g. Punjabi speakers in the U.K, Spanish speakers in North America, Vietnamese speakers in Australia, or Ukrainian speakers in Canada), and secondly, those who live in a multilingual society which (usually because it was once part of an empire, e.g. the British Empire) uses English as a language of mass communication, while nearly all inhabitants have other languages as their L1 (e.g. Nigeria, India, Singapore or Guyana). In principle, English speakers in both these contexts may have English indistinguishable from L1 users who have grown up in the same country, but those in the multilingual society will have developed nativised varieties of English, just as American or New Zealand L1 speakers have. All these speakers will often be referred to as 'second language learners', learning ESL (sometimes EL2) - English as a second language (Crystal 1997).

A third category of learner comes from countries where most inhabitants speak a national language which performs all major functions in the community. Here they learn foreign languages (FLs) for international communication only. They are the learners of EFL ('English as a foreign language'). Examples include Japan, Brazil, Hungary, Germany, and indeed most countries of the world. However, as English is used to communicate with others, irrespective of whether the latter are English native speakers or not, and even by members of Francophone African States (with French as a second language) to communicate with their anglophone neighbours, the term EIL

('English as an International Language') seems to be more appropriate as often only non-native speakers are involved (Crystal 1997).

The choice of a medium of instruction in ex-colonial societies is far from easy. Some states or regions in Africa have to use English from the very first school year onward because they find it impossible to use an indigenous language; either they cannot agree on which language available to choose or they think the indigenous languages have not yet acquired the technical vocabulary they need. Under such circumstances, the only possibility is a straight-for-English approach, especially when parents see English as a means or prerequisite to socio-economic advancement for their children and press the school authorities to start English-medium education as early as possible. It is understandable that this approach is extremely difficult for teachers and pupils; the actual practice in the classroom varies, although a great deal of code mixing and unofficial use of mother tongues take place until the pupils have acquired the minimum level of English that enables them to follow the lessons.

One important point which may be made about this classification is that the categories as those offered above (i.e. ENL, ESL, EFL) are not watertight. Because people are so infinitely varied in the choices they make and the activities they perform, they cannot be constrained by such crude characterisations as those mentioned above.

ENL, for instance, embraces a wide range of spoken speech styles. Some accents may make it difficult for some other speakers of English to understand - though in practice such difficulties are rapidly overcome given goodwill and contact. Some varieties (though very few, if any, in the U.K.) may differ substantially from Standard varieties of English in grammar and vocabulary, so that even when written down (e.g. Cockney English) they will be scarcely intelligible to speakers of some other dialects.

ESL poses similar problems of clear definition. First, the variation issue raised under ENL above poses similar problems in multilingual contexts. In British schools, for instance, there has been a major debate about who should have substantial language support; should it mainly go to 'obvious' bilingual learners who speak (for example)

Punjabi, Greek or Cantonese as a first language, or will this disadvantage speakers of English dialects such as Jamaican (Brumfit 1983)?

Finally, the changing international scene forces us to reconsider the category 'foreign language' also. In the second half of the twentieth century, traditional ESL countries have either developed a mixed local/international language as a means of national communication (as India has with Hindi and English), or have moved heavily towards a major local means (as Hong Kong has recently by demoting English in favour of Mandarin). Thus the old FL countries are gradually becoming more SL and the old SL more FL. But the situation is constantly changing.

One reason for the instability of these categories is that they perform three functions simultaneously: they describe social factors, they describe psychological factors, and they define administrative functions in education. Individuals and groups are constantly making choices in relation to the social factors, and institutions are adjusted by politicians to respond to (or to resist) these choices. So, although they are helpful in clarifying some of the tensions in thinking about language, we must not believe that these distinctions reflect something that is fixed or permanent. Particularly we must not assume that in any sense there is a hierarchy of competence, achieved by ENL, ESL and EFL speakers, implicit in these classifications: a Nigerian writer of English as an L2, Wole Soyinka, won the Nobel Prize for Literature in 1986; two of the greatest English novelists of the past century, Conrad and Nabokov, were originally EFL learners.

Although the labels EFL, EIL, ESL and ENL, in this order, generally imply an increase in the functions the language fulfils, this categorisation, as stressed above, is not always clear-cut because there are also intermediate cases, as shown by the position of English in Mauritius, which we will consider in Section 3.3.

In theory, whereas ENL and ESL countries use English for intranational (as well as international) communication, EIL countries use it only for international communication. Furthermore, due to its intranational functions, multilingualism in ESL countries comprises large sections of society, whereas in EIL countries it is

basically only individuals who are polyglots as a result of their special training or individual experience.

Other sociolinguistic features can be used to determine the classification between ESL and EIL countries. If second languages can be acquired in social contacts, especially from peer groups, international languages are usually learnt in formal education. ESL is usually learnt because a learner wants to integrate into the ESL speech community, which normally enjoys high prestige, English being often used as an indicator of class. On the other hand, the prime motivation for learning EIL is to use the language for restricted communication purposes in one's occupation (e.g. business, teaching) or holidays. The prestige of English certainly appears to be highest in an ESL community, because it is associated with a successful élite and with the degree of formal education (Brumfit 1983).

As sociolinguistic phenomena usually have linguistic correlates, it is interesting to investigate the formal linguistic features of English as used in ENL, ESL and EIL countries. A very important linguistic question is which target norm, model or standard of English, is accepted in the speech community. This norm may be used in language teaching, propagated in books or in broadcasting, and codified in books on usage and grammar and in dictionaries. Growing linguistic awareness in independent nation-states goes hand in hand with growing political awareness because both are aspects of a developing national identity. Thus, the political independence of nations from Britain was often followed by a desire for linguistic independence. This happened in the United States, and more recently in Australia and in the Republic of South Africa, especially as far as pronunciation and vocabulary are concerned. Interestingly enough, a similar development seems to be taking place in some ESL nations, for example in post-independence India or Nigeria, both being countries which have found it difficult to express national identity in one unifying indigenous language, English therefore being the bridge language among different ethnic groups. For EIL nations it is usually not possible to accept their own national standard because their international partners may find communication difficult when a distinct national variety is used. Thus a more neutral 'working English' is considered to be preferable; such an international target variety has been called 'Utilitarian English' (Wong 1982). This concept was suggested as an alternative for the new nations of

the Third World to Quirk's 'Nuclear English' 'that would contain a subset of the features of natural English; ... [it] would be intelligible to speakers of any major variety and could be expanded for specific purposes' (Quirk, Greenbaum, Leech & Svartvik 1985:9). Whereas Quirk wants to introduce planned simplification to make the variety easier for the learner, Wong (1982:270) claims that 'Utilitarian English' 'is already spoken in many parts of the Third World, in regions where English has merely an auxiliary and instrumental role to play in the non-native speaker contexts'.

Even if a certain norm is generally accepted in a country, be it in the codified form of an institutionalised norm or only as a performance norm, there will still inevitably be a degree of variation. In ENL situations, it tends to correlate with ethnic background and educational achievements, which are often closely linked with socio-economic status. In EIL situations it will vary primarily with educational background, that is, the amount of schooling and amount of English language teaching available.

One linguistic reason for deviations from the native speaker norm in ESL, EFL and in EIL nations is the interference from other languages spoken, especially the mother tongue. Standard English structures are not 'properly' used, underused or not used at all, because they do not occur in the mother tongue. This is, of course, true of all L2 situations, and it is a question of the level of proficiency of the L2 learners, and whether the linguistic environment is acquisition poor or acquisition rich (Tickoo 1993). Other linguistic reasons, besides the interlanguage influences, can be found within English itself. For instance, when common target language structures are (over-) generalised, a generally correct English rule is extended to words, structures, etc. to which normally specific rules apply. (This is, of course, a much more complex issue than implied here, as seen in Chapter One)

It is taken for granted that ENL speakers can talk more fluently (whether subjectively or objectively measured) than ESL and of course EIL speakers. Similarly, native-speaker English is thought to be more elaborate and has more registers at its speakers' disposal, whereas ESL speakers are more restricted, and EIL & EFL speakers normally have only a small range of expression in formal style (Schmied 1991).

In the light of the sociolinguistic and linguistic features of English as a native (ENL), second (ESL) and international language (EIL) as described above, the position of English in Mauritius would more closely resemble an EIL country rather than an ESL one. The framework of features (as summarised in Table 3.1) can serve as a basis for determining the position of English in Mauritius.

Table 3.1: Sociolinguistic and linguistic features of English as a native (ENL), second (ESL) and international language (EIL) in idealised oppositions (Schmied 1991:34)

Features	ENL	ESL	EIL	ENGLISH IN MAURITIUS
(1) official status	uniquely recognised	explicitly supported	-	uniquely recognised
(2) communicative range	intranational	intra international	international	international
(3) multilingualism	-	societal	individual	individual
(4) acquisition from	parents	environment formal education	formal education	formal education
(5) motivation for language acquisition	expressive	integrative	instrumental	instrumental
(6) Prestige	(taken for granted)	very high	high	high
(7) target norm	indigenous national	indigenous national	utilitarian international	international
(8) Variation	social and regional	ethnic and educational	educational	educational
(9) interference	-	strong	strong	strong
(10) generalisation	-	very strong	strong	strong
(11) Fluency	very important	important	restricted	restricted
(12) stylistic range (registers)	very broad	broad	restricted	restricted

Given the variation in achievement that will be discussed in more detail in chapter six, the rightmost column in Table 3.1 cannot be completely correct. More

background on English is needed before considering whether these criteria apply to all classroom English learners in Mauritius. The next part of this chapter will present a socio-historical survey of the English language situation in Mauritius which will make sense of the classification proposed in Table 3.1 to be applied to the learning of English in this country.

3.5 Mauritius as a multilingual society: A historical overview

In order to gain a full understanding of the position of English that has resulted in the speaker's knowledge and use of it in Mauritius, it has to be seen against the background of the very complex situation arising from a mixture of ethnic, socio-economic and educational factors, past and present. The sociolinguistic situation holding for Mauritius has been described by Baker (1972, 1976), and Stein (1982) and a summary of their findings that are relevant to this study will be reported here.

The island of Mauritius is one of the former colonies which were first in French possession but were lost to Britain during the Seven Years' War or during the Napoleonic Wars. Although Mauritius had been a British colony for almost two hundred years (1810-1968), it is probably the colonial territory where English influence on culture and language had the least effect. Even today, French plays an important role, second only to the omnipresent French-based Creole. In addition, there are some Indian (Bhojpuri, Hindi, Urdu, Tamil, Telegu, Marathi, Gujerati) and Chinese (Hakka, Cantonese) languages which are declining steadily, even though two thirds of the population of Mauritius are Indians and three per cent Chinese (see Table 3.2). Given the number of languages (at least 12) used by different ethnic groups in an island with a population which now exceeds 1.2 million people and an area of 720 square miles, Mauritius presents an extreme case of individual multilingualism. Uninhabited prior to 1721, it was under French occupation until 1810, when it passed into the hands of the British who ruled it until its accession to independence in 1968. It is significant to note that the number of people from Britain has always been too few for them to form a separate ethnic group on the island. Those members of early British administrations who remained appear to have intermarried, and a few later British settlers have even been assimilated into the Franco-Mauritian society. This situation accounts for the little change in the customs

and language of the first settlers and the African slave population, who continued to speak French or the French-based Creole language which had been formed in the meantime. The introduction of English into the judicial and administrative fields was very slow. As Richardson (1963:2) points out, in spite of the British occupation, "Mauritius is in essence a French island".

After the abolition of slavery in 1836, indentured labourers from India, mainly Bhojpuri speakers, Tamils, Telegus and Marathis (cf. Ramyead 1985; Rivière 1982) and Indian and Chinese tradesmen, came to Mauritius so that by 1860 the population was already made up of a number of different ethnic groups. According to the estimates of Stein (1982), almost half of the actual population are Hindus of different Indian origin (Aryans and Dravidians), about 16% are Muslim Indians, 3% are Chinese and the rest, which comprises about 28% of the inhabitants, falls into the category of what is called the "General Population", which is unofficially subdivided into "white Franco-Mauritians", "Coloureds" (name often applied to those of partial European descent), and "Creoles", the latter being classified according to their physical characteristics into "Black River Creoles" (of African origin), "Malagasy Creoles", "Indian Creoles" and "Chinese Creoles". The Franco-Mauritians, who represent less than 3% of the total population, are by far the most influential social force in the island, and they continue to play a dominant role in the sugar, manufacturing and tourist industries. This, and the fact that their way of life, and most important, their form of speech is closest to that exemplified by the media, means that they represent an ideal for the "coloured" population, and gradually for the rest of the population, thus exerting a sociolinguistic influence beyond their numerical importance.

Despite more than a century and a half of British rule and the imposition of English as an official language, French has maintained its position as the prestige language of Mauritius. Fluency in French is more closely linked to advancement in the social hierarchy, and happens to be indicative of intelligence and good breeding, especially in the eyes of the "General Population".

According to Barnwell and Toussaint (1949), there is considerable evidence to suggest that between 1840-1870, the British administration tried to make the

inhabitants of Mauritius native speakers of the English language. But the decisions to anglicise the colony came a bit too late, since French had already established itself as a strong language with the help of the British colonisers themselves. As long as military and political control remained in the hands of the British, they were content to allow the French to remain in a dominant and privileged position. Hence, the French continued to dominate the linguistic and economic life of the island. In 1992, when Mauritius became a parliamentary republic, it remained a member both of the Commonwealth and the 'Francophonie'.

3.5.1 A history of the English language in Mauritius

The conditions necessary for the French language to live on in the new British colony of Mauritius (the island already had got this name in the 17th century from the Dutch, before the French named it *Isle de France* after they had taken possession of it in 1715) were laid down in the bilingual capitulation treaty of December 3rd, 1810. In article 8 it states:

> Que les habitants conserveront leurs Religion, Loix et Coutumes.
> (quoted from Napal 1962: 80)

This meant that there were in fact almost no changes in the life of the predominantly French colonists and their slaves. The Catholic Church retained its leading position. The *Codes Napoléoniens* (with the exception of the *Code pénal*, which was not introduced in France until after the loss of Mauritius) have, to this day, remained the basis of the Mauritian legal system, though procedures mainly follow the English system. Finally, French was still regarded as the 'true' language of the now British colony.

After 1810, there was no real interest in settling down in Mauritius – neither among the British colonial officers (almost all of whom left the island after the end of their service), nor in the British motherland itself. Other British colonies were obviously more attractive. On the other hand, Mauritius was now out of reach for French settlers. For these reasons, the structure of the white, francophone population did not change. The few Englishmen staying in Mauritius were soon integrated and differed

from the old-established *Franco-Mauriciens* only in their surnames (Bathfield, Hart, Smith, Tyack, etc.).

19th-century official documents emanating from the British colonial administration and travelogues by British visitors contain many remarks on the paradoxical situation that, in a British colony, there was hardly a single person, even among the Europeans, who spoke any English or even understood it.

The earliest relevant document, mentioned by Auguste Toussaint (1969), is a dispatch from Lord Goderich, then Colonial Secretary, to the Governor of Mauritius, which says among other things:

> Des documents ont été reçu dans diverses circonstances, [...] ayant rapport à des poursuites judiciaires ou à d'autres sujets d'un genre spécial, transcrits dans la langue française : il est nécessaire qu'à l'avenir toute pièce de cette nature soit accompagnée de sa traduction ; [...] Il est plus que temps que toute la correspondance officielle avec Maurice soit entretenue dans la langue de la Grande-Bretagne. (Toussaint 1969 : 400.)

In another dispatch of November 28th, 1832, Lord Goderich claims that all inhabitants and especially the officials should learn English because it would be " not convenient" if the correspondence with a British colony went on in a language other than English (cf. Toussaint 1969: 401). In the following years, it was repeatedly announced that sufficient knowledge of English was the main condition for employment in the administration. This announcement obviously remained without practical consequence: only in the Higher Courts was the use of English compulsory from July 15th, 1847 on – despite the strong protest of the francophone population. They felt particularly snubbed by the date chosen for the law to come into effect (the day after July 14th, the French national holiday). Since then there have been no changes in these regulations, which contain only a few exceptions where proper observance of the *Codes Napoléoniens* necessitates the use of French.

The language of edicts and government documents shows even more clearly the gradual retreat of the French language and, at the same time, the slow advance of English: until 1841 both languages were used; from February 25th, 1841 it was ruled

that the English version was authoritative and the French one was to be regarded as a translation for the information of the francophone population. Up to 1865 all documents were published in both languages. From 1865 to 1914 the number of French translations continually decreased, and from 1914 on there were no more official French translations.

As an official language, English is the language of the Court and of the National Assembly. In fact, the English language is one of the basic requirements to be met if an individual is to have a seat in the National Assembly. Section 33 of the Constitution reads as follows:

Section 33 (subsection 4)

> [....] a person shall be qualified to be elected as a member of the Assembly if, and shall not be qualified unless, he is able to speak and, unless incapacitated by blindness or other physical cause, to read the English language with a degree of proficiency sufficient to enable him to take an active part in the proceedings of the Assembly.

In practice, French is accepted as the second language in Parliament, and is used by the present members. Furthermore, the official language of the Courts is English. This provision is made in the Courts Act, section 14.

> The official language to be used in the Supreme Court of Mauritius shall be English.

In this section of the Court Act, no provision is made for any semi-official language. However, taking into consideration the fact that Mauritians, in general, have limited proficiency in the English language, Section 14 (subsection 2) has been promulgated, stating that in case a person does not have competent knowledge of the English language, he can make his statement in the language with which he is best acquainted, usually Mauritian Creole.

In the school system it was even more obvious that the English colonial administration, for a long time, had no interest in the propagation of English. The few attempts made were not successful. Though the *Ecole Centrale*, which was

founded in 1800 and took the name *Lycée de l'Isle de France et de Bourbon* in 1803, was renamed *Royal College* in 1813, it remained "un établissement scolaire à la française" (Toussaint 1969: 402). Not until 1841 did it acquire an English principal and some English teachers from Britain, but the whole enterprise showed little sign of success at first. When Charles Bruce became the principal in 1869, he made the following statement:

> Il est un point sur lequel l'échec du Royal College a été le plus manifeste, c'est précisément l'enseignement de l'anglais. Très peu d'élèves du Collège s'expriment correctement en anglais. (quoted from Toussaint 1969 : 421)

This statement is confirmed in 1859 in a travel account by Patrick Beaton, who writes in great surprise:

> Is it possible that the English language is unknown to all save Englishmen, in a colony which has been in the possession of England since 1810? Is it credible that the Coolies even are taught in the barbarous jargon known as Creole, and that an Englishman, standing in an English colony, should discern no traces of the English language, of English manners, and of English civilisation? (Beaton 1859: 23)

He concludes:

> Mauritius is in feeling, manners, and almost in language, as much a French colony as it was fifty years ago, and every Englishman resident in it feels himself a foreigner in a British colony. (Beaton 1859: 121)

It suits this observation well that Governor Broome had clerks from Britain come to the colony because

> from the local circumstances of the country, the power of writing a good plain straightforward letter or despatch in the English language is not often to be met with. (quoted from Ramdoyal 1977: 105)

This was the case, although from about 1850 on, the colonial administration showed a stronger tendency towards "anglicising and protestantising the island" (Ramdoyal 1977: 73). This caused some tension between the administration and the Catholic

Church as the supporter of the French way of life and the French language, but at first English achieved little progress in its expansion and its rivalry with French. A letter from a member of a Catholic community of 1894 explains why this was so. The writer complains about the use of English as the medium of instruction in state-owned primary schools:

> Experience shows that the great mass of children leave our primary schools with a knowledge of neither English nor French, and that they forget and abandon the English language no sooner they leave the classroom. French is the language of the people. Fifty years' efforts to supplant it by English have proved a failure. (King-Harman to Ripon, July 11th, 1894, quoted from Ramdoyal 1977: 76)

Those responsible were aware of this problem, which is confirmed by *Ordinance 21* of 1857 concerning compulsory education for children of the Indian population, which never became effective. It says in Article 3:

> The French language was to be the medium of instruction; but in every school English was to be taught. (quoted from Ramdoyal 1977: 83)

Instead, *Indian Vernacular Schools* were founded in 1876 on Governor Phayre's initiative because

> [it was] a waste of time to teach the mass of children in English, a language they would never use. (quoted from Ramdoyal 1977: 86)

Nevertheless, six years later, in 1882, English was re-introduced in these schools as a supplementary subject. They were now called *Anglo-Vernacular Schools*.

The problem of English as the medium of instruction still existed at the beginning of the twentieth century. The *Annual Report on Education* for the year 1906 draws attention to pupils' difficulties in the entrance examinations for the *Royal College*:

> The difficulty was furthermore increased through the candidates having to do their examinations in most cases in English, a language which was foreign to them and which in a great number of cases they had only just begun to learn. (Ramdoyal 1977: 100)

Though the problem was well known, it was laid down that English was to be –as far as possible- the only medium of instruction from the fourth class of the primary school on (see Section 3.3 for the relevant paragraph of the *Education Ordinance* 1957). The main problem of this regulation, which in its main parts is still in force, is that the vast majority of the pupils concerned know neither English nor French when they enter school, and instead speak Creole and/or, in Indian-dominated rural areas of the island, Bhojpuri, the Indian lingua franca of Mauritius. In addition, Indian children learn an Indian language, the 'language of their forefathers', from the first year in school, even if their parents do not speak it any more. As far back as 1910, the *Report of the Mauritius Royal Commission* called the result "a smattering of four languages and an adequate knowledge of none" (Ramdoyal 1977: 109). In the following years and decades many critics have likewise blamed languages for the high rate of school failures. As an example, only 16% out of 14,123 participants in the School Certificate/ 'O' Level Examinations in 1983 received a credit in English, i.e. a satisfactory grade (cf. Foondun 1986: 25). 42% of the candidates passed the examination in that year and 63% in 1992 (cf. Mauritius 1994: 128). This means that most of those who pass the School Certificate Examinations do so without having obtained a satisfactory grade in English.

The three following documents are worth mentioning: *Ward's Report on Education in Mauritius* of 1941 recommends, probably for the first time, the use of Creole as the medium of instruction in the first years of primary school; Meade's investigation into *The Economic and Social Structure of Mauritius* of 1961, and Ramdoyal's *The Development of Education in Mauritius* of 1977, which has been quoted from above.

Ward remarked in his report:

> [...] although Mauritius uses both English and French for official purposes, such as Government notices, legal documents, and speeches in the Council of Government, and is sometimes spoken of as a bilingual country, [...] of the two official languages, French is a foreign language to most, and English is foreign to all. (Ward 1941: 12)

Twenty years later, Meade criticised the school system:

> We do not believe that we exaggerate when we say that the greatest handicap to successful education in Mauritius is that imposed by the multiplicity of languages in use. When, however, [these arguments...] result in little children of seven and eight years of age attempting to learn three languages at the hands of teachers who are themselves masters on none of the three, the absurdity of the present system is clearly seen. Children leave the primary schools in large numbers without having acquired anything worth calling literacy in any one language, though they have spent an intolerable amount of time dabbling in all three. (Meade 1961: 208)

Another sixteen years later Ramdoyal came to a similar conclusion:

> Starting three foreign languages at the same time at age five places an enormous burden on the child. For many children this has led to poor standards in oracy [!] and to functional illiteracy in English. (Ramdoyal 1977: 139)

A last quotation of 1993 concerns a newly established secondary school, Bocage High School, which differs from the existing high schools (*Collèges*) in proposing the exclusive use of the English language in all its activities. Before Brelu Brelu (1993) starts discussing its aims and principles, he asks a question which is relevant in the context of the entire Mauritian school system:

> Comment peut-on enseigner des matières aussi diverses que les mathématiques et les sciences en anglais, alors que plusieurs élèves au BHS [Bocage High School] n'ont l'anglais ni comme langue maternelle ni comme langue seconde ? En d'autres mots, comment l'élève de 11-12 ans peut-il parler de son vécu ou de ses réalités dans une langue qu'il ne connaît point ? (Brelu Brelu 1993: 24)

These 'difficulties with the English language' show up today in many spheres of everyday life.

3.5.2 The Present English Language Situation in Mauritius

Officially, the medium of instruction in primary schools is English. In practice, however, as we shall see, most education during the first few years is through the medium of Creole. As the years progress, the medium of instruction gradually

moves, in general, towards French with only that amount of Creole as the teacher may feel appropriate. From the second year through to the final (sixth) year at primary school, the relative extent to which a pupil receives his education through French and English varies considerably, but in general French predominates as the spoken medium of instruction and English as the written medium of instruction. Many teachers feel (see section 4.4 for code switching and mixing in the classroom) that their pupils are able to follow spoken French, because of its affinities with Creole, better than spoken English. All secondary education is aimed towards the Cambridge Overseas School Certificate (S.C.) and the Higher Cambridge School Certificate (HSC.)/General Certificate of Education (GCE.). This would suggest a far greater use of English in secondary education than is found in primary schools. However, most of the schools make a very extensive use of French. Baker (1972) cites the case of one teacher asking his pupils oral questions on English Literature in French but requiring the written answers to be in English.

It is true that English is (at least nominally) the dominant language of school education; it plays an important role in the final examinations; it is the official language of politics, as mentioned earlier, and, therefore, is used in many official contexts, where it has evidently pushed out French. However, anyone who wants to reach a large audience will find English used much less than French. The press is mostly in French, with a certain proportion of English articles, which are often taken over from international news agencies or foreign English-language newspapers; official information and announcements or special advertisements are also in English. Even reports on the parliamentary debates going on in English are nearly always written in French. Quotations, in this case, are generally translated and are given in the original form only in a few cases. The English names of some newspapers (*Mauritius Times, News on Sunday*, *Impact News*) do not say anything about the language used in them. The few Indian and Chinese newspapers have a very restricted circulation and are of no importance to the larger public.

French plays a major role in all forms of entertainment: radio, television and cinema. The proportion of airtime allocated to French surpasses by far that of the other languages, including English. The prime time main Mauritian news bulletin is in French and is broadcast at 19:30 p.m. Almost all families possess a radio and a

television set which are capable of receiving French-language programmes from 'France 2', and 'Canal-Plus' (French television channels). Only a few Mauritians can afford to pay for English Satellite television channels such as "Sky News" and "BBC World Service", and have access to the internet which is dominated by English. The public *Mauritius Broadcasting Corporation* (MBC) tries to devote a certain amount of space to all the languages spoken on the island in its radio programmes and, to a lesser extent, also in the TV programmes. Creole and Bhojpuri were, for a long time, not regarded as fully developed languages and were, therefore, scarcely taken into account. Baker (1972: 25) found that, in March 1971, 52.5% of all radio programmes were in French, 14.6% in English, and the remaining 32.9% were shared among the various Indian and Chinese languages. For television, Baker (1972: 260) mentions 51% for English (in comparison with 41% for French). These figures are, however, out-of-date, because, according to Hookoomsing (1986: 9):

> As far as the television service is concerned, most of the programmes are in French, English and Hindustani, with French getting the lion's share of the transmission time. Indeed approximately half of the total weekly transmission time, which is 60 hours, is made up of programmes in French, the other half being more or less equally shared between English and Hindustani.

Foondun (1986: 17) complements these data in more concrete terms:

> One interesting feature of Mauritian television is that, apart from Indian and French films which are aired in the original languages, even most British and American films are dubbed in French. For example, popular British and American series such as *Magnum, Avengers, Sesame Street*, *The Little House on the Prairie*, *Dallas*, *Columbo*, and *Knight Rider* are often shown in French.

According to Foley (1992), the time allocation for both English and French on a weekly basis is 77.5 hours but Hookoomsing (1986) suggests a ratio of 1:4 in favour of French. Half of the television transmission time (over 60 hours per week) is made up of programmes in French, the other half is more or less equally shared between English and the non-European languages.

The turning away from English (and turning to French) in the cinemas is even more striking: in the mid-seventies American and English films were shown mostly in the original version, whereas Foondun (1986: 18) states for the 1980s:

> French occupies an even greater place in commercial films which are shown in cinema-houses. In fact, most of the films are either in French or in Hindustani. Pictures in English are almost non-existent, since even American, Italian, and British films can be seen in French.

Twenty years later, the overall situation has remained the same in terms of the predominance of French over English on radio and television. Only recently, *BBC World Service* and *Sky News* – two English television channels - have been introduced in Mauritius, but it is too early to assess its impact on Mauritians. As regards current local book production, there is a local *Littérature Mauricienne* in French, but there are very few literary works in English written by Mauritian authors and published locally.

The most senior positions on sugar estates and tourist sectors are generally occupied by Franco-Mauritians, with coloureds and Creoles holding other important positions in management. These groups will normally converse in French with each other. Between the managerial staff and the agricultural workers or waiters in hotels who are mainly Indians and speak Creole among themselves, there are various intermediate posts. These are mainly occupied by people whose first language is Creole, although some of these may also have a good command of French and have opportunities for using it in their work.

As for the Civil Service and administrative jobs, although all written work is in English, the relative extent to which French, English and Creole are employed orally varies considerably from ministry to ministry. Communication, letters, publications and reports are in English. Most civil servants (government sector) must have a pass in the Cambridge School Certificate in English, ranging from high ranking workers to the messengers and since the number of workers in these sectors is significant, this will inevitably have an impact on the use of the language. In other places of employment, such as banking and insurance, the use of French is very extensive. One very clear indication to Mauritians that French, and not English, is regarded as the

"langue de prestige et de culture" (the language of prestige and culture) is that imperfect English does not carry the same kind of social stigma as imperfect French (my personal observation).

3.5.3 Seldom used but indispensable: the English language in Mauritius today

In short, the situation of English in Mauritius seems to be problematic; its existence seems to be a burden rather than a help to the population. However, the situation also has positive aspects and positive arguments can be adduced in favour of the existence of English and its various functions in the independent state (since 1968).

Mauritius was an English colony from 1810 till 1968 and since then it has been a member of the Commonwealth of Nations. English, therefore, has a tradition and a permanent place as the official language and the language of administration, politics and the school system, which is organised on the English model. Apart from these historical facts, its neutrality distinguishes it from French inside the country. For external relations, the role of English as a world language and, above all, as one of the official languages in India is very important. It allows close contact to be kept with the lands of origin of the majority of the population, India and Pakistan – and this is done much more efficiently than would have been possible with the help of the Indian languages, which are now quite clearly declining in Mauritius.

Although the scope of English is limited in Mauritian society, there is a general consensus among all sectors concerned that the institutions seeking to maintain and promote English should not be dismantled. Many persons and institutions who work in favour of the promotion of the French language also approve of the fact that English is an important language for Mauritius. The editorial of Gilbert Ahnee entitled "God save English" (*Le Mauricien* - 15/2/93) can be quoted whereby he says, "Despite any preference for some other languages, any sensible Mauritian should be aware that a practical knowledge of English is vital. Today without a reasonable knowledge of English, success is utterly unthinkable". He also mentions the fact that even in France, a country which has for long tried to remain aloof of the international English speaking community, knowledge of English is always a prerequisite for certain highly paid jobs, specially in the commercial and marketing

sectors. (Le Mauricien - 15/2/93). The language situation in Mauritius is more intimately bound up with the socio-economic realities than sociolinguistic prognostications could ever have suspected. Such statements as:

> ... it is the author's firm belief that the advancement of Mauritian Creole will serve the cause of nation-building in a society where linguistic, religious and ethnic loyalties are too often used as weapons for defending or promoting socio-economic interest and privileges. (Hookoomsing 1986: 309)

now seem over-optimistic. Sugar, which was, and still is, a major source of external revenue, had its price stabilised on the world market by the Lomé Convention (1975). This allowed a financial base to be built and the establishment of the Industrial Free Zone Area - which meant that raw materials brought into Mauritius could be exported as finished products (knitwear, leather etc). The tourist industry took over as the main source of foreign exchange, although many of the hotels were still directly underpinned by money from the sugar industry. Now Mauritius is looking to new areas for expansion, including off-shore banking with the possibility of taking some of the business from Hong Kong, given the proximity to South Africa and the opening up of that economy. Geographic isolation is no longer a barrier since it is now possible to have direct flights from Europe, the Far East and Australia. Add to this contacts which have always existed with the Indian subcontinent, and one sees a growing internationalisation of the economy within the framework of a stable government. This would appear to strengthen the case for the use of international languages in Mauritius (Foley 1992).

It is almost impossible to think of giving up English. A tradition of almost 200 years cannot easily be discarded, nor are any of the languages spoken in Mauritius suitable as a substitute. The Indian and Chinese languages can be neglected, for they are group-specific with restricted extension. The consolidation of Creole has not yet progressed to the point where it could replace English. Besides, it is not (yet) regarded as a fully-fledged language by large sections of the population, and is therefore unlikely to be accepted. The one alternative left is French, the language of the francophone, white section of the population. The language of the sugar industry owned by the Franco-Mauritians remains French. Since the colonial period, this has

been the trend. The senior positions in this sector are generally occupied by Franco-Mauritians, who go to great lengths to promote French. According to Benedict (1961), "Franco-Mauritians make a point of using French among themselves, only employing Creole to address servants and employees of low status". To use Creole in the wrong context is to commit a serious blunder. Therefore, French is used by the sugar sector, both in its oral and written forms. Reports, publications and journals are published in French. However, the mass of the employees of the industry are either sugarcane-cutters or factory workers who either speak Bhojpuri or Creole (the other ethnic languages being restricted to formal classroom contexts). This will therefore decrease the influence of the French language, which remains the language of a minority group. English is, however, the written language of most banks and financial institutions while French is generally the oral medium of communication. Almost all regulations, publications and daily transactions are recorded in English. Deposit and withdrawal forms are in English. The workers may address clients in French because of its closeness to the Creole language, but nevertheless, English is used in its written form. On every bank note, cheque or coin, English is the language to be found. Even on the new coins and bank notes since independence which do not bear the royal emblem, English has not been replaced by another language. Therefore most banks have recourse to the English language, with the exception of the French bank, '*Banque Nationale de Paris Intercontinentale*', which, of course, has all its daily transactions in French.

The ethnic marking of French deprives this language of the neutrality connected with English, which is distant and foreign to everyone to the same extent. In the non-francophone groups among the population, who were underpriviledged in the past and often are today, and especially among the Indian majority, there are too many reservations about their former French masters and the language they spoke. Therefore, the substitution of French for English is impossible, though it would have many practical advantages because French is close to Creole, which makes it much easier to acquire. As a consequence, Mauritius is and will remain an Anglophone country for some time, although the part of the population that speaks English natively is very small and English will remain inaccessible to many Mauritians.

Some questions and the corresponding tables in the population censuses since 1931 (Stein 1982: 197-245) give concrete data on the spread of the various languages, although the questions and also the published data have been reduced since 1962 to the "language of forefathers" (not the "mother-tongue") and the "language currently spoken at home". The rate of 'English' answers to both questions is consistently between 0.2% and 0.3% of the entire population. However, these figures tell us little about the actual knowledge of English because informants are asked to indicate only one "language of forefather" and one "language currently spoken at home", but English is in general the second, third or fourth language. That is why the data of the 1931, 1944 and 1952 censuses are more meaningful. In the first two, questions were asked directly about the "Ability to speak English". In 1931 there were 6,658 (2.5%) positive answers and in 1944, 8,244 (3.1%), a depressing result after more than a hundred years of British rule. The question was changed in 1952, when "Literacy of the population", differentiated according to the languages written and read, was elicited. The figure of 58,881 (17%) positive answers for English shows the great progress in the education of the population and the spread of English from the end of the 1940s. It is worth noting that the census of 1952 was the only one that allowed one to name *one* "additional language occasionally spoken" apart from the "language currently spoken". In this census, 656 persons (0.1%) named English as " language currently spoken", and 11,823 (2.7%) named it as their additional language. Since in individual order of preference, English generally follows an Indian (or Chinese) language, Creole and French, these figures show only a part of the reality, but they describe the secondary role that English played in Mauritius in 1952 and still plays today.

Table 3.2: Languages usually spoken in Mauritius

	Census 1983	Census 1990 (% in Brackets)
English	2,028 (0.21)	2,240 (0.21)
French	36,048 (3.73)	34,455 (3.26)
Creole	521,950 (53.98)	652,193 (61.72)
Non-European Languages	403,849 (41.77)	367,772 (34.71)

Source: Census 1983 and Census 1990

Less restrictive questions in the subsequent censuses of 1983 and 1990 (see Table 3.2) allowed the respondents to consider Creole as a fully-fledged language and to name Bhojpuri for the first time – it was considered as a dialect of Hindi before – as well as any other language. The 1990 census tried to take into account, for the first time since 1952, the individual multilingualism which is prevalent in Mauritius. It allowed informants to name more than one language in response to both questions, the "language of forefathers" and "the language usually spoken at home". It also contains a question on the ability to read and write the diverse languages. More than one language could be given here. The tables simplify certain data by forming language groups ('European', 'Oriental'). The following observations concerning English can be made:

1. The number of persons "usually speaking English at home" remained constant (1962: 1,824; 1972: 2,279; 1983: 2,028; 1990: 2,240), despite an increase in the population from 681,619 in 1962 to 1,056,660 in 1990. By contrast, the number of respondents giving English as the "language of their forefathers" showed a clear decrease on 1990 (1962: 1,606; 1972: 2,410; 1983: 1,903; 1990: 808).
2. In the tables for 1990, English never appears in language combinations; it is given only as an isolated language, whereas French appears as a separate language as well as in combinations. This procedure and the data show the weak position of English among the languages of Mauritius, the school

system and other public domains. This result is the more surprising when we take into account that an important cultural and political movement in Mauritius, *Ledikasyon pu Travayer* ('Instruction for the working people'), at present the main promoter of the pro-Creole movement, claims in its political programme that there are only two languages in Mauritius to be taken into account in all cultural, educational and political programmes and activities – Creole and English.

3. As far as the ability to read and write is concerned, we can only compare the recent data with the data from 1952. As the 1990 tables combine the figures for 'European languages' we cannot consider English separately. The tendency, nevertheless, is clear and does not come as a surprise: the percentage of literacy in European languages has doubled from 36% in 1952 (cf. Stein 1982: 212) to 73.7% in 1990.

Stein's (1982) survey in 1975 with 720 persons from all groups of the population provides the most detailed information available up to now on the knowledge and distribution of the various languages in Mauritius as well as on the frequency and the areas of their use. The inquiry shows, on the one hand, less knowledge and frequency of use for English than for French; on the other hand, it shows that knowledge of English depends on age and, above all, on the education of the speaker. This fact illustrates the importance which school education in Mauritius has attained during the past decades. Only 2.6% of the interviewees younger than 19 declared they did not speak English, whereas among the interviewees older than 48, 60% said they did not speak it. Altogether, 48.1% of the persons asked said they spoke English well (65.1% for French) and 16.2% answered that they did not speak it (8.3% for French); the difference between the two languages was smallest among the Indian population and greatest among the francophone and creolophone population.

Concerning frequency of use of English, 56.1% of the persons asked declared that they used it at least occasionally (French: 66.5%) and only 1.9% (French: 21.8%) said that more than one third of their language production was in English. Differentiated according to situation, context and interlocutor, English shows the typical picture of a socially higher variety in a diglossic situation. In Mauritius, it competes, of course, with French, while Creole is the socially lower variety: the more

formal and official a situation is, the more English is used, but its frequency is always inferior to that of French.

It is not surprising that Mauritius has a rather complex linguistic situation since it is a multi-ethnic society. English is the official language i.e. the language used in parliament, the judiciary and for administration in schools. It is nominally the medium of instruction in all educational institutions. However, since many Mauritians have limited proficiency in English, there is a discrepancy between practice and policy. English is, in fact, spoken by only 0.21% of the population (Table 3.2). French, the mother tongue of the Franco-Mauritians and part of the 'gens de couleur' (mixed) population, is used by the mass media, so that 80% of the newspapers are written in French.

Although the different ethnic groups are anxious to preserve their identity and the language of their forefathers, interaction between them has given rise to an ever-developing Mauritian language, the Mauritian Creole (MC) which has become the dominant home language of the Mauritian population. A look at the census of 1990 shows that 61.72% of Mauritians admitted that Creole was the language they usually spoke. Table 3.2, shown above, illustrates what the official census describes as the 'languages usually spoken in Mauritius', in 1983 and 1990.

Baker (1972) argues that English, French and Creole have become associated with knowledge, culture and egalitarianism respectively, while the non-European languages which include Bhojpuri, Hindi, Urdu, Tamil, Telegu, Marathi and Mandarin, are largely identified with what they may be termed 'ancestral heritage'. In the above censuses, it is significant to note that the instructions relating to 'mother tongue' which accompanied the census forms read as follows: *'Mother tongue' - The language spoken in your home during your early childhood. You may not necessarily have spoken or speak the language at present'*. It is thus clear that the term 'mother tongue' means something quite different from the definition 'one's native language' and it is this writer's experience that many Mauritians of Asiatic origin understand 'mother tongue' to mean a language spoken by one's ancestors at the time of their arrival in Mauritius. For the purpose of this thesis, it is therefore safe to assume that the oriental languages are, in fact, 'ancestral' languages and are

by no means primary or first languages for Mauritians. According to Baker (1972), egalitarianism is generally a more important matter than 'culture', 'knowledge' or 'ancestral heritage', which explains why, in practice, Creole has been adopted as the language of everyday use by almost all Mauritians.

Since Creole is the L1 of the bulk of the Mauritian learners of English, including the subjects of this study, it is interesting to look briefly at the characteristics that languages referred to by the term 'Creole' have in common. Creole languages emerged under similar social circumstances, since all countries in which pidgins and creoles are spoken had plantations and a multilingual society. (For more details about the factors which affected the development of these languages, see Bollée 1977). There is a close link between creoles and pidgins and both are best characterized as the result of contact between languages during colonization. Many creoles are thought to have had a pidgin as their 'ancestral' language and like pidgins they are regarded as 'contact languages'. However, in some respects, creoles and pidgins are quite different. In contrast to creoles, pidgins are generally considered to be the 'contact vernacular, normally not the native language of any of its speakers' (DeCamp 1971:15), while creoles are the native languages of their speakers.

Many theories have been proposed to account for the emergence of creole languages. The three leading theories are the following: (1) the Superstrate theory, (2) the Substrate theory, and (3) the Universalist theory.

One variant of the monogenesis theory of origin is that all the present European-language- based pidgins and creoles derive from a single source, a lingua franca called Sabir used in the Mediterranean in the Middle ages. In the fifteenth and sixteenth centuries, the Portuguese "relexified" this language; that is, they introduced their own vocabulary into its grammatical structure, so that a Portuguese-based pidgin came into widespread use as a trade language. Later, this pidgin was in turn relexified into pidginised French, English, and Spanish. In each case, the underlying grammatical structure remained largely unaffected, but a massive shift occurred in vocabulary. The theory of relexification is not without its problems. One is that it asks us to believe that, in learning a language, people somehow can learn the

grammar quite independently of the vocabulary and that they do indeed learn the first but completely replace the second during the process of learning.

Creolists supporting the Superstrate view are convinced of the overwhelming influence of the Superstrate language (i.e. the European languages) on the formation of creoles. Consequently, they evaluate these creoles in the light of the Superstrate languages. In the case of French-based Creoles like Mauritian Creole, the proposal made by Chaudenson (1977) illustrates this view:

> *Il ne fait pas de doute, à nos yeux, que le créole résulte de l'évolution du français populaire et dialectal du XVIIe siècle.*

In such a theory, Creoles are regarded as Neo-Romance languages, in other words as dialects of French (cf. Bollée 1977; Chaudenson 1977). Morphosyntactic differences between French and these Creoles are ignored in these analyses, since their primary goal is to demonstrate the dependent relation between the superstrate language and the creole.

In contrast to the 'Superstratomaniacs' (to use a term from Bickerton), there are a number of Creolists who claim that the Substrate languages (in many cases African languages) play a bigger role in the emergence of Creoles. Some proponents of this view are Alleyne (1980) and Stolz (1987). Similarities among Creoles on the phonological, syntactic and lexical levels have been pointed out very often (e.g. Goodman 1964). It is argued that similarities found in different types of Creoles, i.e. Creoles which are not related to each other geographically, are due to the substrate languages. However, in the case of Mauritian Creole, there is no evidence for any substrate language which may have been involved (Adone 1994).

Finally, the third theory is based on the universalist hypothesis assumed by Bickerton (1981,1984,1986) and Muysken (1981, 1988), two proponents of this theory. In its most provocative and controversial form (Bickerton 1984), a direct link between Creoles and Universal Grammar is established. Bickerton argues that, unlike 'normal' languages, Creoles were invented by children of pidgin speakers within one generation. These children were not confronted with a structured language so that

they were forced to rely solely on the set of innate principles they were equipped with and therefore were able to create a language mainly because they had a genetic equipment for language.

Bickerton (1981, 1984) is of the opinion that in certain slave communities, there existed no fully-fledged language, but only, rather primitive pidgins for the child to be exposed to. Thus, the child was not exposed to a language the way most children are, and therefore had to create its language itself. Much of his argumentation is based on observations of Hawaiian Creole English (HCE) that arose out of Hawaiian Pidgin English (HPE) in a very short time - less than a generation, according to Bickerton. He argues that HPE presented a learner with problems, partly since there were no clear or consistent rules to learn, but also, from a communicative point of view, since several features of natural languages were largely or completely missing, like :

- Consistent marking of tense, aspect and modality
- Relative clauses
- Movement rules
- Embedded complements
- Articles

Most often, HPE sentences consisted of nouns and verbs stringed together, whereas HCE, like all native languages, have the above features. So, how did they evolve? One answer would of course be that the first language of the HPE speaker influenced the children who learned HCE as his/her first language. This cannot be true, says Bickerton, since

> The erasure of group differences in that generation was complete. Even locally-born persons cannot determine the ethnic background of an HCE speaker by his speech alone, although the same persons can readily identify that of an HPE speaker by listening to him for a few seconds (1981:15).

This would imply that while HPE variants are influenced by the speakers' native languages, the same is not the case with HCE. This, in turn, would imply that the

grammatical complexification in HCE would have another source than the respective native languages of the parents to the children who first learned HPE as their first language (thus turning into HCE). Bickerton argues that there are but two possible alternatives: one is that they are produced by a general problem-solving device, the other being that they are the result of 'innate faculties genetically programmed' (p.41).

It is significant that there is a continuum between Creole and French with Mauritian speakers shifting along the continuum depending on the identity of their conversational partner. The coexistence of Mauritian Creole and French, and the subsequent mutual interferences between them exercise strong decreolising pressures which are evidenced at most linguistic levels. Decreolisation involves a process of change which has its origin in the transfer of features to Creole from its lexically related Standard language (i.e. French in Mauritius), also called the Superstrate. The development of education and communication facilities has led to a relatively rapid evolution of Creole resulting from contact with French. As a result of this evolution, a situation is ultimately created where it becomes difficult to draw any kind of boundary line between the two languages, or to subdivide the Creole language into any number of levels or varieties.

Skutnabb-Kangas (1987: 75) divides the bilinguals of the world into four large groups:

(1) Elite bilinguals.
(2) Children from linguistic majorities learning a foreign language, including those involved in "linguistic immersion in situations in which a more prestigious minority language or a so-called world language ... is taught to an (oppressed) linguistic majority in a (formerly) colonized country" (Skutnabb-Kangas 1987: 77).
(3) Children from bilingual families.
(4) Children from linguistic minorities.

She sees each of these groups as being under differential pressures to be bilingual, with different consequences of failure. She also draws distinctions between *natural* (without formal teaching), *school* (within the walls of the school), and *cultural* (learning a foreign language for cultural reasons) bilingualism on the one hand (Skutnabb-Kangas 1987: 95) and elite and folk bilingualism on the other

(Skutnabb-Kangas 1987: 97). Her analysis is based on concepts of minorities and of oppressed majorities which, when translated into Mauritius, have some rather unexpected impacts. All four types of bilinguals are present in Mauritius. Some individuals are simultaneously in two, three or four of her categories. Superficially, however, most Mauritian learners are in her second category – an 'oppressed' majority immersed in a 'world language'.

English is thus a contact language in Mauritius in a complex multilingual setup. It is not flourishing enough though, and its further propagation is just beginning, so that it has not yet formed its own, stable Mauritian variety. It shows instead the features of a foreign language, mastered with a greater or lesser degree of success, and with more or less marked interference from the dominant surrounding languages, namely Creole and French, depending on the speaker. English is still in an inferior position as a language learnt at school and not spoken outside the classroom and some other formal situations. Mauritian learners are exposed to English in two ways. The first time they meet English is when it is introduced as a subject in the school curriculum, the second is when it is used as a medium of instruction. Chapter Four will therefore discuss the classroom English language situation before I began collecting my data.

CHAPTER FOUR

ENGLISH AS A LANGUAGE IN EDUCATION IN THE MAURITIAN SCHOOL SYSTEM

4.0 The use of an L2 Medium of Instruction

Throughout the history of formal education, the use of an L2 medium of instruction has been the rule rather than the exception (Lewis 1976). Until the rise of nationalism, few indigenous languages other than those of the great empires, religions, and civilisations were considered competent or worthy to carry the content of a formal curriculum. Latin was the medium of both religious and secular education in Europe for a thousand years after the fall of the Roman Empire. Classical Arabic is still widely used as the medium of instruction in Muslim countries where many different vernaculars or languages are spoken. In the days of the British Empire, English was introduced as the language of the elite and as the language of higher education (Gupta 1994). In India, and elsewhere in Asia and parts of Africa, its function was in some ways akin to that of Latin in medieval and Renaissance Europe in that it was the language of administration and of 'high' culture. English became, and remains, one of the national languages but it is the language of a small proportion of the population. Gupta (1994) states that English medium education of a high quality was envisaged in the Empire only for the 'respectable class of native'. The legacy of this elitist tradition is still with us, as in many of the postcolonial countries, including Mauritius, a high level of ability in English either indicates or defines an elite.

4.1 English as a medium of instruction in the postcolonial period

In the postcolonial era, the language of the former coloniser has in many cases been retained as a second language medium of instruction since the support for native or indigenous language educational development is often minimal or nonexistent (Schmied 1991). This situation may result from deliberate policy and from a lack of financial and

other resources, particularly where no well-developed tradition of literacy and formal education existed. Each of the Western imperial powers imposed its language upon the colonised, and English, French, Spanish, and Portuguese are still widely used as media of instruction despite the ending of the colonial era, either because settlers using one of those languages as the native language established dominance, or because after independence no agreement could be reached on an intranational replacement, or because a language that gives international access is preferred to alternatives that have only local or national currency. The assumption underlying the use of the L2 as a medium in our present system of education is essentially that of the communicative approach to language teaching. The use of the L2 as a medium is a means for maximising the quantity of 'comprehensible input' and purposeful use of the target language in the classroom.

The term 'immersion education', adopted in the 1960s to describe programmes in which a second language (i.e., French) was used as the medium of instruction in selected schools in Quebec (Cummins & Swain 1986), can be used to describe a variety of situations in which a home-school language switch occurs for a variety of reasons or purposes. These include immersion for majority students in a minority language (e.g., French for Anglophone students in Quebec), immersion for language support and language revival (e.g., to promote Catalan among Spanish-speaking children in Spain), and immersion in the language of the coloniser to facilitate English-medium education (e.g., for Creole speakers in Mauritius).

Immersion has been shown to be successful in several countries (Swain 1981, 1984) in providing the quantity and quality of input in the target language that ensure the development of a high level of oral and written proficiency. Students would learn the L2 through its use as the medium of instruction (as opposed to having it taught specifically as a subject), and the assumption is that the curriculum content can be adequately covered through a language that is in the process of being mastered. Just as immersion programmes can be used to enable students to communicate effectively within particular language communities or with individuals, they may also be used to enable students to communicate

across linguistic and cultural boundaries. In Singapore, for example, where English has been established as both an intranational and international *lingua franca*, immersion has provided an important means for accomplishing this aim (Lim, Gan and Sharpe 1997). Over time, this lingua franca has become the L1 of an increasingly large portion of the population, particularly the urban elite. English is now claimed as the L1 of more than 20% of the population of Singapore, typically the more highly educated.

Immersion is particularly appropriate in contexts like Mauritius where the target language is rarely, if ever, used by pupils outside the classroom. In all Mauritian schools, the textbooks and examinations are in English and the intent is for the oral medium to be in English. However, as will be illustrated below, in reality the oral medium involves, in varying proportions, the use of Creole, French and English, and a mixed code of Creole with English terminology inserted. Some English is used toward the end of the Primary School, and teachers take so much advantage of the permission given by the educational authorities to explain difficulties in Creole or French that English is far from being the real medium of instruction. The result has been a national level of L2 English proficiency far below that demanded by the (English-medium) tertiary institutions and the business community (Stein 1982; Tirvassen 1999).

4.2 Place of the mother tongue in the Mauritian education policy

Craig (1980) has discussed at length the models for educational policy in Creole-speaking communities and it is immediately obvious that the typology of bilingual education of Fishman & Lovas (1970) includes the alternatives recommended in the Richards Report (1979: 52) on Pre-Primary and Primary Education in Mauritius as variations on 'transitional bilingualism', in which the home language of the child is used in school only to the extent necessary to allow the child to learn enough of the school language to permit it to become the medium of education. The Report (1979: 52) included the following comments:

> In spite of the large chunk assigned to language the general opinion is that language is badly taught, that too many languages are taught at the same time and that children have no time to master the mechanics of reading ... But the major question remains unsettled. Opinions vary considerably. Some hold that English is the only language that should be taught at Primary, others that a start should be made with Creole and Bhojpuri depending on the environment and a transition should be made to French and Hindi at Standard III (i.e. age 8) and English be started at Standard IV (i.e. age 9) or even later, others still uphold the view that Creole should be the language medium of Primary and that French/non-European language and English be taught as Languages from Standard IV.

The Richards Report came forward with the following alternatives:

> **Alternative A**. Since the language of the home is recommended for the Pre-Primary with a gradual transition to spoken French, the Commission feels that for year 1 (age 5+) of the Infant School, the language of the environment should be used still with Oral French and an oral non-European language. That in Standard II, French and a non-European language be introduced gradually in the written form and English in the Oral form; that in Standard III, the three languages be taught formally. The Commission would like to see facilities being made available to all children to learn a non-European language from start, subject to parental choice being considered.
>
> **Alternative B**. The language of the environment should be used in Standards I and II and French should be introduced in an oral form in Standard II; and in Standard III French and English be studied in formal form and a non-European language in the oral form, the faculty to learn a non-European language being offered to all at their parental option.

However, the Report of the Select Committee on the Certificate of Primary Education (1986) advocated that from the beginning of primary school, English be the L1, French the L2 and a non-European language the L3. Obviously, from this perspective, the successful product of the Mauritian school system would be someone literate in English, French and possibly a non-European language, with Creole being used in the transitional stage of schooling – but, although this Report was adopted officially, this is far from being the case.

As English is an additional language for Mauritians, there are several levels at which Mauritian children may be exposed to input in it; in general it is true that the stronger the position of English in the country, the earlier and deeper the impact on its schoolchildren (Schmied 1991). Mauritian children are exposed to English in two ways. The first time they meet English is when it is introduced as a subject in the school curriculum, the second is when it is used as a medium of instruction. Normally, English must be taught as a subject for several years before it can be used as a medium (Schmied 1991), because in many post-colonial countries, including Mauritius, exposure to reasonably proficient English is not available outside the classroom.

In 1953, UNESCO (the United Nations Educational, Scientific, and Cultural Organisation) came out with a report which has had a considerable influence on the discussion of educational linguistic matters ever since. The position it took was that the language school children can effectively use should be given priority in selecting the medium of instruction. On this criterion, it becomes clear that the choice in virtually every case will be the child's mother tongue:

> It is axiomatic that the best medium for teaching a child is his mother tongue. Psychologically, it is the system of meaningful signs that in his mind works automatically for expression and understanding. Sociologically, it is a means of identification among the members of the community to which he belongs. Educationally, he learns more quickly through it than through an unfamiliar linguistic medium. (UNESCO 1953: 11)

The UNESCO committee defined mother tongue as 'the language which a person acquires in early years and which normally becomes his natural instrument of thought and communication'. It went on to say that a mother tongue 'need not be the language he first learns to speak, since special circumstances may cause him to abandon this language more or less completely at an early age' (UNESCO 1968: 689-90). Another term that the committee defines is vernacular language: 'A language which is the mother tongue of a group which is socially or politically dominated by another group speaking a different language' (UNESCO 1968: 689-90). The paradigm case the committee seemed to have

had in mind is the colony or former colony in which in question is that the language of the (former) colonial power and the 'vernacular' language is an indigenous language.

Not only does the UNESCO report recommend that initial education be given through the mother tongue, even if it is a vernacular language, but recommends that 'the use of the mother tongue be extended to as late a stage in education as possible' (UNESCO 1968: 691)

> ...it is important that every effort should be made to provide education in the mother tongue...On educational grounds we recommend that the use of the mother tongue be extended to as late a stage in education as possible. In particular, pupils should begin their schooling through the medium of the mother tongue, because they understand it best and because to begin their school life in the mothertongue will make the break between home and school as small as possible. (UNESCO 1951: 691)

Although the UNESCO axiom is now understood to be problematic (Le Page 1992; Fasold 1992), it still forms the basis for many educational recommendations. Its adoption is often part of the remediation of discrimination against minorities or subjugated communities and their languages, and has helped movements wishing to develop languages that have not previously been used in educational settings. In the past, there has been some official support for the introduction of Mauritian Creole in education. The UNESCO Report of 1974 also underlined the necessity of a clearer definition of the educational needs of the child as far as languages were concerned. The Report said that Mauritian children do not live in England or France, but use Creole at home and therefore are disoriented when they enter school and have to use French or English. In the same year, the Minister of Education declared that the Mauritius Institute of Education (MIE) would undertake a study of the use of Creole in the education system with a view to its use as a medium of instruction. Nothing ever came of this study and in the more recent *Report of the Select Committee on the Certificate of Primary Education* (1986), no mention was made of Creole. However, in spite of official reluctance, teachers themselves set up organisations such as *L'Atelier d'Art Enfantin*, an organisation of playgroups. They held story-writing

competitions in French and Creole to establish a children's literature which was Mauritian-based. The Federation of Playgroup Associations (FPA) undertook work on Creole as an instrument for the cognitive and emotional development of the child; a number of works were published by this organisation in Creole and Bhojpuri for the pre-school child. We might note also the work done in adult education by *Ledikasion Pu Travayer* (LPT).

The value of mother tongue education is part of a larger phenomenon of what Ruiz (1988) terms orientations, which refers to a "complex of dispositions toward language and its role, and toward languages and their role in society" (p.4). Ruiz goes on to distinguish three prevalent orientations toward multilingualism – *language-as-problem*, *language-as-right*, and *language-as-resource*. In the first orientation, language-as-problem, members of a society tend to see multilingualism as a problem that on a social level can result in a lack of social cohesiveness and on an individual level may result in cognitive deficiencies. In the second orientation, language-as-right, the promotion of bilingualism is viewed as a legal mandate involving the right of individuals to use their mother tongue and not to suffer discrimination for this use. Finally, in a language-as-resource orientation, individuals view multilingualism as a social and individual resource that can reap economic, political, social and individual benefits.

As will be mentioned later, Cummins (1979, 1981) was the first to posit that literacy skills as well as content knowledge acquired in the mother tongue will transfer to the second language. He argues that there is a threshold level of linguistic competence that a bilingual child must acquire in order for bilingualism to provide beneficial cognitive growth. Hence, in Cummins's view, acquiring strong skills in at least one language is a necessary but not sufficient condition to avoid deficits in the cognitive development of bilinguals. If this hypothesis is accurate, then bilingual children must be provided with the opportunity to develop at least one of their languages to this threshold level of proficiency. Cummins further argues that once learners have acquired literacy skills in their mother tongue, developing literacy in a second language is facilitated since learners transfer these skills

across languages. Cummins terms this idea the 'developmental interdependence hypothesis'.

Existing programmes for L2 English language learners in the U.S. (August and Hakuta 1997; McKay 1997) reflect these different assumptions regarding the value of mother tongue education and the transfer of literacy skills from one language to a second. What is termed 'bilingual education' in the U.S. includes an immense array of programmes, some of which include a good deal of instruction in the mother tongue and some of which, ironically, include instruction only in English. One of the main controversies surrounding bilingual education in the U.S. has been whether such programmes should exist solely to provide a transition to English-only instruction (commonly termed transitional bilingual education or early exit programmes) or whether they should support the development of the mother tongue (termed maintenance bilingual education or late-exit programmes). Underlying the latter model particularly is a belief in the value of mother tongue education in which multilingualism is seen as a resource. Proponents of maintenance bilingual education also support the notion that the literacy skills learned in the mother tongue will transfer to English. Those who oppose bilingual education support the assumption that the time on task is the main factor in promoting language learning. Hence, they believe that the time spent on developing mother tongue literacy detracts from time spent directly on learning English.

Fasold (1992: 281) reminds us that the UNESCO axiom quoted above links mother tongue with groups which are "socially or politically dominated by another group speaking a different language". This returns us to the minority model of bilingualism which is inappropriate for Mauritius. Consider the idea that the need to remediate underpriviledge may operate differently in different situations. There are plenty of instances in which linguistic 'minorities', given a choice, have chosen a language other than their community language as medium of instruction. Fasold (1992: 289) quotes the example of residents of Abidjan, Ivory Coast in West Africa, where only one-fourth of the respondents in a survey indicated support for the use of their native language as a medium of instruction instead of

French, the language of the colonial power, with more than 40% opposed to its use (the remainder were undecided). Some were even startled at the suggestion, making comments like: "You mean to tell me that my son would have to learn mathematics in our native language, no, you can't be serious!" It cannot therefore be safely assumed that all linguistic minorities *want* their language to be used as the medium of instruction. Although mentioned by many of those who have discussed the issue of vernacular-language education, the ideological motivation is not always emphasised. Weinstein (1987: 39) sees the 'never-ending debate' about mother-tongue education as reflecting both 'a clash of interests and inconclusive test results'.

The recommendations of Cummins and Swain (1986) are also based on the majority/ minority dichotomy. The assumption is that the majority language will be readily learnt, and that the minority language needs an effort at maintenance, which has various educational, psychological and social benefits. Children need to achieve a 'threshold' level of proficiency in both the languages of a bilingual education, but to achieve this for majority children large doses of education in a second language will be required, whereas for minority language children large doses of education in their first language will be required.

To translate the minority/majority perspective into the Mauritian context requires some gymnastics. What is the majority language in Mauritius? English is a major and prestigious language in Mauritius, the major medium of all education and the principal language of administration. On the other hand, Creole would appear to have become the major domestic language. English is neutral with regard to ethnic groups, although not with regard to social groups, as proficiency is associated with more educated groups. It could be said that Creole has become the majority language not only numerically as a native language but also in terms of its impact as a lingua franca on all minority ethnic groups. Applying Cummins and Swain's distinction between the education of the majority and minority groups would require definition of majorities and minorities – would Mauritian English speakers (of whatever ethnic group?) be classed as a majority or as a minority?

Would Creole speakers be classed as a majority? Or would speakers who claim non-European (e.g., Hindi, Urdu, Tamil etc.) languages as their 'mother tongues' be classed as a majority? We cannot imagine the chaos, ill-feeling, and discrimination that would result from an inappropriate application of a majority/minority model which does not transfer into the Mauritian setting.

In the Mauritian context, education in the actual mother tongue would be seen as 'disempowering' speakers of French and non-European language backgrounds. We have seen in Chapter Two that in the Mauritian socio-political system, education in the 'mother tongue' means education in the language of ethnic ancestry. The offering of education in the 'mother tongue' in this sense does not fulfil the requirements of the UNESCO axiom, as the 'mother tongue' may be a new language to the Mauritian child (i.e. an ethnic group language rather than Creole). The rhetoric of language planning in Mauritius is that Mauritius needs English for education, technology and trade (outward looking) and the 'mother tongues' (i.e. 'ancestral' languages) for culture (inward looking).

Bearing this in mind, it would not be surprising that a controversy regarding the value of a more formal Creole educational role exists in Mauritius. A survey carried out by Kistoe-West (1978) in Primary Schools asked the following question of headteachers, teachers, and parents of Standard One pupils (aged 6): 'At what level can the following languages be used as Medium of Instruction?' The use of Creole in the first year of school was favoured by both headteachers (79%) and parents (63%), but parents (40%) were much more inclined towards the use of English as a medium of instruction from the beginning than were the headteachers (13%). Also, when parents were asked the question: 'Which languages would you like your children to study at school in order of preference?', there was a clear tendency to opt for what was economically useful (See Table 4.1).

Table 4.1: Language of Instruction in Order of Preference (for parents)

	English	French	l languages	Creole
First	72%	18%	7%	3%
Second	24%	70%	6%	-
Third	3%	8%	55%	3%
Fourth	1%	1%	3%	1%

Source: Mauritius Institute of Education Survey (1978)

Probably the most important question was to find out what language was actually used by Standard One teachers with their pupils: 'Which of the following languages do you use in Standard One to facilitate an immediate understanding of English, French and Mathematics?' (see Table 4.2). Basically then, Creole, according to the teachers' own self-reporting, was used as a means of explanation when new topics and ideas were being introduced in primary schools. However, English was used in other subject areas because the mathematics textbooks were and are in English, which would naturally incline the teacher towards English rather than French.

Table 4.2: Languages Used in Standard One

	Creole	English	French	Any other
English	66%	49%	14%	2%
French	49%	-	62%	1%
Mathematics	79%	41%	22%	1%

Source: Mauritius Institute of Education (1978)

This survey shows a clear discrepancy between what school administrators thought of as a suitable language for early schooling, what parents wanted and what was actually happening in the classroom as described by the teachers. It can be safely assumed that till

today, things haven't changed since the survey, though it doesn't apply equally to all students in the classroom.

4.3 English language policy in the Mauritian school system

English in Mauritius has its origins in the education system established in the British colonial period. Various colonial and post-colonial governments have made attempts to promote (or given lipservice to the notion of promoting) vernacular Mauritian Creole education, but English (along with French) has always been seen as the pathway to membership of the elite in Mauritius, and has been the language of both the colonial and the post-colonial independent governments since 1968 (Tirvassen 1998).

The use of English in the highly competitive education system of Mauritius, whereby the best candidates from the Primary schools get admitted to so-called 'star' secondary institutions, is a strong incentive to ambitious parents to encourage their children to learn English at school. The *Master Plan for Education in the year 2000,* a document produced by the Ministry of Education, Arts and Science in 1991, includes a section on the language education policy of the government. In accordance with the official regulations dating back to 1957, instructors are allowed to use any language that is spoken in Mauritius during the first three years of primary schooling, although the use of English is compulsory from the fourth year (i.e., 10 year-old children) of study:

> In the lower classes of government and aided (i.e., subsidised on religious grounds) primary schools up to and including Standard III (i.e. 8 years), any one language may be utilised as the medium of instruction, being a language which in the opinion of the Minister is most suitable for the pupils.
>
> In Standards IV, V and VI (i.e. 9-11 years) of the Government and aided primary schools the medium of instruction shall be English, and conversation between teacher and pupils shall be carried on in English, provided that lessons in any other language (e.g. French) taught in the school shall be carried on through the medium of that instruction. (Extract from The Education Ordinance, 1957; quoted from Tirvassen 1999: 5-6).

The *Education Ordinance* of 1957 reiterates the policy stated in the 1944 *Education Ordinance*. At the time when the latter Ordinance was promulgated by the British colonial office, everyone was aware of the widespread use of Mauritian Creole in all the primary schools. Besides, the following statement was made officially by the Director of Education in a well-known report, namely the *Ward Report* submitted to the government in 1944:

> In Standard VI some English is used, but so much advantage is taken of the permission given to explain difficulties in Creole or French, that English is very far from being the real medium of instruction. Sums written on the blackboard in English are explained in Creole or French, and teachers use great latitude in anticipating difficulties and dropping into Creole or French before the difficulty arrives. French on the other hand (sometimes mixed with Creole) is used with more freedom. (Ward Report; quoted from Tirvassen 1999: 6)

It is significant to note that the 1944 *Education Ordinance* was the outcome of a political compromise during the days of the Empire between the English and the French who were competing with each other for cultural supremacy.

> On sait, par ailleurs, que *l'Education Ordinance* de 1944, est l'expression d'un compromis politique entre deux groupes rivaux qui se battaient pour la suprématie culturelle de leur groupe respectif. (Tirvassen 1999: 6)

In practice, what this meant was that the language policy of the British administration was honoured in its breach. It granted total freedom to its teachers to choose any medium of instruction, even if all the textbook material (with the exception of French) was in English. At the pedagogical level, this implied that such a measure of freedom was exercised especially at an oral level since the technical terms in Mathematics, for example, could not be translated in Creole insofar as this language has not undergone any standardisation process to be suitable as a medium of instruction. In brief, the language policy in the Mauritian educational system was (and still is) particularly geared towards accomplishing 'political' objectives (i.e. to cater to different linguistic groups), thus obviating the

psycholinguistic and pedagogical dimensions of language acquisition in an input-poor environment:

> La politique linguistique de l'école prend donc deux sens: il sert à cautionner la pratique des institutions officielles; par ailleurs, il vient stabiliser une situation ou tout simplement prévenir toute revendication qui mettrait en péril le choix officiel. L'aménagement linguistique dans le secteur éducatif à Maurice a une fonction essentiellement politique et ignore la dimension psycho-pédagogique de la transmission de connaissances à l'école. (Tirvassen 1999 : 6)

Since 1957 when the *Education Ordinance* was introduced, the trends in the Mauritian education system have remained the same, though several socio-economic and cultural changes that have had a direct bearing on the language policy as practised at school have taken place. The Mauritian educational landscape has experienced rapid expansion during the past thirty or fourty years with increasing demand for pre-primary and tertiary education. Since the sixties, the education system in Mauritius has changed from one serving an elite of approximately 25% of the school-age population to one that provides universal education for 13 years. The Mauritian Educational System conforms to a 6+5+2 structure with six years of Primary Education (Certificate of Primary Education/C.P.E), five years of General Secondary Education leading to the Cambridge School Certificate (S.C) or the General Certificate of Education (G.C.E 'O' level) and a further two years leading to the Cambridge Higher School Certificate (H.S.C) or G.C.E 'A' Level examinations.

The Ministry of Education is empowered to introduce a common English curriculum for pupils in Mauritian schools. In terms of curriculum assessment objectives, candidates for English language at all levels are required to demonstrate: (i) ability to read with understanding written material in a variety of forms, and to comment on its effectiveness; (ii) knowledge and understanding of features of the English language (including grammatical features); (iii) ability to write clearly, accurately and effectively for a particular purpose or audience (Sources from *Syllabus 2002, 'English Language',*

Mauritius Examination Syndicate). The Oral English Paper has been introduced since 1995, and comprises Reading Aloud, Picture Discussion and Conversation on a related topic. The aim of this paper is to encourage learners to participate actively in group work, to prepare topics, discuss views and issues orally in English and also to learn to listen to the views of others. However, the reality is that students tend to think of English language learning in terms of writing skills principally. Speaking skills are supposed to accompany any language teaching and are as important as writing skills, but the latter supersede the former in importance in the classroom situation due to the fact that the exams are centred around written communication. In other words, tests are supposed to cover both speaking and writing, but in practice more emphasis is put on written skills. The main textbook prescribed in all schools is "A Graded Course in English" by Alan Etherton. This course comprises several volumes intended to cover all levels from lower Primary to post secondary. One of the objectives of this course is to deal primarily with the common weaknesses of students, and the material chosen seeks to strengthen those grammatical areas with which students are known to have particular problems, including the features investigated in this study.

Those who pass the Certificate of Primary Education join the secondary schools, where they take the Cambridge School Certificate after five years and if they qualify, i.e. obtain a minimum of four credits at S.C. level (including a pass, i.e., 40% in English Language) and are below 19 become eligible to follow courses leading to the Higher School Certificate Examination. All these three major examinations are carried out in the English medium, except for French and the non-European languages. The English Language paper at the C.P.E level tests knowledge of discrete items of grammar (e.g., use of prepositions, tenses, etc.), appropriate vocabulary, basic comprehension and composition skills (see a sample of a C.P.E English Language question paper in Appendix 1). At the S.C. level, the English Language paper tests comprehension and summary skills, and ability to write on narrative, descriptive or argumentative essays. Candidates are also required to write a guided composition which is presented in note form. Cambridge examiners take into consideration vocabulary and sentence structure among the criteria for assessment. This

criterion refers to the effectiveness and range of the lexical choices the candidate has made, in relation to the demands of the specific question being answered. It also looks at the range and accuracy of sentence structures used and at accuracy within the sentence. The examiners state in their yearly reports that a fluent writer will use a wide range of sentence structures and will be accurate within the sentence in such areas as agreement of tenses or of subjects and verbs. On the other hand, a low level writer will only use a very limited range of sentence structures and the grammatical errors within the sentence will cause strain for the reader (see a sample of an S.C. English Language question paper in Appendix 2). All candidates for Higher School Certificate are required to reach a satisfactory standard in General Paper which tests the candidate's understanding and use of English and the extent to which he has achieved a maturity of thought appropriate to sixth-form students in their second year. It consists of two parts. Part 1 contains topics for composition as follows: historical, social, economic, political and philosophical topics; science, including its history, philosophy, general principles and applications; mathematical and geographical topics; literature and language, arts and crafts. Answers to questions in this section of the Paper are normally between 500 and 800 words in length. Part 2 tests comprehension of an English prose passage as a whole and in detail; ability to re-express in continuous form material supplied in the paper; knowledge and understanding of common English usage (see a sample of a question paper in 'General Paper' in Appendix 3).

With a School Certificate and Higher School Certificate, students can follow Certificate, Diploma and degree courses either at the Mauritius Institute of Education (M.I.E) or at the University of Mauritius. Many attend other institutions of higher/tertiary education.

The model used by Mauritius is not one of the more obvious ones e.g., in the Seychelles, where French-based Creole is the L1 and the medium of instruction, and English and French are second languages, or any of the other Creole-language areas listed by Hancock (1977), but rather Singapore, with its multilingual and multicultural background and an economy based on international trade. In Singapore, there is a very strong political sense

of economic realities, with English as the medium of education for all but a few special schools, and with the ethnic languages taught as subjects in the curriculum. However, there are historical, political and economic reasons for the development of the education system in Singapore as we find it today. For example, the growth of English in Singapore does not fit into the traditional model of a creole continuum, although researchers have used that term (Platt 1977; Tay 1979; Lowenberg 1984). A better categorisation would be that of diglossia (Gupta 1990). The success of Singapore in both the integration of languages and the economy has come about because of a variety of factors which may not be possible within a Mauritian context. The crucial difference, as far as languages are concerned, is that English has little foundation in Mauritian society except a political one. French has an historical and economic base, even if it is politically controversial. Creole's limitations seem to be lack of acceptance as a language of education, and limited use in an economy which is looking at international markets and a break from a labour-intensive workforce with low levels of proficiency in English.

Looking at the overall picture, it is clear that more and more Mauritians, including those from lower socioeconomic groups, have gained access to educational facilities over the past decades, the vast majority of whom have Mauritian Creole as integral part of their linguistic environment. At the same time, the dialectical relationship between English and French has also gone through significant transformations (Baggioni and de Robillard 1990; de Robillard 1992). When the British left Mauritius after independence, the political elite of the majority ethnic group, made up mainly of Mauritians of Indian origin, adopted English as a symbol of their social mobility. The French language gradually became de-ethnicised (de Robillard and Baggioni 1990), and English became predominantly the official *written* medium of communication. The French language, which is the mother tongue of the economically powerful Francophone Mauritian community, started taking over the socio-symbolic functions previously attached to English. In brief, the language situation in Mauritius can be summed up as follows: English is the predominant medium of *formal* communication (i.e., the medium of instruction in schools and parliament, judiciary and the civil service in general), whereas French and, to a certain extent, Creole

has obtained a certain legitimate status in *oral* communication among the administrative personnel themselves and in instructional contexts. The next section focuses on the actual practice regarding the use of English in schools in Mauritius today.

4.4 English language use in Mauritian schools: mixing and switching mode

The environment for learning in pre-primary schools (i.e. kindergarten), which are fee-paying, is at present supportive of the use of French or/and Creole rather than English. The socioeconomic status of pupils is the determining factor in the choice between French and Creole: all children coming from professional family backgrounds go to schools where French is the sole medium of instruction. The quality of education (defined in terms of well-trained staff and good infrastruture, etc.) provided in these schools is higher than in the schools where less priviledged children are enrolled (Tirvassen 1998). We must add, however, that this kind of sociolinguistic profiling is simplistic because a small number of low income parents, who are sufficiently interested in their children's education, do not miss the chance to admit them to schools frequented by middle class children as a deliberate effort to prepare them for formal education. In these schools, for the teacher to be able to speak French constitutes an asset valued by parents, and English is virtually never used in any pre-primary schools either in oral or written form. As far as the primary and secondary levels are concerned, the strategies of communication, as stated above, vary from teacher to teacher. The following combinations have been encountered in language use in these schools (Tirvassen 1998): (1) a three-language formula (i.e., English, French and Creole); (2) a two-language formula (i.e., Creole and French or English and French or English and Creole); and (3) a one-language formula (i.e., either English or French). There are classes which are entirely conducted in Creole, but such situations were not encountered either during Tirvassen's research work or in my study. The study carried out by Tirvassen, a Mauritian linguist, focused on issues of language, education and development, and he was particularly interested in English language policy in the Mauritian education system.

On the basis of Tirvassen's observations, teachers in Mauritius have adopted a style of mixing and switching between Creole or French and English and students do not obtain sufficient exposure to reasonably proficient English inside the classroom where it is supposed to be the medium of instruction. In circumstances where English is used as a classroom language but where the pupils' first language is not English, a teacher may codeswitch to the first language if problems of comprehension arise. Sometimes the mother tongue may be used only for asides, for control purposes or to make personal comments (Mercer 1995). However, when codeswitching amounts to the teacher translating the curriculum content being taught, its use as an explanatory teaching strategy is somewhat controversial. On the one hand, there are those who argue that it is a sensible, common-sense response by a teacher to the specific kind of teaching and learning situation. Thus in studying its use in English-medium classrooms in China, Lin (1988: 78) explains a teacher's use of translation as follows:

> The teacher was anxious that her students might not understand the point clearly; she therefore sought to ensure thorough comprehension through presenting the message again in Cantonese which is the students' dominant language.

Researchers on bilingual codeswitching have, however, concluded that it is of dubious value as a teaching strategy if one of the aims is to improve students' competence in English. Thus Jacobson (1990: 6) comments:

> The translation into the child's vernacular of everything that is being taught may prevent him/her from ever developing the kind of English language proficiency that must be one of the objectives of a sound bilingual programme.

The following example (quoted from Tirvassen 1999: 10) illustrates code-switching in a mathematics class from a Mauritian Primary school:

Teacher: Regarde ène coup ça travail là ... Il y a fifteen ... Il y a three là ... quand nous pour reduce to lowest term Ça devient three to one ... alors combien women will join the committee ... qui chiffre ça

bizin vini là pour nous capave gagne three to one ? (*Have a look at this work ... We have fifteen here ... We have three there ...when we reduce to its lowest term, it becomes three to one ...so how many women will join the committee ... what figure will this become to obtain three to one*?)
(pupils do not answer)

Teacher: Ça vinn one ... après là-bas qui mo trouvé ? Par qui mo coupé là-bas pour qui fifteen vinne three ? (*It becomes one ...and what do I find there ? By what figure do I divide fifteen to have three?)*
Pupil: by five.

From the above extract, it can be assumed that teachers resort to Creole to make themselves clearly understood. Such a strategy of communication illustrates the difficulty of Mauritian teachers to observe the official educational policy on the use of English as a medium of communication. Tirvassen concludes that teachers regard the use of English - at least in Primary schools – as incompatible with the sociolinguistic characteristics of Mauritian learners.

According to Brinton (1999), who visited Mauritius as an 'academic specialist' during that year, the status of English language instruction and pedagogical training in this island is a 'fascinating but somewhat troubling' one. She claims that there appears to be little or no awareness of the need for English across the curriculum. She goes on to say that the English curriculum is very traditionally EFL (textbooks consisting of short readings with comprehension questions) and there is no attempt to link English instruction to the wider curriculum despite the fact that all subject matter instruction is in English. In terms of the training of English language teachers, Brinton found it to be almost exclusively devoted to the reading and analysis of classical works of English literature. Indeed, very few Mauritian teachers of English have a background in 'language education' and basic notions of how second language acquisition theories are related to teaching methodology. Brinton concludes that there is a clear need for work on content-based instruction and materials/curriculum development.

The English curriculum is, indeed, largely driven by exit tests (the O and A levels inherited from the British system). In the Syllabus Report 2003 of the Mauritius Examinations Syndicate, the CPE (the last examination at the end of the primary cycle), SC (the Cambridge School Certificate), and HSC (the Higher Cambridge School Certificate), the aims and objectives of the English Language paper, Literature in English for SC and General Paper for HSC are clearly specified. The English paper is composed of three parts: Paper 1 (composition), Paper 2 (comprehension), Paper 3 (oral test). The aims of the English papers at SC are to develop the ability of candidates to: (1) communicate accurately, appropriately and effectively in speech and writing; (2) understand and respond appropriately and imaginatively to what they read and experience; (3) enjoy and appreciate reading texts in the English language.

Some of the assessment objectives for the papers are that the students must use language to inform and explain, show an awareness of how spoken and written communication varies according to situation, purpose and audience, appreciate the ways writers make use of language. What examiners insist upon is that candidates must write in Standard English, and are penalised for making mistakes of grammar, punctuation and vocabulary. The General Paper at HSC consists of two papers, composition and comprehension. Again, students are required to have knowledge and understanding of common English usage and a very good command of the language to express themselves in writing. Therefore, we find that the assessment criteria lay much emphasis on language and students must have a good mastery of English.

In view of the goals set by the curriculum, it can be argued that Mauritius is almost a typical case of contradicting discourse between the rhetoric on the English language education, as given in government education plans and reports (e.g. Master Plan for the Year 2000) and the grassroots versions as heard and constructed during investigation. Mauritius, it is true, has a free education system, compulsory education between the ages of five to twelve years and the enrolment ratio at primary school stands at 95%. Such a

record has contributed to giving Mauritius a good name in the African region to which it belongs. However, a less enthusiastic discourse reveals itself with even the briefest look in newspapers or superficial conversation with parents and teachers.

In spite of the objectives stated in the curriculum, the low levels of achievement in English and the discrepancy in favour of receptive over productive skills in tests are predictable, given the assumptions generally accepted within content-based instruction. In terms of input, students do not receive enough through the aural mode, and much of what they deal with in the written mode is either not comprehensible or is dealt with through general problem solving rather than acquisition-related strategies. Thus the quantity and quality of input required for effective acquisition are not being achieved (see Krashen 1982, 1985).

Mixed mode teaching has also been identified by Tirvassen (1998) as one major cause of the wide gap between the level of English proficiency required and the level which schools have been able to supply. The study carried out by Tirvassen (1998) shows that English language instruction in Mauritius is restricted to the repetition of a few basic structures and the buildup of a limited vocabulary. He concludes that Mauritian teachers confuse 'mechanical' repetition with 'acquisition': in fact, they use a structural approach to practise drills which do not aid acquisition. He also argues that in a context which makes it virtually impossible to enforce the official language policy, Mauritian teachers make pedagogical choices which are dictated by their own sociolinguistic perceptions and even prejudices rather than the linguistic competencies of learners. The use of Creole in the classroom, he says (1999: 11), can bear several interpretations.

> Tout dépend naturellement du niveau d'intelligence des enfants car si un élève a un quotient d'intelligence faible, on ne peut lui imposer des explications dans une langue qu'il ne comprend pas. (Extract of an inquiry with a teacher from a secondary school in 1993)

The interviews done by Tirvassen (1999: 11) with several teachers from both primary and secondary schools revealed that language use at school could be attributed a social significance. One teacher from a primary school consisting primarily of children from less

privileged socio-economic backgrounds stated that her use of Creole was not systematic, but that it depended on the 'catchment area' where she was supposed to teach. In rural areas, the medium of instruction is Creole, but in the urban areas she uses French as being most suitable. Another teacher declared that she uses English and French in English and Mathematics classes, respectively. Still another teacher asserted that her use of Creole is due to extra-classroom factors, namely that the children come from poor neighbourhoods ("*sé ban zenfant cités*"). Similarly, one teacher from a secondary urban school said that she uses English predominantly when she teaches English, but for other subjects she uses either English or French. However, the use of Creole is ruled out by her because "*cela réduira l'effort que l'enfant pourrait faire pour apprendre la langue à travers la matière*". In short, teachers do not always choose a medium of instruction in terms of the linguistic competencies of the learner; they are guided rather by their own sociolinguistic representations of Mauritian society.

The constellation of social class and language factors in Mauritius means that children from lower social classes are less likely to come from home backgrounds where there is sufficient exposure to English –or, French for that matter. The least priviledged – with a few exceptions - are also least likely to have attended kindergarten with lot of input in European languages. These children will start school with maximum disadvantage. A large percentage of primary school students from wealthy backgrounds follow private tuition, either individually or in groups, after school hours. In other words, the schools' expectations are geared towards middle-class children. The uneven distribution of language use and exposure among the social classes exacerbates the disadvantage of those who do not get input in English. The 'Save the Children' movement which militates to promote children's rights in Mauritius has published its most recent (2001) report on the present educational system. The report underscores the bias of the Mauritian educational system in favour of children from middle-class backgrounds. Free education has been provided to all primary and secondary children since the 1970s but the level and success of this schooling remains modest and benefits the most advantaged groups. The report also emphasises that schools in the urban areas have a much higher standard than in the rural

and deprived townships. "The reality is that education benefits those who fit the cultural and *linguistic* (italics mine) norms. Children in deprived regions often attend poorly resourced schools and failure rates are high" (Le Mauricien 21/11/01).

There is not sufficient empirical evidence to link academic success or underachievement among Mauritian learners to proficiency in English or lack of it. Several factors such as socio-economic status, the effects of social background, minority ethnicity, parental education levels, and expectations for children's educational levels are all known to influence children's success in schools. There is, however, no denying that linguistic and academic success for children who are not native speakers of the school language are interrelated.

Schools are the principal institutions for the implementation of language-in-education policies, and the issue of achievement or underachievement in language education needs to be examined. If one looks at results between 1990 and 1996 in the three major examinations, *Certificate of Primary Education* (CPE) taken at age 11-12 at the end of primary schooling, *Cambridge School Certificate* (SC) taken at age 16 at the end of five years of secondary schooling, *Cambridge Higher School Certificate* (HSC) taken at age 18 at the end of seven years of secondary schooling, the figures show that approximately the same number of candidates took both English and French, but that there is a marked contrast in the pass rate in these two subjects. As the educational pyramid moves towards the top, the pass rate in French (which is an optional subject and not an 'official' medium of instruction) in the *Cambridge Higher School Certificate* (HSC) is consistently above 90%, while General Paper (which is compulsory for all HSC candidates, and which tests a command of English), the number of students who succeed averages 70% (see Tables 5, 6 and 7). As mentioned earlier, the better performance of learners in French can be attributed to greater input from teachers and exposure to this language outside the classroom.

The performance of Mauritian students in English in the above examination has led to constant complaints about the 'standard of English' since independence in 1968. To make matters worse, as English is the general medium of instruction, a drop in the pupils'

competence in English may seriously affect their performance in other subjects. The greatest concern about English standards is the fear that a vicious circle may develop: when the pupils' English deteriorates, some of them are still trained to be teachers and their 'bad English' results in their pupils learning even worse English.

Table 5: The Percentage Pass for the *C.P.E (Certificate of Primary Education)* Examination

YEAR	1990		1991		1992		1993		1994		1995		1996	
	Examined	(%) Passed	Examined	(%) Passed	Examined	(%) Passed	Examined	(%) Passed	Examined	(%) Passed	Examined	(%) Passed	Examined	(%) Passd
ENGLISH	33375	67.3	36959	68.4	37286	71.8	34648	68.4	31135	68.1	29303	69.7	27080	71.25
FRENCH	33374	69.5	36957	69.7	37298	70.5	34652	70.0	31133	76.8	29308	78.0	27075	77.09

(Source : *The Mauritius Examinations Syndicate,* Le Reduit)

Table 6: The Percentage Pass for the *S.C (School Certificate)* Examination

YEAR	1990		1991		1992		1993		1994		1995		1996	
	Examined	(%) Passed	Examined	(%) Passed	Examined	(%) Passed	Examined	(%) Passed	Examined	(%) Passed	Examined	(%) Passed	Examined	(%) Passed
ENGLISH	12796	65.2	12571	73.3	12887	66.9	13787	68.7	13485	68.8	11440	76.2	11650	86.1
FRENCH	12334	96.2	12298	97.1	12630	92.7	13512	93.2	13220	94.4	14061	93.4	14948	91.5

(Source : *The Mauritius Examinations Syndicate* , Le Reduit)

Table 7: The Percentage Pass for the *H.S.C* (Higher School Certificate) Examination

YEAR	1990		1991		1992		1993		1994		1995		1996	
	Examined	(%) Passed	Examined	(%) Passed	Examined	(%) Passed	Examined	(%) Passed	Examined	(%) Passed	Examined	(%) Passed	Examined	(%) Passed
ENGLISH (GP)	3983	67.8	4162	79.6	4334	58.2	4812	72.2	5063	68.9	5438	72.8	5812	73.3
FRENCH	1343	84.5	1355	90.4	1321	93.8	1450	93.0	1567	97.8	1776	95.5	1926	96.3

(Source : *The Mauritius Examinations Syndicate,* Le Reduit)

Thus the problem may constantly be aggravated as education expands and not enough qualified teachers are available. The problem may be compounded from primary school to higher levels and jeopardize the whole educational system. In a sense, though, the 'falling' standard of English in schools was to be expected in view of the rapid expansion of the educational system in Mauritius during the past thirty years. Several accelerated development plans for education were geared more towards quantity than quality. Looking at the overall picture, it seems clear that there are many more Mauritians learning and speaking English than ever before. The Certificate of Primary Education (CPE) examination, which sanctions the end of primary schooling, represents the life chances of an average number of 31,000 children every year, as compared to about 3,000 children in the 1960s (Sources from *Mauritius Examinations Syndicate*).

Although the primary sector takes a large portion of the educational budget reflecting the government's commitment to primary education, it has not escaped criticisms. Chinapah (1983:168), in a comprehensive study of participation and performance in primary schooling, has concluded that primary education is marked by extreme forms of inequalities (urban vs rural; ethnic, linguistic, socio-economic) which are reproduced in the system. According to Chinapah, equality of educational opportunity in Mauritius is only rhetoric. The government's attempt to overcome inequalities in education has not been successful and this, according to Chinapah, is partly due to its failure to address the overall problem of social inequality in the society (Chinapah 1983:167). Other studies, such as that of Kistoe-West (1983), argue that the primary system is still inadequate, in spite of the extensive primary school provision since independence. Studies by Datta et al (1976) and Chung (1980) have also shown that the Junior Scholarship examination was too biased in favour of high achievers and put tremendous pressure on children to do well. Although that particular examination was abolished and replaced by the Certificate of Primary Examination, one can argue that very little has changed as indicated by Chinapah's study. Teachers play a pivotal role in the lives and education of learners. Their training and experience have also been explored to ascertain the extent to which the subjects receive input in English in the classroom situation. The recruitment of teachers for the Government Primary schools is carried out by the Public Service Commission. All applicants must possess a minimum of five credits at S.C level and in the following subjects: English, French and Mathematics. Newly recruited teachers follow a two-year training course at the Mauritius Institute of

Education (M.I.E) before they are appointed to teach.

This survey highlights the fact that, unlike the situation with the French language, the vast majority of Mauritian learners are taught English in what Tickoo (1993) has called an 'acquisition poor environment' (APE), and as a result are not provided with sufficient 'comprehensible input' inside (and outside) the classroom. In this context, a key factor that needs to be taken into account is the social dimension of second language learning. As Paulston (1981: 476) points out,

> Educational institutions have limited power in dealing with language acquisition or the lack thereof, a learning process which is the result of social factors.

One important context that must be considered is the home environment which is, after all, a key context for both acquiring knowledge and learning how to learn. One type of research regarding language education has sought to ascertain to what extent the culture of the school, which is frequently based on middle class standards, differs from the home culture of many learners. As one of society's main socializing instruments, the school, by endorsing mainstream, and largely middle-class, values and language, plays a powerful role in exerting control over its pupils. My study seeks to investigate L2 achievement in an acquisition-poor environment, and will therefore show that underachievement in English can be attributed to a combination of poor input from teachers and little extra-classroom exposure that socially advantaged learners make up for somehow.

4.5 L2 English proficiency and socioeconomic status

In the light of the three types of language planning context discussed in Section 3.1, the language situation of Mauritius is a good example of an A-modal nation where language decisions were made on the basis of *nationism* (the practical concerns of governing) rather than *nationalism* (the feelings that develop from a sense of group identity).

English is seen here, as in many countries at an individual, institutional or national level, as representing the key to economic opportunity. For example, in 1995 the British Council surveyed 2,000 native and non-native English speakers worldwide who were actively involved in the teaching of English. Respondents were asked to register their agreement or

disagreement with a series of statements about the role of English. The results indicated that 'English is recognized and accepted as the world's language and is not, on the whole, associated with elitism' (British Council 1995: 4). The majority of respondents agreed with statements that claimed English was important to modernization in developing countries. 73% agreed that English is a major contributor to economic and social advancement in most countries; 95% agreed that English is essential for progress, as it will provide the main means of access to high-tech communication and information over the next twenty-five years. Interestingly, most respondents seemed to disagree that the demand for English had negative effects. 59% disagreed that competence in English encourages elitism and increases socio-economic inequalities.

It is probably to be expected that members of the English-teaching profession will see their role in a favourable light. There is increasing evidence that in many countries fluency in the English language is required for access to better jobs and opportunities, but access to English, is rarely uniformly available, leading to underachievement. Success in educational performance is said to depend on proficiency in the language in which this learning is accessed and expressed, an ability that seems to be tied to the social class or the socio-economic status (SES) of the learner. The Swann Report (DES 1985) attributed the under-achievement of some groups of learners to a great many relevant factors, notable among which is the latter's socio-economic status. (SES).

Many students learn English in what Tickoo (1993) called an 'acquisition poor environment' (APE): one where the teacher is not fully proficient in the language, where the schools and classrooms are under-equipped, and where there is no real communicative use of the language in the community.

> The truth is that the vast majority of Indians are taught English in an APE, and as a result the language does not become a usable means of communication. This is eminently true for those who live in villages where there are no opportunities to hear the language spoken. It is almost equally true of a majority of those who learn it in the bulk of schools in cities and towns where English is learnt in a class hour of 35 minutes each working day. (Tickoo 1993:234).

Tickoo studied the position of the Kashmiri language in north India. Although by no means

at the bottom of the Indian linguistic hierarchy, being one of the 15 'scheduled' languages and spoken by 3-4 million people, Tickoo argued that educational policies with English as a medium of instruction rendered Kashmiri an inferior language, while the emphasis on English caused many students to fail:

> Kashmiri, like many other languages of similarly small reach in India, has to live in the shadow of larger languages or, more truly, at the bottom of a hierarchy of languages. In such a hierarchical arrangement what often happens is that the child's first language, which operates at the bottom of the educational ladder, is viewed as a mere stage on the way to gaining the mastery of the larger languages which are known to serve more important national goals. It thus becomes a transactional language rather than a true language of learning or a dependable resource towards lasting literacy (Tickoo 1993: 232-3).

Tickoo's study raises an important point, namely that educational policy (which establishes the languages to be used as a medium of education at primary, secondary and university level) is a key factor in determining how successful speakers of the lesser used languages are within the educational system. Tickoo argued that the pressure to attend English-medium education in cases where students had no real need for English and where the education system could not support quality learning through English had disastrous consequences for both students and for the Kashmiri language.

Ahai and Faraclas (1993) examined the effect of English-medium education in Papua New Guinea, a country that probably contains greater linguistic diversity than any other in the world. Like Tickoo, they too argue that expecting students to learn to read and write in a language that most of them do not know in its oral form results in a devastating toll, both in terms of rates of school leaving and declining standards for the few who manage to continue. This highlights one of the main points of this study which seeks to investigate L2 achievement in an acquisition-poor environment.

Let us now turn to the Mauritian situation. Mauritian learners are required to master expressions to convey an increasing level of abstraction of ideas through extended utterances and appropriate words. The language production system that is geared mainly to interpersonal conversation has to be converted to operate with decreasing support of the context in order to be able to function by itself for academic expression. However, the

social status of some Mauritian learners affects their scope for exposure to 'decontextualised' English. They do not have access to an environment where they can meet people who can give them exposure to the use of such academic language. The vast majority of Mauritian learners are taught English in an 'acquisition poor environment', and as a result are deprived of the necessary input for developing mastery of the language. As might be expected in an 'acquisition poor environment', there are, in Mauritius, largely differential levels of proficiency, whereby some English language learners are more successful than others. All normal children, given a normal upbringing, are successful in the acquisition of their first language, but this contrasts with our experience of L2 learners who vary greatly in their abilities to acquire their second language. It is clear that a child or adult acquiring a second language is different from a child acquiring a first language in terms of both personal characteristics and conditions for learning. In addition, any given second language learner may differ from another second language learner in many ways. A pre-school child learning a second language from playmates in a bilingual setting has a different profile from an adolescent student learning a second language formally in a foreign language classroom, or an adult immigrant learning the second language in an informal language learning setting, at work and in daily life. In other words, the social environment in which language acquisition takes place creates the conditions for success or failure in mastering the language.

This study will compare the rural and urban contexts in Mauritius, and will show that where an educationally supportive environment differs markedly between families of different levels of socio-economic status, this contributes directly to differences in school achievement in English, despite pre-puberty exposure to the L2. Chapter Five will present the methodology which has helped us decide on the nature of the data we would require, the mode of data collection which would be feasible in different school settings, the period during the school year which would be most suitable for classroom observation and data collection etc.

Chapter Five

METHODOLOGY

5.0 Overview of the study

In this section, we shall recapitulate the previous four chapters in order to situate the method of investigation used for this study. This study seeks to compare the differences in the language learning conditions and proficiency outcome which arise as a result of differences in the nature of extra-classroom and classroom interaction in rural and urban classes in which English is taught as a subject of study and also used as a medium of instruction.

It is widely believed that second languages are best learnt when learners are given opportunities to hear and use the target language (see Section 2.1). However, the chief contention of this study is that all classes in which English is used as a subject and medium of instruction do not provide equal opportunities or equally conducive conditions for language learning, hence the differential level of success in L2 learning. The language data or input to which the learner is exposed outside the classroom environment is also seen as a stimulating/reinforcing agent which leads to language learning. In order to deal with the central questions raised in this study, a description of the language learning conditions inside and outside the classes (*Chapter 2)* was needed as a basis for comparing the different class settings. This description of the language learning conditions was arrived at through an extensive review of the available literature on L2 acquisition theory and research *(see Chapter 1).*

Our review of empirical studies of language acquisition in different settings as well as the discussion of theoretical models of second language learning (*Chapter 1*) indicates that success or failure in language learning depends on the availability of (i) opportunities for exposure to suitable target language data, and (ii) opportunities for

sufficient and appropriate practice in using the target language for real-life communication. Language input is considered suitable when it is available in large quantities, is comprehensible and is of real communicative value (see Section 2.2). The role played by such input in language learning is evident from the research literature presented in Chapter 2.

Language acquisition occurs when there is adequate exposure to language input data. For the process of grammar construction to take place, it is also necessary that this input data has sufficient structural and functional variety (Spada 1987). Observational studies of first and second language acquisition in natural settings indicate that language development is actually retarded when adequate quantities of varied input data are not available (Long 1983). Theories of second language acquisition also indicate that language learning takes place when rich and varied input data is available.

While many discussions about second language learning have focused on the role of input and the age factor *(see Chapter 1, section 1.3),* issues related to the social context of L2 learning, which have not been the subject of much empirical research in L2 acquisition studies, have been analysed in Chapter 3. We have considered the impact of social factors in L2 achievement, with a view to considering reasons for variable proficiency of Mauritian learners who are exposed to English prior to puberty, but with little extra-classroom input in a formal instruction context. Some evidence has also been provided to suggest that female learners are more sensitive to input, and gender is likely to interact with other variables such as social class in determining L2 achievement. It should be recognised that it is not age, gender or social class that determine success or failure in second language learning, but rather the social conditions and attitudes associated with these variables. Social factors determine the learning opportunities which learners experience in so far as they affect the nature and the extent of the input to which they are exposed.

On the basis of this review, I arrived at the observation that fewer opportunities for active learner involvement exist for learners, both male and female, in rural classroom settings in Mauritius than in urban settings.

5.1 Background of the study

This pointed to the need to explore the nature of the input in different types of classes in which English is used as a subject and a medium of instruction, in order to ascertain the extent to which a suitable context for language learning exists, and to examine the extent to which the language learning conditions in rural settings differ from the language learning conditions that seem to be present in typical English classes in urban settings. The central problem to which this study addressed itself was the extent to which various class environments differ in terms of the opportunities for language learning which become available in and outside these classes.

5.1.1 Rationale for the study

It is by now well-accepted that what we need is to be able to look inside the "black box" of the classroom (Long 1983) and to see what actually goes on there in order to arrive at any real insights into how classroom interaction provides a setting for language acquisition to take place by making available certain opportunities for language learning. If, as this literature suggests, interaction is crucial to language learning, and the environment or the context in which a second language is learnt is potentially more important than the approach adopted (Savignon 1983), it becomes necessary to understand the nature of the classroom interaction and the learning environment provided by any particular programme before a beginning can be made in assessing the success of the programme.

Therefore, in this study an attempt has been made to describe the nature of the conditions which assist second language learning and the nature of classroom

interaction which makes available these conditions in terms of opportunities to hear and use the target language. It is hoped that such a study will have implications for English language teaching in Mauritius, and that an understanding of the nature of the interaction occurring in different classes may lead to an understanding of the kind of tasks which tend to generate interaction conducive to language learning.

The central concern of this study is to find out, define and measure to what extent and in what ways the nature of the classroom interaction differs in the different settings, and the extent of the differences in the conditions for language learning that become available as a result of these differences. Therefore, the central questions which this study addresses itself to, are:

(i) Does a more suitable context for language learning become available in urban classroom situations vs rural classroom situations in Mauritius?

(ii) Do contextual factors, namely the socio-economic background of learners and gender, influence the learning of English in Mauritius?

(iii) Does the gender factor influence the learning of English in Mauritius?

These initial questions are reformulated as hypotheses which are presented in the next section.

5.1.2 The Research Hypotheses of the Study

The main hypothesis of this study is that the conditions prevailing in an urban classroom setting and outside the classroom in Mauritius are more conducive to language learning than the conditions available in the rural schools and areas.

This hypothesis can be divided into five hypotheses on the basis of the main conditions for language learning, as described earlier.

(i) The urban classroom provides greater exposure to the target language and more opportunities to use language for as genuine as possible communication than does the rural context.

(ii) The urban context provides an extra-classroom environment which is more conducive to language learning than does the rural context.

(iii) The L2 achievement scores of urban learners are higher than those of rural learners.

(iv) Regardless of the setting, female learners outperform male learners in L2 achievement.

(v) In terms of teacher-student attitudes, the rural classroom limits participation by learners, prevents them from using language for a variety of purposes and causes them to adopt a passive role in the classroom.

In order to examine these hypotheses, I needed to be able to compare the nature of interaction in rural and urban settings. This involved three steps in terms of data collection, (1) selecting a sample representative in each setting, (2) using questionnaires to determine classroom exposure, (3) using questionnaires to determine extra-classroom exposure, (4) carrying out tests and tasks to measure learners' proficiency. Deciding on a procedure for the analysis of this data would enable me to compare the interaction in each of the settings in terms of the availability of opportunities for exposure to the target language, opportunities for learners to use the target language as well as the availability of an appropriate learning environment.

5.1.3 The Procedure for Research

Before I could start testing the achievement levels in different classes, I first had to get some insights into the extent and nature of input in different settings so that I could structure my investigation regarding the availability of the language learning conditions in each type of class, select a suitable sample which would enable me to make some generalisations about the classroom situations and evolve a suitable

procedure for the actual data collection and analysis. To enable me to carry out these tasks, a preliminary investigation was conducted.

A preliminary study was necessary because without some insights into the nature of different settings - both intra and extra-classroom input, I could not hypothesise about the availability of the language learning conditions in any of the classes. I needed to see if there did exist differences between urban and rural classes, to highlight the characteristic features in each class and to draw attention to the features of the different types of teaching situations which each class represents. Nor could I decide upon a representative sample of classes which would form sufficiently discrete groups to enable me to make valid comparisons and generalisations and which I could, therefore, subject to analysis. Thus a preliminary study could help me decide which type of classes I could include in the study and also decide on a representative school sample.

For the preliminary study, I decided to observe a variety of classes in six schools in different areas in Mauritius over a period of three months. In order to increase the reliability of the classroom observations, I also decided to conduct semi-structured interviews of teachers and students in each of the classes observed to enable me to get further information on the quality of the interaction as well as on teacher/student attitudes.

5.1.4 Choice of Schools for the Study

During 1999, I spent three months in the six schools selected for the final study, alternating between the schools on a daily basis. My aim was to examine input inside and outside the classrooms to see whether there existed any discrepancy between the urban and rural learners - which equates with different social backgrounds - and to measure it with their achievement in English. The methods used for this study were participant observation, interviews and the distribution of different types of questionnaires. In the afternoons after school hours and during the weekends, I

school related needs such as reading materials in English, private tuition, extra-classroom exposure, if any, to English. The questionnaire was administered as a part of a structured interview which lasted twenty to twenty-five minutes per subject.

TABLE 5.1

Field Study Questionnaire for Parents

Dear parents,

The survey which you are going to complete is designed to help us understand some issues concerning the learning of English by Mauritian Creole speakers. Your participation in this survey is highly appreciated. The results of this survey may be published, but your name will not be used.

1. Name:

2. Age group of father: A 30-40
   B 40-50
   C 50-60
   D Beyond

3. Age group of mother: A 30-40
   B 40-50
   C 50-60
   D Beyond

4. Occupation of Father:
   Occupation of Mother:

5. Salary Range of

Father	**Mother**
A 2000-4000	A 2000-4000
B 4000-6000	B 4000-6000
C 6000-8000	C 6000-8000
D 8000-10000	D 8000-10000
Above 10000	Above 10000

6. Do you regularly meet the teacher or headteacher to ask about your children's performance?
   (A) Yes (B) No

7. What language(s) do you use with your children
   (A) Creole
   (B) French
   (C) English
   (D) Oriental Languages (Hindi, Urdu, Bhojpuri, Mandarin etc.)

TABLE 5.2

Field Study Questionnaire

English language situation for learners

1. Name

   Age

   Sex

2. How many years have you been to preprimary school?

3. What is the occupation of your : Father
   Mother

4. (a) Do you use English outside the classroom with family members?
   A Never. B very rarely C at least once a week D at least once a day E many times daily

   (b) Do you use English outside the classroom with friends?
   A Never B very rarely C at least once a week D at least once a day E many times daily

   (c) Do you use English outside the classroom with strangers?
   A Never B very rarely C at least once a week D at least once a day E many times a day

5. Do you borrow books from other libraries apart from those of your school library?

   Yes
   No

6. Do you read mostly

A English books B French books C Oriental books D None?

7. Do you read popular materials (books) for your pleasure in English?

A Never B Very rarely C At least once a week D At least once a day E Many times daily

8. Do you use English outside the classroom to listen to the radio, watch TV, go to movies?
A Never B Very rarely C At least once a week D At least once a day E Many times daily

9. Do you use English to write personal letters?
A Never B Very rarely C At least once a week D At least once a day E Many times daily

10. Do you take private tuition?
A Yes
B No

11. How well can you understand English?
A. not at all
B. only a few words
C. enough to follow a class, but not all
D. I understand everything that is said by native speakers

12. How well can you speak English?

A. not at all

B. only a few words

C. well enough to communicate simple ideas, requests

D. well enough to communicate most ideas

E. I can speak it fluently

13. How well can you read English?

A. not at all

B. I can understand only a few words when I read

C. I can understand about half of what I read (with a dictionary)

D. I can understand most of what I read (with a dictionary)
E. I understand everything I read

14. How well can you write English?

A. not at all
B. few words with difficulty
C. well enough to communicate simple ideas, requests with many errors
D. well enough to communicate most ideas with few errors
E. I can write without any grammatical mistakes

Questionnaires for the teachers (Table 5.3) were divided into two parts. Teachers of English were required to answer all the nine questions found in the questionnaire, whereas teachers of other subjects (Mathematics, Science, Economics, etc.) were asked to answer the first seven questions only. These questionnaires were designed to obtain information on the language used by teachers inside and outside the classroom.

TABLE 5.3

Questionnaire for teachers

Dear Sir/ Madam,

I am carrying out a survey on the learning/acquisition of English by Mauritian learners as part of my Ph.D thesis at the University Of Durham, U.K. I would appreciate if you could convey your views on the different questions in this questionnaire. Please note that all information that you will provide will remain confidential.

(Please tick or write where appropriate).

Questions 1-7 apply to teachers of various specialist subjects.

Questions 1-9 apply to English language teachers.

School:

Subjects taught:

Qualification: Graduate Non-Graduate

(1) Do you use English as the medium of instruction in the class?

A Yes

B No

(2) If 'no', which language(s) do you use as the medium of instruction?

(3) Do you think that English should remain the medium of instruction in Mauritian schools and colleges?

(4) If 'no', which language should be the medium of instruction?

(a) French (b) Creole (c) Bhojpuri

(5) Which language do you usually use to interact with students outside the classroom?

(a) English (b) French (c) Creole

(d) Bhojpuri (e) Any other

(6) Do you think that special training and qualifications are needed to teach in English?

Yes No

(7) Do you always correct your students' mistakes in English?

Yes No

TO ENGLISH LANGUAGE TEACHERS ONLY

(8) Do you make use of films, cassettes or other audiao-visual aids during your English lessons?

(a) Always (b) Sometimes (c) Rarely

(d) Never

(9) Do you usually encourage group-work discussions in your English classes?

Yes No

The study is based on a sample of six schools, two each from three levels of education namely Primary/Lower Secondary, Secondary or 'O' Level, Post Secondary or 'A' Level. As stated earlier, the education system in Mauritius is very similar in formal terms to the British system with six years in primary school, followed by five years in secondary school if students leave school after completing 'O' level or seven years in Post Secondary schools if students go on to H.S.C or the London GCE 'A' level.

The schools (see Table 5.4) chosen for the case study are situated in four districts of Mauritius which are typical of the country. They were selected in such a way that they were a representative sample of the schools of the island on the basis of the criteria of pass rates for Certificate for Primary Education (C.P.E), School Certificate (S.C.) and Higher School Certificate (H.S.C.) examinations in proportion to the total number of schools obtaining in Mauritius, and in consideration of the geographical location of urban and rural areas. The schools chosen were as follows:

TABLE 5.4: **Choice of Schools**

Region	Level of Education	Name	Pass Rate
URBAN	Lower Secondary	Villiers Rene Primary School	70.53%
	Secondary	Mahatma Gandhi State Secondary School	85%
	Post-Secondary	St-Esprit College (A' Level College)	90%
RURAL	Lower Secondary	Shri Rajiv Gandhi Government Primary School	30%
	Secondary	Professor Basdeo Bissondoyal Private Secondary School	33%
	Post-Secondary	Modern College	35%

The urban schools have been categorised as 'star' / 'high achieving'schools and colleges, while the rural schools are 'substandard'/ 'low achieving' schools and colleges on the basis of percentage passes for the year 1998.

At the secondary and post secondary levels, I thought it fit to choose Mahatma Gandhi State Secondary School and St Esprit College among the 'star' schools since they are the only mixed schools within the star schools grouping, as opposed to poorly resourced schools, which are gender-mixed. Also, these schools have a relatively stable group of staff. Most 'star' schools staff is often transferred within the state system, and while this makes the two above schools somewhat untypical, it enhances their 'star' qualities. Poorer resourced schools do not have this problem. They, as private schools, employ their own teachers. The notion of private schools in Mauritius has a different meaning from that in the U.K or in Australia. In the latter countries, private schools are often characterised as elitist, expensive and conservative. In Mauritius, there are only two private schools of this type. They are Lycée Labourdonnais and Bocage. The other private schools in Mauritius are funded

by the government and they are non fee paying. Among these private schools, there is a handful which is run by religious organisations and together with the state schools, they are often referred to as the 'star' schools. 'Star' school pupils are the most sought after. The majority of the private schools are poorer resourced schools in terms of infrastructure and training of staff. These schools have fewer academically qualified teachers than the state schools, they have a higher pupil/teacher ratio; many of them are poorly equipped and housed. Since certain state and confessional schools have a high reputation, they attract the best candidates and hence obtain the best results. At the other extreme there are ' a small number of institutions which ... are a real disgrace to the system'. (Management Audit Bureau, Report on the Private Secondary Education Sector, November 1989). There are regional inequalities, the best schools are located in Port-Louis and Plaines Wilhems, which are urban areas. Approximately 81 percent of secondary school pupils attend private colleges. 'According to the PSSA estimates, less than 20% of pupils attending private schools are in institutions comparing favourably with the state schools' (Master Plan 1991: 86). The Private Secondary Schools Authority (PSSA) is a para-statal organisation created in 1977 to exercise some control over all private secondary schools. It also allocates government funds to the private schools according to an agreed formula.

Disparities exist between schools in terms of the teaching force, infrastructural facilities and in the quality of entrants. Tables 5.5 and 5.6 highlight some of the disparities in the system. The disparity between the teaching force of state and private colleges is shown in Table 6.6. Over half of the teachers in state schools, but only a fifth of teachers in private schools are in Grade A. Grade A teachers are the best qualified, those who possess a Higher School Certificate (H.S.C) and a university degree and in some cases post-graduate qualifications too. The striking thing is that there are no Grade C teachers in state schools, but such teachers account for nearly half of all teachers in private schools.

Table 5.5: Estimated Government monthly cost per student in State Colleges and Private Schools

	Rupees per student		% increase
	1988-1989	1989-1990	
State Secondary Schools	530	695	31
Private Secondary Schools	285	373	31

Source: Mauritius Audit Bureau Report (p.75),
Ministry of Finance, November 1989

Table 5.6: Number of teachers by grade in state and private secondary schools

Grade	State	%	Private	%
A	586	55.8	523	20.3
B	464	44.2	844	32.5
C	-	-	1226	47.3
TOTAL	1050	100	2593	100

Source: Master Plan 1991 (p.87)

5.1.5 Description of schools in their setting

The immediate surrounding neighbourhood of all urban schools is quite distinct and serves as a residential area for high-income people but as one moves further in the district, the situation changes dramatically. People living in the rural areas, in the interior of the district, are of poorer socioeconomic background. The difference is easily observed. For example, Mahatma Gandhi State Secondary School, built 15 years ago, is a large school with a present enrolment of 370 boys and 380 girls. As

one approaches the school from the main road, one finds a long alley flanked by palm trees. On the two sides of the alley leading to the actual school building are vast expanses of beautifully mown lawns. The actual school building is well spread over a fairly large area. The classrooms in this school are large, well aerated with large windows overlooking the beautiful range of mountains, vast expanses of green and well manicured gardens. As the visitor approaches the schools, he or she sees different makes of latest model cars whizzing up the main road and turning in the school drive to drop children off. School transport too is organised for students. Those who do not come by car can wait for the school bus at the different pickup points. They need not worry about getting wet or burning in the scorching sun since the school bus drops them right in front of the school building. Walking across the schoolyard, one hears students greeting and exchanging a few words with teachers in French. Some teachers too chat away in English and French but the students mostly talk to each other in Creole. Professor Bissoondoyal Private Secondary School, on the other hand, is a smaller secondary school which has been in existence for over twenty years. It has a student population of 200 boys and 180 girls. For the first few minutes of the journey from Mahatma Gandhi State Secondary School to Professor Bissoondoyal Private Secondary School, the drive is along a relatively clean stretch of road. Before actually entering the street in which the school is located, one comes across a large sugar factory. As the road leads to the rural school, the scene begins to change. Everything suddenly looks rural. One or two oxcarts carry sugarcane or cow dung; some men cycle with stacks of grass tied at the back of their bicycles. This grass is used as feed for their cows. Women moving to or from the river carry their piles of washing. The road itself is narrow with some large slabs acting as a pavement along some part of the road.

A market with its hurly burly of vegetable and fruit sellers and the morning clientele stands at the very beginning of the road. Creole and Bhojpuri are mostly spoken. Further down the road approaching the school, two textile factories belonging to the industrial group, developments of recent years, appear. A few more meters and we are at Professor Bissoondoyal Private Secondary School. The school is an 'L' shaped

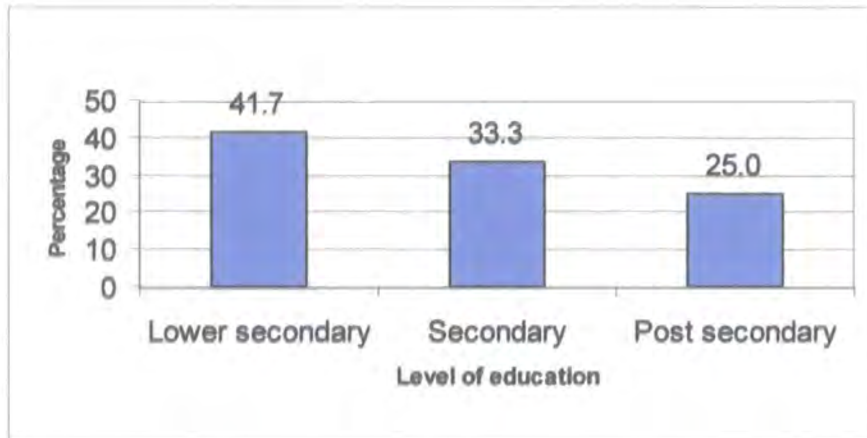
building. It looks rather drab, sections of it have grown mouldy and cry desperately for a coat of paint. Part of the 'L' shaped block is made of rusty corrugated iron sheets. The remaining part of the school block is cement. There is a volley ball pitch right in front of the school building and a patch of green on the left side of the school yard. Most of the front yard is tarred but the backyard is mostly parched earth.

The classrooms in this school are small and very poorly aerated. The roofs of some of the classrooms leak. When the weather is inclement, it gets very dark and as there is no lighting in the school, working becomes impossible. Long desks and very narrow benches with no backrest are crowded in the rather small classrooms. Each of these benches is uncomfortably occupied by three or four students. A good number of these students speak of 'coming to school simply to spend some time as there is nothing else to do' and others say 'we are coming until we fail and are made to leave'. Many of these students are resigned to their fate and accept this almost inevitable failure which the present school system ensures by demanding from the children what they do not possess. In all the other schools observed, namely Villiers Rene Government school & St Esprit College (both of which are in the urban areas), Shri Rajiv Gandhi School & Professor Basdeo Bissoondoyal College (both of which are in the rural areas), we could discern the same differential pattern in terms of the general atmosphere and setting.

5.1.6 Subjects

The subjects who took part in the study are Creole-speaking Mauritian learners of English (some of whom have Bhojpuri as an additional first language) who represent three levels of L2 proficiency, i.e. Lower Secondary, Secondary and Post Secondary. Fig 5.7 shows these divisions into the three levels of education. A representative sample of 240 subjects (130 boys, 110 girls) was selected from the above six schools and data gathered on their background characteristics such as home environment, language use, reading habits outside the classroom, and access to private tuition after school hours.

Fig 5.7 - Divisions of learners into 3 levels of education



The Lower Secondary level was represented by 100 students in Standard VI (age 10-11), which is the end of primary schooling when they take part in the Certificate of Primary Education (CPE) examinations. These subjects belong to 4 mixed (boys and girls) classes, 2 from a rural school, and the other 2 from an urban school. The rural school is named Shri Rajiv Gandhi Government Primary School situated in the East of the island in the Central Flacq district, and is composed predominantly of learners with very little exposure to English. The percentage pass of this school for 1998 was 30%. The urban school is named Villiers Réné Government Primary School which is situated in the Plaines Wilhems district, and is a high achieving school in terms of its pass rate (above 70%).

The 80 subjects selected from the secondary level also belong to 2 mixed schools, one from an urban area and the other from a rural area. The rural institution is named 'Professor Basdeo Bissoondoyal Private Secondary School', from the Central Flacq district, with a pass rate of less than 35%, whereas the urban institution is named 'Mahatma Gandhi State Secondary School ', from the Moka district, with an average pass rate of 85%. At the post secondary level, 60 subjects were selected from 2 institutions providing courses for 'A' level students. One is situated in the rural North of the island, and is named 'Modern College', from the district of Pamplemousses, and the urban college is named 'St Esprit' college from the Plaines Wilhems district.

All the learners in the urban areas are highly motivated, and ultimately aim to go to the University and are aware of the importance of English in their future academic careers. Passes in 'A' level English are required for university entrance.

5.1.7 Student composition of schools

A glance at the differential intake of the two types of schools ('star' vs 'low achieving') in our study provides evidence of the recruitment pattern of students. Although there is no overt recruitment pattern and the system is ostensibly meritocratic, one can see the extent to which the school system reflects stratification in the wider Mauritian society. The vast majority of students attending top schools such as Mahatma Gandhi State Secondary School come from middle and upper class homes whereas those accessing the schools at the bottom rungs of the school ladder are from poorer socio-economic background.

Students from urban schools come from homes which range from the discreetly comfortable in the more expensive towns and well developed villages to sumptuous houses in the exclusive areas of the country. The milieu from which students in the schools originate is strikingly different. Parents have had at least secondary qualifications and many possess tertiary qualifications. They work as doctors, engineers, teachers, and accountants. Many of these children's parents form part of the bureaucratic elite and a few are politicians. There is also a handful whose parents are not terribly well educated but they own plantation and small businesses who are determined to see their children occupy prestigious and well paid jobs after their schooling. And the children often come from the best streams of primary schools.

Students admitted to 'star' secondary schools are amongst the best performers at the C.P.E examination and come from different parts of this island. They are often referred to in educationally accepted French as 'La crème, les plus brilliants, les

meilleurs de l'île' (The cream, the most brilliant, the best of the island). Most of them have siblings either attending the same school or another 'star' school.

Rural schools have a substantially working class clientele. Parents of children attending such schools have very little schooling and work mostly as labourers, lorry drivers, masons, gardeners, factory workers. Some mothers work as maids. Some of the boys in these schools have already joined the labour market as part time workers. They work as assistant lorry drivers, apprentice hairdressers, vegetable sellers, and carpenters. On visiting a number of students in their home settings to carry out interviews with their parents, I noticed that many students of rural schools come from relatively large families and lived in rather small houses. Some houses had only two or three rooms made of brick with iron sheet roofs, the floor was rough, furnishing was sparse and in some cases the walls were often plastered with cuttings from magazines or newspapers (which are predominantly in French). A few students lived in slightly bigger houses. The buildings were stronger, and more amenities were available. But all the houses were small and basic by comparison with the houses of the students attending urban schools.

5.1.8 The home environment and academic achievement

While the unequal distribution of resources and facilities between the 'star' schools and the 'low achieving' schools (including private secondary schools) affects students' chances of getting the sort of education required for effective competition on the skilled-labour market, more fundamental is the fact that many of those who make it to secondary schools often lack competence in French, but especially English, as the key to success *(Chapter 4)*. Failure rate in English is highest in the schools frequented mostly by children from poorer socioeconomic background who have inadequate exposure to language input data. As long as education remains academically-oriented and English remains the language of the elite, children from poorer socioeconomic backgrounds are destined to lag behind in the race for jobs.

Amongst the various components of school, and which affect their performance, are their linguistic skills and the help they obtain from home.

In this section, I reported the preliminary investigation that was carried out to explore the nature and extent of interaction in various schools in Mauritius, presented the hypotheses of the main study and described the procedure for conducting the study with a view to determining the opportunities the different schools make available for language learning. In the next chapter, I shall present the qualitative and quantitative analysis of the data. This will help us to compare the schools in terms of the availability of the language learning conditions and present the main findings of the study. A rigid statistical analysis of the data might conceal rather than reveal the qualitative aspects of classroom input and the finer differences in the quality of interaction among the schools might get obscured. Accordingly, I have favoured a qualitative analysis which is based on the field notes and illustrative examples from the data. The quantitative information is made use of to develop a more comprehensive picture of the nature of the interaction in each school.

This study, recognizing the interaction of many variables in second language acquisition, has examined what has been said about the effect of age (Chapter 1) on the development of L2 proficiency. As discussed in that chapter, the Critical Period Hypothesis suggests that there is a time in human development when the brain is predisposed for success in language learning. Developmental changes in the brain, it is argued, change the nature of second language acquisition. According to this view, language learning which occurs after the end of the critical period may not be based on the innate structures believed to contribute to first language acquisition or second language acquisition in early childhood. Rather, older learners depend on more general learning abilities – the same ones they might use to learn other kinds of skills or information. It is argued that these general learning abilities are not as successful for language learning as the more specific, innate capacities which are available to the young child. The Critical Period Hypothesis has been challenged from several different points of view. Some studies of the second language development of older

and younger learners who are learning in similar circumstances have shown that, at least in the early stages of L2 acquisition, older learners are faster and more efficient than younger learners.

Of course, as we saw in Chapter 2, it is difficult to compare children and adults as second language learners. One of the difficulties in making the comparison is that the conditions for second language acquisition are often very different. Younger learners in informal L2 language learning environments usually have more time to devote to acquiring language. L2 acquisition, indeed, takes place in different settings. Generally three types of settings are distinguished: naturalistic setting, pure classroom setting and mixed and naturalistic classroom setting. Most of the studies on L2 in the classroom setting have been conducted in mixed classrooms where learners have good opportunities to use the target language by participating in natural communication situations. English learning in Mauritius can be regarded as a case of pure classroom L2 learning because English is not the language for daily communication and so learners have little or no opportunities to use it in natural communication situations. Lightbown (1987:169) claims that L2 classrooms, especially those for students receiving little or no informal contact with the language, offer a rare opportunity for studying the relationship between input and output in L2 development.

> ...Whereas the input available in "natural" second language exposure is varied and difficult to describe exhaustively, classroom exposure can be sampled, recorded, described and analyzed with a reasonable degree of adequacy. This makes it possible, at least hypothetically, to compare input (the teacher's language, the textbook, and the language used by the students in class) with the development of the second language by the students exposed to the input. (Lightbown 1987:169).

So far very few empirical studies have been conducted in a pure classroom setting where learners have no or little opportunity to use the target language outside the class. It is not clear, therefore, whether the various types of results pertaining to L2 learning obtained from the studies on naturalistic and mixed classroom learners

apply to the learners in pure classroom settings. Because of the differences in research objectives and research designs (most studies adopt experimental design), it is difficult to compare the findings among these studies and then judge how the variables under investigation are related to L2 mastery.

Chapter 3 considered how social factors influence L2 acquisition in determining the learning opportunities which individual learners experience. The learners' socio-economic class may affect the extent of the input to which they are exposed. The process of L2 acquisition can be better understood if the social dimension is included. The social context can determine extra-classroom language learning situations and opportunities for input from various sources. It is important to note, however, that the social context is not directly involved in setting specific conditions for language learning. Its effect rather is indirect, and its conditions are conditions on the development of attitudes with regard to learning and learning opportunities which influence behaviour.

The aim of this study is to investigate the issue of variation in L2 proficiency among learners coming from an acquisition-poor environment in a linguistically under-researched geographical area. The purpose of this study is indeed to seek answers to some of the questions which have been raised in the preceding chapters, namely: What factors are associated with achievement in English in Mauritius? What are the characteristics of high and low achieving schools with regard to L2 English proficiency? Are there differences in achievement among Mauritian classroom learners of English?

Since the description and analysis of language production may entail the examination of the situational factors of production, this research question is concerned with the impact of some learner-external factors on English learning in Mauritius. This is related to social milieu, the learners' learning context and target language input available to the learners. Thus the social milieu, learning context, and input are relevant to this study.

The results of previous research, referred to in chapter 2, indicate that instruction is very limited in its ability to help learners to *acquire* the structures taught. This study attempted to find out whether this holds true for Mauritian learners of English whose mother tongue (Mauritian Creole) and language learning environment might be different from the subjects of other studies. Do learners who *acquire* a given structure always exhibit learner-external factors such as social milieu, etc?

5.2 Measurement of English Proficiency

The areas to be investigated are those in which learners' achievement, as reported by Mauritian teachers of English, varies the most. They are as follows: (a) Plural Nouns (PL), (b) Adverb Placement (ADV), (c) Passivization (PAS), (d) Relativization (REL), (e) WH-Questions (WH) and (f) Present Perfect vs Past Simple Tense (TNS).

Language proficiency required for school tasks incorporates the whole range of skills of listening, reading, writing and speaking, but it is especially for school that students need to develop context-reduced and cognitively demanding aspects of language in order to function successfully in the classroom. Swain (1981:5) describes some of these aspects of language for school:

> One of the goals of the educational system is that students be able to make use of decontextualized language, that is, to be able to use language alone as a tool for learning in reading and listening; and to use language alone as a tool for conceptualising, drawing abstract generalizations, expressing complex relationships in speaking and writing.

For academic purposes in Mauritius, students are expected to acquire as complete a range of skills in the second language as possible. English in school becomes increasingly abstract as students move from one grade level to the next. It becomes the focus of every content area task, with all meaning and all demonstration of

knowledge expressed through oral and written forms of language. It would be good to know, then, after what length of time students do best in acquiring a second language for school.

Since language learning in Mauritian classrooms is done mainly through the conscious study of grammar, even at primary levels, it is worth bearing in mind that acquisition advances only through comprehensible input. From an acquisitional perspective, input does not equal intake because (in Krashen's (1991) Monitor Model, for instance) input may be disrupted by the activity of the socioaffective filter, where sociopsychological concerns – whether the learners can identify with the role(s) of the target language in their speech community – play a decisive role. The language elicitation taks (See Appendix 4 for written tasks) and exercises on the above structures will help to measure the varying levels of achievement which can then be compared with factors isolated regarding the learners' social milieu, and degree of formal education in English.

I chose these types of tests because they provide clear-cut right and wrong answers, thus avoiding endless agonising debates about whether a particular answer is correct or not. They are also very easy to mark, which is particularly important when a large number of test results are required in a short space of time. I made sure that the content of the tests were representative of the subject area being covered. A test cannot of course deal directly with every single item covered on a programme. Such a test would be impossibly long. I therefore selected items from the content of the English language curriculum which was taught. With regard to reliability of the tests, I provided clear and explicit instructions, ensured that the tests were perfectly legible, and that the conditions of administration were uniform and non-distracting. As an added safeguard, the same tests were assessed not only by me but by two of my colleagues who teach English at the University of Mauritius.

The subjects' L2 proficiency was investigated by eliciting their written and oral production at regular intervals. The written elicitation test (see Appendix 4)

consisted of six grammar-focused exercises on the above mentioned structures, namely: (a) Plural Nouns, (b) Adverb Placement, (c) Passivitization, (d) Relativization, (e) *Wh*-Movement and (f) Present Perfect vs Past Simple Tense. These tests were scored on the basis of 100 points each and administered to each group of learners after prior verification had been made with teachers as to whether these structures had been taught in class.

It has to be recognized, however, that the spoken and written forms of English, as of any other language, are different media, displaying very different standards of usage. The rules made about the written medium are frequently inapplicable to the spoken. Rules have been written, phrased as if they apply to the entirety of English grammar, whereas in fact they only apply to the written part of it. A rule, for example, tells us that the regular plural of an English noun is formed by 'adding an *s*'. But this rule does not apply in speech, where there are three distinct sounds which we regularly add to nouns to make them plural, depending on the nature of the sound a noun ends with. This is illustrated by the endings of the words 'cats', 'dogs' and 'horses', where the first sounds like an *s*, the second like a *z*, and the third like the word *is* [*iz*].

The fact that in Mauritius, as in many African societies, the written word has an authority exceeding that of the spoken form has far-reaching consequences for English language learners, particularly in a situation where native speakers of English are non-existent, even in language teaching. Thus, Mauritian speakers of English tend to reproduce characteristics of written English even in the spoken form. The oral task assigned to the subjects was therefore carried out without any inclination to test spoken English as having its own separate grammar (Carter & McCarthy 1997). The elicitation of the subjects' oral production, performed after the written tasks, was executed in the following manner. Each subject was given a picture and asked to make up five statements and one question, necessitating the use of each of the structures investigated (*e.g. I can see two boys on the picture; The Chinese New Year has recently been celebrated in Mauritius by people of Chinese origin, etc*).A sample of the pictures and materials can be found in Appendix 5. All

240 learners produced six utterances each. The percentage of correct utterances for each subject was computed in relation to their individual totals and the average for the class was calculated (see Appendix 8 and Appendix 9 for scores on written and oral tests).

Now let us turn to the grammatical structures to be investigated and look at previous studies to find out the reasons for the occurrence of deviation from Standard English forms.

5.2.1 Variable production of plural –s

Young (1988, 1991) investigated marking plural –s on English nouns in the speech of twelve adult Chinese learners who were interviewed in English twice, once by a native English speaker and the second time by a fellow Chinese speaker. Data relating to four general factors were obtained: (1) the context of the performance (in particular the extent to which each learner converged with the interviewers in terms of general social factors such as ethnicity, sex, education and occupation) (2) the subjects' proficiency in English (whether 'high' or 'low'), (3) the linguistic context (whether the plural nouns were definite or indefinite, animate or inanimate, the syntactic function of the noun phrase, and the phonological environment), and (4) redundancy in plural marking (whether plural –s was indicated by some other linguistic device such as a numeral or verb-subject agreement).

Young reports that the learners marked 65 per cent of nouns correctly for plural –s. Using the VARBRUL computerized statistical procedure, Young was able to calculate the effect that each factor had on the learners' use of plural –s. As predicted, Young found that all four general factors accounted for the variability present in the data. One of the most interesting findings was that different factors influenced the performance of low- and high-proficiency learners. Thus, for instance, the phonological environment of –s had a significant impact on variation only during the early stages of acquisition, while social convergence with an

interlocutor has a significant effect only during the later stages. Another interesting discovery was that the presence of some other marker of plurality (for example, a numeral) seemed to trigger –s. One reason for this was that the learners, particularly those of low proficiency, made frequent use of a closed set of 'measure expressions' (for example, numeral + years, days, hours, dollars). These expressions were formula-like; the nouns in them were more or less invariably marked with –s.

In general, such effects are within the bounds of Accommodation theory – how speakers adapt their speech to those they are speaking to (Giles and Smith 1979). It is not surprising that L2 learners vary their speech from one circumstance to another. The factor of variation has to be borne in mind whenever considering examples of L2 learner's language, including that of the Mauritian learner.

A contrastive analysis between the English and Mauritian Creole (MC) systems might help to explain the errors which learners make which are due to transfer from the L1. MC, which is the L1 of the learners in this study, has a typical Creole grammar (Bickerton 1981; 1986; 1988). There is evidence for MC to be regarded as a 'radical' Creole, since MC grammar contains early reconstitutions typical of Creoles invented by the first generation of Creole speakers.

Compared to the phonological component and to the lexicon, the morphological and syntactic components of Mauritian Creole reveal little interference from French (Mahadeo 1981:73). Indeed, while acknowledging the existence of decreolization (i.e. a process of change which has its origin in the transfer of features to the Creole from its lexically related Standard language) in French-related Creoles, Valdman (1973:525) argues that their grammatical structure is not significantly affected:

> ...although English creolists underestimate the degree of decreolisation that all Creole dialects in contact with French undergo, they are correct in their assertions that there exists a structural gap between the two languages and that any sample of speech can be assigned to one or the other language.

Regarding plurality, MC has a plural marker *ban* to express this concept, taken from its superstrate French noun '*bande*' meaning 'group'. Plurality, Bickerton (1988) proposes, is marked in the grammar of 'radical' Creoles:

(1)	*Zãn*	*ti*	*aste*	*ban*	*liv*	*la*
	John	TNS	buy	PLU	book	DET
	John bought the books.					

However, the tendency to overgeneralize the use of –s plural markers to mass nouns by these learners in their English is also quite common and in most cases semantically correct, i.e. although they can be seen as collective units, several individual pieces can be distinguished, e.g. with *luggages*, *furnitures*, *firewoods* or *grasses*. But it ignores the grammatical distinction of count vs. non-count nouns. Sometimes the learners conflate more or less subtle semantic differentiations in Standard English, such as between *hair-hairs*, *food-foods*, *work-works*, *people-peoples*, sometimes they merely regularise (historical) morphological Standard English irregularities, such as *childrens*, *fishes*. In Standard English, plural *–s* is not added to nouns that are considered collective or mass and thus non-count (e.g. *He had too many luggages*) nor to some historical irregular forms (e.g. *There were many fishes in the pond*), whereas this occurs frequently among Mauritian learners of English.

5.2.2 Adverb Placement

Adverb placement is another area where deviations from Standard English can be observed. As mentioned earlier, research on adverb placement (White 1991) shows that francophone learners of English incorrectly assume that English, like French, allows raising of the main verb over an adverb, leading learners to accept and produce sentences like (**John watches often television*) where the adverb intervenes between verb and object (SVAO word order). White argues that these learners have adopted the L1 parameter setting (permitting verb raising over an adverb) and that

the errors are such that negative evidence will be required to eliminate them because SVAO order is nonoccurring in English and there appears to be nothing in the input that indicates that the order is ungrammatical; in other words, learners may require negative evidence to reset parameters in certain cases.

In MC, adverbs can appear in a sentence-initial or sentence-final position (Adone 1994:26), although they cannot occur in a sentence-internal position:

(2) (ADV) NP INFL V (ADV)

These are the two possible positions for adverbs (sentential as well as adverbs of time, manner etc). Three examples (Adone 1994:26) are shown below:

(3) a *Demeñ to pu geny to siro zanana*
Tomorrow you MOD get your telling off
Tomorrow you'll get a telling off.
b *To pu geny to siro zanana demeñ*
c **To pu demeñ geny to siro zanana*

Among some Mauritian L2 English learners, some adverbs tend to come as an appendix but often without a break at the end of the clause or sentence.

(4) a *She went <u>often</u> to see them.*
b *He did not arrive in time <u>unfortunately</u>.*
c *<u>Always</u> the tank must be clean.*

Such positions as in (4)b do not seem to emphasize the adverb as is possible in Standard English.

5.2.3 Passivization

Passive structures are still another source of variable achievement among Mauritius learners of English. Mauritian Creole follows the Creole pattern, as pointed out by Bickerton (1981) who notes that Creoles do not have a morphologically marked distinction between active and passive.

(5) a	*Nu*	*fin*	*aste*	*en*	*Komputer.*
	We	ASP	buy	DET	computer
	We	have	bought	a	computer.

b	*En*	*komputer*	*fin*	*aste*	
	DET	Computer	ASP	buy	
	A	computer	has	been	bought.

In English, the passive voice is always morphologically marked by the "be" auxiliary and the "v+ed/en" past participle. When the agent is present, it appears in the "by" phrase usually placed at the end of the sentence and occasionally at the beginning.

(6) a *The house has been painted.*
   b *John was tricked by Mary.*

All sentences in active voice with transitive verbs can passivize:

(7) a *John kissed Mary.*
   b *Mary was kissed by John.*
   c *The dog is chasing the cat.*
   d *The cat is being chased by the dog.*

5.2.4 Relativization

With regard to relativisation, MC has developed a single relativizing particle *ki*. According to Bickerton, this feature is typical of Creole grammars, and it is considered to belong to the early features of radical Creoles.

(8)	*En*	*bug*	*ki*	*mo*	*papa*	*kone*	*dañ*	*travay*	*in*	*mor*
	DET	man	who	my	father	know	in	work	ASP	die

A man who my father knows at his work died.

The acquisition of relative clauses presents learners with two tasks. In the case of English, they must first learn that relative clauses can modify noun phrases that occur both before the verb (i.e. as subject of the main clause) and after the verb (i.e. as object or in a prepositional phrase):

(9) a *The man who lives next door is getting married.*

b *We met the man who lives next door.*

Second, they must learn the various functions that the relative pronoun can serve. English permits a range of functions, as shown in Table 5.7. These two tasks amount to a substantial learning burden. How do learners tackle it?

Table 5.7: Relative pronoun functions in English

Function	Example
Subject	The man who lives next door....
Direct Object	The man whom I saw ....
Indirect Object	The man to whom I gave a present....
Oblique (object of preposition)	The man about whom we spoke....
Genitive	The man whose wife had an accident....
Object of comparative	The man that I am richer than....

Studies which have investigated the acquisition of relative clauses in L2 English include those by Cook (1973), Schachter (1974), Ioup (1977), Gass (1979), Schumann (1980), Chiang (1980), Gass and Ard (1980), Hyltenstam (1984), Pavesi (1986), and Hansen-Strain and Strain (1989). The learners in these studies come from a variety of language backgrounds.

With regard to the first task, Schumann found that the five Spanish-speaking learners he investigated began by attaching a relative clause to a noun phrase that follows a verb. Often learners include a pronominal copy:

(10) *I know the man who he coming.*

in which case the relative pronoun may be functioning in a similar way to the co-ordinator 'and', joining two main clauses. Only when learners omit the pronominal copy can they be said to have acquired the use of relative clauses:

(11) *Sam's a boy who is silly.*

Relative clauses modifying the subject of the main clause appear later:

(12) *The boys who doesn't have anybody to live they take care of the dogs.*

Gass and Ard (1980) provide evidence for a different sequence of acquisition. Where the data Schumann used consisted of naturally occurring speech, their data came from a sentence joining task, which may explain the differences.

With regard to the second task, learners may begin by omitting the relative pronoun (see Schumann 1980):

(13) *I got a friend speaks Spanish.*

Next, they may use an ordinary personal pronoun:

(14) *I got a friend he speaks Spanish.*

And, finally, the relative pronoun proper is used:

(15) *I got a friend who speaks Spanish.*

The first function to be mastered is that of subject. The order of acquisition then proceeds as shown in Table 5.1. Two studies, one of L2 Swedish (Hylstenstam 1984) and the other of L2 English (Pavesi 1986), both of which used implicational scaling, could find no clear evidence for differentiating the order of acquisition of indirect object/oblique and genitive/object of comparison, however.

The retention of pronominal copies is also linked to the acquisition of the functions of the relative pronouns. Hyltenstam's study indicates that the extent to which learners retain copies is influenced by their L1. Thus, Persian learners, whose L1 permits copies, are much more likely to retain them than Finnish learners, whose L1 does not. However, all learners use at least some copies and, interestingly, are more likely to use them with the relative pronoun functions that are difficult to acquire. Hylstenstam and Pavesi provide evidence to suggest that copies disappear from learners' language in the same order as the relative pronoun functions are acquired.

5.2.5 Natural order of acquisition of Wh-questions

The next area where varying levels of L2 achievement can be observed is in the acquisition of *Wh*-questions. It is worth mentioning that in MC there is no syntactic difference between questions and statements, another typical Creole feature:

(16)	*to*	*fin*	*al*	*flak?*
	You	ASP	to	Flacq?

Did you go to Flacq?

(17)	*to*	*fin*	*al*	*flak*
	You	ASP	go	Flacq
	You went		to	Flacq.

MC does not have any subject-aux inversion in questions, as in French *(e.g. Es-tu allé à Flacq?)* and English.

Interrogation has been the subject of several studies investigating the 'natural' route of development. Drawing on the findings of Cazden, Cancino, Rosansky, and Schumann (1975), Gillis and Weber (1976), Wode (1978), Shapira (1978), and Butterworth and Hatch (1978), Ellis (1985:60-64) provides the following description of the development of the rules of interrogation in English:

1. The first productive questions are intonation questions. At this stage, there are also some *wh*-questions, but these are learnt as ready-made chunks.
2. Appearance of productive *wh*-questions. There is no subject-verb inversion to begin with, and the auxiliary verb is often omitted.
3. Inversion occurs in yes/no questions and in *wh*-questions. Inversion with *be* tends to occur before inversion with *do*.
4. Embedded questions are the last to develop. When they first appear, they have subject-verb inversion as in ordinary *wh*-questions.
5. Only later does the learner successfully differentiate the word order of ordinary and embedded *wh*-questions.

Albeit in reference to Spanish, Terrell, Gomez, and Mariscal (1980) hypothesise that learners will acquire question forms through exposure to well-formed questions in the classroom, via passive exposure to sentences of this type used in a communicative context. In English, the fact that learners sometimes do not invert in *wh*-questions when they should, and do invert embedded questions when they should

not may be due to the input. Learners will hear not only simple *wh*-questions, but also embedded questions which are correctly uninverted. Until they are able to distinguish between simple and embedded questions, this may lead them to assume that inversion is variable. In a study of the acquisition of interrogatives by six Spanish speakers, Cancino, Rosansky, and Schumann (1978) comment that no differentiation exists in their mother tongue. The same can be said for Mauritian Creole speakers since there is no difference in word order in MC between direct and embedded questions.

(18) *Ki kote to pu al etidye?*
Which side you MOD go study
Where will you study?

(19) Li fin demande ki kote to pu al etidye
He ASP ask which side you MOD go study
He asked where you will study.

This sometimes leads to errors like: "He asked me what does she like" and "she wondered where was her father". Thus, the basic word order is maintained in indirect speech and questions.

5.2.6 Complex tenses

With regard to complex tenses, namely the present perfect and past perfect, they tend to be avoided among lower proficiency Mauritian learners of English. This tendency affects mainly the sequence of tenses, which is taught in school grammars, particularly in the case of subordinate clauses in past contexts (e.g. They could have lived a happy life if they were not [had not been] told ......)

Unlike English, MC has lexical TMA (Tense, Mood and Aspect) markers. They are preverbal and are preceded by negation. This structure is well attested in many

Creole languages, and is regarded as a typical creole structure (Bickerton 1981; 1986; 1988). For example, the marker 'fin' expresses the perfective aspect.

(20) *Mo misie fin al kandos*
My husband ASP go Candos
My husband has gone to Candos.
(Adone 1994:42)

MC speakers use *fin* in talking about events which took place in the remote past (Baker 1972:108)

(21) *Nu fin pas mizer pañdañ lager*
We ASP experience poverty during war
We have experienced poverty during the war.
(Adone 1994:42)

The marker *fek* is used to express an action completed recently, usually expressed in English by the adverb 'just' and is also an aspect marker. This marker can be combined with *fin*:

(22) *Mo fin fek dir twa avoy zot fer fut.*
I ASP ASP tell you send them don't give a damn
I have just told you to send them to hell.
(Adone1994:43)

It has been consistently observed that L1 and L2 learners, in the early stages of acquiring verbal morphology, use tense-aspect markers selectively according to the inherent lexical aspect of the verb to which the tense-aspect marker is attached or with which it is associated (Andersen 1989, 1991). For example, in the L1 acquisition of English, children initially use past marking on accomplishment (e.g. build a house, write a letter, etc.) and achievement verbs (e.g. recognise, die, reach

the summit, etc) much more frequently than on activity (e.g., run, sing, play, dance, etc.) and stative verbs (e.g., see, love, hate, want, etc.), while attaching the progressive –ing to activity verbs more frequently than to accomplishment and achievement verbs. This phenomenon of limiting a tense-aspect marker to a restricted class of verbs, according to the inherent aspect of the verb, is known as the Primacy of Aspect (POA). The phenomenon of POA has also been observed in L2 acquisition studies.

To sum up, relevant aspects of MC have been described in order to address the question with reference to specific constructions and to provide a set of scores on constructions known to be variable in their acquisition in order to look at the influence of external factors.

Chapter Six
RESULTS

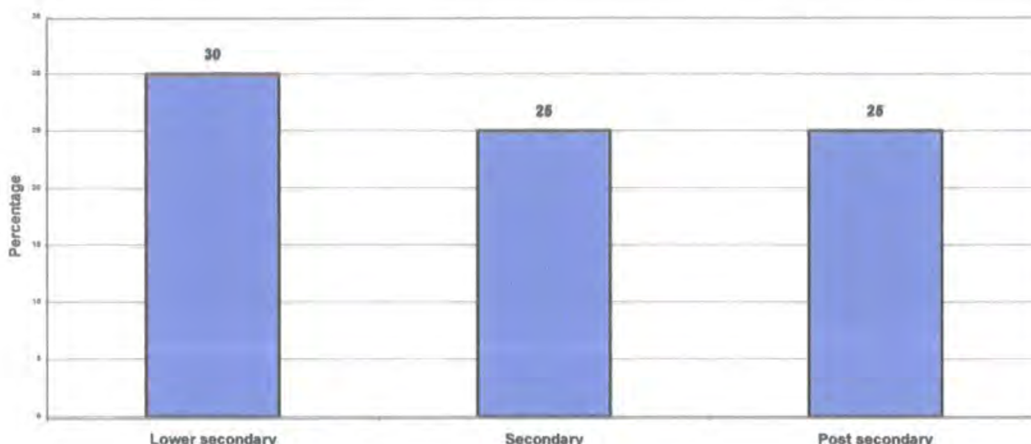
6.0 Introduction

In this chapter, I report the results of the investigation that was conducted to examine the hypotheses of this study: First I present the data on the different class settings in our sample. Following this, I discuss the main findings of the study in terms of the extent to which each class setting provides opportunities for language learning.

6.1 Classroom input

The disparities between the rural and urban schools can be illustrated by comparing transcripts from two classrooms, namely Shri Rajiv Govt Primary School and Villiers Rene Govt Primary School - the rural one making a more predominant use of Creole than the urban one with a greater input in English. Before considering the classroom interactions below, we must note that the teachers of most urban classes believe in 'English-only' as the desired norm for their classes. They assert that their professional training and common sense predispose them to favour English as the sole medium of instruction. Those who eventually concede that French and/or Creole are used in their classrooms are usually apologetic, putting the blame on the low proficiency of their students, or the linguistic demands of a particular lesson.

Table 6.1 : Percentage of class hours devoted to English per week



In any situation where English is used as a classroom language but it is not the main language of learners' home or community teachers have the multiple task of teaching (1) the English language, (2) the educational ground rules for using it in the classrooms and (3) any specific subject content. In most urban Mauritian schools, it was observed that when teachers were teaching Mathematics, for example, they commonly used question- and-answer sessions as opportunities for schooling learners in the use of appropriate 'classroom English' as well as Mathematics. For example, one primary teacher from Villiers Rene Government school commonly insisted that pupils reply to questions 'in full sentences', as shown below.

(1)	Teacher:	How many parts are left here?
	First pupil:	Seven parts.
	Teacher:	Answer fully. How many parts are there?
	Pupil:	There are....there are seven parts.
	Teacher:	How many parts are left? Sit down, my boy. You have tried. Yes.
	Second pupil:	We left with seven parts.
	Teacher:	We are left with seven parts. Say that.
	Second pupil:	We are left with seven parts.
	Teacher:	Good boy, we are left with seven parts.

We can observe, in the above sequence, that the learners needed to understand that their teacher was using these exchanges not only to evaluate their mathematical understanding, but also to test their fluency in spoken English and their ability to conform to a 'ground rule' that she enforced in her classroom _ ' answer in full sentences'. For learners in this kind of situation, the demands of classroom communication are complicated because their teacher is attempting to get them to focus on both the medium (English) and the message (Mathematics). Such dual focus is common in urban classrooms in Mauritius.

6.1.1 English language use in Mauritian schools: mixing and switching mode

The environment for learning in pre-primary schools (i.e. kindergarten), which are fee-paying, is at present supportive of the use of French or/and Creole rather than English. The socioeconomic status of pupils is the determining factor in the choice between French and Creole: all children coming from professional family backgrounds go to schools where French is the sole medium of instruction. The quality of education (defined in terms of well-trained staff and good infrastruture, etc.) provided in these schools is higher than in the schools where less priviledged children are enrolled (Tirvassen 1998). We must add, however, that this kind of sociolinguistic profiling is simplistic because a small number of low income parents, who are sufficiently interested in their children's education, do not miss the chance to admit them to schools frequented by middle class children as a deliberate effort to prepare them for formal education. In these schools, for the teacher to be able to speak French constitutes an asset valued by parents, and English is virtually never used in any pre-primary schools either in oral or written form. As far as the primary and secondary levels are concerned, the strategies of communication, as stated above, vary from teacher to teacher. The following combinations have been encountered in language use in these schools (Tirvassen 1998): (1) a three-language formula (i.e., English, French and Creole); (2) a two-language formula (i.e., Creole and French or English and French or English and Creole); and (3) a one-language formula (i.e., either English or French). There are

classes which are entirely conducted in Creole, but such situations were not encountered either during Tirvassen's research work or in my study. The study carried out by Tirvassen, a Mauritian linguist, focused on issues of language, education and development, and he was particularly interested in English language policy in the Mauritian education system.

On the basis of Tirvassen's observations, teachers in Mauritius have adopted a style of mixing and switching between Creole or French and English and students do not obtain sufficient exposure to reasonably proficient English inside the classroom where it is supposed to be the medium of instruction. In circumstances where English is used as a classroom language but where the pupils' first language is not English, a teacher may codeswitch to the first language if problems of comprehension arise. Sometimes the mother tongue may be used only for asides, for control purposes or to make personal comments (Mercer 1995). However, when codeswitching amounts to the teacher translating the curriculum content being taught, its use as an explanatory teaching strategy is somewhat controversial. On the one hand, there are those who argue that it is a sensible, common-sense response by a teacher to the specific kind of teaching and learning situation. Thus in studying its use in English-medium classrooms in China, Lin (1988: 78) explains a teacher's use of translation as follows:

The teacher was anxious that her students might not understand the point clearly; she therefore sought to ensure thorough comprehension through presenting the message again in Cantonese which is the students' dominant language.

Researchers on bilingual codeswitching have, however, concluded that it is of dubious value as a teaching strategy if one of the aims is to improve students' competence in English. Thus Jacobson (1990: 6) comments:

The translation into the child's vernacular of everything that is being taught may prevent him/her from ever developing the kind of English language proficiency that must be one of the objectives of a sound bilingual programme.

The following example (quoted from Tirvassen 1999: 10) illustrates code-switching in a mathematics class from a Mauritian Primary school:

(2) Teacher: Regarde ène coup ça travail là ... Il y a fifteen ... Il y a three là ... quand nous pour reduce to lowest term Ça devient three to one ... alors combien women will join the committee ... qui chiffre ça bizin vini là pour nous capave gagne three to one ? (*Have a look at this work ... We have fifteen here ... We have three there ...when we reduce to its lowest term, it becomes three to one ...so how many women will join the committee ... what figure will this become to obtain three to one*?)
(pupils do not answer)

(3) Teacher: Ça vinn one ... après là-bas qui mo trouvé ? Par qui mo coupé là-bas pour qui fifteen vinne three ? (*It becomes one ...and what do I find there ? By what figure do I divide fifteen to have three?)*
Pupil: by five.

From the above extract, it can be assumed that teachers resort to Creole to make themselves clearly understood. Such a strategy of communication illustrates the difficulty of Mauritian teachers to observe the official educational policy on the use of English as a medium of communication. Tirvassen concludes that teachers regard the use of English -at least in Primary schools – as incompatible with the sociolinguistic characteristics of Mauritian learners.

Since the acquisition of interactional skill,i.e., the ability to encode and decode meaning, to initiate and respond in accordance with conversational rules, is a necessary part of learning how to communicate in English - as in any language, for that matter - and the acquisition of this skill comes through experience of actual interaction in that language, it is presumed that active participation in interaction would enable learners to internalise this skill. Interaction would also facilitate second language learning processes by providing learners with opportunities for diverse language experiences and with opportunities to practise language. However, in Mauritian rural schools, opportunities of this kind which could result in a great deal of language being 'picked up' do not exist with restricted input in English, whereas in the urban schools, it is the total school environment and the

school culture which leads to a higher success rate in language learning because English is used to a greater extent as a medium of instruction.

6.1.2 Current use of English in Mauritian schools

In my study of language use in Mauritian classrooms, I observed four content area teachers (i.e., Mathematics, Environmental Studies, Economics and Principles of Accounts) in four schools (two Standard VI primary schools consisting of 40 pupils each aged 11 to 12 years and two Form IV secondary schools consisting of 35 pupils each aged 15 years from both rural and urban areas), and found wide variation in the proportions of English to Creole or/and French and mix that were used among schools, among teachers and even among lessons taught by the same teachers. Even in the so-called 'star' schools with the most able and best-motivated students (as determined by their end of year performance), teachers used on average no more than 50% English, while in the schools catering to less able and less motivated students, the percentage of English used was often less than 10% of teacher-talk. In one recorded lesson at primary level, the only English used was "Good morning, class" at the beginning and "Goodbye, class" at the end. Teachers who were interviewed in this study felt that their approach was appropriate and inevitable given the low levels of English proficiency of their students and the amount of content to be covered in their subject areas.

Tirvassen's finding was replicated by me in this study. In the following Mathematics class from a Form I secondary school in an urban area, I observed the teacher switching from English to Mix (i.e. mixing between English and Creole), and to Creole.

(4) Teacher: Now, 6x plus 2x is ...8x. minus 4, minus 7. All right? Nou capav simplify li? *(Can we simplify it?)* No? Yes? Kisanla dire "yes"? *(Who says "yes"?)* Kisanla? (Who's that?) ...Ki? (What?) Comment pu simplifie li? (*How do we simplify*?)

In lessons dominated by the teacher talking, Creole and Mix predominate. In lessons involving texts, textbooks, blackboard work, students' written exercises and so on, the teacher switched between the English of the text and Creole or French for explanation and elaboration. In many cases the switch in medium can be seen to be acting as a cue, directing attention to the textbook when the teacher switches to English and back to the teacher with a switch to Creole, the students' eyes moving up and down in unison.

Creole or/and French is used for classroom control and organisation and for interpersonal interaction between teacher and class, as the next example illustrates. This Standard VI teacher from another Primary school used English quite extensively, but felt that the kind of personalised tongue-lashing handed out here was only possible, or likely to be effective, in Creole. The teacher was moving around the class checking, in English, that homework had been done.

(5) Teacher: How about you? Oh? To pa fin fer, eh, Gopal. Kumsa to pares. Ek toi? Zot deux ki fer zot pa fin fer? Zot fin blier? Kuman li posib ki zot fin blier fer devoir ? Ki ? zot deux, ki zot krwar zot pe fer ? *(Oh ? You haven't done it, eh, Gopal. So lazy. And you? You two why? What? Forgotten? How can that be? Eh? Is there such a thing as forgetting to do homework? What? You two, what do you think you're doing?)*

Interaction in English, when it occurs, tends to minimise the language required of the students, consisting of attention-getting or attention-focusing rhetorical questions or statements, or questions requiring yes/no or either/or answers. These are provided in chorus by the class as a whole. Another standard questioning technique involves gap-filling (e.g., *Computers are complex machines that can carry out tasks ...... than human beings.*) The teacher creates gapped contexts for which the student provides the deleted element (which, in the above example, is *faster*). Teacher/student interaction therefore rarely requires from the students more than a one-word or single-phrase answer. Where more is demanded, it normally results in silence until the teacher reformulates the question into a more manageable

form. Extended answers tend to occur only where the student is able to report a prepared answer or read from the textbook or blackboard.

The teaching of each subject is generally based on or around a textbook designed to meet the requirements of the syllabus and the public examinations. In the lower forms of secondary schools, the tendency has been to simplify: reducing the vocabulary load, reducing discourse to simple statements of fact and relying on pictures, charts, tables and so on to assist the readers' understanding. At higher levels, teachers often prepare handouts in note form and students also purchase sets of revision materials for examinations (e.g., model essays, guides on literature texts, etc.), some of which are also prepared in note form. It then becomes the teachers' responsibility to extend, illustrate and qualify, which they do in Creole or/and French rather than in English. Texts are not translated; they are essentially pretaught so that by the time students come to read the texts for themselves the more able students at least are sufficiently familiar with the content to be able to deal with them.

Under these circumstances and under pressure to complete syllabuses heavily loaded with facts, it is easy to sympathise with the teachers' view that they could not do their jobs without resorting to Creole or/and French and Mix, and to understand why students prefer, and even demand, that they do so. The weakest students entering Form I (i.e., Year one of secondary schooling) are unable to read even the most elementary of extensive readers (Tirvassen 1999). They can identify some individual words, but beyond that they are essentially illiterate in English, despite 6 years of learning the language as a subject and 'medium' at primary level. The reading techniques of the weaker students at this and later stages can best be described as lexically-based translation. They identify the French equivalent of the content words in a text, and then (often falsely) construct a meaning around them. These students have so little grasp of the contexts of the words that the French characters identified are often inappropriate (e.g., Eng '*assist*'– Fren '*assister*'; Eng

'journey'– Fren *'journee'*; Eng *'sensible'* – Fren *'sensible'*), and the meanings constructed may be very different from the original.

Coming to a lesson taught in English as a subject, the following is a transcript from a Standard VI classroom from a 'successful' school in the urban area (most of its students gain admission to the elite 'star' colleges). In the excerpt, X represents the teacher; Y represents a student. (All students in this class are eleven-year-old Creole and French speakers).

(6) X OK, we finished the book – we finished in the book Unit 1, 2, 3. Finished Workbook 1,2, 3. So today we're going to start with Unit 4. Don't take your books yet, don't take your books. In 1, 2, 3 we worked in what tense? What tense did we work on? OK?

Y Past tense
X In the Past tense – which past tense?
Y Simple Past tense
X We're going to work in the Present Perfect – OK? You know what it is?
Y Yes
X Have
X Yes? What auxiliary in the Present Perfect?

Y Have

X What does that mean, Present Perfect? You don't know? OK, fine. What have you eaten for breakfast, Jean?
Y Bread and cheese
X Oh! You have eaten bread and cheese.
Y I have eaten bread and cheese for breakfast.

As the above exercise shows, the teacher, not being a native or near-native speaker, who has not himself mastered the use of English, has tried to focus on form (i.e. grammar) with the purpose of giving some practice in the Present Perfect. However, the use of the Present Perfect (*'have eaten'*) is inappropriate, and his focus turns out to be on the use of the auxiliary (*'have'*) rather than the tense. From a lexical point of view, his request to students not to "take" their books is a direct translation from French *"prendre"*. Since the lessons were taught (though badly) in the target language, it can be argued that this, in itself, provides comprehensible input for acquisition, although it is not the study of grammar that is responsible for

the students' progress, but the medium (Krashen 1982: 120). Most Mauritian teachers' competence in English is relatively low and not very flexible, because many are still insufficiently trained. Thus, in order to convey their subject matter, some take refuge in Creole or/ and French, and those who do use English in the classroom venture upon a special English 'interlanguage' to bridge the gap between the subject's language requirements and the students' language competence. Unfortunately, the students are exposed to this English interlanguage more often than to a reasonably native-speaker English. Many forms that are considered incorrect in Standard English and in the textbooks become fossilized for students and impede development towards higher proficiency. It can even be concluded that using this type of English as a medium of instruction is not necessarily an advantage in acquiring English.

Mauritian students, like teachers, vary in the amount of English, Creole and French they use, but any attempt to maintain the use of English beyond the minimal requirements of text-related, teacher-student interaction is rare outside the English-language classroom. Neither teachers nor students see the need to do so, and the advantages of Creole or/and French in ease of expression and freedom to explore ideas are all too evident. Attempts to maintain English are rarely sustained because teachers and students see themselves faced with short-term problems in communication that need to be solved at that moment, and long-term gains that could be achieved by maintaining English are sacrificed.

When students are required to write, they rely heavily on copying from textbooks, or notes provided by the teacher or copied from the blackboard, and on stringing together memorised holophrases, or even complete sentences. Memorisation of key phrases and summary statements is an important survival strategy in this context, not as a substitute for understanding (which may already have been established through Creole) but as an aid in expressing through English what has been understood.

Extended to summary writing (in English language as well as other subjects), survival strategies include ignoring subordinate or embedded material and copying down main clauses. These survival strategies are often taught, or at least not discouraged, by teachers faced with a heavy load of marking. With writing, problem-solving skills are no substitute for control of the grammatical system of the target language.

The following is an extreme, but unfortunately not rare, example of the kind of writing that can result when extended writing rather than single-word or multiple-choice answers are required and the student has no model to use or source from which to copy. In this case the student, who is in Form V coming from a rural secondary college, has been learning English, like all Mauritian boys and girls, as a subject, and using English as the 'medium' of instruction for more than 11 years.

> (7) *Separation the mixable from water the water is upper. We take some cold surface make the gas condenses change to water.*

The teacher's comment was that the student appeared to understand the scientific content but had difficulty in expressing it.

When students are required to write, usually at sentence level but sometimes beyond, the Mauritian teacher or examiner tends to look for evidence that the student knows the answer and to ignore accuracy or style of presentation (as the teacher did in the previous example). Content teachers do not place emphasis on productive language, accuracy and presentation skills. Besides, the students' additional powers of expression gain them few if any marks in examinable subjects like chemistry, accounts, geography. Although it is easy to criticise teachers and examiners who tolerate or even promote these practices, any alternative approach would appear to require changes to the curriculum and to teacher training.

On the other hand, lot of codeswitching was used by the teachers. Sometimes, the first language (i.e. Creole) was used only for asides, for control purposes or to

make personal comments. Thus, Creole was used to prepare the students for the lesson (by giving them necessary directions regarding the arrangement of the chairs/room, for example) and English for instruction. Students in these classes learn to recognize that the opening remarks are not part of the lesson, and 'tune in' only when the language changes to English. The utterance in Creole functions to break the ice and establish rapport with the students for the instruction to follow.

The following is an instance of this function:

(8) Teacher: *Tourne page 40 pu leçon jordi. Arrange zot sez dan en cercle. Après ça, pa faire tapage. Fer li vite.*
(Turn to page 40 for today's lesson. Arrange your chairs into a circle. Without making any noise. Do it quickly.)

However, very often in the rural areas, codeswitching amounts to the teacher translating the curriculum content being taught, the following sequence involves the teacher explaining a Mathematics lesson in Creole.

(9) Teacher: *Si zot pas ti ena graph, zot ti ena sa table la. Zot pa conne. Si ti ena deux 14, qui ti pou arrive. Parce qui ena de pu vin 4 ici; si ti ena 0, ti pou 2.*
(If no graph is possible, you can see this table. Don't you know? If you had two 14, what would happen? Since you have 2 here, it will become 4. If you have 0, it will be 2 over there.)

Researchers of bilingual codeswitching have concluded that it is of dubious value as a teaching strategy if one of the aims of the teaching is to improve students' competence in English Jacobson (1990: 6) comments that the translation into the child's vernacular of everything that is being taught may prevent him or her from ever developing the kind of English language proficiency that must be one of the objectives of a sound programme in the teaching of English.

More interaction in English takes place in the urban schools, and this is illustrated by the observation of the different attitudes of the teacher toward encouraging talk among the learners. In Shri Rajiv Gandhi Primary Government school, situated in a

rural area, I found an example of a structural lesson in which the teacher's focus of attention was on the teaching of certain language structures such as "It is a ....", "He is/She is ......", "This/That is ....", "This is a .... and that is a ....". The chief strategy for teaching adopted by the teacher seems to be to model a certain structure, ask learners questions in order to elicit the same structure with/without variations and to drill the structure by getting learners to repeat it. Occasionally she gives or gets pupils to recall the rule related to the use of the articles 'a' and 'an'.

In this class, the teacher plays the dominating role - she decides on what language structures are to be used in the class, how and by whom they are to be used and she conducts drills based on the pre-selected language items. The teacher uses or creates classroom situations and also uses pictures in the textbook to exemplify words and structures as in the following extracts:

(10) Teacher: Who is sitting in front of you?
Pupil: Pallavi.
Teacher: Who?
Teacher: No. Pallavi is beside you. Who is in front of you?
Pupil: Malini.
Teacher: Dolly is sitting in front of you, isn't it?
Teacher: ...... Now, what is this in the first picture - what, what is this?
Pupil: This is a man.
Teacher: This is a ....?
Pupil: Man.
Teacher: O.k.

While comprehensibility of teacher talk seems to be ensured to some extent through the use of classroom situations and pictures, they are used only for the sake of exemplifying language forms and structures and not to convey any real information which is meaningful to the pupils. Further, as we can see in the following extract, the pictures are not really described and used as a stimulus for language use - they are only used to enable pupils to participate in a drill in which they employ the appropriate word in the sentence slot. Only once does the teacher refer to or describe details in the textbook picture:

(11) Teacher: .....Number 15 - Who is he?
Pupil: He is a man.
Teacher: He is a teacher. Can you see him, he's carrying some ..... with books .
Pupil: He is a teacher.

This extract suggests that even here the teacher describes the details in the picture only to enable pupils to see the difference between one picture and another, so that they use the correct word in the sentence slot. In fact, the teacher's chief focus of attention in this class is on language. Because of the emphasis on the teaching of language, the teacher hardly ever uses language to convey 'real' information. Instead, the purposes of her talk seem to be merely to model language structures, to elicit language structures from the pupils, to conduct language drills, to correct the pupils' wrong use of structures etc.

The pupils' role in the class appears to be an extremely passive one. They seem to have no right to initiate talk. She decides who is to answer next and even what the pupil is to say. Answering out of turn immediately fetches a rebuke ("*Don't answer out of turn*"). It seems then that the pupils are expected to follow the teacher's lead and to talk only if and when the teacher wants them to do so.

I observed an English-related activity class (which consisted in essay writing and reading it aloud in class) in Villiers Rene Primary school in the urban area, where the teacher's main emphasis, on the whole, was on attaching a great deal of importance to getting the pupils to initiate talk, to ask questions, to express their reactions etc. The discourse patterns are close to those of everyday life with questions being followed by counter-questions, with directives and responses to directives being followed by acknowledgements or comments. The teacher's focus in this class is on getting the pupils to perform the particular task rather than on getting them to display knowledge of facts or language structures. Language is thus used by the teacher as a means to an end and relates to a variety of communicative purposes which make it purposeful and meaningful. In this class, the pupils are engaged in their task while the teacher gives instructions and explains the processes involved as she walks around each group. During the process, a great deal of verbal

as well as non-verbal interaction takes place. In fact, during my observations, I noted that a great deal of interaction was occurring simultaneously in different corners of the classroom and this, apparently, the tape-recorder had not picked up. The teacher's role in the class appears to be primarily a managerial one - to establish the intended activity and to give a series of instructions. The teacher's questions relate to the personal likes and dislikes of the pupils as in the following exchange on the essay topic "How to bake a cake":

(12) T: How many of you like cake?
P: Only one girl said she doesn't eat ......
P: I don't eat egg.
T: What kind of cake does your mother make?
P: Plain cake only.

The teacher thus engages learners in genuine communicative activities.The teacher never corrects language forms although occasionally she reformulates a pupil's incorrect utterance.

(13) P: Ma'am, we sprinkle flour not to sticken, isn't it?
T: Yes, to avoid sticking to the vessel.

Because of the group arrangement in the class (groups of pupils working around tables placed all around the room) and because the teacher moves from group to group, the teacher addresses pupils in groups or as individuals more often than she addresses them as a whole class. Thus, although the teacher in this class does direct the activity, she does not exercise complete control over the discourse. Pupils have the right to initiate talk, to ask questions, to express their reactions etc. In fact, there is a more equal distribution of discourse rights in this class than in the rural classes. As a result of this sharing of discourse rights, the pupils' share of the discourse is not only quantitatively different but also qualitatively different with far greater freedom for pupils to express their own meanings, to choose what they want to say and how they want to say it, and to engage in spontaneous interaction with the teacher and peers. For language learning to take place, learners need to be exposed

to language input data which is available in large quantities. The highest amount of verbal interaction occurred in the urban schools, whereas the least amount of interaction occurred in the rural areas. Classroom input has been quantified in terms of varying levels of exposure to English, '1' for no exposure at all, '2' for barely, '3' for moderately enough, and '4' for much exposure available (see Appendix 7). The input scores needed to be correlated with the achievement scores of all 240 learners from the 6 schools at all 3 levels of schooling, so I carried out written and oral tests to determine this.

6.2 Different linguistic capital for different folks

As stated in Chapter 3, although Creole is not officially recognized, it is the language most widely spoken, irrespective of socioeconomic grouping. Talking to the students indicated the usage of a combination of languages for some, and just one or two for others. All students said they spoke Creole at home, and many of those going to the rural schools spoke a combination of Creole and Bhojpuri. Although Creole is the predominant language, students whose parents had secondary or tertiary education said they sometimes spoke either French or English or a combination of both. This was not the case among students from rural areas.

Home background and the school attended were indications of students' ability or inability to express themselves in English or French. Students' ability to do so could in fact be assessed during the interviews themselves. The findings of this study indicate that the conditions for language learning are not available in the rural schools to the same extent as in the urban schools. We recognise that the complexity of interaction in actual ongoing classes can hardly be captured in its entirety through any type of analysis. However, the claim is made that we have been successful in capturing the differences relevant to our hypotheses. While we also recognise that a variety of approaches to the same problem are possible and indeed, desirable, this study has served to demonstrate that research within classroom settings is an extremely useful mode of investigation. The next section,

which explains students' views about encouragement to study and availability of help with their homework, also illustrates the different linguistic capital of the different students.

The lack of 'linguistic capital' amongst children from disadvantaged homes in the rural areas is compounded by the fact that very few teachers make use of English to interact with students inside and outside the classroom. Language used by teachers outside the classroom indicated the importance they attached to providing the opportunities for learning and practice of English. The findings from the questionnaires designed for the teachers working in all six rural and urban schools (see Table 7.1) are illustrative. I obtained a hundred responses from all teachers-30 English teacher respondents from the six schools, i.e, 10 male graduates, 5 male non-graduates, 12 female graduates and 3 female non-graduates (i.e. holders of Higher School Cambridge Certificate); 70 teachers of specialist subjects, i.e 23 male graduates, 18 male non-graduates and 29 female teachers, of whom 21 were graduates and 8 non-graduates.

Table 6.2: Language used by teachers at school outside the classroom

	Rural	Urban	No. Of Respondents	% Of Respondents
English	2	19	21	21
French	5	44	49	49
Creole	25	4	29	29
Bhojpuri	1	0	1	1
Any other	0	0	0	0

In general, 21% of the teachers use English to interact with students outside the classroom compared to 49% who use French. 29% of the teachers use Creole to interact with students outside the classroom and 1% use Bhojpuri to speak with their students in informal situations.

Before actually responding to my questions, some students (see below for details on age and school) expressed their fear about the need to use English or French. They were quickly reassured that Creole could be used. (My translations in brackets) Saleem (17 yrs), Jean Paul (16 yrs), Sangeeta (16 yrs) and Devi (17 yrs) are students at Modern College, a low-achieving rural institution. Here are some of their views about speaking English:

(14) Saleem: *Anglais la li trop difficile, mo gagne peur pou cause li*
(English is too hard, I feel scared to speak it.)

Jean Paul: *Mo la voix tremble si mo bisin dire kik chose dans anglais.*
(My voice trembles if I have to say something in English.)

Sangeeta: *Parfois mo seye, mo seye mem, mo banne mot la pas vini.*
(Sometimes I try, I try very hard, but the words simply do not come.)

Devi: *Enan foi, mo trouve le zotte dimoune cause anglais ou francais, mo envie cause, mo pa capav, apres mo per dimoune rie moi.*
(There are times when I hear people speak English or French, I have the desire to do so as well but I just can't do it. Moreover, I am scared that people would laugh at me.)

In contrast with students at rural schools, most students at urban schools had no fear or hesitation to express themselves in either English or French. Speaking about encouragement they receive from parents to study, here are some extracts of what they had to say:

(15) Jyoti (16 yrs;Mahatma Gandhi State School): '*My success so far is due to my home. My parents are very interested in what I do and if I need*

help with my homework, they are always there. They are 'always' telling me that being educated is very important in life. What they say incites me to work harder and give the best of myself. They "always" want me to pass my exams with "flying colours".'

Iqbal (15 yrs;Mahatma Gandhi State School): *'Throughout all my years at school, I am influenced and controlled by my parents. My parents "always" say without education, one is an outcast in society. My performance during exams is mostly due to my parents' encouragement. My parents often sit till late in the night when I study. If they did not encourage me, I would not be successful.'*

Denis prefers to express himself in French than in English.

(16) Denis (16 yrs; St Esprit College): *'Mon père est professeur de mathématiques, il veut que je sois premier en mathématiques. Je pense qu'il veut me voir premier en toutes les matières. Il m'aide beaucoup en mathématiques. Je prends des leçons dans d 'autres sujets.'*

(My dad is a maths teacher, and he wants me to be first in Maths. I think he wants me to be first in all subjects. He helps me mostly with Maths, in the other subjects I take private tuition.)

Shalini (15 yrs; Mahatma Gandhi State School): *'My eldest sister is really good at Chemistry. I don't need to take tuition in Chemistry, she helps me with that. My mother can help me with my essays but what I really like, she sits in my room doing her sewing while I study at night'.*

Nafiza (16 yrs; Mahatma Gandhi Sate School): *'My father is very strict. He does not allow us to watch television on school days except for the news. He often checks my copybooks. He is "always" telling me that I've to study hard. My mother sits with me while I revise, and this motivates me to study till late in the night, especially when exams are close.'*

Azagee, like Denis, prefers French.

(17) Azagee (16 yrs; St Esprit College): *'Pour mes parents, avoir un certificat et un bon travail est très important. Leur façon de penser m'a beaucoup influencé. Je suis déterminé à bien faire aux examens.'*

(For my parents, having good qualifications and a good job is very important. Their way of thinking has also influenced me. That is why I am determined to pass my exams with "flying colours").

Such academic help from parents and/or siblings does not arise in rural schools. Many parents from these areas are illiterate, and siblings have had little schooling. Often, the siblings form part of the great number of failures that the system churns out every year.

Vikash and Ramesh also attend Mahatma Gandhi State Secondary School but their situation is different to Iqbal, Denis, Shalini, Jyoti and many others. Vikash and Ramesh consider themselves lucky to have gained admission to such a school. Vikash's and Ramesh's parents have had little schooling and cannot help them with their school work. Vikash and Ramesh speak of their good performance at primary school and how their teachers pushed them to work hard.

(18) Vikash (15 Yrs; Mahatma Gandhi State School): *'My parents can't help me because they can't understand most of the things I do at school. I know I've to work hard. And my tuition teachers help. There is a lot of competition in this school and pupils are clever – it's not like the schools where I live.*

Vikash lives in a village where there are few schools like Professor Basdeo Bissoondoyal Private Secondary School. He thinks if he had gone to such a school, there would have been no future for him. Vikash, unlike many students at Mahatma Gandhi State Secondary School, finds it somewhat hard to express himself in English. Vikash's speech is interspersed with Creole.

(19) Vikash: *Labas si ou bete ou vinn pli bete.*
(In such schools, if you are dumb you become more dumb.)

Reverting to English, Vikash carries on:

Vikash: *But here whether parents help you or not, encourage you to study or not, you are forced to study hard.*

Vikash lapses back to Creole.

Vikash: *Ici enan boucou competition, tou zenfan for ou pas envie pou passe pou pli bete.*
(At this school, there is a lot of competition, all the students do well and one does not want to be seen as more dumb than the others.)

Ramesh holds more or less similar views as Vikash. Ramesh speaks of the school as motivating him to work hard. Ramesh too does not get help at home. His mother had very little schooling and his father is dead. Ramesh shows no inclination to express himself in English or French; he uses Creole all the time. He admits finding both languages very hard. Ramesh's attitudes to these languages reflect his home background.

For Vikash and Ramesh, there is no such support from the home but being at Mahatma Gandhi State Secondary School and having to compete with the most able students act as motivating factors. According to Vikash and Ramesh, it is the school which motivates them to work hard. Their parents simply know that they have to study. Parents become aware that competitions in such schools are fierce and students have to work hard. In Vikash's and Ramesh's case, it is the 'star' school that they attend which sends the message home.

Students at Professor Basdeo Bissoondoyal Private Secondary School lack the home support. Also there is no competition here but there is a small A stream which tells students that they have a chance to make it. They are the ones that teachers attempt 'to save', the ones that teachers at this school reserve their energies for.

Saleem is in the A stream. Saleem tells us that English is hard and that he feels scared to speak it. His teachers think that he can make it if his English improves.

Saleem is in Form Five, there is not much time left for him to improve but he is trying hard. In spite of being in the A stream and being 'average' in subjects like Mathematics, Human and Social Biology and Accounts, Saleem may end up being a failure and never finding a good job.

(20) Saleem (17 yrs; Modern Colllege): *mo parents conne mo feb dan anglais, mo pren lecon, zot encourage moi, mo say lir plis liv parceki professer dir li important pou mo vocabilaire, mais mo pas tro content lir.*
(My parents know I am weak in English, I take tuition, they encourage me; I try to read more books. My teachers say that reading may help my vocabulary but I do not like reading very much.)

Jean-Paul is in the 'C' stream. He is the one whose voice trembles if he has to say something in English or French.

(21) Jean Paul (16 yrs; Modern College): *Mo parents desir trouve moi gagne ene certificat. Zotte content trouve moi pass mo form cinq mais mo pas sir si mo pou capav passe.*
(My parents' desire is to see me have a certificate. They say they wish to see me pass S.C. but I am not sure to pass.)

Devi (17 yrs; Modern College): *Mo papa, mama envoy moi lekol zotte fer boucou sacrifice, zotte travail boucou, zotte envie mo passe mo l'examen.*
(Both my father and mother send me to school, they work very hard and sacrifice themselves a lot, they wish me to pass my exams.)

Madevi (17 yrs; Modern College): *Mo mama pas envie mo vine lekol, li oule mo reste lacaze pou donne li coude main, tou le tem li dir moi fer louvraz, mo pa enen le tem fer devoir.*
(My mother does not want me to come to school, she wants me to stay at home and help her. She is always asking me)

Many of the students at Professor Basdeo Bissoondoyal Private Secondary School regard encouragement to study as parents' desire to send them to school and their desire to see them pass their exams. The elements necessary to help students pass their exams do not exist, but the wish to see them pass is there. This wish is often

unfulfilled. For some the notion that '*paren travail dir, fer sacrifice*' (parents work hard and sacrifice a lot.) is seen as a form of encouragement. For others there is no encouragement as such, parents want them to stay at home instead and help with the household work, like in Madevi's case for instance. As opposed to rural school students, most students at urban schools see encouragement to study from parents being translated in practical terms. Parents sit up late in night keeping them company when they have a lot of work or when examinations are close.

They speak of 'always' being told to study hard. Education being important is drummed into them. Most of them have parents who can provide some form of academic help. There are very few students who are like Vikash and Ramesh at Mahatma Gandhi State Secondary School. It should also be noted that these few are very deprived linguistically. Vikash's English was constantly interspersed with Creole and Ramesh preferred to stick to Creole all the time.

Parents play an active role by modelling attitudes conducive to successful language learning. A number of studies have found a positive relationship between parental encouragement and achievement in L2 learning (for example, Burstall 1975). In this study, the findings of the questionnaire designed for parents (see Table 5.1) indicate that in the urban areas, the children are exposed to a greater amount of input in English and French, while the children in the rural areas are deprived of opportunities to interact in these languages. 85% of the urban children take private tuition in English, while only 20% of the rural children benefit from tuition after school hours.

6.2.1 Private tuition

The extent to which inequality is structured in Mauritian education is also highlighted by the phenomenon of private tuition which is entrenched within the system. Whilst all students attending Mahatma Gandhi State Secondary School had taken tuition at primary school especially in the last two years of primary school, many of those at Professor Bissoondoyal Private school did not. This confirms

what the University of Mauritius study (1989) has found concerning the tendency for better off families to take more tuition than students from poor families.

The motivation and reasons for private tuitions differ greatly amongst parents belonging to different socioeconomic groups. Many of the poorer and more uneducated parents state sending their children for private tuition because:

(22) Devi's father: *Devi dire bocou zeleve dans so classe prend lecon, li oussi li bizin pren lecon, alors mo fer ene ti sacrifice, mo envoye li.*
(Devi tells me that many students in her class take tuition and that she too needs to take tuition, so I do a little bit of sacrifice and I send her for tuition.)

Some other parents speak of their children as being weak and that they may pass their exams. They send them for private tuition in order to improve their performance. Competition is not an issue amongst the parents of this school. None of them speak of either competition or teachers not working hard enough at school. The latter two are the major reasons advanced by the more educated parents and better off parents.

(23) Jyoti's father: *Lecon inn vin ene business pou bann professeurs, ene facon pou vin riche, professeurs travail minimum dans lekol; nou oblige envoy zenfan pren lecon et etan done enan gran competition, lecon vin ene must.*
(Private tuition has become a flourishing business for teachers, it is a means to become rich, teachers work to the minimum at school; we are forced to send our children for tuition and the fact that there is so much competition, tuition becomes a must.)

(24) Vikash's mother: *Zordi jour, si ou pas envoye ou zenfan pren lecon, professeur neglige zotte, professeur la bisin casse, si ou fer pren lecon tou correct.*
(These days if you do not send your children for private tuition, the teachers neglect them in class. Teachers want extra money; if you make children take tuition, then everything is all right.)

Denis' father spoke in English during the interview.

(25) Denis' father: *I coach Denis in mathematics but I've to send him for tuition for in other subjects. He has very good teachers but they do not work half as hard at school as they do in tuition.*

(26) Jacques' mother: *Jacques a chaque foi pe double, line double so sixieme, li pe double form quatre, li un pe feb, mo oblige fer li pren lecon.*
(Jacques is often repeating his classes; he had to repeat standard six at primary school and now he is repeating form four. He is somewhat weak, I am forced to send him for private tuition.)

(27) Krishan's father: *Mo envoy li pren lecon, kit foi sa capav aide li gagne ene ti certifica.*
(I send him for private tuition. That can perhaps help him to get a small certificate.)

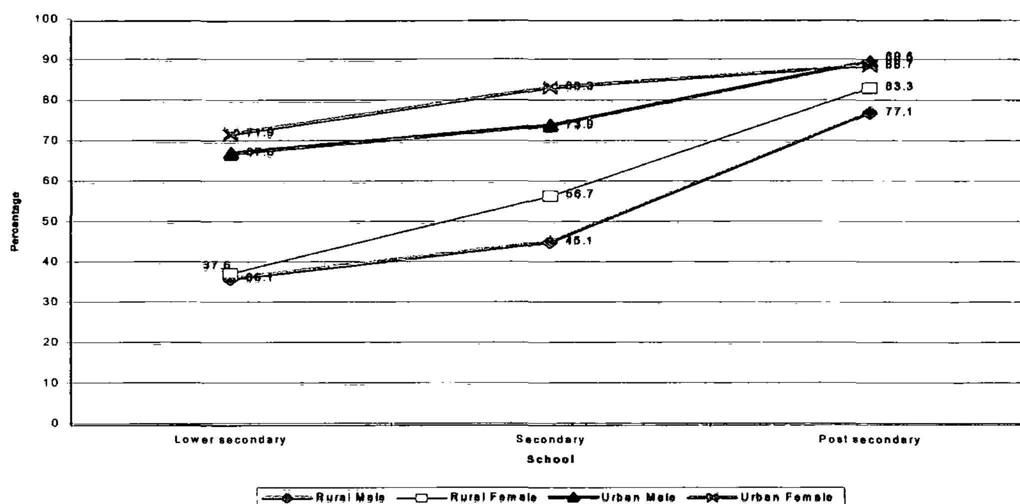
Many of the rural subjects' parents talk about their children as being weak, as not having the potential and place some hope in private tuition to enhance their performance. These parents have been made to believe that private tuition can act as a reinforcement and help their children to make the grade. There is a strong ideology of ability prevailing but the notion of competition prevails only at the level of the better off and more educated parents. Children from different socioeconomic backgrounds possess differentiated cultural capital. Their academic performance is largely affected by their linguistic capital.

Extra classroom input has been quantified in terms of varying levels of exposure to English, '1' for no exposure at all, '2' for barely, '3' for moderately enough and '4' for much exposure available (see Appendix 6).

6.3 Results: presentation and discussion

The overall results for both written elicitation tests and the oral structures by level of education and gender are presented in Figure 6.3. The mean composite scores range from 36.1% to 675 for the Lower Secondary male rural and urban learners, from 37.6% to 71.9% for their female counterparts, from 45.1% to 73.9% for the Secondary male learners, from 56.7% to 83.3% for their female counterparts, from 77.1% to 88.7% for Post Secondary male learners (i.e. St. Esprit college and Modern College), from 83.3% to 89.6% for their female counterparts.

Fig 6.3 : Total achievement scores by level of education and gender



At post-secondary level, the scores look quite close to each other, and this can be attributed to the number of years of exposure to English. The achievement scores are presented separately for written and oral tasks in Figures 6.4. & 6.5. Learners from the urban areas, as expected, achieved higher scores than those from the rural areas, and more significant results are noted for the girls than for the boys.

Fig 6.4: Written achievement scores by level of education and gender

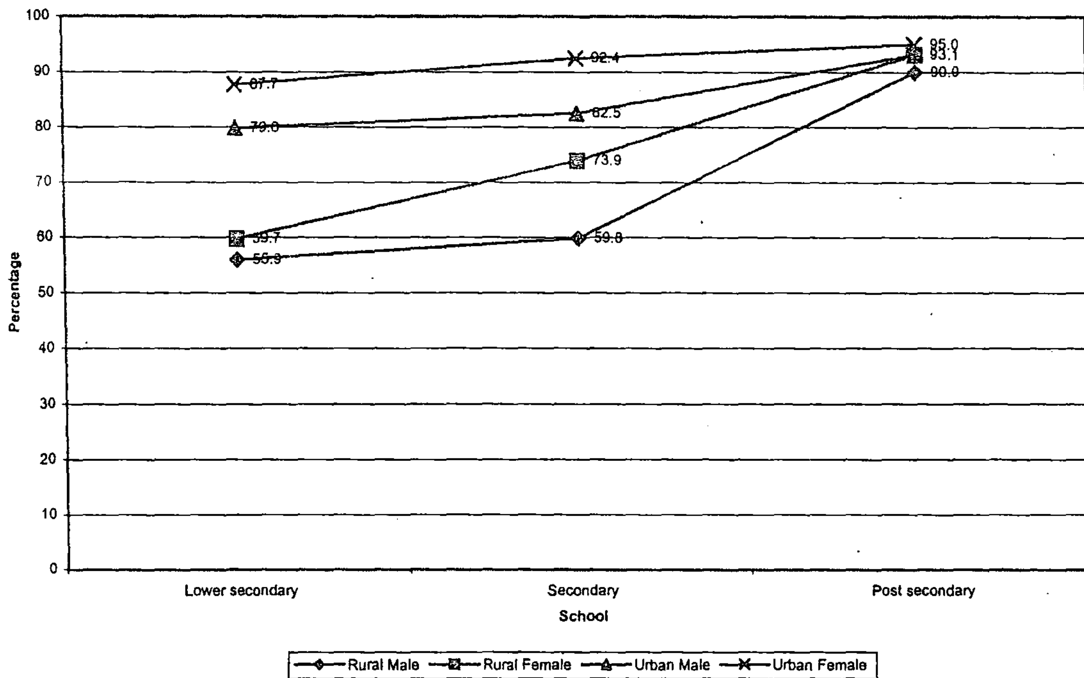
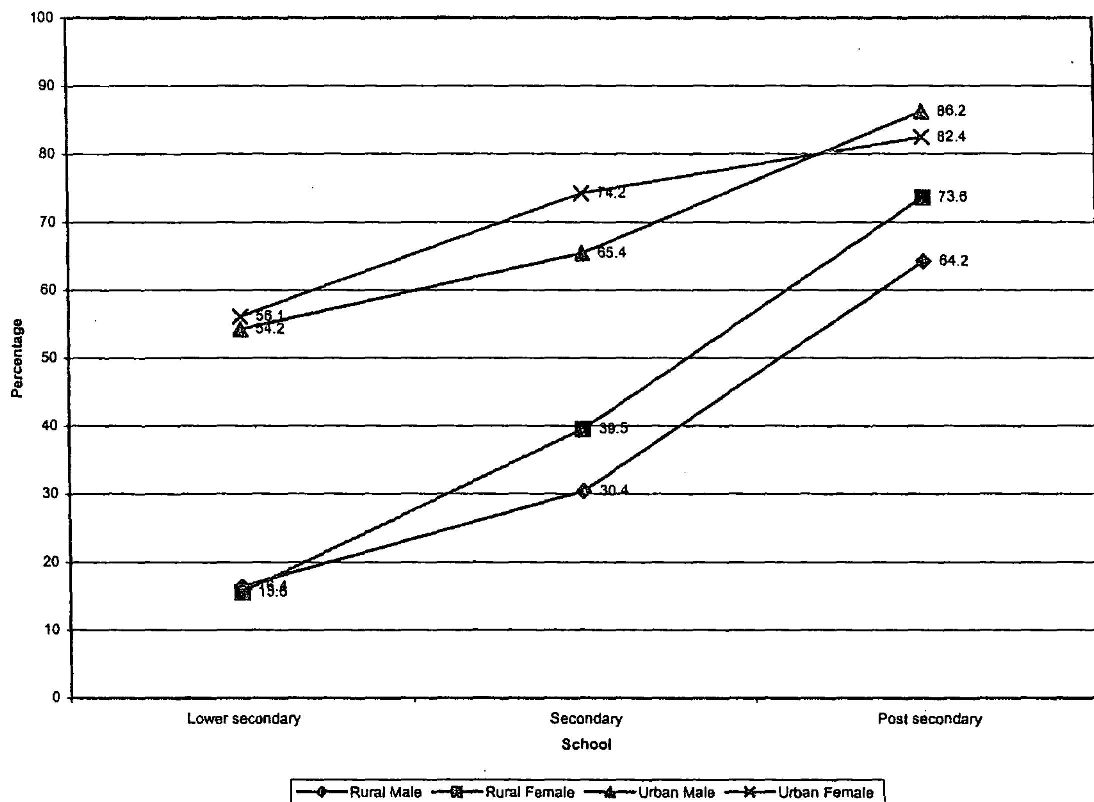


Fig 6.5 Oral achievement scores by level of education and gender



6.3.1 Scores by level of education and gender

Figures 6.6 & 6.7 show the mean score (%) on each written and oral structure for the Lower Secondary learners by region and gender. The rural male learners' achievement scores varied from 40.7% in *Wh*-movement task to 72.1% in PL task, while the female achievement scores varied from 42% in the former task to 73% in the latter task. As for the urban male learners' achievement scores, they varied from 72.4% in *Wh*-movement task to 91.45 in PL task, while the urban female learners'scores ranged from 76.8% in the former task to 94.8% in the latter task. The same pattern of performance can be observed with regard to the oral achievement scores of the Lower secondary learners (Fig 6.7). In both written and oral structures, the learners proved to be more proficient at some grammatical structures e.g. plural morphemes than others e.g. passivization, relativization and Wh-questions. It is clearly essential to establish whether the learning that results from instruction persists, and also what factors determine whether it does or not. Few definite conclusions are yet available but there is sufficient evidence to show that learners acquire at least some of the grammatical structures they have been taught.

Fig 6.6: Written achievement scores of lower secondary learners by region and gender

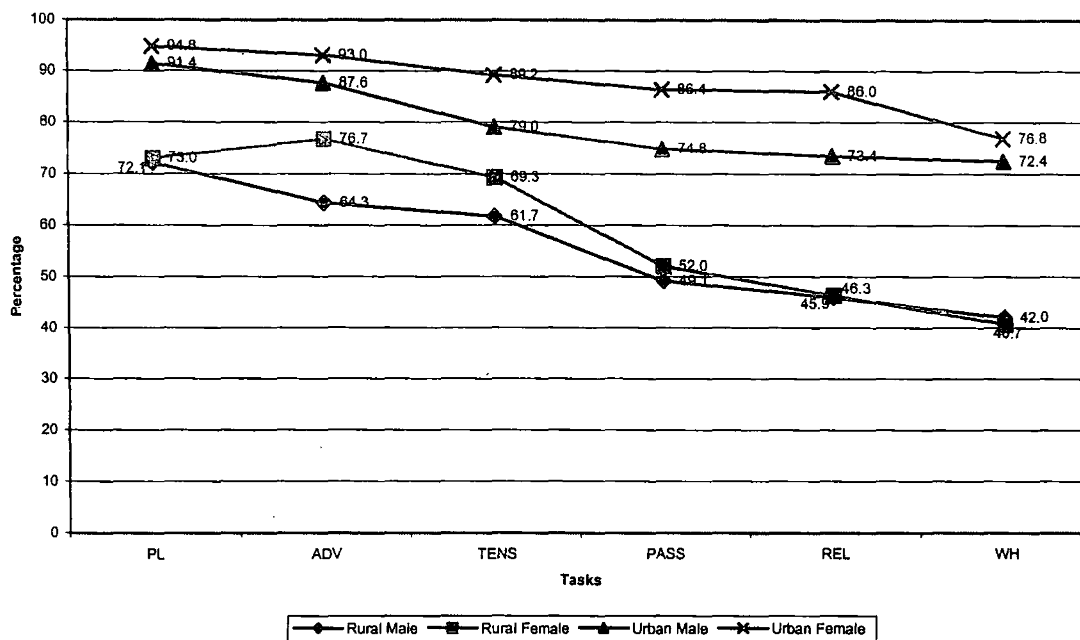


Fig 6.7: Oral achievement scores of lower secondary learners by region and gender

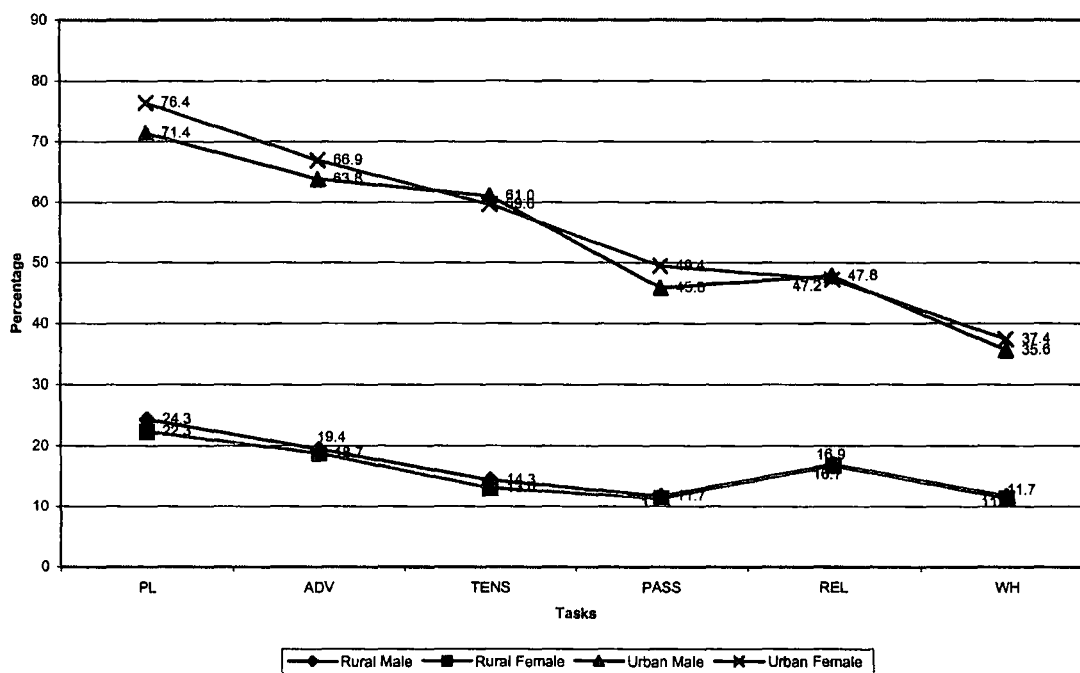


Fig 6.8 & 6.9 look at the written and oral achievement scores of Secondary learners by region and gender. It will be noted that learners from the urban schools made fewer errors in every single structure than those from the rural schools. Once again, the performance of the female learners surpasses that of the males. It is likely that school exposure and extra-school exposure/use available in the urban areas must have impinged on achievement. The urban learners are also exposed to French inside and outside the classroom, and their language proficiency in French is better developed than learners from the rural areas. It may be then, that the French language has sufficiently matured to serve as a source of transferable skills for the former whereas the learning task is very burdensome for the latter as their L1 skills are not available for transfer.

Fig 6.8 Written achievement scores of secondary learners by region and gender

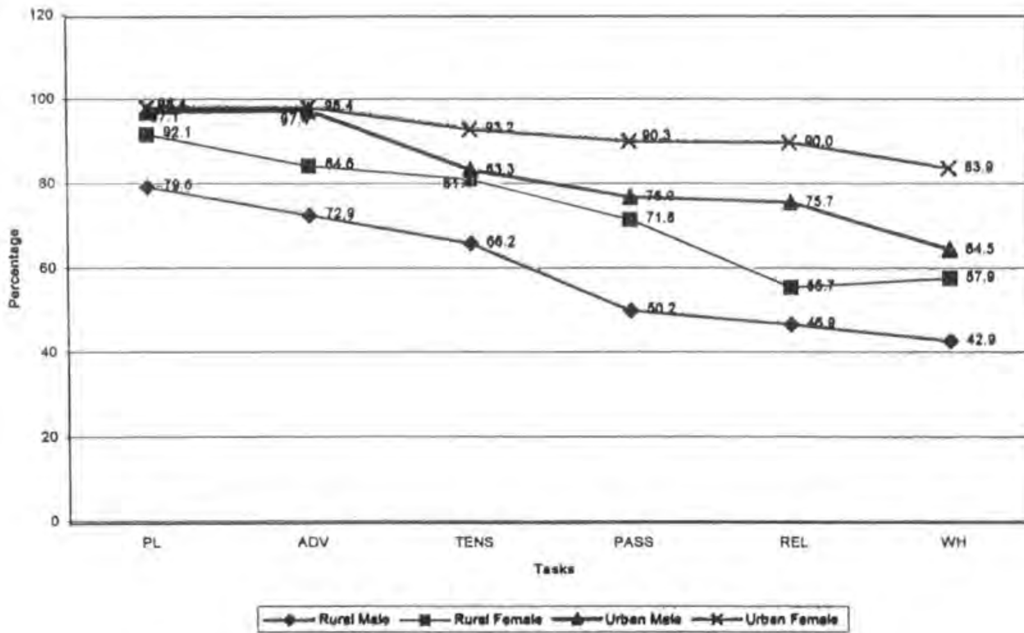


Fig 6.9 Oral achievement scores of secondary learners by region and gender

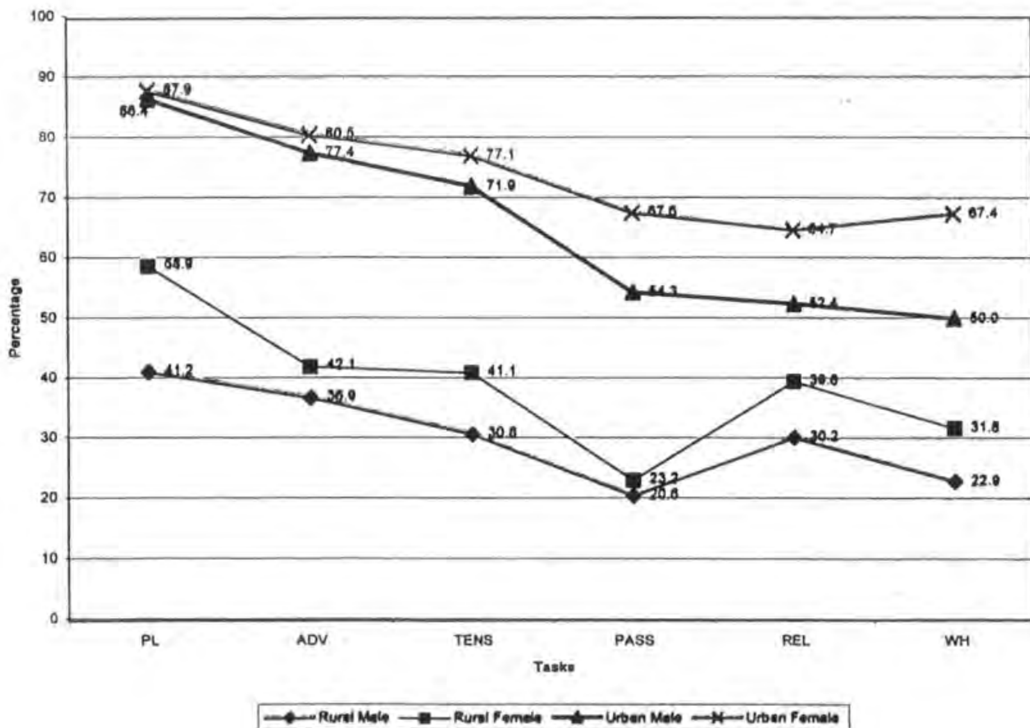


Fig 7 & 7.1 look at the written and oral achievement scores of Post Secondary learners by region and gender. They show an improvement in written and oral structures over the years. Does age affect the development of language proficiency for school? Based on this study, we can assert older students are faster, more efficient acquirers of school language than younger students. It reinforces the argument (Burstall 1975, Cummins 1981) that older learners have an advantage in cognitive maturity, which gives them more strategies for acquiring a new language.

Fig 7: Written achievement scores of post secondary learners by region and gender

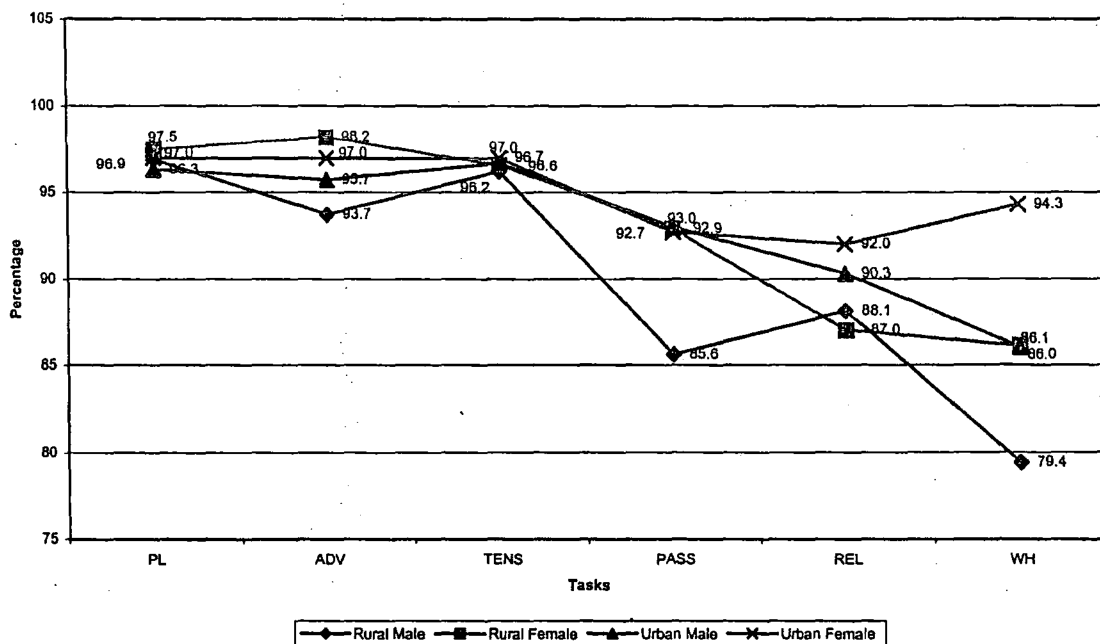
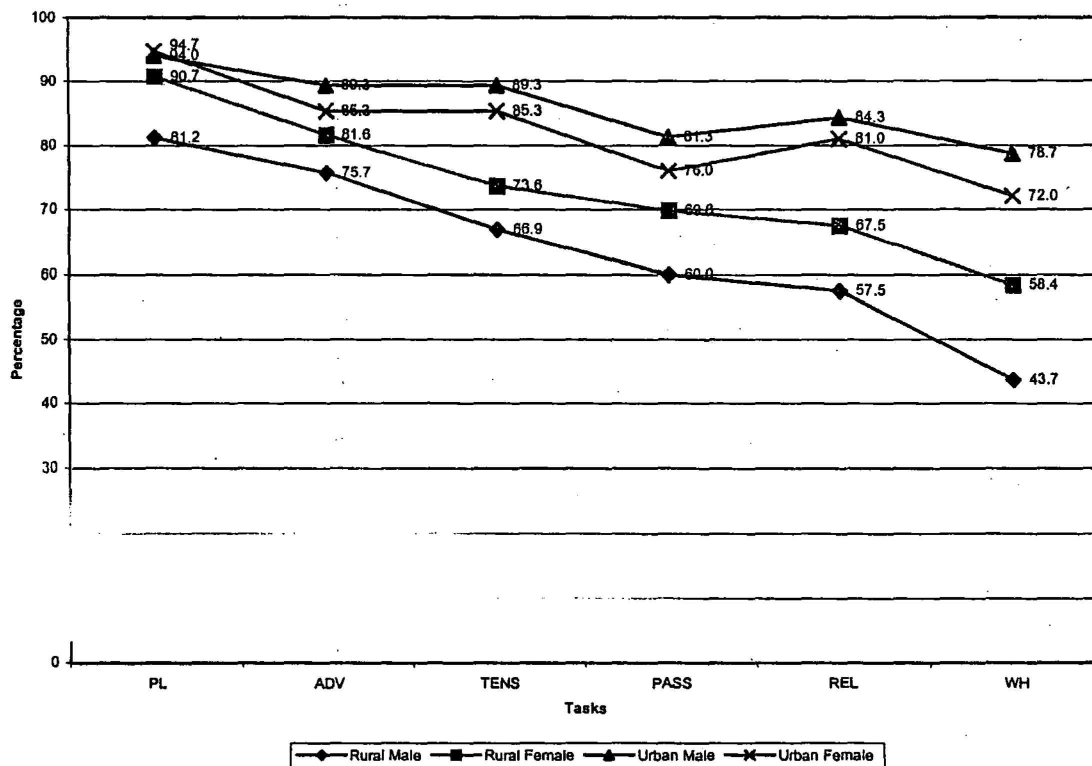


Fig 7.l: Oral achievement scores of post secondary learners by region and gender



6.3.3 Findings

The main hypothesis of the study was that the conditions prevailing in the urban classes are more conducive to language learning than the conditions available in the rural classes. My description of the language learning conditions enabled me to divide this hypothesis as follows:

(i) The urban classes provide greater exposure to language input than do the rural classes.

(ii) The urban classes provide learners with more opportunities to use language than do the rural classes.

(iii) The achievement scores of the urban learners are higher than those of the rural learners.

My analysis of the classroom interaction revealed that in the urban classes in my sample, large quantities of input were indeed available. On the other hand, in the rural classes, the amount of interaction was limited in quantity and the language input in these classes lacked communicative purpose since the focus was nearly always on demonstrating/practising language for its own sake and all exchange of information taking place between the teacher and the learners involved considerable amount of code-switching.

The analysis led to the conclusion that the conditions for language learning in the urban classes, in terms of the nature of the input to which the learners are exposed, the nature of the opportunities available are more conducive to language learning than those available in the rural classes.

CHAPTER SEVEN

CONCLUSION

7.0 Introduction

The aim of the present investigation was to characterise and compare the extent to which different classes provide differential opportunities for language learning. The basic assumption underlying the investigation was that differences in setting lead to different kinds of classroom interaction. As a result of these differences in the nature and extent of interaction, different kinds of classroom conditions are created and thus differential opportunities for language learning are made available. The central concern of this study was, therefore, to find out to what extent and in what ways the nature of the classroom and extra-classroom interaction differs in the rural and urban classes, and the extent and nature of the differences in the conditions for language learning that become available as a result of these differences in the nature of the interaction inside and outside these classes.

7.1 The Implications of the study

The method of investigation employed in this study was observation and analysis of classroom and extra-classroom interaction data. The emphasis was not mainly on establishing the language learning outcomes, but on investigating what actually happens in the 'black box' of the classroom (Long 1983) and on exploring the nature of the interaction generated in different classroom settings in terms of the extent to which they provide a suitable context for language learning.

In fact, researchers have increasingly turned their attention to the use of language in the classroom and a great deal of importance is assigned to the context or environment in which second languages are learnt (e.g. Savignon 1983). This has created a need to gain insights into the processes by which classroom interaction provides the necessary content for

language acquisition and makes available certain opportunities for language learning to take place (Ellis 1984; Allwright 1983).

The theoretical underpinnings that supported this investigation were derived from the premise that certain environmental conditions are necessary for language learning to take place. The assumption on which this study was based is that differences in setting generate different patterns of classroom interaction and thus create differential opportunities for language learning. The findings of the study suggest that the urban classes rather than the rural classes make available the necessary conditions for language learning.

Our investigation led to the conclusion that the interaction in and outside the urban classes is more conducive to language learning than that generated in the rural classes. The study thus enables teachers and course designers to see which types of interaction provide optimal opportunities for language learning.

The role of the teacher in an approach in which a deliberate attempt is made to create the kind of interaction which is conducive to language learning becomes very significant. For the teacher in such an approach would be required to keep in view the learners' needs and interests and to be willing to give learners to interact freely and spontaneously in the target language. The teacher should create genuine communication in the class, allow information exchange to take place in English, ensure that the activities in which pupils participate are meaningful and interesting.

7.2 The effect of social setting in the development of L2 proficiency

The study investigated if learners from different backgrounds reached varying levels of proficiency in English while undergoing pressures of the same academic course entailing varying amounts of learning input. The difference between the settings was that the education was experienced within milieux that differed in exposure to English outside the classroom. The study supports the assumption that higher ability learners seem to have benefited from exposure to more input in their social milieu. Where under-achievement exists, the reason is lack of exposure to English outside class. Failure or below average

performance is attributed to learners having insufficiently developed English language competence to cope with the curriculum.

Social psychologists hold that not only must the linguistic factors for acquisition be present and be accessible, but that the social environment requires to be favourable so that the learners allow the linguistic factors to work. For interaction to take place, there have to be interlocutors. So language learning has an immediate social aspect: the learners have to use the second language to talk to others. How far they do so depends on the opportunity they have for interaction, the attitude they have towards the second language and its users, and their need to use the second language. Language proficiency depends on the contact that is possible between the learner and members of the target language community, and the exposure to and scope for interaction the learner has with the users of the second language. For d'Anglejan (1978), one of the causes for failure to acquire an L2 is often the lack of contact with target language speakers available to the learner due to restricted social interaction. The classroom cannot provide the same social stimulus and pressure as a realistic context and the learner should be directed to or placed in communication situations with well-disposed natives.

People such as Krashen (1981) propose that passive exposure to linguistic input that is comprehensible is the main variable necessary for language learning. Others such as Long (1981, 1983) claim that rather than input per se, it is the input accessed through active interaction and negotiation which causes learning. Still others like the Canadian researchers Harley and Swain (1984) hold that it is only when there is an opportunity to use the language received through the input as output in production, that actual linguistic proficiency can be attained. Harley and Swain (1984) agree that the "comprehensible input" of Krashen is certainly a necessary factor but they do not consider it to be sufficient by itself for grammatical development and productive control of the language by the learner. For them too, the process of language learning begins with exposure to "comprehensible input" but this by itself is not sufficient for acquiring target-like proficiency. In addition to comprehensibility of input, mastery of the language requires the learners to be involved in productive activities which would lead them to use the forms for "comprehensible output" in meaningful situations. According to Swain (1985), the linguistic elements that one receives

through the analysis necessary for comprehension of the meaning of language are reorganised through a syntactic processing into the intended meaning only when one wants to produce it in output. Whereas comprehension of the language input can take place simply by attending to the meaning of words, production can focus the learners' attention on the formal features of the language, and can make one notice the syntactic item. In her study, Swain (1985) finds that the comprehension of meaning precedes the comprehension of the form, and contends that the necessity for producing the language as output may be the trigger that forces learners to pay attention to the syntactic means necessary for expression of the speaker's intended meaning.

Children from urban settings come to school with the experience of language (i.e. French in the Mauritian context) used in literacy in various contexts away from the immediate context, at a more context-reduced or 'decontextualised' end of a continuum that can represent the two contrasting types of language use. But the Mauritians from rural settings are acquainted only with the expressiveness of interpersonal language used within the context at a 'context-embedded' end of the continuum of language use. To perform well academically, Mauritians have to learn to use the 'decontextualised' variety of English. They have to learn to express relationship between ideas through extended use of the second language in situations far removed from context. Through the 'context-embedded' or interpersonal language use they are familiar with, education needs to develop in them the extended analyticity of 'decontextualisation' ability.

Mauritian learners of English need to master expressions to convey an increasing level of abstraction of ideas through extended utterances and appropriate words. The language production system that is geared mainly to interpersonal conversation has to be converted to operate with decreasing support of the context in order to be able to function by itself for academic expression. However, the social status of Mauritian learners affects the children's scope for exposure to 'decontextualised' English. They do not have access to an environment where they can meet people who can give them exposure to the use of such academic language.

It should be noted that the poor performance of children in rural schools cannot be ascribed to any sort of cognitive or logical incapacity. It is simply that a more formal style of language is in normal use in school than that to which they are accustomed outside school (although the exact characteristics of the two styles have only been hinted at in writings about the restricted and elaborated codes). This more formal style is accepted as the socially correct style in all the formal situations of society of which school is generally one. Moreover, reading and writing are almost always in this formal style.

7.3 Some limitations of the study

Though this study covers some general aspects of L2 learning examined in the literature, it was not possible to include all the variables investigated in previous research, given the differences in research purpose, research question and research methodology. Therefore some limitations have to be set in order to sharpen the research objectives of the present study. One type of study on the cognitive processes of L2 learning examines the stages involved in the process of assimilating target input in the L2 system. This variable is not considered in this study because its investigation is beyond the scope of the present study.

The level of English proficiency and the level of education in Mauritian schools is necessarily connected. Pertaining to the individual learner differences and other cognitive abilities, it is usually the case that the more intelligent or cognitively capable the subjects are, the better the subjects can perform an academic task. Since the learners in the advanced group (i.e the secondary and post-secondary learners) have gone through the highly selective process in the Mauritian educational system, it is reasonable to assume that, as a group, they are cognitively more capable than those of the lower levels. So, the observed difference among the three levels in the experiment could be the result of divergence in cognitive ability. To control this factor, the low intermediate and the high intermediate learners have been chosen from schools which have a high rate of students who go to key institutions of higher education. However, total control of this factor is impossible. There is always a risk of error due to individual differences among the subjects. Therefore, for the cognitive aspects of L2 learning, the study investigates only learning and communication strategies.

Personality, which includes a number of different personal traits, is one of the factors under the general aspect 'individual differences'. This variable is excluded from the study first, because many of the concepts under the term 'personality' are ambiguous and hard to operationalize; and second,

from previous empirical studies, it appears that the personality variable is related only to second language achievement in general terms, and even such a relationship is not conclusive. The aptitude variable is also excluded from this study because the concept is also difficult to operationalize.

7.4 What are some of the future directions for L2 research in contexts similar to Mauritius?

The fact that the language classroom is specifically designed for the purpose of facilitating language learning should constitute sufficient justification for studying what goes on there. Despite the opportunity for studying L2 learning through classroom research, and despite the growing attention the L2 acquisition field is receiving, there is still comparatively little research that is actually carried out in language classrooms. More research is needed that focuses on what does or does not take place in the language classroom. The existence, and indeed persistence, of this state of ignorance may seem surprising given the frequency with which attempts are made to import insights into the L2 classrooms from research conducted outside the classroom. The most pressing need at the moment is for contextualized research, that is, research that is carried out in real classrooms, not in simulated environments that are constituted for the purposes, not of teaching and learning, but of research. In addition, research is needed in areas that broaden the agenda away from a rather narrow focus on input as defined by one particular tradition of SLA research. Much current research is couched within a tradition that assumes that learning and acquisition take place in a social vacuum; and there is, in consequence, the need for counterbalancing research that takes cognizance of social variables and their effects on the language that learners use and learn.

APPENDIX 1

Index Number

....

MAURITIUS EXAMINATIONS SYNDICATE

The Certificate of Primary Education Examination
October 2000

ENGLISH

(Subject Code No. 110)

Time: 1 hour 45 minutes

SECTION A

Question 1 (20 marks)

For each item circle the letter which shows the correct answer.

Example:

The head teacher rang the bell .... it was time to go home.

(A)	when	**C**	while
B	nearly	**D**	soon

---

1. This pen belongs to my sister. It's ....

A	mine	**C**	her
B	hers	**D**	me

2. I was invited .... Simon's birthday party.

A	on	**C**	in
B	to	**D**	by

3. Reena felt proud because she had done the work by ....

A	himself	**C**	itself
B	themselves	**D**	herself

4. Azad is competing .... the 100 metre race.

A	with	**C**	in
B	to	**D**	by

5. "What are you doing?"
"I .... a letter."

A	writing	**C**	wrote
B	was writing	**D**	am writing

6. .... father promised that he would buy her a present.

A Him

B Her

C He

D Hers

7. "Dad, can you .... time to take me to Caudan Waterfront?"

A find

B give

C lose

D do

8. "............... teasing your friends," said the teacher to Kenny.

A Stopped

B Stopping

C Stops

D Stop

9. The cakes are delicious. I think I'll have ....

A any

B every

C another

D other

10. The tourists are very happy here, ... ?

A they are

B were they

C aren't they

D weren't they

11. The rain was .... that the whole village was flooded.

A so heavy

B too heavy

C not very heavy

D not very enough

12. We are all waiting. Be as .... as possible.

A quickly

B quicker

C quick

D quickest

13. If you have a problem, Nikita .... you, won't she?

A is helping

B will help

C helped

D helps

14. The job of the .... is to keep law and order in the country.

A electrician

C musician

B policeman D teacher

15. "Will he enjoy this kind of food?"

"I think ...."

A no B so

B either D neither

16. "............ Idea was it to go swimming?

"It was Sheila's."

A Which C What

B Whose D Who

17. Ashley has .... been here before. Please take him around.

A never C quite

B ever D nearly

18. When Lola went fishing she .... a huge fish.

A catches C is catching

B will catch D caught

19. The meeting was .... because of the cyclone.

A called out C called off

B called upon D called at

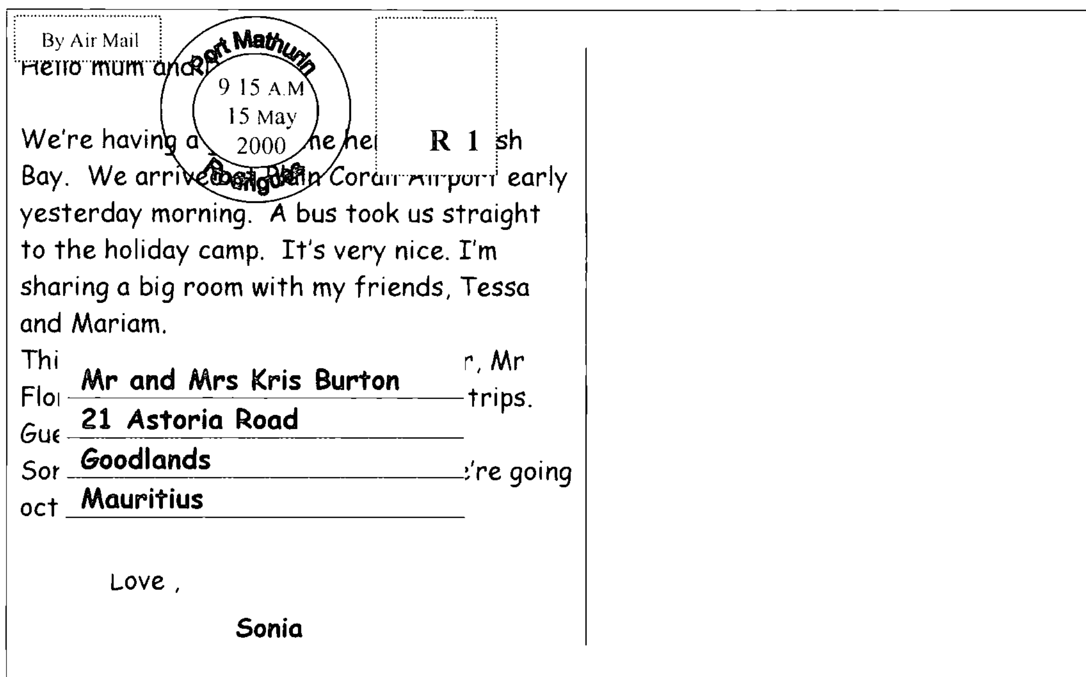
20. The man who saved my life was very brave ....

A only C enough

B indeed D quite

Question 2A (10 Marks)

Read this postcard. Sonia sent it to her parents in Mauritius.


By Air Mail

Hello mum and

We're having a ... he ... sh
Bay. We arrived ... Coran Airport early
yesterday morning. A bus took us straight
to the holiday camp. It's very nice. I'm
sharing a big room with my friends, Tessa
and Mariam.
Thi ... r, Mr
Flo ... trips.
Gue
Sor ... 're going
oct

Love ,

Sonia

Port Mathurin
9 15 A.M
15 May
2000

R 1

Mr and Mrs Kris Burton
21 Astoria Road
Goodlands
Mauritius

Now briefly answer questions 1 to 9.

1. What is Sonia's family name?

   ....

2. Where was the card posted?

   ....

3. On what date was the card posted?

   ....

4. How much does it cost to send the card?

   ....

5. How did Sonia get to the camp from the airport?

   ....

6. Where is the holiday camp in Rodrigues?

....

7. With whom Sonia is sharing a room?

....

8. Who is the camp leader?

....

9. What is Sonia especially looking forward to ?

....

10. **Circle the letter which shows the correct answer.**

The last sentence "I just can't wait!" tells us that Sonia is ....

A sad

B excited

C angry

D disappointed

Question 2B (20 marks)

Read the following passage and then answer questions 1 to 10 on pages 9 to 10.

Mr and Mrs Moorad live in Petite Rivière and work at the Solo Knitwear Factory. They are the proud winners of the Star Prize for the best employees. Their prize is:

- Two return tickets to Kuala Lumpur, Malaysia on our national airline
- Seven days in a luxury Hotel
- R 10 000 spending money

A dream come true!

When the great day arrived, the plane took off at 22 00 hours from Sir Seewoosagur Ramgoolam International Airport. On board, the Moorads felt really comfortable and relaxed. They were looked after by charming air hostesses.

Dinner was served an hour after leaving Mauritius.

"Mm! Delicious!" murmured Mr Moorad.

After the meal the passengers watched television for a while before going to sleep.

The next morning, the plane landed safely at Kuala Lumpur International Airport.

"What a huge place!" exclaimed Mrs Moorad.

"It's much bigger than our airport," added her husband.

It took them a whole hour to go through Immigration and customs. Outside, a guide was waiting for them. He welcomed them and drove them to their hotel. Alongside the road were the oil palm plantations they had seen from the plane as they flew in.

At the Grand Continental Hotel, Mr and Mrs Moorad were taken to their room on the 23rd floor. From there they had a wonderful view of Kuala Lumpur.

"Look at that building! That's the famous Twin Towers." Said Mr Moorad to his wife.

"Really, how do you know? All the buildings look the same to me."

"Simple. I've been told it's the tallest building in the city."

They were already enjoying their stay in the City of Lights.

For each of items 1 to 8 circle the letter which shows the correct answer.

Example:

Mr and Mrs Moorad live in

A Flacq.

B Port Louis.

(**C**) Petite Rivière.

D Grande Rivière.

1. The Moorads work in a

A tourist hotel.

B sugar factory.

C shopping centre.

D knitwear factory.

2 Mr and Mrs Moorad won the Star Prize because they were

A Proud

B very lucky

C the oldest workers

D very good workers

3. The prize winners had to travel by

A Air France

B Air Mauritius

C British Airways

D Singapore Airlines

4. The sum of R 10 000 was given to Mr and Mrs Moorad for

A air fares.

B airport taxes.

C pocket money.

D accommodation.

5. The plane left Sir Seewoosagur Ramgoolam International Airport

A at night.

B in the morning

C at midday.

D in the afternoon.

6. On the plane Mr and Mrs Moorad were

A sick.

B happy.

C uncomfortable.

D afraid.

7. After going through Immigration and Customs, the Moorads

A caught a bus to the city.

B could not find the guide.

C got lost in the huge place.

D went straight to their hotel.

9. On the way to the city they could see plantations of

A oil palms.

B date palms.

C raffia palms.

D coconut palms.

Write your answers to the following questions.

9. Why could Mr and Mrs Moorad see so much of the city from their hotel room?

....

....

10. How did Mr Moorad recognise the Twin Towers?

....

.

....

Question 3 (10 marks)

Read this admission form. It concerns Sarah Vanessa White.

ADMISSION FORM

Family name	: White
Other name(s)	: Sarah Vanessa
Sex	: Female
Date of Birth	: 22 September 1989
Address	: 15 Alpha Road Cottage
Father's name	: Billy Tom White
Mother's name	: Ann Carol White
Father's occupation	: Teacher
Mother's occupation	: Nurse
Sports practiced	: Cycling, volleyball and table tennis

Using the above information write five more sentences about Sarah Vanessa White.

1. Her middle name is Vanessa.
2. She likes to play table tennis.
3. ....
4. ....
5. ....
6. ....
7. ....

SECTION B

Question 4 (10 marks)

Complete the following newspaper report with the correct form of the verbs given in brackets. The first one has been done for you.

CYCLIST SAVED BY CHILDREN

Yesterday a cyclist ......**was saved**...... **(to save)** by two children, Phil Moore and Neil Varma. The cyclist Mrs Anna Bell tried to avoid a dog as she was riding along South Road. She .... **(to fall)** heavily from her bicycle, hitting her head badly and breaking her leg. Luckily, help .... **(to give)** by the two quick children who .... **(to see)** the accident.

Phil told our reporter: "We .... **(to be)** at the bend of the road when the accident happened. One minute the road was clear, the next minute the dog was right in front of the lady. She just .... **(to go)** straight into a tree and fell off her bike. We .... **(to run)** to the spot to see what we could do." The two children gave her first aid until an ambulance .... **(to arrive)**

Mrs Bell who is still in hospital .... **(to recover)** quickly. She told the reporter: "Thank God the children saw what .... **(to happen)**. I hope they .... **(to visit)** me so that I can thank them myself."

Question 5 (10 marks)

Fill in each blank in the following passage with one suitable word. The first one has been done for you.

8 Koala Road
Sydney
New South Wales 2345
Australia

12 March 2000

Dear Vicky,

I'm writing to tell you that we're now comfortably settled in our new home in Sydney. I've made ......many......... friends in my school. But I .... my friends in Mauritius and I miss you .... of all. It would be .... to see you again.

Why don't you come for a .... later this year? I know we'll have a .... good time. You must have heard that the Olympic Games will be held in Sydney, so there will be .... of exciting things to see and ....

I hope you and the rest of your .... are keeping well. Please write and .... me know how you are all getting on, and tell me .... you can come to Sydney.

Hope to hear from you soon.

Gino

Question 6 (20 Marks)

You went on an excursion with your parents and you got separated from them. You looked for them but couldn't see them. You realised you were lost!

Describe the incident in about 150 words. You may wish to include the following:

- how you felt at first
- who helped you
- what you told your parents when you saw them again
- how you felt afterwards

....

....

....

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....

UNIVERSITY OF CAMBRIDGE LOCAL EXAMINATIONS SYNDICATE

Joint Examination for the Higher School Certificate and General Certificate of Education

ENGLISH LANGUAGE — 1125/1
PAPER 2

Tuesday **9 NOVEMBER 1999** 1 hour 30 minutes

Additional materials:
Answer paper

TIME 1 hour 30 minutes

INSTRUCTIONS TO CANDIDATES

Write your name, Centre number and candidate number in the spaces provided on the answer paper/answer booklet.

Answer both **Part One** and **Part Two**.

Write your answers on the separate paper provided.

If you use more than one sheet of paper, fasten the sheets together.

Part one (40 Marks)

Write on **one** of the following topics.

At the head of your composition put the number of the topic you have chosen.

You are advised to spend about 60 minutes on this part of the paper and to write between 350 and 600 words.

1 Celebrating the Millenium (the year 2000).

2 'The best beach in Mauritius is ...' Write about **your** favorite beach.

3 Write a story based on

either **(a)** 'I've had a horrible day,' she said, bursting into tears.

or **(b)** An occasion when mistaken identity caused confusion.

4 Teenagers sometimes complain that they are treated like children. What are your opinions about this?

5 The ancient temple.

Part Two (20marks)

Begin your answer on a fresh page.

You are advised to spend about 30 minutes on this part of the paper, using a 200-300 words.

An important event or competition has been held in your country. You were present and you have been asked to write an account, with a suitable headline, for a magazine.

You **must** include the following information:

- where was the event held?
- why was it important?
- who took part?
- what happened?
- how successful was it?

You must cover all five points **in detail.**

UNIVERSITY OF CAMBRIDGE LOCAL EXAMINATIONS SYNDICATE

Joint Examination for the Higher School Certificate
and General Certificate of Education

ENGLISH LANGUAGE
PAPER 2

1115/2, 1120/2, 1123/2
1124/2, 1125/2

INSERT

Tuesday **9 NOVEMBER 1999** 1 hour 30 minutes

INSTRUCTIONS TO CANDIDATES

This insert contains the passage for comprehension.

(The passage describes the building of the liner *Titanic* and her subsequent sinking on her first voyage from England to America.)

1 Accounts of shipwrecks and other marine disasters exert a fascination that is all but universal. Disasters at sea are rich in examples of superhuman skill and determination, and on occasion, criminal negligence, and sometimes more sinister behaviour. The name that inevitably springs to mind whenever disasters at sea are mentioned is *Titanic*. The loss of this in 1912 was particularly memorable not only because she sank on her first voyage after hitting an iceberg, but also because of the events t that preceded the disaster.

2 The directors of the company that built *Titanic* were pioneers in the transatlantic passenger trade. However, they did not have much experience in the design and operation of appropriate vessels since ships of this class and size were at a very recent innovation. Competition for contracts in the prestigious and lucrative business of the transatlantic run spurred the major competitors to build increasingly larger and faster vessels. With *Titanic*, both technology and economics were pushed to their limits. Furthermore, it was the intention of her owner to build a vessel which was capable of operating at a competitive speed and also to focus on luxury as a means of attracting the wealthy. At the same time, *Titanic* was uniquely designed with a system of watertight compartments and electrically operated watertight doors. The designers got carried away by the advances they had made in the construction of the ship and this led them to make unwarranted and inaccurate claims for its safety. Their claim that *Titanic* was unsinkable was plausible but unfortunate in the light of subsequent events. It also encouraged the designers to ignore basic considerations of safety to which they might have otherwise given closer attention.

3 One of these considerations should have been the number of lifeboats on board *Titanic*. Certainly she could have carried sufficient for all her passengers and crew without any difficulty; this was originally contemplated by the builders, but they later rejected the idea. If *Titanic* was truly unsinkable, why go to unnecessary expense and trouble to provide something that caution would dictate for a less advanced vessel? It is quite likely that this overconfidence in *Titanic's* capabilities was communicated to her crew. Thoughts of safety gave way to the exciting prospect of manning such a splendid vessel on her very first voyage. Undoubtedly the captain was a fine seaman of outstanding ability; he had commanded several vessels on their first voyages, and he had planned to retire from his long career at the completion of *Titanic's* first voyage. Any fears for her safety he might have had were diminished in the face of the enthusiasm of *Titanic's* owner for her outstanding qualities. Besides, the owner disliked any criticism of his judgement and so it is understandable that the captain hesitated to express any possible doubts about the equipment and safety of this ocean queen.

4 At noon on 10 April 1912 a long blast on *Titanic's* whistle signaled her imminent departure. Some people at the time expressed a certain wariness about that particular first voyage. Yet any premonitions of doom would have been hard to detect amid the eager anticipation which accompanied the first sailing of this superb ship. In fact, the ship's owner himself was among the passengers, along with a spectacular array of the most famous people of the day.

5 *Titanic* headed out into the grey Atlantic. Her massive engines were soon

brought up to speed, and she steamed towards her icy destiny. Reports of huge icebergs were radioed in by other ships right from the start but were given little attention on board *Titanic*. The increasing throb of the engines gave promise of even higher speeds. Although the owner had earlier declared that there was no point in driving the ship too hard, the possibility of an early arrival in New York was too enticing to ignore; a record crossing on this first voyage would receive much publicity. Amidst all the excitement, a day had been aside for lifeboat drill. This indeed might have helped later and stopped passengers from scrambling frantically for places in these boats. However, the captain made the mistake of postponing the drill out of deference to the many illustrious passengers on board.

6 Meanwhile, further reports showed icebergs nearly in the path of the huge liner; unfortunately not all these reports reached her control room. Nevertheless, the captain and his officers clearly knew there was a distinct possibility, even likelihood, of encountering an iceberg during the night. The captain must have known the risk he was taking in maintaining *Titanic's* speed, but decided to take it anyway; to have slowed his ship under the circumstances would have suggested a degree of timidity out of keeping with his character. Also his reputation was involved; he was understandably proud of it and did not want to damage it at this stage in his career. This marvelous vessel he commanded was on her first voyage while he, ironically, was on his last.

7 The lookouts were specifically warned to watch for icebergs, yet they did not seem particularly concerned about this possibility. Nor had any extra lookouts been posted. No special instructions were given to the ship's engineers to stand by for possible emergency manoeuvres. The advisability of slowing the vessel to allow more time to react should an iceberg be sighted ahead does not appear to have been considered by the captain. This is hardly surprising as it would have thwarted the hope for an even higher speed on the following day.

8 When further messages about icebergs came in from the ship *Californian*, the young radio operator on *Titanic* ignored them. Although he was dedicated to his profession, he did not have that degree of judgement which comes from years of experience. Besides, the glamour of his job had made him arrogant. Meanwhile, as one of the lookouts neared the end of his watch, an ominous smudge about the size of his hand loomed on the horizon dead ahead. The object rapidly grew in size and distinctness. Convinced that one of the icebergs he had been warned about was directly in *Titanic's* path, the lookout raised the alert and watched helplessly as the ship hurtled towards the sheer grey wall of ice.

9 With hindsight, it has been suggested that *Titanic's* officers should not have reversed the engines and altered the ship's course. Its collision with the iceberg would then have been head on, and the damage, though serious, would not have been fatal. Their mistakes were catastrophic, no doubt. But the reaction of the officers was understandable; they merely responded to the instinct that would have prompted most seamen under these circumstances. As it was, the side of the ship took the full impact of the iceberg; the damage to the watertight compartments was disastrous. Only about one third of the passengers and crew, who together numbered over 2000, escaped in the inadequate number of lifeboats; the rest drowned.

10 Amidst the frantic scramble for places in the lifeboats, the owner of *Titanic* exploited his role as a passenger and, as the last boats were being launched, seated himself in one of them. He was later persecuted by the press for not having gone down with his ship. Various conflicting stories were told about *Titanic's* gallant but tragic captain, yet none could be proved. Suffice to say, he went down with the ship and it is unlikely that he wanted to be included among those who survived. The sinking of Titanic, although partly a natural disaster, can also be seen as a man-made one, resulting from human avarice and complacency 9

UNIVERSITY OF CAMBRIDGE LOCAL EXAMINATIONS SYNDICATE

Joint Examination for the Higher School Certificate and General Certificate of Education

ENGLISH LANGUAGE — 1115/2, 1120/2, 1123/2
PAPER 2 — 1124/2, 1125/2

Tuesday **9 NOVEMBER 1999** 1 hour 30 minutes

TIME 1 hour 30 minutes

INSTRUCTIONS TO CANDIDATES

Write your name, Centre number and candidate number in the spaces provided on the answer paper/answer booklet.

Answer **all** questions.

Leave a space of **one** line between your answers to **each part** of a question, e.g. between **2 (a)** and **2 (b)**. Leave a space of at least **three** lines after your completed answer to each **whole** question.

Write your answers on the separate answer paper provided.

If you use more than one sheet of paper, fasten the sheets together.

INFORMATION FOR CANDIDATES

The number of marks is given in brackets [ ] at the end of each question or part question.

The insert contains the passage for comprehension.

Mistakes in spelling, punctuation and grammar may be penalized in any part of the paper.

Read the passage in the insert and then answer **all** the questions which follow below.

You are recommended to answer the questions in the order set.

Mistakes in spelling, punctuation and grammar may be penalised in any part of the Paper.

From paragraph 1:

1 Give **one** reason why the loss of *Titanic* is 'particularly memorable' among disasters at sea. [1]

From paragraph 2:

2 (a) Ships like *Titanic* were a 'recent innovation'. What was the initial disadvantage the builders faced in designing such a ship? [1]

(b) What **two** benefits were gained by ship owners who won contracts to build transatlantic ships? You must answer **in your own words.** [2]

(c) In building *Titanic*, 'economics were pushed to their limits.' What is the author saying here? [2]

(d) The builders of the ship claimed that it was unsinkable. What was there in its design that made them so confident? [1]

From paragraph 3:

3 From your reading of paragraph 3, suggest **briefly** the reason why some people felt wary about the first voyage to *Titanic* (line 40). [1]

From paragraph 5:

4 The captain decided to postpone the lifeboat drill. Explain **in your own words** why this proved to be an unwise decision later. [2]

From paragraph 6:

5 (a) The captain maintained *Titanic's* speed to avoid any suggestion of timidity. What other reason did he have for maintaining her speed? [1]

(b) The captain was 'ironically' on his last voyage. Explain fully what this means. [2]

From paragraph 8:

6 (a) The young radio operator misjudged the importance of radio messages reaching Titanic. **Using your own words**, give **two** reasons for his lack of judgment. [2]

(b) *Titanic* 'hurtled' towards the iceberg in its path. Apart from the notion of speed, what other idea do you think is emphasised by 'hurtled'? [1]

From paragraph 9:

7 Perhaps it would be have been better if *Titanic's* officers had ignored their seamen's instinct at the last moment. Explain why. [2]

From paragraph 10:

8 The author believes that Nature alone did not cause the disaster of *Titanic*. Explain **in your own words** what else he thinks was the cause. [2]

From the whole passage:

9 Choose **five** of the following words or phrases. For each of them give **one** word or short phrase (of not more than **seven** words) which has the same meaning that the word or phrase has in the passage.

1. rich (line 2)	5. contemplated (line 26)
2. spurred (line 12)	6. imminent (line 39)
3. plausible (line 20)	7. enticing (line 50)
4. in the light of (line 21)	8. ominous (line 77)

[5]

10 Different groups of people were responsible for the disaster that overlook *Titanic*.

Using your own words as far possible, summarise how the actions of these people contributed to the disaster.

USE ONLY THE MATERIAL FROM THE LINE 26 TO LINE 91

Your summary, which must be in continuous writing (not note from), must not be longer than **160** words, including the **10** words given below.

Begin your summary as follows:

The builders could have installed enough lifeboats on *Titanic* but ... [25]

UNIVERSITY OF CAMBRIDGE LOCAL EXAMINATIONS SYNDICATE

Joint Examination for the Higher School Certificate
and General Certificate of Education

GENERAL PAPER 8009/1

PAPER 1

OCTOBER/NOVEMBER SESSION 2001

Additional materials:
Answer paper

TIME 1 hour 30 minutes

INSTRUCTIONS TO CANDIDATES

Write your name, Centre number and candidate number in the spaces provided on the answer paper/answer booklet.

Answer **one** question.

Write your answer on the separate answer paper provided.

If you use more than one sheet of paper, fasten the sheets together.

INFORMATION FOR CANDIDATES

You should write between 500 and 800 words.

1 'To protect the planet, travel should be discouraged.' Do you agree?

2 Should the media be controlled?

3 Can Mauritius have an influence on the international community?

4 Is obedience always desirable?

5 Should the unemployed receive financial support?

6 Is too much importance placed on academic achievement at the expense of other skills and qualities?

7 Which areas of scientific research deserve financial support, and which do not?

8 Why, in age of science, are people still interested in the supernatural and the unexplained?

9 Discuss the effects of other cultures on young people in your country.

10 Why read a book when the film or video version is available?

11 How can the transport system in Mauritius be improved?

12 What are the main threats to public health in your society?

13 'There is little in twentieth century history of which we can be proud.' Do you agree?

14 What are the advantages and disadvantages of being old in your society?

15 Do richer countries have a responsibility to help poorer ones?

UNIVERSITY OF CAMBRIDGE LOCAL EXAMINATIONS SYNDICATE

Joint Examination for the Higher School Certificate and General Certificate of Education

GENERAL PAPER 8009/2

PAPER 2

OCTOBER/NOVEMBER SESSION 2001

Additional materials:
Answer paper

TIME 1 hour 45 minutes

INSTRUCTIONS TO CANDIDATES

Write your name, Centre number and candidate number in the spaces provided on the answer paper/answer booklet.

Answer **one** question.

Write your answer on the separate answer paper provided.

If you use more than one sheet of paper, fasten the sheets together.

INFORMATION FOR CANDIDATES

The number of marks is given in brackets [ ] at the end of each question or part question.

The total time of 1 hour and 45 minutes includes 15 minutes for you to study the questions before you begin your answers. You may make notes during this time if you wish.

Up to 15 marks will be given for the quality and accuracy of your use of English throughout this paper.

Dictionaries are **not** permitted.

1 Read the following passage, which was written in December 1998, and then answer all the questions below.

As the 20th century draws to a close, does science stand at the beginning of an epic period or at the end? Research over the past 100 years has roamed across an extraordinary variety of frontiers: space exploration; the computer revolution; widespread vaccination; the first heart-transplant operation; air travel; test-tube babies; the atomic bomb; genetically engineered foods available in supermarkets; unraveling the structure of DNA. Some doubters, therefore, argue that the 21st century will not deliver similarly profound advances because the golden age of discovery is over. Their view is that the fundamentals of science have been mastered. The Big Bang theory tells us how the Universe started; we now understand DNA, the code of life; technologists are close to creating a robot as intelligent as any human being. 5 10 15

Others, however, argue that the astounding achievements of the past century do not spell the end of science. Rather, they will do one of two things – pave the way for future glories or crumble in the face of further evidence, giving rise to completely new theories. One example of the former is space exploration – without the Moon landings, we wouldn't have the International Space Station, on which construction began this year. On the other hand, the Big Bang theory of how the Universe began will undergo a radical overhaul since some problems with the theory stubbornly refuse to be solved. For example, there is less mass in the Universe than predicted. While some have confidently expected that the 'missing mass' would be located, it has yet to be found. Could the next few years throw up a completely new theory of how the Universe started? 20 25 30

Robotics and artificial intelligence, commonly known as AI, are two related fields of research which promise much. One of the best known schemes is the Cog Project – a humanoid robot that can act, talk and even look like a person. Hans Moravec, an AI Pioneer, believes that by 2030 robots will be able to visualise tasks and assess the consequences of their actions. By 2040 robots should be able to reason at least as efficiently as people. Moravec even envisages a world where robots will display 'superhuman reasoning'. By 2050, emotions will be commonplace because they will help machines to bond with their human masters. All this, however, raises an intriguing question: will robots be so similar to us that they, too, will start wondering where they came from? As well as showing awareness of the world, will they be aware of themselves? In other words, will they be *self*-conscious? By the middle of the next century, we may even begin to wonder whether such advanced robots, with their enormous mental capacities and physical strength, pose a threat to their human inventors. 35 40 45 50

The cyborg – the fusion of man and machine – is another plausible prospect in our lifetime. Doctors have already devised silicon chips that can replace damaged retinas and therefore restore sight, while

paralysed individuals can control computers by twitching an eyelid or through the power of thought alone (using the tiny electrical impulses in the brain). There is one barrier to controlling the human body using silicon chips in that the complete electrical wiring for the brain has never been charted. Yet some scientists estimate that by 2010 it will be feasible to dissect a brain into a million slices to determine how each cell is connected. It would be comparable to the Human Genome Project, a $3 billion study aimed at listing the 100,000 or so genes in the body. This project, in its turn, has given rise to some astonishing predictions of how biology will advance. Francis Collins and Walter Gilbert, who run the Human Genome Project, expect that by 2010 we will have genetic profiles of as many as 5,000 hereditary diseases. By 2030 we will each have access to our individual DNA codes, perhaps on a compact disc. Biologists predict that this will revolutionise medicine. Visiting a doctor in 2030 will involve a scan of your DNA code for signs of disease, then recommendations for preventive therapy, some of it gene-based. 55 60

Next century, scientists will begin thinking seriously about how to power the planet, given that fossil fuels are expected to last only a few more decades. Physicists have already been trying to create energy from the process of fusion. They are aiming to extract energy from seawater by fusing nuclear particles of hydrogen together. Inevitably, there are great problems with this technique. Nevertheless, scientists engaged on this fusion project still expect the technique to light up the planet one day. By 2010 the principle should have been demonstrated; by 2050 fusion could be a common energy source. Harnessing energy from the Sun is another prospect. By 2025 some scientists predict that half the world's electricity will come from the Sun. These areas of research are as exciting and profound as any that have challenged scientists this century.

Note: When a question asks for an answer IN YOUR OWN WORDS AS FAR AS POSSIBLE and you select the appropriate material from the passage for your answer, you must still use your own words to express it. Little credit can be given to answers which only copy words or phrases from the passage.

(a) Without referring to any specific scientific achievements and **using your own words as far as possible**, summarise the two main arguments put forward as to why the 21st century will not be another 'golden age of discovery'. [4]

(b) Nine scientific achievements are listed in the first paragraph as having been among the most significant during the past 100 years. Choose **one** of the following and briefly consider its possible advantages and disadvantages and the scale of its impact:

(i) the computer revolution;

(ii) test-tube babies;

(iii) the atomic bomb. [5]

(c) The construction of the International Space Station and the controversy over the Big Bang theory quoted as examples of two different ways in which science may develop. Explain **in your own words** what these two ways are. [2]

(d) Give **two** reasons of your own why research into the Big Bang theory could have little appeal to the general public. [2]

(e) (i) Explain the meaning of **six** of the following words as they are used in the passage. You may write the answer in one word or a short phrase.

structure (line 6); fundamentals (line 8); radical (line 18); intriguing (line 31); plausible (line 37); hereditary (line 49); therapy (line 52); harnessing (line 61). [6]

(ii) Use the six words that you have chosen from the list above in six separate sentences to illustrate their meanings as used in the passage. Your sentences should not deal with the subject matter of the passage. [6]

(f) Much of the article is devoted to four major developments in technology that may take place during the next fifty years.

In a summary of no more than 150 words, explain their advantages and any possible drawbacks or difficulties. [10]

2 During a period of acute and prolonged recession, the Government of Jodelbic, a very small country whose main export is bananas, is considering the closing down of ONE of two public buildings in the capital, Shebatha, in order to save costs. The first is the National Museum and the second is the Shebatha Folk Theatre. Study the information below and then answer all the questions.

1 The Folk Theatre is in the middle of a large area of substandard housing which was due to be demolished before the recession began.

2 During the last twelve months, the Folk Theatre has been able to afford only two groups of actors, dancers and singers from abroad.

3 As a condition of the original international sponsorship, no entry fee can be charged for the National Museum.

4 In days gone by, groups who have performed at the Folk Theatre have often gone on successful international tours.

5 The National Museum was the favourite project of Evelyn Archimac, founder of the Republic of Jodelbic.

6 Dramas, songs and dances have been traditionally performed in the open air.

7 The National Museum has acquired few new exhibits since the start of the recession and the end of international subsidies.

8 The National Museum is part of a modern development in the centre of Shebatha.

9 Stage performances at the Folk Theatre have featured in the drive to increase tourism.

10 The Banana Growers Federation has expressed an interest in taking over the Folk Theatre to promote their image at home and abroad.

11 Some of the performances at the Folk Theatre have made fun of the democratically elected Government.

12 Beggars frequently sleep under the arches that are the most prominent feature of the exterior of the National Museum.

13 The Folk Theatre is always full to capacity despite the recession and despite substantial increases in the price of tickets.

14 The National Museum was built, at great expense, from funds provided by the international community and cannot be used for any other purpose.

15 The National Museum has featured in many films about Jodelbic.

16 Attendances at the National Museum have steadily declined in recent months.

17 The Folk Theatre, an old warehouse, is in urgent need of structural repair.

18 The National Museum houses a unique collection of butterflies donated by Evelyn Archimac.

19 Many of the performances at the Folk Theatre bring to prominence previously unknown actors, dancers and singers.

20 The National Museum contains a great number of exhibits from the colonial period but comparatively few from recent times.

Note: When a question asks for an answer IN YOUR OWN WORDS AS FAR AS POSSIBLE and you select the appropriate material from the passage for your answer, you must still use your own words to express it. Little credit can be given to answers which only copy words or phrases from the passage.

(a) In no more than 150 words, write a letter to the 'Jodelbic Gazette' explaining why the National Museum should be closed rather than the Folk Theatre. **Use your own words as far as possible**. [15]

(b) In no more than 150 words, write a letter to the 'Jodelbic Gazette' explaining why the Folk Theatre should be closed rather than the National Museum. **Use your own words as far as possible**. [15]

(c) In about 50 words, explain which details from the information provided above could be used against the present Government by their many opponents.

[5]

3 An international relief organisation has, over the past eighteen months, sent aid in various forms to four areas struck by different kinds of disaster. Details of these are given below.

(i) **Atambra**, a densely populated peninsula, has been devastated by a powerful earthquake.

(ii) In **Bolebo**, a vast agricultural country situated on the Equator, famine has reduced thousands to starvation, following yet another severe drought.

(iii) **Contensov**, a city on the banks of the River Treju, has been largely submerged as result of a dam bursting upstream.

(iv) **Dramende**, a small town in the midst of the rain forest, has been threatened by raging fires.

(a) For each of these four areas, outline the various kinds of assistance that the relief organisation could have offered the inhabitants in terms of personnel, supplies and equipment. Set out your answers as **(i)**, **(ii)**, **(iii)** and **(iv)**. Write no more than 50 words on each area. [20]

(b) Identify the area, a different one in each example, which would have benefited most from the following and briefly explain why:

(i) inflatable boats;
(ii) explosives;
(iii) specialists in breathing problems;
(iv) vitamin tables. [8]

(c) Pick the **one** item in the list below that the relief organisation would not have sent to any of the disaster areas and briefly explain why:

automatic washing powder; baby clothes; blankets; face masks; hoses; ploughs; seed; tents. [2]

(d) In all fours situations, the forces of nature were the immediate cause of the suffering endured by all communities of Atambra, Bolebo, Cortensov and Dramende. Human greed, ignorance, incompetence or wickedness, however, may have contributed in a manner of ways to each disaster.

Choose **one** disaster from those mentioned and, in not more than 50 words, explain how human beings may have been at fault. [5]

APPENDIX 4
Written Elicitation Tests

Plural Nouns

Exercise 1

Rewrite these sentences in the plural. Make changes if necessary, but leave the words in bold print in the singular

The lady waited at the church. *The ladies waited at the church.*

1. The child is crying for her mother.
2. There is a mouse in the Kitchen.
3. That lorry is carrying cement to the factory.
4. He knows the name of the clerk working the office.
5. A life was lost in the fire last night.
6. A fly is settling on the food that you have placed on the table.
7. There is an easy way to do this sum.
8. The dynamo on his bicycle is not working.
9. There is a farm at the foot of the mountain.
10. A mosquito is an insect.

Exercise 2

Put the adverb in the correction Position.

I can hear what you are saying. (hardly) *I can hardly hear what you are saying.*

1. He has met with an accident in his car before. (never)
2. These boys are punished for their mistakes. (always)
3. The train is delayed these days.1 (often)
4. He sets mousetraps in his house. (sometimes)
5. Her relatives stay until the visiting hours are over. (usually)
6. Has he been to Windy Hill? (ever)
7. Parents are invited to the prize-giving ceremony each year. (usually)
8. Frogs come out after it rains. (usually)

9. The shops are full of customers on Saturdays. (generally)
10. He loses his temper with his children. (rarely).

The Passive Voice

Exercise 3

Change these sentences into Passive Voice.

Someone led the child into the room and told here to stay there. *The child was led into the room and told to stay there.*

1. His mother promised him a bicycle if he passed the examination.
2. Nobody has ever turned down such an offer.
3. The bees attacked him when he accidentally disturbed their nest.
4. Somebody has split ink all over the floor. Someone must wash the floor at once.
5. The have made my father the secretary of the Rotary Club.
6. My uncle pointed out the landmarks of the town to me.
7. Has someone paid the milkman yet?
8. Did you think that that had caused it?
9. Somebody has broken the typewriter, and I can't use it anymore.
10. People shouldn't speak to me as though I were a child of seven.

Who, Which That

Exercise 4

Combine these sentences, using "Who", "which", "that", "whose", or "whom".

Look out for the bear. It escaped from the Zoo yesterday. *Look out for the bear which escaped from the zoo yesterday.*

1. She scolded the man. He stepped on her foot.
2. I saw the carpet. You wanted to buy it.
3. We met the salesman. He came to our house yesterday.
4. These are the men. They rescued the children from burning house.
5. Can you show me the road? It leads to the railway station.
6. I have just written a thank-you note to Mr. Taylor. I stayed in his house during the floods.
7. The postman has been admitted to the hospital. His leg was bitten by a mad dog.
8. The person is a swindler. You bought some gold coins from him.
9. The scream came from the child. His teeth were being examined by the dentist.
10. Irene recited a poem at the concert. Most people think she is a shy girl.

Indirect Questions With Tense Changes

Exercise 5

Change the following into Indirect Questions. Also, change the tense of the verb.

"What is she looking for?" I asked him. *I asked him what she was looking for.*

1. I wondered, "Shall I be able to beat them in the competition?"
2. I asked the man, "Did you see the accident happen?"
3. John asked, "How much does it cost to rent a furnished room?"
4. She asked her mother, "Have you done the marketing yet?"
5. The stranger inquired, "Do you know where Mr. West has shifted to?"
6. She asked her friend, "Were all your answers correct?"
7. The children asked their mother, "When will Uncle come to visit us again?"
8. The proprietor of the shop asked, "Would you like to start an account with us?"
9. Where are you working now?" she asked.
10. "Why were you hiding behind the door?" the teacher questioned her.

Present Perfect and Simple Tenses

Exercise 6

Put in the present or the present Perfect tense of the verbs in brackets.

They.......just.......(go) to the dentist. They.......(leave) about ten minutes ago. *They have just gone to the dentist. They left about ten minutes ago.*

1. The price of butter............(go) up since last month. When I.......... (buy) a quarter kilogramme of it last week, I.............(have) to pay more for it.

2. The manager.......... already.......... (sign) the letter.

3. He ....(not arrive) yet. I ....(receive) a letter from him three days ago saying that he would arrive today.

4. I..................(meet) Tony yesterday. As I ....(not see) his sister for several months, I ....(ask) about her.

5. He............. (be) here last week, but he................(leave) for Unitown now.

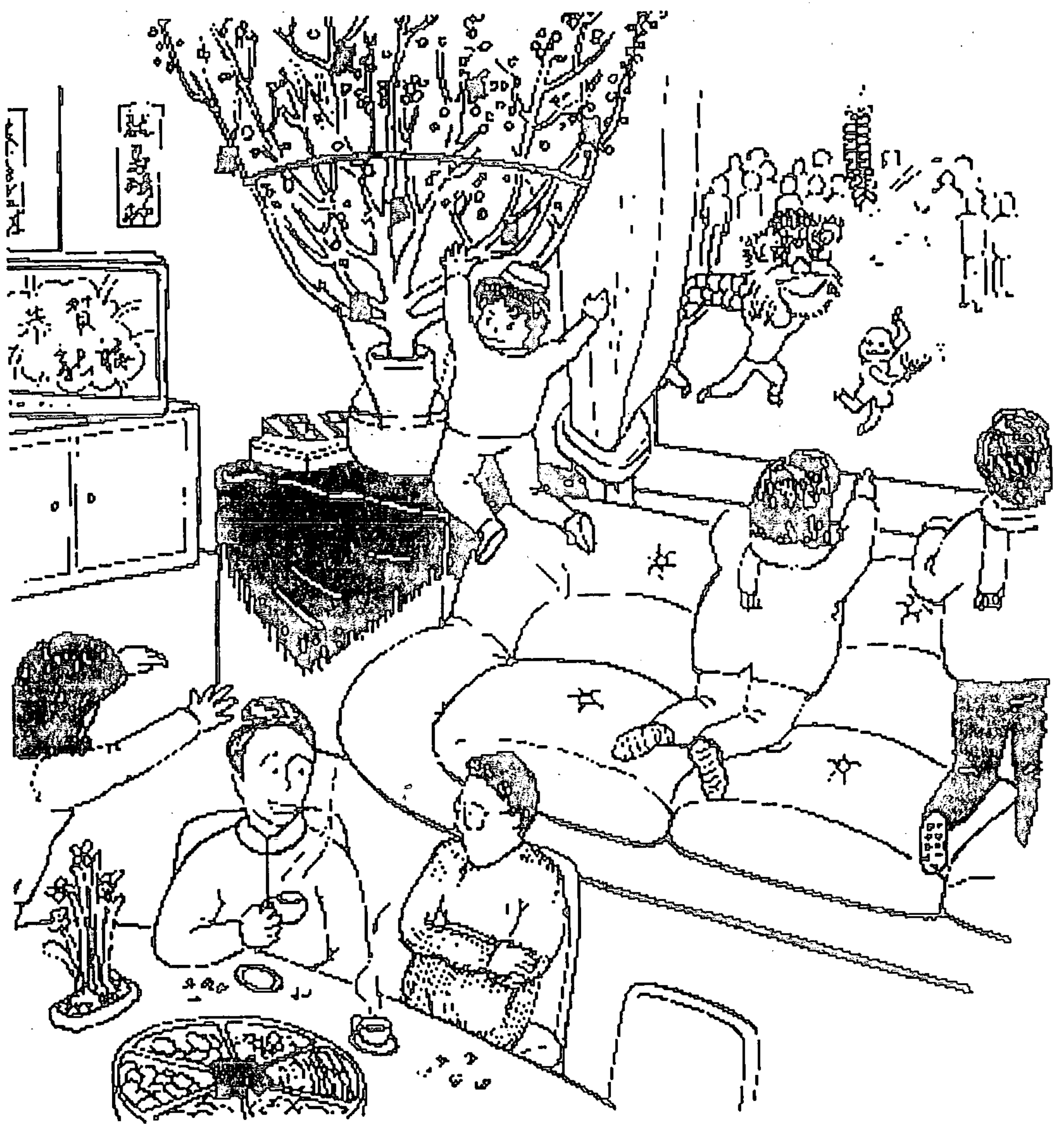
6. She ....(fall) ill again. The doctor................ already ....(come) and ....(examine) her.

7. The cut on his leg.......... almost...........(heal). He..........just.........(be) to the clinic to change the dressing. He.............(hurt) himself when he was chopping some firewood.

8. ....you ever...........(be) up Mount Pine Tree? I.........(go) up there last week and............(enjoy) the beautiful view of the whole island from here.

APPENDIX 5

Principal investigation: sample materials used in oral tasks.



APPENDIX 6

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MEANS /TABLES WAVERAGE OAVERAGE TAVERAGE BY SCHOOL by EXTRACLA.
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Summaries of WAVERAGE Written average
By levels of SCHOOL Lower/Secondary/Post Secondary school
EXTRACLA Extra classroom input

Variable	Value	Label	Mean	Std Dev	Cases
For Entire Population			77.9236	17.0193	240
SCHOOL	1	Lower secondary	70.3667	16.5773	100
EXTRACLA	1	None	53.9706	6.4094	34
EXTRACLA	2	Barely	60.9722	4.4782	12
EXTRACLA	3	Moderately	72.1970	8.8512	22
EXTRACLA	4	Much	90.0521	6.5032	32
SCHOOL	2	Secondary	75.9583	15.9653	80
EXTRACLA	2	Barely	57.8704	7.4876	18
EXTRACLA	3	Moderately	71.5942	12.3269	23
EXTRACLA	4	Much	86.8803	11.3099	39
SCHOOL	3	Post Secondary	93.1389	5.7865	60
EXTRACLA	3	Moderately	91.7742	7.0735	31
EXTRACLA	4	Much	94.5977	3.5608	29

Total Cases = 240

Summaries of OAVERAGE Oral average
By levels of SCHOOL Lower/Secondary/Post Secondary school
EXTRACLA Extra classroom input

Variable	Value	Label	Mean	Std Dev	Cases
For Entire Population			51.4757	25.3801	240
SCHOOL	1	Lower secondary	35.6617	21.1273	100
EXTRACLA	1	None	13.2598	5.2439	34
EXTRACLA	2	Barely	20.2083	5.1875	12
EXTRACLA	3	Moderately	44.3939	8.6838	22
EXTRACLA	4	Much	59.2552	8.0003	32
SCHOOL	2	Secondary	51.5833	20.8747	80
EXTRACLA	2	Barely	29.0741	8.3426	18
EXTRACLA	3	Moderately	37.9710	9.7274	23
EXTRACLA	4	Much	70.0000	10.9424	39
SCHOOL	3	Post Secondary	77.6889	12.4194	60
EXTRACLA	3	Moderately	70.7419	11.3730	31
EXTRACLA	4	Much	85.1149	8.7109	29

Total Cases = 240

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ummaries of    TAVERAGE    Total average (Written & Oral)
y levels of    SCHOOL      Lower/Secondary/Post Secondary school
               EXTRACLA    Extra classroom input
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ariable	Value	Label	Mean	Std Dev	Cases
or Entire Population			64.6997	20.2321	240
CHOOL	1	Lower secondary	53.0142	18.2367	100
EXTRACLA	1	None	33.6152	3.1226	34
EXTRACLA	2	Barely	40.5903	1.7719	12
EXTRACLA	3	Moderately	58.2955	6.6355	22
EXTRACLA	4	Much	74.6536	6.7178	32
CHOOL	2	Secondary	63.7708	16.7130	80
EXTRACLA	2	Barely	43.4722	3.9295	18
EXTRACLA	3	Moderately	54.7826	8.4339	23
EXTRACLA	4	Much	78.4402	8.2272	39
CHOOL	3	Post Secondary	85.4139	7.5591	60
EXTRACLA	3	Moderately	81.2581	7.2110	31
EXTRACLA	4	Much	89.8563	5.0127	29

Total Cases = 240

APPENDIX 17

MEANS /TABLES WAVERAGE OAVERAGE TAVERAGE BY SCHOOL by CLASSRO.

Summaries of WAVERAGE Written average
By levels of SCHOOL Lower/Secondary/Post Secondary school
CLASSRO Classroom input

Variable	Value	Label	Mean	Std Dev	Cases
For Entire Population			77.9236	17.0193	240
SCHOOL	1	Lower secondary	70.3667	16.5773	100
CLASSRO	2	Barely	57.0000	7.6283	50
CLASSRO	4	Much	83.7333	11.5067	50
SCHOOL	2	Secondary	75.9583	15.9653	80
CLASSRO	2	Barely	64.7292	11.3689	40
CLASSRO	4	Much	87.1875	11.3317	40
SCHOOL	3	Post Secondary	93.1389	5.7865	60
CLASSRO	3	Moderately	92.2500	6.6708	30
CLASSRO	4	Much	94.0278	4.6890	30
Total Cases =	240				

Summaries of OAVERAGE Oral average
By levels of SCHOOL Lower/Secondary/Post Secondary school
CLASSRO Classroom input

Variable	Value	Label	Mean	Std Dev	Cases
For Entire Population			51.4757	25.3801	240
SCHOOL	1	Lower secondary	35.6617	21.1273	100
CLASSRO	2	Barely	16.1333	6.8217	50
CLASSRO	4	Much	55.1900	8.7765	50
SCHOOL	2	Secondary	51.5833	20.8747	80
CLASSRO	2	Barely	33.5833	9.7186	40
CLASSRO	4	Much	69.5833	11.1181	40
SCHOOL	3	Post Secondary	77.6889	12.4194	60
CLASSRO	3	Moderately	71.1000	11.3883	30
CLASSRO	4	Much	84.2778	9.7102	30
Total Cases =	240				

Summaries of TAVERAGE Total average (Written & Oral)
By levels of SCHOOL Lower/Secondary/Post Secondary school
CLASSRO Classroom input

Variable	Value	Label	Mean	Std Dev	Cases
For Entire Population			64.6997	20.2321	240
SCHOOL	1	Lower secondary	53.0142	18.2367	100
CLASSRO	2	Barely	36.5667	5.5823	50
CLASSRO	4	Much	69.4617	9.4180	50
SCHOOL	2	Secondary	63.7708	16.7130	80
CLASSRO	2	Barely	49.1563	7.8495	40
CLASSRO	4	Much	78.3854	8.1285	40
SCHOOL	3	Post Secondary	85.4139	7.5591	60
CLASSRO	3	Moderately	81.6750	6.9438	30
CLASSRO	4	Much	89.1528	6.2538	30
Total Cases =	240				

FREQUENCIES /VARIABLES CLASSRO EXTRACLA.

CLASSRO Classroom input

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
Barely	2	90	37.5	37.5	37.5
Moderately	3	30	12.5	12.5	50.0
Much	4	120	50.0	50.0	100.0
	Total	240	100.0	100.0	

Valid cases 240 Missing cases 0

EXTRACLA Extra classroom input

Value Label	Value	Frequency	Percent	Valid Percent	Cum Percent
None	1	34	14.2	14.2	14.2
Barely	2	30	12.5	12.5	26.7
Moderately	3	76	31.7	31.7	58.3
Much	4	100	41.7	41.7	100.0
	Total	240	100.0	100.0	

Valid cases 240 Missing cases 0

APPENDIX 8

Raw data for individual scores on written and oral structures

	WRITTEN						ORAL												INPUT	
NUM	PL	ADV	TENS	PASS	REL	WH	PL	ADV	TENS	PASS	REL	WH	Writ@	Oral@	Tot@	SEX	LOCATION	SCHOOL	CLASSROOM	EXTRACLASS
1	40	40	40	45	30	30	15	5	5	5	5	5	37.5	6.7	22.1	M	Rural	Low	Barely	None
2	80	85	90	60	55	50	20	10	10	5	5	5	70.0	9.2	39.6	F	Rural	Low	Barely	Barely
3	80	80	45	50	50	45	15	10	5	5	5	5	58.3	7.5	32.9	M	Rural	Low	Barely	None
4	70	75	85	60	45	35	20	10	10	5	5	5	61.7	9.2	35.4	F	Rural	Low	Barely	None
5	90	70	50	55	50	35	30	25	15	15	5	15	58.3	17.5	37.9	M	Rural	Low	Barely	Barely
6	70	65	80	50	45	30	15	5	5	5	5	5	56.7	6.7	31.7	M	Rural	Low	Barely	None
7	80	60	55	45	30	30	30	25	15	15	15	15	50.0	19.2	34.6	F	Rural	Low	Barely	None
8	80	65	70	55	50	50	20	10	10	5	5	5	61.7	9.2	35.4	M	Rural	Low	Barely	None
9	70	70	60	40	30	30	15	5	5	5	5	5	50.0	6.7	28.3	M	Rural	Low	Barely	None
10	70	70	65	55	50	45	20	10	5	5	5	5	59.2	8.3	33.8	M	Rural	Low	Barely	None
11	90	60	40	50	45	35	30	25	15	15	15	15	53.3	19.2	36.3	F	Rural	Low	Barely	None
12	80	95	90	55	45	30	15	5	5	5	5	5	65.8	6.7	36.3	F	Rural	Low	Barely	None
13	90	65	85	50	55	50	20	10	10	5	5	5	65.8	9.2	37.5	M	Rural	Low	Barely	None
14	80	55	80	45	45	35	20	10	10	5	5	5	56.7	9.2	32.9	F	Rural	Low	Barely	None
15	90	50	60	55	50	45	15	5	5	5	15	5	58.3	8.3	33.3	M	Rural	Low	Barely	None
16	70	85	70	55	45	30	20	10	10	5	15	5	59.2	10.8	35.0	F	Rural	Low	Barely	None
17	70	45	55	45	30	30	30	25	15	15	15	15	45.8	19.2	32.5	M	Rural	Low	Barely	None
18	90	45	50	55	55	45	15	5	5	5	15	5	56.7	8.3	32.5	M	Rural	Low	Barely	None
19	75	40	45	40	30	30	30	25	15	15	15	15	43.3	19.2	31.3	M	Rural	Low	Barely	None
20	85	55	40	40	30	30	20	10	10	5	15	5	46.7	10.8	28.8	M	Rural	Low	Barely	None
21	55	50	85	45	30	30	15	5	5	5	20	5	49.2	9.2	29.2	M	Rural	Low	Barely	None
22	80	80	70	50	45	35	20	10	10	5	15	5	60.0	10.8	35.4	F	Rural	Low	Barely	None
23	70	75	60	55	55	50	30	25	15	15	20	15	60.8	20.0	40.4	M	Rural	Low	Barely	Barely
24	90	55	55	55	55	50	15	5	5	5	15	5	60.0	8.3	34.2	M	Rural	Low	Barely	None
25	75	50	50	40	30	35	30	25	15	15	20	15	46.7	20.0	33.3	M	Rural	Low	Barely	None
26	75	65	55	45	55	50	20	10	10	5	15	5	57.5	10.8	34.2	M	Rural	Low	Barely	None
27	90	75	85	55	45	35	30	25	15	15	20	15	64.2	20.0	42.1	M	Rural	Low	Barely	Barely
28	55	65	70	40	45	45	20	10	10	5	15	5	53.3	10.8	32.1	M	Rural	Low	Barely	None
29	70	60	60	50	50	45	30	25	15	15	20	15	55.8	20.0	37.9	M	Rural	Low	Barely	None
30	70	55	40	45	50	45	20	20	15	15	20	15	50.8	17.5	34.2	M	Rural	Low	Barely	None
31	80	75	45	40	50	45	30	25	15	15	20	15	55.8	20.0	37.9	M	Rural	Low	Barely	None
32	90	80	50	45	55	50	20	20	10	15	20	15	61.7	16.7	39.2	F	Rural	Low	Barely	Barely
33	55	60	40	40	50	45	30	25	15	15	20	15	48.3	20.0	34.2	M	Rural	Low	Barely	None
34	85	65	45	45	50	50	20	20	10	15	20	15	56.7	16.7	36.7	F	Rural	Low	Barely	None
35	70	60	70	50	55	50	25	25	15	15	20	15	59.2	19.2	39.2	M	Rural	Low	Barely	Barely
36	70	50	60	50	55	50	20	20	15	15	20	15	55.8	17.5	36.7	M	Rural	Low	Barely	None
37	80	65	70	45	55	45	25	25	15	15	20	15	60.0	19.2	39.6	M	Rural	Low	Barely	Barely
38	50	80	50	40	30	35	20	25	15	15	20	15	47.5	18.3	32.9	M	Rural	Low	Barely	None
39	70	75	40	40	45	35	25	25	15	15	20	15	50.8	19.2	35.0	F	Rural	Low	Barely	None
40	70	85	45	40	30	35	20	25	15	15	20	15	50.8	18.3	34.6	F	Rural	Low	Barely	None
41	80	80	80	40	40	35	35	35	30	15	25	15	59.2	25.8	42.5	M	Rural	Low	Barely	Barely
42	50	90	100	70	60	60	35	35	30	20	35	20	71.7	29.2	50.4	F	Rural	Low	Barely	Moderately
43	80	70	60	50	40	35	35	35	30	20	25	20	55.8	27.5	41.7	M	Rural	Low	Barely	Barely
44	50	70	80	50	50	50	20	25	15	15	30	15	58.3	20.0	39.2	F	Rural	Low	Barely	Barely
45	80	70	60	50	40	35	35	35	30	20	30	20	55.8	28.3	42.1	M	Rural	Low	Barely	Barely
46	50	90	100	70	60	60	35	35	30	20	30	20	71.7	28.3	50.0	M	Rural	Low	Barely	Moderately
47	50	90	80	70	60	60	35	35	30	20	30	20	68.3	28.3	48.3	M	Rural	Low	Barely	Moderately
48	50	90	100	70	50	50	20	25	15	15	25	15	68.3	19.2	43.8	F	Rural	Low	Barely	Barely
49	50	90	100	70	60	60	35	35	30	20	25	20	71.7	27.5	49.6	M	Rural	Low	Barely	Moderately
50	80	60	40	40	40	35	20	25	15	15	25	15	49.2	19.2	34.2	M	Rural	Low	Barely	None
51	50	70	80	70	60	60	35	35	30	20	25	20	65.0	27.5	46.3	M	Rural	Sec	Barely	Barely
52	50	70	80	70	50	50	35	35	30	20	25	20	61.7	27.5	44.6	M	Rural	Sec	Barely	Barely
53	50	70	80	70	60	60	35	35	30	20	25	20	65.0	27.5	46.3	M	Rural	Sec	Barely	Barely
54	100	100	100	70	60	60	20	25	15	15	25	15	81.7	19.2	50.4	F	Rural	Sec	Barely	Moderately
55	50	70	80	50	50	50	35	35	30	20	25	20	58.3	27.5	42.9	M	Rural	Sec	Barely	Barely
56	100	80	60	50	50	50	20	25	15	15	25	15	65.0	19.2	42.1	M	Rural	Sec	Barely	Barely
57	100	80	60	50	50	50	35	35	30	20	25	20	65.0	27.5	46.3	M	Rural	Sec	Barely	Barely
58	100	100	100	70	60	50	35	35	30	20	25	20	80.0	27.5	53.8	M	Rural	Sec	Barely	Moderately
59	100	80	60	50	50	50	35	35	30	15	25	15	65.0	25.8	45.4	M	Rural	Sec	Barely	Barely
60	100	80	60	50	50	50	20	35	15	15	25	15	65.0	20.8	42.9	M	Rural	Sec	Barely	Barely

Raw data for individual scores on written and oral structures **APPENDIX**

NUM	WRITTEN PL	ADV	TENS	PASS	REL	WH	ORAL PL	ADV	TENS	PASS	REL	WH	Writ@	Oral@	Tot@	SEX	LOCATION	SCHOOL	INPUT CLASSROOM	EXTRACLASS
61	100	80	60	50	50	50	35	35	30	20	25	20	65.0	27.5	46.3	M	Rural	Sec	Barely	Barely
62	100	80	60	50	50	50	20	35	15	15	25	15	65.0	20.8	42.9	M	Rural	Sec	Barely	Barely
63	80	60	40	40	40	35	35	35	30	20	25	20	49.2	27.5	38.3	M	Rural	Sec	Barely	Barely
64	80	60	40	40	40	35	20	35	15	15	25	15	49.2	20.8	35.0	M	Rural	Sec	Barely	Barely
65	100	70	100	70	60	60	35	35	30	20	25	20	76.7	27.5	52.1	F	Rural	Sec	Barely	Moderately
66	80	60	40	40	40	35	20	25	15	15	25	15	49.2	19.2	34.2	M	Rural	Sec	Barely	Barely
67	80	60	40	40	40	35	35	35	30	20	25	20	49.2	27.5	38.3	M	Rural	Sec	Barely	Moderately
68	100	70	100	60	60	60	20	35	15	15	25	15	75.0	20.8	47.9	M	Rural	Sec	Barely	Moderately
69	100	80	80	40	40	40	35	35	30	20	25	20	63.3	27.5	45.4	M	Rural	Sec	Barely	Moderately
70	100	60	40	40	40	35	35	35	30	20	25	20	52.5	27.5	40.0	M	Rural	Sec	Barely	Moderately
71	80	80	50	60	40	60	60	40	40	20	40	30	61.7	38.3	50.0	F	Rural	Sec	Barely	Moderately
72	90	90	90	80	60	60	60	40	40	20	40	30	78.3	38.3	58.3	F	Rural	Sec	Barely	Moderately
73	80	80	90	60	60	60	70	50	50	30	45	40	71.7	47.5	59.6	F	Rural	Sec	Barely	Moderately
74	80	80	70	35	40	50	70	50	50	30	45	40	59.2	47.5	53.3	F	Rural	Sec	Barely	Moderately
75	60	75	70	35	40	50	60	40	40	20	40	30	55.0	38.3	46.7	M	Rural	Sec	Barely	Barely
76	100	90	90	90	60	60	70	50	50	30	45	40	81.7	47.5	64.6	F	Rural	Sec	Barely	Moderately
77	90	80	90	80	60	60	60	40	40	20	40	30	76.7	38.3	57.5	F	Rural	Sec	Barely	Moderately
78	80	80	90	60	40	60	70	50	50	30	45	40	68.3	47.5	57.9	M	Rural	Sec	Barely	Moderately
79	100	90	90	80	60	60	60	40	40	20	40	30	80.0	38.3	59.2	F	Rural	Sec	Barely	Moderately
80	80	80	70	35	40	20	60	40	40	20	40	30	54.2	38.3	46.3	M	Rural	Sec	Barely	Barely
81	90	90	90	80	60	50	70	50	50	30	45	40	76.7	47.5	62.1	F	Rural	Sec	Barely	Moderately
82	60	75	50	35	40	20	70	50	50	30	45	40	46.7	47.5	47.1	M	Rural	Sec	Barely	Barely
83	90	80	50	70	60	60	60	40	40	20	40	30	68.3	38.3	53.3	F	Rural	Sec	Barely	Moderately
84	90	75	50	60	40	50	70	50	50	30	45	40	60.8	47.5	54.2	F	Rural	Sec	Barely	Moderately
85	100	90	90	90	60	60	60	40	40	20	40	30	81.7	38.3	60.0	F	Rural	Sec	Barely	Moderately
86	60	75	50	60	40	20	70	40	40	30	40	30	50.8	41.7	46.3	M	Rural	Sec	Barely	Barely
87	60	60	70	35	40	20	60	40	40	20	40	30	47.5	38.3	42.9	M	Rural	Sec	Barely	Barely
88	90	80	90	80	60	60	70	50	50	30	45	40	76.7	47.5	62.1	M	Rural	Sec	Barely	Moderately
89	100	90	90	80	60	60	60	40	40	20	40	30	80.0	38.3	59.2	F	Rural	Sec	Barely	Moderately
90	60	60	70	35	40	20	70	40	40	30	40	30	47.5	41.7	44.6	M	Rural	Sec	Barely	Moderately
91	100	95	90	90	80	80	85	60	80	50	70	40	89.2	64.2	76.7	M	Urban	Low	Much	Much
92	90	85	85	80	40	60	55	60	60	40	40	20	73.3	45.8	59.6	M	Urban	Low	Much	Moderately
93	95	90	75	75	90	70	85	60	80	50	70	40	82.5	64.2	73.3	M	Urban	Low	Much	Much
94	90	85	75	80	80	60	55	60	50	40	40	20	78.3	44.2	61.3	M	Urban	Low	Much	Moderately
95	100	95	85	80	75	70	55	60	60	40	40	20	84.2	45.8	65.0	F	Urban	Low	Much	Much
96	70	80	50	40	80	80	55	60	60	40	40	20	66.7	45.8	56.3	M	Urban	Low	Much	Moderately
97	95	80	75	75	75	60	85	60	60	40	40	40	76.7	54.2	65.4	M	Urban	Low	Much	Moderately
98	100	80	75	75	80	70	55	60	50	40	40	20	80.0	44.2	62.1	F	Urban	Low	Much	Moderately
99	90	80	50	40	40	60	55	60	60	40	40	20	60.0	45.8	52.9	M	Urban	Low	Much	Moderately
100	95	95	90	90	90	80	85	60	60	50	70	40	90.0	60.8	75.4	F	Urban	Low	Much	Much
101	70	90	90	80	75	70	55	60	50	40	40	40	79.2	47.5	63.3	M	Urban	Low	Much	Moderately
102	90	85	85	75	80	70	55	60	60	40	40	20	80.8	45.8	63.3	M	Urban	Low	Much	Much
103	95	80	50	40	40	60	55	60	60	40	40	20	60.8	45.8	53.3	M	Urban	Low	Much	Moderately
104	90	90	75	80	75	60	55	60	50	40	40	20	78.3	44.2	61.3	F	Urban	Low	Much	Much
105	70	90	85	80	80	80	85	60	60	40	40	40	80.8	54.2	67.5	F	Urban	Low	Much	Much
106	100	95	85	75	80	80	55	50	60	40	40	20	85.8	44.2	65.0	F	Urban	Low	Much	Much
107	90	80	75	75	80	70	55	60	60	40	40	40	78.3	49.2	63.8	F	Urban	Low	Much	Much
108	90	80	75	75	90	70	55	50	60	40	40	20	80.0	44.2	62.1	F	Urban	Low	Much	Much
109	95	85	75	75	80	60	85	60	80	40	40	40	78.3	57.5	67.9	F	Urban	Low	Much	Moderately
110	95	80	85	80	80	60	55	60	60	40	40	40	80.0	49.2	64.6	F	Urban	Low	Much	Moderately
111	95	80	90	90	75	70	55	60	60	40	40	40	83.3	49.2	66.3	M	Urban	Low	Much	Moderately
112	70	80	50	40	40	60	55	50	60	40	40	20	56.7	44.2	50.4	M	Urban	Low	Much	Moderately
113	100	90	90	90	80	80	85	60	80	50	70	40	88.3	64.2	76.3	M	Urban	Low	Much	Much
114	70	80	50	40	40	50	55	50	60	40	40	20	55.0	44.2	49.6	M	Urban	Low	Much	Moderately
115	90	85	85	80	80	60	55	40	60	40	40	20	80.0	42.5	61.3	F	Urban	Low	Much	Moderately
116	90	80	50	80	75	80	85	60	60	40	40	40	75.8	54.2	65.0	M	Urban	Low	Much	Moderately
117	95	80	85	80	75	70	55	60	60	40	40	40	80.8	49.2	65.0	M	Urban	Low	Much	Moderately
118	95	80	50	40	40	50	85	60	60	40	40	40	59.2	54.2	56.7	M	Urban	Low	Much	Moderately
119	90	85	85	80	75	70	55	60	60	40	40	20	80.8	45.8	63.3	M	Urban	Low	Much	Moderately
120	95	85	85	80	90	80	85	60	80	60	70	40	85.8	65.8	75.8	F	Urban	Low	Much	Much

Raw data for individual scores on written and oral structures **APPENDIX** 8

NUM	WRITTEN PL	ADV	TENS	PASS	REL	WH	ORAL PL	ADV	TENS	PASS	REL	WH	Writ@	Oral@	Tot@	SEX	LOCATION	SCHOOL	INPUT CLASSROOM	EXTRACLASS
121	95	100	100	90	90	100	90	80	80	60	50	50	95.8	68.3	82.1	F	Urban	Sec	Much	Much
122	100	95	100	90	90	100	90	80	80	50	50	40	95.8	65.0	80.4	F	Urban	Sec	Much	Much
123	100	100	100	100	100	100	90	80	80	50	50	50	100.0	66.7	83.3	F	Urban	Sec	Much	Much
124	95	100	100	100	100	100	65	55	60	50	50	40	99.2	53.3	76.3	M	Urban	Sec	Much	Moderately
125	90	100	100	100	100	100	90	80	80	50	40	40	98.3	63.3	80.8	M	Urban	Sec	Much	Much
126	100	90	90	90	90	80	90	80	70	50	50	40	90.0	63.3	76.7	M	Urban	Sec	Much	Much
127	100	100	90	90	90	80	90	80	80	50	50	40	91.7	65.0	78.3	F	Urban	Sec	Much	Much
128	100	95	90	90	90	80	65	55	60	50	50	40	90.8	53.3	72.1	F	Urban	Sec	Much	Much
129	100	100	100	100	100	100	90	80	80	60	50	40	100.0	66.7	83.3	F	Urban	Sec	Much	Much
130	100	100	100	100	100	100	90	80	70	50	40	40	100.0	61.7	80.8	M	Urban	Sec	Much	Much
131	100	100	100	90	90	80	90	80	80	50	50	40	93.3	65.0	79.2	M	Urban	Sec	Much	Much
132	100	100	50	55	55	30	90	80	80	50	50	50	65.0	66.7	65.8	M	Urban	Sec	Much	Much
133	95	100	90	90	90	30	65	55	60	50	50	40	82.5	53.3	67.9	M	Urban	Sec	Much	Much
134	100	95	90	90	90	50	90	80	80	60	50	40	85.8	66.7	76.3	M	Urban	Sec	Much	Much
135	100	100	100	100	100	100	90	80	70	50	50	40	100.0	63.3	81.7	M	Urban	Sec	Much	Much
136	90	100	50	55	55	30	90	80	80	50	50	40	63.3	65.0	64.2	M	Urban	Sec	Much	Much
137	100	90	90	90	90	80	90	80	80	50	50	40	90.0	65.0	77.5	F	Urban	Sec	Much	Much
138	100	100	100	100	100	100	65	55	60	50	40	40	100.0	51.7	75.8	M	Urban	Sec	Much	Much
139	95	100	90	55	55	30	90	80	70	50	40	40	70.8	61.7	66.3	M	Urban	Sec	Much	Much
140	90	90	50	55	55	30	90	80	80	60	50	40	61.7	66.7	64.2	M	Urban	Sec	Much	Much
141	100	95	50	55	55	100	90	80	80	50	50	50	75.8	66.7	71.3	M	Urban	Sec	Much	Much
142	100	100	100	100	100	30	65	55	60	50	50	40	88.3	53.3	70.8	F	Urban	Sec	Much	Much
143	100	100	90	55	55	30	90	80	80	50	40	40	71.7	63.3	67.5	M	Urban	Sec	Much	Much
144	100	100	90	55	55	30	90	80	80	60	50	40	71.7	66.7	69.2	M	Urban	Sec	Much	Much
145	100	100	90	55	55	30	90	80	70	50	50	50	71.7	65.0	68.3	M	Urban	Sec	Much	Much
146	100	100	90	90	90	85	100	90	95	95	80	90	92.5	91.7	92.1	F	Urban	Sec	Much	Much
147	100	100	90	80	80	85	80	80	65	65	70	80	89.2	73.3	81.3	M	Urban	Sec	Much	Much
148	95	100	90	80	80	85	100	90	65	65	80	90	88.3	81.7	85.0	M	Urban	Sec	Much	Much
149	100	100	100	90	90	90	80	80	65	65	70	80	95.0	73.3	84.2	F	Urban	Sec	Much	Much
150	100	100	100	90	90	90	100	90	95	95	80	90	95.0	91.7	93.3	F	Urban	Sec	Much	Much
151	100	100	80	80	80	85	80	80	65	65	70	80	87.5	73.3	80.4	F	Urban	Sec	Much	Much
152	100	100	80	80	80	85	100	90	65	65	80	90	87.5	81.7	84.6	F	Urban	Sec	Much	Much
153	100	100	90	90	90	90	80	80	65	65	70	80	93.3	73.3	83.3	F	Urban	Sec	Much	Much
154	100	100	100	100	100	90	100	90	95	95	80	90	98.3	91.7	95.0	F	Urban	Sec	Much	Much
155	100	100	70	85	70	75	80	80	65	65	70	80	83.3	73.3	78.3	M	Urban	Sec	Much	Much
156	90	75	70	70	60	60	100	90	65	65	80	90	70.8	81.7	76.3	M	Urban	Sec	Much	Much
157	95	95	80	70	80	75	80	80	65	65	70	80	82.5	73.3	77.9	F	Urban	Sec	Much	Much
158	90	95	80	85	70	60	100	90	95	95	80	90	80.0	91.7	85.8	F	Urban	Sec	Much	Much
159	90	100	100	90	90	85	80	80	65	65	70	80	92.5	73.3	82.9	F	Urban	Sec	Much	Much
160	100	100	100	100	100	90	100	90	95	95	80	90	98.3	91.7	95.0	F	Urban	Sec	Much	Much
161	100	100	100	100	100	90	80	80	65	65	70	80	98.3	73.3	85.8	F	Rural	Post	Moderately	Moderately
162	100	100	100	100	70	75	100	90	65	65	80	90	90.8	81.7	86.3	F	Rural	Post	Moderately	Moderately
163	100	100	100	100	70	75	80	80	65	65	80	80	90.8	75.0	82.9	F	Rural	Post	Moderately	Moderately
164	100	95	100	100	70	60	100	90	95	95	80	90	87.5	91.7	89.6	F	Rural	Post	Moderately	Moderately
165	100	100	80	80	80	70	80	80	65	65	80	60	85.0	71.7	78.3	F	Rural	Post	Moderately	Moderately
166	90	100	95	100	100	60	80	74	60	50	40	35	90.8	56.5	73.7	F	Urban	Low	Much	Much
167	90	100	90	100	90	100	98	80	60	65	55	50	95.0	68.0	81.5	F	Urban	Low	Much	Much
168	100	95	95	80	75	100	80	74	60	50	40	35	90.8	56.5	73.7	F	Urban	Low	Much	Much
169	100	100	90	95	90	100	98	80	60	65	55	50	95.8	68.0	81.9	F	Urban	Low	Much	Much
170	95	100	100	100	100	60	80	74	45	50	40	35	92.5	54.0	73.3	F	Urban	Low	Much	Much
171	95	100	100	80	75	90	98	80	60	65	55	50	90.0	68.0	79.0	F	Urban	Low	Much	Much
172	100	95	100	95	90	60	80	74	60	50	55	50	90.0	61.5	75.8	M	Urban	Low	Much	Much
173	100	100	100	100	100	100	98	80	60	65	55	50	100.0	68.0	84.0	M	Urban	Low	Much	Much
174	100	95	100	80	75	90	80	74	60	50	55	50	90.0	61.5	75.8	M	Urban	Low	Much	Much
175	100	100	100	80	90	100	98	80	60	65	55	50	95.0	68.0	81.5	M	Urban	Low	Much	Much
176	95	95	100	100	100	60	80	74	45	50	55	50	91.7	59.0	75.3	M	Urban	Low	Much	Much
177	95	100	100	100	90	100	98	80	60	65	55	50	97.5	68.0	82.8	F	Urban	Low	Much	Much
178	95	95	100	100	100	100	80	74	60	50	55	50	98.3	61.5	79.9	F	Urban	Low	Much	Much
179	100	100	100	100	100	100	98	80	60	65	55	50	100.0	68.0	84.0	M	Urban	Low	Much	Much
180	100	100	100	100	100	100	80	74	60	50	55	50	100.0	61.5	80.8	M	Urban	Low	Much	Much

Raw data for individual scores on written and oral structures **APPENDIX 8**

	WRITTEN						ORAL												INPUT	
NUM	PL	ADV	TENS	PASS	REL	WH	PL	ADV	TENS	PASS	REL	WH	Writ@	Oral@	Tot@	SEX	LOCATION	SCHOOL	CLASSROOM	EXTRACLASS
181	100	95	100	100	100	60	80	74	60	50	40	35	92.5	56.5	74.5	F	Urban	Low	Much	Much
182	100	100	95	80	75	60	80	74	45	50	55	50	85.0	59.0	72.0	F	Urban	Low	Much	Much
183	100	100	95	100	100	100	98	80	60	65	55	50	99.2	68.0	83.6	F	Urban	Low	Much	Much
184	100	100	95	100	100	60	80	74	60	50	40	35	92.5	56.5	74.5	F	Urban	Low	Much	Much
185	100	100	100	80	75	90	80	74	60	50	55	50	90.8	61.5	76.2	F	Urban	Low	Much	Much
186	100	100	100	100	100	100	80	74	60	50	40	35	100.0	56.5	78.3	M	Rural	Post	Moderately	Moderately
187	100	100	95	80	75	100	80	74	45	50	40	35	91.7	54.0	72.8	F	Rural	Post	Moderately	Moderately
188	100	100	100	80	75	100	80	74	60	50	40	35	92.5	56.5	74.5	F	Rural	Post	Moderately	Moderately
189	100	95	95	100	100	100	98	80	60	65	55	50	98.3	68.0	83.2	F	Rural	Post	Moderately	Moderately
190	100	90	95	75	75	90	80	74	60	50	55	50	87.5	61.5	74.5	M	Rural	Post	Moderately	Moderately
191	100	90	100	95	100	90	80	74	60	50	55	50	95.8	61.5	78.7	M	Rural	Post	Moderately	Moderately
192	100	95	100	75	75	60	80	74	45	50	40	35	84.2	54.0	69.1	M	Rural	Post	Moderately	Moderately
193	95	100	100	95	100	100	98	80	60	65	55	50	98.3	68.0	83.2	F	Rural	Post	Moderately	Moderately
194	95	100	100	95	75	100	80	74	60	50	55	50	94.2	61.5	77.8	F	Rural	Post	Moderately	Moderately
195	95	100	100	95	100	60	80	74	60	50	40	35	91.7	56.5	74.1	F	Rural	Post	Moderately	Moderately
196	95	100	95	90	85	95	100	90	90	80	70	50	93.3	80.0	86.7	F	Rural	Post	Moderately	Moderately
197	100	95	100	100	100	95	100	90	90	80	80	70	98.3	85.0	91.7	F	Rural	Post	Moderately	Moderately
198	100	100	100	100	100	100	100	90	90	80	70	50	100.0	80.0	90.0	F	Rural	Post	Moderately	Moderately
199	95	100	100	90	85	95	100	80	80	80	70	50	94.2	76.7	85.4	F	Rural	Post	Moderately	Moderately
200	100	100	100	100	100	100	100	80	80	80	80	70	100.0	81.7	90.8	F	Rural	Post	Moderately	Moderately
201	100	100	100	100	100	100	100	90	90	80	80	70	100.0	85.0	92.5	M	Rural	Post	Moderately	Moderately
202	95	95	95	80	90	95	60	70	70	60	60	30	91.7	58.3	75.0	M	Rural	Post	Moderately	Moderately
203	85	85	85	80	80	50	100	90	90	80	80	70	77.5	85.0	81.3	F	Rural	Post	Moderately	Moderately
204	95	95	95	85	80	50	90	80	80	70	70	50	83.3	73.3	78.3	F	Rural	Post	Moderately	Moderately
205	100	100	100	100	100	100	100	80	80	80	80	70	100.0	81.7	90.8	F	Rural	Post	Moderately	Moderately
206	95	100	100	100	100	100	100	90	90	80	80	70	99.2	85.0	92.1	F	Rural	Post	Moderately	Moderately
207	95	95	95	85	80	85	60	70	70	60	60	30	89.2	58.3	73.8	F	Rural	Post	Moderately	Moderately
208	85	85	85	80	80	50	100	80	80	80	70	50	77.5	76.7	77.1	M	Rural	Post	Moderately	Moderately
209	95	95	95	80	85	50	70	70	70	60	60	30	83.3	60.0	71.7	M	Rural	Post	Moderately	Moderately
210	100	100	85	90	90	95	90	80	80	80	70	50	93.3	75.0	84.2	F	Rural	Post	Moderately	Moderately
211	95	95	95	85	90	95	100	80	80	70	70	50	92.5	75.0	83.8	F	Urban	Post	Much	Much
212	85	85	85	80	80	50	70	70	70	60	60	30	77.5	60.0	68.8	M	Urban	Post	Much	Moderately
213	95	95	95	85	90	95	100	80	80	70	70	50	92.5	75.0	83.8	F	Urban	Post	Much	Much
214	85	85	95	85	85	85	100	90	90	80	80	70	86.7	85.0	85.8	F	Urban	Post	Much	Much
215	100	100	100	100	100	100	70	70	70	60	60	30	100.0	60.0	80.0	F	Urban	Post	Much	Much
216	100	95	95	90	85	85	100	80	80	70	70	50	91.7	75.0	83.3	F	Urban	Post	Much	Much
217	85	85	85	90	90	85	100	90	90	80	80	70	86.7	85.0	85.8	M	Urban	Post	Much	Much
218	95	95	100	90	85	85	90	80	80	70	70	50	91.7	73.3	82.5	M	Urban	Post	Much	Much
219	100	95	100	100	100	100	100	90	90	80	80	70	99.2	85.0	92.1	F	Urban	Post	Much	Much
220	100	100	95	85	90	85	100	90	90	80	80	70	92.5	85.0	88.8	F	Urban	Post	Much	Much
221	100	100	95	85	100	95	100	100	100	90	90	90	95.8	95.0	95.4	F	Urban	Post	Much	Much
222	95	100	100	75	95	90	90	80	80	75	85	80	92.5	81.7	87.1	M	Urban	Post	Much	Much
223	100	100	95	100	95	95	100	100	100	90	90	90	97.5	95.0	96.3	F	Urban	Post	Much	Much
224	100	100	95	100	90	100	90	80	80	75	85	80	97.5	81.7	89.6	F	Urban	Post	Much	Much
225	95	95	95	95	95	95	100	100	100	75	90	90	95.0	92.5	93.8	F	Urban	Post	Much	Much
226	100	100	100	95	95	90	90	80	80	75	85	80	96.7	81.7	89.2	M	Urban	Post	Much	Much
227	100	100	100	100	100	90	100	100	100	90	90	90	98.3	95.0	96.7	M	Urban	Post	Much	Much
228	95	100	100	95	95	70	90	80	80	75	85	80	92.5	81.7	87.1	M	Urban	Post	Much	Much
229	100	100	95	100	100	95	100	100	100	95	90	90	98.3	95.8	97.1	M	Urban	Post	Much	Much
230	100	100	100	95	65	100	90	80	80	75	85	80	93.3	81.7	87.5	M	Urban	Post	Much	Much
231	100	100	100	95	100	70	100	100	100	90	90	90	94.2	95.0	94.6	M	Urban	Post	Much	Much
232	100	75	90	95	95	80	90	80	80	75	85	80	89.2	81.7	85.4	M	Urban	Post	Much	Much
233	100	100	100	100	100	95	100	100	100	90	90	90	99.2	95.0	97.1	M	Urban	Post	Much	Much
234	95	100	100	90	75	100	90	80	80	75	85	80	93.3	81.7	87.5	F	Urban	Post	Much	Much
235	95	100	100	95	75	90	100	100	100	90	90	90	92.5	95.0	93.8	M	Urban	Post	Much	Much
236	100	95	100	95	95	95	90	80	80	75	85	80	96.7	81.7	89.2	F	Urban	Post	Much	Much
237	95	100	100	100	95	100	100	100	100	90	90	90	98.3	95.0	96.7	M	Urban	Post	Much	Much
238	95	100	100	100	95	95	90	80	80	75	90	90	97.5	84.2	90.8	F	Urban	Post	Much	Much
239	100	95	95	95	85	100	100	100	100	90	90	90	95.0	95.0	95.0	M	Urban	Post	Much	Much
240	95	100	100	95	95	95	90	80	80	75	90	90	96.7	84.2	90.4	F	Urban	Post	Much	Much

APPENDIX . 9

```
EANS /TABLES WX1 TO TAVERAGE by school by location by sex.

ummaries of    WX1         Written x1
y levels of    SCHOOL      Lower/Secondary/Post Secondary school
               LOCATION    Location of school urban/rural
               SEX         sex of student
```

ariable	Value	Label	Mean	Std Dev	Cases
or Entire Population			89.0208	14.3105	240
CHOOL	1	Lower secondary	82.7500	15.4131	100
LOCATION	1	Rural	72.4000	13.6367	50
SEX	1	Male	72.1429	13.8418	35
SEX	2	Female	73.0000	13.6015	15
LOCATION	2	Urban	93.1000	8.6832	50
SEX	1	Male	91.4000	10.2591	25
SEX	2	Female	94.8000	6.5320	25
CHOOL	2	Secondary	90.8750	14.3592	80
LOCATION	1	Rural	84.0000	17.5119	40
SEX	1	Male	79.6154	19.6938	26
SEX	2	Female	92.1429	8.0178	14
LOCATION	2	Urban	97.7500	3.7468	40
SEX	1	Male	97.1429	4.0532	21
SEX	2	Female	98.4211	3.3552	19
CHOOL	3	Post Secondary	97.0000	4.3375	60
LOCATION	1	Rural	97.3333	4.0965	30
SEX	1	Male	96.8750	5.3033	8
SEX	2	Female	97.5000	3.7001	22
LOCATION	2	Urban	96.6667	4.6113	30
SEX	1	Male	96.3333	5.1640	15
SEX	2	Female	97.0000	4.1404	15

Total Cases = 240

APPENDIX 9

Summaries of	WX2	x2 written
By levels of	SCHOOL	Lower/Secondary/Post Secondary school
	LOCATION	Location of school urban/rural
	SEX	sex of student

Variable	Value	Label	Mean	Std Dev	Cases
For Entire Population			86.2917	14.9195	240
SCHOOL	1	Lower secondary	79.1500	16.1128	100
LOCATION	1	Rural	68.0000	14.3214	50
SEX	1	Male	64.2857	13.6200	35
SEX	2	Female	76.6667	12.3443	15
LOCATION	2	Urban	90.3000	8.1071	50
SEX	1	Male	87.6000	7.7889	25
SEX	2	Female	93.0000	7.6376	25
SCHOOL	2	Secondary	87.4375	13.3832	80
LOCATION	1	Rural	77.0000	10.7894	40
SEX	1	Male	72.8846	9.9170	26
SEX	2	Female	84.6429	7.9576	14
LOCATION	2	Urban	97.8750	4.7888	40
SEX	1	Male	97.3810	6.0455	21
SEX	2	Female	98.4211	2.9120	19
SCHOOL	3	Post Secondary	96.6667	5.3414	60
LOCATION	1	Rural	97.0000	4.4721	30
SEX	1	Male	93.7500	5.1755	8
SEX	2	Female	98.1818	3.6337	22
LOCATION	2	Urban	96.3333	6.1495	30
SEX	1	Male	95.6667	7.7613	15
SEX	2	Female	97.0000	4.1404	15

Total Cases = 240

APPENDIX 9

Summaries of WX3 x3 written
By levels of SCHOOL Lower/Secondary/Post Secondary school
LOCATION Location of school urban/rural
SEX sex of student

Variable	Value	Label	Mean	Std Dev	Cases
For Entire Population			81.6042	19.4815	240
SCHOOL	1	Lower secondary	74.0500	20.1220	100
LOCATION	1	Rural	64.0000	18.6537	50
SEX	1	Male	61.7143	16.9316	35
SEX	2	Female	69.3333	21.8654	15
LOCATION	2	Urban	84.1000	16.2471	50
SEX	1	Male	79.0000	20.0520	25
SEX	2	Female	89.2000	9.0921	25
SCHOOL	2	Secondary	79.7500	19.3551	80
LOCATION	1	Rural	71.5000	19.6834	40
SEX	1	Male	66.1538	18.5638	26
SEX	2	Female	81.4286	18.3375	14
LOCATION	2	Urban	88.0000	15.2248	40
SEX	1	Male	83.3333	18.5293	21
SEX	2	Female	93.1579	8.2007	19
SCHOOL	3	Post Secondary	96.6667	4.9289	60
LOCATION	1	Rural	96.5000	5.5940	30
SEX	1	Male	96.2500	5.1755	8
SEX	2	Female	96.5909	5.8526	22
LOCATION	2	Urban	96.8333	4.2514	30
SEX	1	Male	96.6667	5.5635	15
SEX	2	Female	97.0000	2.5355	15

Total Cases = 240

APPENDIX . ; 9

```
Summaries of   WX4        x4 written
By levels of   SCHOOL     Lower/Secondary/Post Secondary school
               LOCATION   Location of school urban/rural
               SEX        sex of student
```

Variable	Value	Label	Mean	Std Dev	Cases
For Entire Population			73.7083	21.3899	240
SCHOOL	1	Lower secondary	65.3000	20.7780	100
LOCATION	1	Rural	50.0000	8.9214	50
SEX	1	Male	49.1429	8.6165	35
SEX	2	Female	52.0000	9.5991	15
LOCATION	2	Urban	80.6000	17.7465	50
SEX	1	Male	74.8000	21.5291	25
SEX	2	Female	86.4000	10.4602	25
SCHOOL	2	Secondary	70.5000	20.9822	80
LOCATION	1	Rural	57.7500	17.2073	40
SEX	1	Male	50.1923	13.4522	26
SEX	2	Female	71.7857	14.6244	14
LOCATION	2	Urban	83.2500	16.1939	40
SEX	1	Male	76.9048	19.1361	21
SEX	2	Female	90.2632	7.9011	19
SCHOOL	3	Post Secondary	92.0000	8.0885	60
LOCATION	1	Rural	91.0000	9.2289	30
SEX	1	Male	85.6250	10.8356	8
SEX	2	Female	92.9545	7.9671	22
LOCATION	2	Urban	93.0000	6.7722	30
SEX	1	Male	93.3333	7.2375	15
SEX	2	Female	92.6667	6.5101	15

Total Cases = 240

APPENDIX 9

```
Summaries of   WX5        x5 written
By levels of   SCHOOL     Lower/Secondary/Post Secondary school
               LOCATION   Location of school urban/rural
               SEX        sex of student
```

Variable	Value	Label	Mean	Std Dev	Cases
For Entire Population			70.5833	22.1698	240
SCHOOL	1	Lower secondary	62.8500	21.9533	100
LOCATION	1	Rural	46.0000	9.5831	50
SEX	1	Male	45.8571	10.2531	35
SEX	2	Female	46.3333	8.1211	15
LOCATION	2	Urban	79.7000	17.3914	50
SEX	1	Male	73.4000	21.0020	25
SEX	2	Female	86.0000	9.6825	25
SCHOOL	2	Secondary	66.2500	21.0710	80
LOCATION	1	Rural	50.0000	9.0582	40
SEX	1	Male	46.9231	7.8838	26
SEX	2	Female	55.7143	8.5163	14
LOCATION	2	Urban	82.5000	16.6024	40
SEX	1	Male	75.7143	19.3834	21
SEX	2	Female	90.0000	8.1650	19
SCHOOL	3	Post Secondary	89.2500	10.3262	60
LOCATION	1	Rural	87.3333	11.5768	30
SEX	1	Male	88.1250	10.9992	8
SEX	2	Female	87.0455	12.0178	22
LOCATION	2	Urban	91.1667	8.6785	30
SEX	1	Male	90.3333	10.4312	15
SEX	2	Female	92.0000	6.7612	15

Total Cases = 240

```
Summaries of    WX6        x6 written
By levels of    SCHOOL     Lower/Secondary/Post Secondary school
                LOCATION   Location of school urban/rural
                SEX        sex of student
```

Variable	Value	Label	Mean	Std Dev	Cases
For Entire Population			66.3333	24.3126	240
SCHOOL	1	Lower secondary	58.1000	21.0672	100
LOCATION	1	Rural	41.6000	9.3372	50
SEX	1	Male	42.0000	9.2514	35
SEX	2	Female	40.6667	9.7955	15
LOCATION	2	Urban	74.6000	15.9348	50
SEX	1	Male	72.4000	15.6205	25
SEX	2	Female	76.8000	16.2583	25
SCHOOL	2	Secondary	60.9375	24.5606	80
LOCATION	1	Rural	48.1250	13.5726	40
SEX	1	Male	42.8846	14.0124	26
SEX	2	Female	57.8571	4.2582	14
LOCATION	2	Urban	73.7500	26.4757	40
SEX	1	Male	64.5238	30.6147	21
SEX	2	Female	83.9474	16.3791	19
SCHOOL	3	Post Secondary	87.2500	15.5799	60
LOCATION	1	Rural	84.3333	18.7880	30
SEX	1	Male	79.3750	22.1097	8
SEX	2	Female	86.1364	17.6562	22
LOCATION	2	Urban	90.1667	11.1017	30
SEX	1	Male	86.0000	13.7840	15
SEX	2	Female	94.3333	5.3005	15

Total Cases = 240

APPENDIX : 9

```
Summaries of   OX1        x1 oral
By levels of   SCHOOL     Lower/Secondary/Post Secondary school
               LOCATION   Location of school urban/rural
               SEX        sex of student
```

Variable	Value	Label	Mean	Std Dev	Cases
For Entire Population			65.5625	29.1862	240
SCHOOL	1	Lower secondary	48.7900	28.1967	100
LOCATION	1	Rural	23.7000	6.8370	50
SEX	1	Male	24.2857	7.3907	35
SEX	2	Female	22.3333	5.3005	15
LOCATION	2	Urban	73.8800	16.5796	50
SEX	1	Male	71.3600	16.7777	25
SEX	2	Female	76.4000	16.3248	25
SCHOOL	2	Secondary	67.2500	25.1187	80
LOCATION	1	Rural	47.3750	18.9123	40
SEX	1	Male	41.1538	18.2925	26
SEX	2	Female	58.9286	14.4353	14
LOCATION	2	Urban	87.1250	10.4934	40
SEX	1	Male	86.4286	10.0178	21
SEX	2	Female	87.8947	11.2195	19
SCHOOL	3	Post Secondary	91.2667	10.9170	60
LOCATION	1	Rural	88.2000	12.4994	30
SEX	1	Male	81.2500	13.5620	8
SEX	2	Female	90.7273	11.3732	22
LOCATION	2	Urban	94.3333	8.1720	30
SEX	1	Male	94.0000	8.2808	15
SEX	2	Female	94.6667	8.3381	15

Total Cases = 240

APPENDIX 9

```
Summaries of   OX2        x2 Oral
By levels of   SCHOOL     Lower/Secondary/Post Secondary school
               LOCATION   Location of school urban/rural
               SEX        sex of student
```

Variable	Value	Label	Mean	Std Dev	Cases
For Entire Population			58.1458	26.7226	240
SCHOOL	1	Lower secondary	42.2800	25.2667	100
LOCATION	1	Rural	19.2000	10.1197	50
SEX	1	Male	19.4286	10.7629	35
SEX	2	Female	18.6667	8.7560	15
LOCATION	2	Urban	65.3600	10.0158	50
SEX	1	Male	63.8400	8.6971	25
SEX	2	Female	66.8800	11.1517	25
SCHOOL	2	Secondary	58.8125	21.9066	80
LOCATION	1	Rural	38.7500	6.8641	40
SEX	1	Male	36.9231	6.0128	26
SEX	2	Female	42.1429	7.2627	14
LOCATION	2	Urban	78.8750	9.9671	40
SEX	1	Male	77.3810	9.8259	21
SEX	2	Female	80.5263	10.1235	19
SCHOOL	3	Post Secondary	83.7000	9.3579	60
LOCATION	1	Rural	80.0667	6.9179	30
SEX	1	Male	75.7500	6.5411	8
SEX	2	Female	81.6364	6.4921	22
LOCATION	2	Urban	87.3333	10.1483	30
SEX	1	Male	89.3333	10.9978	15
SEX	2	Female	85.3333	9.1548	15

Total Cases = 240

APPENDIX 9

```
Summaries of    OX3         x3 Oral
By levels of    SCHOOL      Lower/Secondary/Post Secondary school
                LOCATION    Location of school urban/rural
                SEX         sex of student
```

Variable	Value	Label	Mean	Std Dev	Cases
For Entire Population			53.4792	27.5628	240
SCHOOL	1	Lower secondary	37.1000	24.5585	100
LOCATION	1	Rural	13.9000	7.5788	50
SEX	1	Male	14.2857	8.3263	35
SEX	2	Female	13.0000	5.6061	15
LOCATION	2	Urban	60.3000	7.9160	50
SEX	1	Male	61.0000	8.1650	25
SEX	2	Female	59.6000	7.7621	25
SCHOOL	2	Secondary	54.3750	23.0076	80
LOCATION	1	Rural	34.3750	11.5574	40
SEX	1	Male	30.7692	11.0175	26
SEX	2	Female	41.0714	9.6434	14
LOCATION	2	Urban	74.3750	10.8715	40
SEX	1	Male	71.9048	7.8224	21
SEX	2	Female	77.1053	13.1567	19
SCHOOL	3	Post Secondary	79.5833	14.4178	60
LOCATION	1	Rural	71.8333	13.9879	30
SEX	1	Male	66.8750	13.8712	8
SEX	2	Female	73.6364	13.9029	22
LOCATION	2	Urban	87.3333	10.1483	30
SEX	1	Male	89.3333	10.9978	15
SEX	2	Female	85.3333	9.1548	15

Total Cases = 240

APPENDIX 9

Summaries of	OX4	x4 Oral
By levels of	SCHOOL	Lower/Secondary/Post Secondary school
	LOCATION	Location of school urban/rural
	SEX	sex of student

Variable	Value	Label	Mean	Std Dev	Cases
For Entire Population			44.2500	25.8184	240
SCHOOL	1	Lower secondary	29.6000	19.6134	100
LOCATION	1	Rural	11.6000	5.6641	50
SEX	1	Male	11.7143	5.8086	35
SEX	2	Female	11.3333	5.4989	15
LOCATION	2	Urban	47.6000	9.1607	50
SEX	1	Male	45.8000	8.5000	25
SEX	2	Female	49.4000	9.6090	25
SCHOOL	2	Secondary	41.0625	22.5256	80
LOCATION	1	Rural	21.5000	5.3349	40
SEX	1	Male	20.5769	5.1627	26
SEX	2	Female	23.2143	5.4091	14
LOCATION	2	Urban	60.6250	14.6405	40
SEX	1	Male	54.2857	6.3808	21
SEX	2	Female	67.6316	17.9016	19
SCHOOL	3	Post Secondary	72.9167	12.7323	60
LOCATION	1	Rural	67.1667	13.3056	30
SEX	1	Male	60.0000	13.0931	8
SEX	2	Female	69.7727	12.6752	22
LOCATION	2	Urban	78.6667	9.1852	30
SEX	1	Male	81.3333	10.0830	15
SEX	2	Female	76.0000	7.6064	15

Total Cases = 240

APPENDIX : 9

Summaries of OX5 x5 Oral
By levels of SCHOOL Lower/Secondary/Post Secondary school
LOCATION Location of school urban/rural
SEX sex of student

Variable	Value	Label	Mean	Std Dev	Cases
For Entire Population			47.1250	23.6135	240
SCHOOL	1	Lower secondary	32.1500	17.9401	100
LOCATION	1	Rural	16.8000	8.1291	50
SEX	1	Male	16.8571	7.7730	35
SEX	2	Female	16.6667	9.1937	15
LOCATION	2	Urban	47.5000	10.1645	50
SEX	1	Male	47.8000	10.7121	25
SEX	2	Female	47.2000	9.7980	25
SCHOOL	2	Secondary	45.8750	17.0772	80
LOCATION	1	Rural	33.5000	8.7852	40
SEX	1	Male	30.1923	8.0599	26
SEX	2	Female	39.6429	6.6403	14
LOCATION	2	Urban	58.2500	14.1217	40
SEX	1	Male	52.3810	12.2085	21
SEX	2	Female	64.7368	13.4860	19
SCHOOL	3	Post Secondary	73.7500	15.0035	60
LOCATION	1	Rural	64.8333	14.5320	30
SEX	1	Male	57.5000	13.6277	8
SEX	2	Female	67.5000	14.2051	22
LOCATION	2	Urban	82.6667	9.0719	30
SEX	1	Male	84.3333	8.6327	15
SEX	2	Female	81.0000	9.4868	15

Total Cases = 240

APPENDIX 9

Summaries of	OX6	x6 Oral
By levels of	SCHOOL	Lower/Secondary/Post Secondary school
	LOCATION	Location of school urban/rural
	SEX	sex of student

Variable	Value	Label	Mean	Std Dev	Cases
For Entire Population			40.2917	25.4441	240
SCHOOL	1	Lower secondary	24.0500	15.5974	100
LOCATION	1	Rural	11.6000	5.6641	50
SEX	1	Male	11.7143	5.8086	35
SEX	2	Female	11.3333	5.4989	15
LOCATION	2	Urban	36.5000	11.9630	50
SEX	1	Male	35.6000	12.6095	25
SEX	2	Female	37.4000	11.4673	25
SCHOOL	2	Secondary	42.1250	23.1502	80
LOCATION	1	Rural	26.0000	9.0014	40
SEX	1	Male	22.8846	8.1453	26
SEX	2	Female	31.7857	7.7477	14
LOCATION	2	Urban	58.2500	21.7076	40
SEX	1	Male	50.0000	17.8885	21
SEX	2	Female	67.3684	22.3214	19
SCHOOL	3	Post Secondary	64.9167	20.6974	60
LOCATION	1	Rural	54.5000	17.8282	30
SEX	1	Male	43.7500	13.8229	8
SEX	2	Female	58.4091	17.7540	22
LOCATION	2	Urban	75.3333	18.1437	30
SEX	1	Male	78.6667	17.2654	15
SEX	2	Female	72.0000	18.9737	15

Total Cases = 240

APPENDIX : 9

Summaries of	WAVERAGE	Written average
By levels of	SCHOOL	Lower/Secondary/Post Secondary school
	LOCATION	Location of school urban/rural
	SEX	sex of student

Variable	Value	Label	Mean	Std Dev	Cases
For Entire Population			77.9236	17.0193	240
SCHOOL	1	Lower secondary	70.3667	16.5773	100
LOCATION	1	Rural	57.0000	7.6283	50
SEX	1	Male	55.8571	7.7028	35
SEX	2	Female	59.6667	6.9779	15
LOCATION	2	Urban	83.7333	11.5067	50
SEX	1	Male	79.7667	13.7805	25
SEX	2	Female	87.7000	6.9024	25
SCHOOL	2	Secondary	75.9583	15.9653	80
LOCATION	1	Rural	64.7292	11.3689	40
SEX	1	Male	59.7756	9.6884	26
SEX	2	Female	73.9286	8.1874	14
LOCATION	2	Urban	87.1875	11.3317	40
SEX	1	Male	82.5000	13.2051	21
SEX	2	Female	92.3684	5.5226	19
SCHOOL	3	Post Secondary	93.1389	5.7865	60
LOCATION	1	Rural	92.2500	6.6708	30
SEX	1	Male	90.0000	8.2616	8
SEX	2	Female	93.0682	6.0059	22
LOCATION	2	Urban	94.0278	4.6890	30
SEX	1	Male	93.0556	5.6049	15
SEX	2	Female	95.0000	3.4790	15

Total Cases = 240

APPENDIX 9

Summaries of OAVERAGE Oral average
By levels of SCHOOL Lower/Secondary/Post Secondary school
LOCATION Location of school urban/rural
SEX sex of student

Variable	Value	Label	Mean	Std Dev	Cases
For Entire Population			51.4757	25.3801	240
SCHOOL	1	Lower secondary	35.6617	21.1273	100
LOCATION	1	Rural	16.1333	6.8217	50
SEX	1	Male	16.3810	7.1940	35
SEX	2	Female	15.5556	6.0558	15
LOCATION	2	Urban	55.1900	8.7765	50
SEX	1	Male	54.2333	8.8265	25
SEX	2	Female	56.1467	8.8004	25
SCHOOL	2	Secondary	51.5833	20.8747	80
LOCATION	1	Rural	33.5833	9.7186	40
SEX	1	Male	30.4167	9.0592	26
SEX	2	Female	39.4643	8.2600	14
LOCATION	2	Urban	69.5833	11.1181	40
SEX	1	Male	65.3968	7.7083	21
SEX	2	Female	74.2105	12.5998	19
SCHOOL	3	Post Secondary	77.6889	12.4194	60
LOCATION	1	Rural	71.1000	11.3883	30
SEX	1	Male	64.1875	10.8102	8
SEX	2	Female	73.6136	10.7389	22
LOCATION	2	Urban	84.2778	9.7102	30
SEX	1	Male	86.1667	10.3978	15
SEX	2	Female	82.3889	8.9191	15

Total Cases = 240

APPENDIX 9

Summaries of TAVERAGE Total average (Written & Oral)
By levels of SCHOOL Lower/Secondary/Post Secondary school
LOCATION Location of school urban/rural
SEX sex of student

Variable	Value	Label	Mean	Std Dev	Cases
For Entire Population			64.6997	20.2321	240
SCHOOL	1	Lower secondary	53.0142	18.2367	100
LOCATION	1	Rural	36.5667	5.5823	50
SEX	1	Male	36.1190	6.0023	35
SEX	2	Female	37.6111	4.4612	15
LOCATION	2	Urban	69.4617	9.4180	50
SEX	1	Male	67.0000	10.6932	25
SEX	2	Female	71.9233	7.3570	25
SCHOOL	2	Secondary	63.7708	16.7130	80
LOCATION	1	Rural	49.1562	7.8495	40
SEX	1	Male	45.0962	6.0591	26
SEX	2	Female	56.6964	4.4771	14
LOCATION	2	Urban	78.3854	8.1285	40
SEX	1	Male	73.9484	6.5546	21
SEX	2	Female	83.2895	6.8605	19
SCHOOL	3	Post Secondary	85.4139	7.5591	60
LOCATION	1	Rural	81.6750	6.9438	30
SEX	1	Male	77.0938	7.0295	8
SEX	2	Female	83.3409	6.2618	22
LOCATION	2	Urban	89.1528	6.2538	30
SEX	1	Male	89.6111	7.6400	15
SEX	2	Female	88.6944	4.7111	15

Total Cases = 240

BIBLIOGRAPHY

Adone, D. 1994. *The acquisition of Mauritian Creole*. Amsterdam : John Benjamins.

Ahai, N. and Faraclas, N. 1993. 'Rights and expectations in an age of "debt crisis": literacy and integral human development in Papua New Guinea' in Freebody, P. and Welch, A. R. (eds.) *Knowledge, Culture and Power: international perspectives on literacy as policy and practice*. London : Falmer.

Alleyne, M. 1980. *An historical-comparative study of English-based Afro-American dialects of the New World*. Ann Arbor: Karoma.

Andersen, R. (ed.). 1984. *Second Language: a Crosslinguistic Perspective*. Rowley, Mass. : Newbury House

Andersen, R. 1989. *The acquisition of verb morphology*. Los Angeles: University of California.

Andersen, R. 1991. 'Developmental sequences: The emergence of aspect marking in second language acquisition' in Huebner, T. and Ferguson, C.A. (eds.). *Crosscurrents in second language acquisition and linguistic theories* (pp. 305-324). Amsterdam: John Benjamins.

d'Anglejan, A. 1978. 'Language learning in and out of classrooms' in Richards (ed.) 1978.

d'Anglejan, A., Painchaud, G. and Renaud, C. 1986. 'Beyond the classroom: a study of communicative abilities in adult immigrants following intensive instruction.' *TESOL Quarterly* 20: 185-205.

August, D., and Hakuta, K. (eds.). 1997. *Improving schooling for language minority children*. Washington D.C: National Academy Press.

Bacon, S. and Finnemann, M. 1992. 'Sex differences in self-reported beliefs about foreign-language learning and authentic oral and written input'. *Language Learning* 42: 471-95.

Baker, P. 1972. *Kreol : A Description of Mauritian Creole*. London: Hurst.

Baker, P. 1976. *Towards a Social History of Mauritian Creole. B.Phil. dissertation*. University of York.

Baker,C.(ed) 1996. *Foundations of Bilingual Education and Bilingualism*. Multilingual Matters Ltd.

Barnes, S., Gutfreund, M., Satterly, D. and Wells, G. 1983. 'Characteristics of adult speech which predict children's language development.' *Journal of Child Language* 10: 65-84.

Barnwell, P. J. and Toussaint, A. 1949. *A Short History of Mauritius*. Longmans, Green & Co.

Beaton, P. 1859. *Creoles and Coolies or Five Years in Mauritius*. London: Nisbet (Reprint: Port Washington: Kennikat Press 1971).

Beebe, L. (ed.) 1988. *Issues in Second Language Acquisition: Multiple Perspectives*. New York: Newbury House.

Benedict, B. 1961. *Indians in a plural society: a report on Mauritius*. Colonial research studies no 34, London.

Bernstein, B.B. 1964. 'Aspects of language and learning in the genesis of the social process' in D. Hymes (ed.) 251-63.

Bernstein, B.B. 1971. *Class, Codes, and Control*. Vol 1: *Theoretical Studies Towards a Sociology of Language*. London: Routledge and Kegan Paul.

Bernstein, B.B. (ed.). 1973. *Class, Codes, and Control. Vol 2: Applied Studies Towards a Sociology of Language*. London: Routledge and Kegan Paul.

Bialystok, E. 1978. 'A theoretical model of second language learning'. *Language Learning* 28: 69-84.

Bialystok, E. 1981. 'Some evidence for the integrity and interaction of two knowledge sources' in Andersen (ed.) 1981. *New Dimensions in Second Language Acquisition Research* (pp. 62-74). Rowley, Mass: Newbury House.

Bialystok, E. 1988.'Levels of bilingualism and levels of linguistic awareness.' *Developmental Psychology* 24: 560-567.

Bialystok, E. 1988. 'Pyscholinguistic dimensions of second language proficiency'in Rutherford and Sharwood-Smith (eds.) 1988: 31-50.

Bialystok, E. 2001. *Bilingualism in Development: Language, Literacy, and Cognition*. Cambridge: Cambridge University Press.

Bialystok, E. and Hakuta, K. 1999. 'Confounded age: Linguistic and cognitive factors in age differences in second language acquisition' in Birdsong, D. (ed.), *Second language acquisition and the critical period hypothesis*. Mahwah, NJ: Lawrence Erlbaum Associates.

Bickerton, D. 1981. *Roots of Language*. Ann Arbor: Karoma.

Bickerton, D. 1984. 'The language bioprogram hypothesis'. *The Behavioral and Brain Sciences* 7. 173-221.

Bickerton, D. 1986. *The lexical learning hypothesis and the pidgin-creole cycle.* Reproduced by L.A.U.D. University of Duisburg.

Bickerton, D 1988. 'Creole languages and the Bioprogram' in Newmeyer (ed.) *Language: Psychological and Biological Aspects*, 267-284.

Birdsong, D. 1992. 'Ultimate attainment in second language acquisition'. *Language* 68: 706-55.

Birdsong, D. 1999. 'Introduction: whys and why nots of the Critical Period Hypothesis for second language acquisition' in Birdsong, D. (ed.) *Second language acquisition and the critical period hypothesis.* Mahwah, NJ: Lawrence Erlbaum Associates.

Blactchford, C. and Schachter, J. (eds.) 1978. *On TESOL 78: EFL Policies, Programs, Practices.* Washington D.C. : TESOL.

Bley–Vroman, R. 1988. The fundamental character of foreign language learning' in Rutherford and Sharwood-Smith (eds.) 1988.

Bley-Vroman, R. 1989. 'The logical problem of second language learning' in Gass and Schachter (eds.) 1989.

Bollée, A. 1977. 'Pidgins and Kreolishche Sprachen'. *Studium Linguistik* 3: 48-76.

Boyle, J. 1987. 'Sex differences in listening vocabulary'. *Language Learning* 37: 273-84.

Bratt Paulston, C. 1981. 'Bilingualism and education' in Ferguson, C. and Heath, S.B. (eds.) *Language in the USA* (pp. 469-485). Cambridge: Cambridge University Press.

Brelu Brelu, E. 1993. 'Le Bocage High School : Langue officielle d'enseignement des langues.' *Culture de Pedagogie, Revue de l'A.M.E.F.* (Mauritius) 10/11 : 24-35.

Brinton, D. 1999. 'Report on Academic Specialist Visit to South Africa, Madagascar, and Mauritius : September 1999.'

British Council. 1995. *English in the World: the English 2000 global consultation.* Manchester, British Council.

Brown, R. 1973. *A first language: The early stages.* Cambridge, MA: Harvard University Press

Brown, R. and Hanlon, C. 1970. 'Derivational complexity and order of acquisition in child speech' in Hayes (ed.) 1970.

Brown, H., Yorio, C. and Gymes, R. (eds.) 1977. *On TESOL 77.* Washington D.C: TESOL.

Brumfit, C.J. (ed.) 1983. *Language Teaching Projects for the Third World.* Oxford: Pergamon/British Council.

Buckby, M. 1976. 'Is primary French in the balance ?' *Modern Language Journal* 56: 340-6.

Burstall, C. 1979. 'Primary French in the balance' in Pride (ed.) 1979.

Burstall, C. 1975. 'Factors affecting foreign-language learning: a consideration of some relevant research findings'. *Language Teaching and Linguistics Abstracts* 8: 105-25.

Burstall, C., Jamieson, M., Cohen, S. and Hargreaves, M. 1974. *Primary French in the Balance.* Windsor: NFER Publishing Company.

Butterworth, G. and Hatch, E. 1978. 'A Spanish- speaking adolescent's acquisition of English syntax' in Hatch (ed.) 1978: 231-45.

Canale, M. and Swain, M. 1980. 'Theoretical bases of communicative approaches to second language teaching and testing' in *Applied Linguistics 1*: 1-47.

Cancino, H., Rosansky, E. and Schumann, J. 1978. 'The acquisition of English negatives and interrogatives by native Spanish speakers' in Hatch (ed.) 1978: 207-30

Carroll, J.B.1967. 'Foreign language proficiency levels attained by language majors near graduation from college.' *Foreign Language Annals 1*: 131-51.

Carroll, J. B. 1969. 'Psychological and educational research into second language teaching to young children' in Stern 1969: 56-68.

Carroll, J.B. 1969. 'Reaction to Brimer's article'. *Journal of Research and Development in Education* 9: 18-21.

Carroll, J.B. 1973. 'Implications of aptitude test research and psycholinguistic theory for foreign language teaching.' *Linguistics* 112: 5-13.

Carroll, J. B. 1975. 'Aptitude in second language learning' in Taggart 1975: 8-23.

Carroll, J. B. 1975. *The Teaching of French as a Foreign Language in Eight countries.* New York: Wiley.

Carroll, J. B. 1981. 'Twenty-five years of research on foreign language aptitude' in Diller (ed.) 1981.

Carroll, J.B. and Sapon, S. 1959. *Modern Language Aptitude Test-Form A.* New York: The Psychological Corporation.

Carter, R. and McCarthy, M. 1997. *Exploring Spoken English.* Cambridge: Cambridge University Press.

Cazden, C., Cancino, H., Rosansky, E. and Schumann, J. 1975. *Second Language Acquisition in Children, Adolescents and Adults. Final Report.* Washington D. C.: National Institute of Education.

Chastain, K. 1969. 'Prediction of success in audio-lingual and cognitive classes.' *Language Learning* 19: 27-39.

Chaudenson, R. 1977. 'Toward the reconstruction of the social matrix of creole language' in Valdman, A. (ed.) *Pidgin and Creole linguistics.* Bloomington.

Chaudron, C. 1988. *Second Language Classrooms: Research on teaching and learning.* Cambridge: Cambridge University Press.

Chiang, D. 1980. 'Predictors of relative clause production' in Scarcella and Krashen (eds.) 1980.

Chinapah,V. 1983. *Participation and performance in primary schooling: A study of equality of educational opportunity in Mauritius.* Stockholm, Institute of International Education, University of Stockholm.

Chomsky, N. 1965. *Aspects of the Theory of Syntax.* Cambridge, Mass.: MIT Press.

Chomsky, N. 1981. 'Principles and parameters in syntactic theory' in Hornstein,N. and Lightfoot,D. (eds.), *Explanation in Linguistics: the logical problem of language acquisition*, London: Longman, pp 32-75.

Chung, T.C. 1980. *Objectives of Primary schooling in Mauritius.* Mauritius: Mauritius Institute of Education.

Clahsen, H. and Muysken, P. 1986. 'The availability of universal grammar to adult and child learners – the study of the acquisition of German word order'. *Second Language Research* 2: 93-119.

Clahsen, H. and Muysken, P. 1989. 'The UG paradox in L2 acquisition'. *Second Language Research* 5: 1-29.

Collier, V. 1987. 'Age and rate of acquisition of second language for academic purposes'. *TESOL Quarterly* 21: 617-41.

Cook, V. 1973. 'The comparison of language development in native children and foreign adults'. *International Review of Applied Linguistics* 11: 13-28.

Cook, V. 1977. 'Cognitive processes in second language learning'. *International Review of Applied Linguistics* 15: 1-20.

Cook, V. 1988. *Chomsky's Universal Grammar: An Introduction.* Oxford: Basil Blackwell.

Cook, V. 1991. *Second Language Learning and Language Teaching*. London: Edward Arnold.

Cook, V. and Newson, M. 1996. *Chomsky's Universal Grammar: An Introduction*. Oxford: Basil Blackwell.

Cooper, R. 1989. *Language planning and social change*. Cambridge: Cambridge University Press.

Coppieters, R. 1987. 'Competence differences between native and near-native speakers'. *Language* 63: 544-73.

Craig, D. R. 1980. 'Models for educational policy in creole-speaking communities' in Valdman, A. and Highfield, A. (eds.). *Theoretical Orientations in Creole Studies* (245-66). New York: Academic Press.

Crain, S. 1991. 'Language acquisition in the absence of experience' in Bloom, P. (ed.) *Language Acquisition : core readings*. New York: Harvester/Wheatsheaf.

Crystal, D. 1997. *English as a Global language*. Cambridge: Cambridge University Press.

Cummins, J. 1981. *Bilingualism and Minority Children*. Ontario: Ontario Institute for Studies in Education.

Cummins, J. 1984. *Bilingualism and Special Education: Issues in Assessment and Pedagogy*. Clevedon, UK: Multilingual Matters.

Cummins, J. 1983. 'Language proficiency and academic achievement' in Oller (ed.) 1983.

Cummins, J. and Swain, M. 1986. *Bilingualism in Education: Aspects of theory, research and practice*. London: Longman.

Cummins, J. and Swain, M. 1986. *Bilingualism in Education*. London: Longman.

Datta et al. 1976. *Report of a study on the causes of failure in the PLSC examination*. Mauritius: Mauritius Institute of Education.

Decamp, D. 1971. 'The study of pidgin and creole languages' in Hymes, D. (ed.) *Pidginization and Creolization of languages*. Cambridge.

Dechert, H. (ed.). 1990. *Current Trends in European Second Language Acquisition Research*. Clevedon, Avon : Multilingual Matters.

DES (Department of Education and Science). 1985. The Swann Report: *Education for All: A Report of the Community of Enquiry into the education of children of ethnic minority groups*. London: HMSO.

Diller, K. (ed.) 1981. *Individual Differences and Universals in Language Learning Aptitude.* Rowley, Mass.: Newbury House.

Donaldson M. 1978. *Children's Minds.* London: Fontana.

Dulay, H., Burt, M. and Krashen, S. 1982. *Language Two.* New York: Oxford University Press.

Eckman, F., Bell, L. and Nelson, D. (eds.) 1984. *Universals of Second Language Acquisition.* Rowley, Mass.: Newbury House.

Ehrman, M. 1990. 'The role of personality type in adult language learning: an ongoing investigation' in Parry and Stansfield (eds.) 1990.

Ekstrand, L. 1977. 'Social and individual frame factors in L2 learning: comparative aspects' in Skuttnab-Kangas (ed.) 1977.

Ellis, R. 1984. 'Can syntax be taught? A study of the effects of formal instruction on the acquisition of WH questions by children'. *Applied Linguistics* 5: 138-55.

Ellis, R. 1985. *Understanding Second Language Acquisition.* Oxford: Oxford University Press

Ellis, R. (ed.). 1987. *Second language Acquisition in Context.* London: Prentice-Hall International.

Ellis, R. 1990. *Instructed Second Language Acquistion.* Oxford: Blackwell.

Ellis, R. 1994. *The Study of Second Language Acquisition.* Oxford: Oxford University Press

Ellis, R. and Wells, G. 1980. 'Enabling factors in adult-child discourse'. *First Language* 1: 46-82.

Ervin-Tripp, S. 1974. 'Is second language learning like the first?' *TESOL Quarterly* 8: 111-27.

Eubank, L. 1987. 'The acquistion of German negation by formal language learners' in VanPatten et al. (eds.) 1987.

Eubank, L. (ed.). 1991. *Point Counterpoint: Universal Grammar in the Second Language.* Amsterdam: John Benjamins.

Eubank, L. 1994. 'On the transfer of parametric values in L2 development'. *Language Acquisition* 3: 183-208.

Fasold, R. 1992. 'Vernacular-language education reconsidered' in Bolton, K. and Kwok, H. (eds.) *Sociolinguistics Today: International Perspectives* (281-299). London: Routledge.

Fathman, A. 1976. 'Variables affecting the successful learning of English as a second language'. *TESOL Quarterly* 10: 433-41.

Fathman, A. 1978 'ESL and EFL learning: similar or dissimilar?' in Blatchford and Schachter (eds.) 1978.

Felix, S. 1981. 'The effect of formal instruction on second language acquisition'. *Language Learning* 31: 87-112.

Felix, S. 1985. 'More evidence on competing cognitive systems'. *Second Language Research* 1: 47-72.

Felix, S. and Weigl, W. 1991. 'Universal grammar in the classroom: the effects of formal instruction on second language acquisition'. *Second Language Research* 7: 162-80.

Fishman, J. 1969. 'National languages and languages of wider communication in developing nations'. *Anthropological Linguistics* 11, 111-35.

Fishman, J. and Lovas, J. 1970. 'Bilingual education in sociolinguistic perspective'. *TESOL Quarterly* 4: 215-22.

Flege, J. 1999. 'Age of learning and second language speech' in Birdsong, D. (ed.) *Second language acquisition and the critical period hypothesis* (101-131). Mahwah, NJ: Lawrence Erlbaum Associates.

Fletcher, P. and Garman, M. (eds.) 1986. *Language Acquisition* (2nd ed.). Cambridge : Cambridge University Press.

Floud, J. 1970. 'Social class factors in educational achievement' in Craft, M. (ed.) *Family, Class and Education* (pp.31-48). London : Longman.

Flynn, S. 1984. A universal in L2 acquisition based on a PBD typology' in Eckman et al. (eds.) 1984.

Flynn, S. 1987. *A parameter-setting model of L2 Acquisition*. Dordrecht: Reidel.

Flynn, S. and Manuel, S. 1991. 'Age-dependent effects in language acquisition : an evaluation of the 'critical period' hypothesis' in Eubank (ed.) 1991.

Fodor, J. A. 1983. *The Modularity of Mind*. Cambridge, Mass.: and London : MIT Press.

Foley, J. A. 1992. 'What future for Kreol Morisyen?' *Journal of Multilingual and Multicultural Development*, Vol. 13, No. 4: 359-372.

Foondun, R. 1986. 'Implications of interference theory analysis for instruction in the writing of English in Mauritian secondary schools.' M.A. thesis, University of Kentucky.

Fuller, B. 1987. (The World Bank). *What school factors raise achievement in the Third World*? Review of Educational Research, Volume 57 .

Gardner, R. 1985. *Social Psychology and Second Language Learning: The Role of Attitude and Motivation*. London : Edward Arnold.

Gardner, R. and Lambert, W. 1972. *Attitudes and Motivation in Second Language Learning*. Rowley, Mass. : Newbury House.

Gardner, R. and Clement, R. 1990. 'Social psychological perspectives on second language acquisition' in Giles and Robinson (eds.) 1990.

Gass, S. 1979. 'Language transfer and universal grammatical relations'. *Language Learning* 29: 327-44.

Gass, S. 1987. 'The resolution of conflicts among competing systems: a bidirectional perspective'. *Applied Psycholinguistics* 8: 329-50.

Gass, S. 1988. 'Integrating research areas: A framework for second language studies' *Applied Linguistics* 9: 2(198-217).

Gass, S and Ard, J. 1980. 'L2 data : their relevance for language universals'. *TESOL Quarterly* 16: 443-52.

Gass, S and Madden, C. (eds.). 1985. *Input in Second Language Acquisition*. Rowley, Mass: Newbury House.

Gass, S. and Schachter, J. (eds.). 1989. *Linguistic Perspectives on Second Language Acquisition*. Cambridge : Cambridge University Press.

Gass, S. 1990. 'Second and foreign language learning: same, different or none of the above?' in VanPatten, B. and Lee, J.F. (eds.), *Second Language Acquisition-Foreign Language learning* (34-44).

Gass, S. and Varonis, E. 1986. 'Sex differences in NNS/NNS interactions' in Day (ed.) 1986.

Gathercole, V.C.M. (2002). 'Monolingual and bilingual acquisition: Learning different treatments of *that*-trace phenomena in English and Spanish' in Oller, D.K. and Eilers, R. (eds.), *Language and literacy in bilingual children*. Clevedon, UK: Multilingual Matters.

Genesee, F. 1976. 'The role of intelligence in second language learning'. *Language Learning* 26: 267-80.

Genesee, F. 1978. 'Individual differences in second language learning'. *The Canadian Modern Language Review* 34: 490-504.

Giles, H. and Robinson, W. (eds.) 1990. *Handbook of Language and Social Psychology*. Chichester : John Wiley and Sons.

Giles, H. and Smith, P.M. 1979. 'Accommodation Theory: Optimal Levels of Convergence', in H. Giles and R.N. St Clair (eds.), *Language and Social Psychology* (pp 45-65). Oxford : Basil Blackwell.

Gillis, M. and Weber, R. 1976. 'The emergence of sentence modalities in the English of Japanese-speaking children' in *Language Learning* 26: 77-94.

Gingras, R. (ed.) 1978. *Second Language Acquisition and Foreign Language Teaching*. Arlington, VA.: Center for Applied Linguistics.

Goodluck, H. 1986. 'Language acquisition and linguistic theory' in Fletcher and Garman (eds.) 1986.

Goodman, M.F. 1964. *A comparative study of creole french dialects*. The Hague.

Graddol, D., Leith, D. and Swann, J. (eds.). 1996. *English: History, Diversity and Change*. London: The Open University/Routledge.

Gregg, K. 1984. 'Krashen's Monitor and Occam's Razor'. *Applied Linguistics* 5 : 79-100.

Griffiths, R. 1991. 'Personality and second-language learning: theory, research and practice' in Sadtano (ed.) 1991.

Grosjean, F. 1982. *Life with two languages*. Cambridge, MA: Harvard University Press.

Gupta Fraser, A. 1990. 'Acquisition of diglossia in Singapore English' in Kwan-Terry, A. (ed.) *Child Language Development in Singapore and Malaysia* (pp. 119-60). Singapore: Singapore University Press.

Hakuta, K. 1976. 'A case study of a Japanese child learning English.' *Language Learning* 26: 321-351.

Hakuta, K., Butler, Y.G. and Witt, D. 2000. How long does it take English learners to attain proficiency? The University of California Linguistic Minority Research Institute, policy report 2000-1.

Hancock, I. F. 1977. 'Repertory of pidgin and creole languages' in Valdman, A. (ed.) *Pidgin and Creole Linguistics* (pp. 362-91). Bloomington and London: Indiana University press.

Hansen-Strain, L. and Strain, J. 1989. 'Variation in the relative clause of Japanese learners'. *JALT Journal II*: 211-37.

Harley, B. 1986. *Age in Second Language Acquisition*. Clevedon, Avon: Multilingual Matters.

Harley, B. 1989. 'Functional grammar in French immersion: a classroom experiment'. *Applied Linguistics* 19: 331-59.

Harley, B. and Swain, M. 1984. *The Interlanguage of Immersion Students and its Implications for Second Language Testing*. Draft of paper presented at the Interlanguage Seminar in honour of Pit Corder, Edinburgh.

Hatch, E.M. (ed.) 1978. *Second Language Acquisition: A book of readings*. Rowley, Mass: Newbury House.

Hatch, E.M. 1978. 'Acquisition of syntax in a second language' in Richards (ed.) 1978.

Hatch, E. 1983. ' Simplified input and second language acquisition' in Andersen, R. (ed.) *Pidginization and Creolization as Language Acquisition* (64-86). Rowley,MA: Newbury House.

Hawkins, B. 1985. 'Is an "appropriate response" always so appropriate?' in Gass, S. and Madden, C. (eds.) (162-178).

Hayes, J. (ed.) 1970. *Cognition and the Development of language*. New York: Wiley and Sons.

Heath, S. 1983. *Ways with words: Language, Life and Work in Communities and Classrooms*. Cambridge: Cambridge University Press.

Henning, C. (ed.) 1977. Proceedings of the Los Angeles Second Language Research Forum. University of California at Los Angeles.

Hilles, S 1986. 'Interlanguage and the pro-drop parameter'. *Second Language Research* 2: 33-52.

Hilles, S 1991. 'Access to Universal Grammar in second language acquisition' in Eubank (ed.)1991.

Holobrow, N., Genesee, F. and Lambert, W. 1991. 'The effectiveness of a foreign language immersion programme for children from different ethnic and social class backgrounds: Report 2'. *Applied Psycholinguistics* 12: 179-98.

Hookoomsing, V.Y. 1986. 'Creole and the language situation in Mauritius' in Annamalai, E., Jernudd, B. H. and Rubin, J. (eds.) *Language Planning* (pp. 307-37). Mysore India, Central Institute of Indian Languages.

Hookoomsing, V. Y. 1987. L'emploi de la langue créole dans le contexte multilingue et multiculturel de l'Ile Maurice. Doctoral Dissertation, University of Laval, Quebec.

Hornstein, N. and Lightfoot, D. (eds.) 1981. *Explanation in Linguistics : the Logical Problem of Language Acquisition*. London: Longman.

Hyltenstam, K. 1984. 'The use of typological markedness conditions as predictors in second language acquisition: the case of pronominal copies in relative clauses' in Andersen (ed.) 1984.

Hymes, D. (ed.). 1964. *Language in Culture and Society: A Reader in Linguistics and Anthropology*. New York: Harper and Row.

Ioup, G. 1977. 'Interference versus structural complexity as a predictor of second language relative clause acquisition' in Henning (ed.) 1977.

Ioup, G., Boustagui, E., El Tigi, M. and Moselle, M. 1994. 'Reexamining the critical period hypothesis: A case study of successful SLA in a naturalistic environment.' *Studies in Second Language Acquisition* 16: 73-98.

Ioup, G. 1995. 'Evaluating the need for Input Enhancement in Post-Critical Period Language Acquisition' in Singleton, D. and Lengyel, Z. (eds.) *The Age Factor in Second Language Acquisition* (95-123).

Jacobson, R. 1990. 'Allocating two languages as a key feature of a bilingual methodology' in Jacobson, R. and Faltis, C. (eds.) *Language Distribution Issues in Bilingual schooling*. Clevedon: Multilingual Matters.

Johnson, L. and Newport, E. 1989. 'Critical period effects in second language learning: the influence of maturational state on the acquisition of English as a second language'. *Cognitive Psychology* 21: 60-99.

Johnson, K. and Swain, M. 1997. *Immersion Education: International Perspectives*. Cambridge: Cambridge University Press.

Judd, E. 1987. 'Teaching English to speakers of other languages: A political act and a moral question'. *TESOL Newsletter* 21: 1,15-16.

Kadia, K. 1988. 'The effect of formal instruction on monitored and spontaneous naturalistic interlanguage performance'. *TESOL Quarterly* 22: 509-15.

Karmiloff-Smith, A. 1979. 'Language development after age 5' in Fletcher, P. and Garman, M. (eds.). *Language acquisition* (pp. 307-322). Cambridge: Cambridge University Press.

Kistoe-West, M. 1978, *Languages in Primary Schools in Mauritius*. Mauritius: Mauritius Institute of Education.

Kistoe-West,M. 1983. *Curriculum Development: The Form I, II and III Project*, Mauritius. Cambridge, Cambridge Institute of Education.

Krashen, S. 1973. 'Lateralization, language learning and the critical period: some new evidence'. *Language Learning* 23: 63-74.

Krashen, S. 1976. 'Formal and informal linguistic environments in language acquisition and language learning'. *TESOL Quarterly* 10: 157-68.

Krashen, S. 1977. 'Some issues relating to the Monitor Model' in Brown, H. et al. (eds.).

Krashen, S. 1978. 'Individual variation in the use of the monitor' in Ritchie (ed.) 1978.

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: Issues and Implications*. London: Longman.

Krashen, S. 1989. 'We acquire vocabulary and spelling by reading : additional evidence for the input hypothesis'. *Modern Language Journal* 73: 440-64.

Krashen, S. 1991. 'Bilingual education and second language acquisition theory' in California Department of Education, *Schooling and language minority students: A theoretical framework*. Los Angeles, CA : California State University, Los Angeles.

Krashen, S. 1996. *Under Attack: The Case against Bilingual Education*. Culver City, CA: Language Education Associates.

Krashen, S. and Seliger, H. 1975. 'The essential characteristics of formal instruction' *TESOL Quarterly* 9: 173-83.

Krashen, S. and Seliger, H. 1976. 'The role of formal and informal linguistic enviroments in adult second language learning'. *International Journal of Psycholinguistics* 3: 15-21.

Krashen, S. and Scarcella, R. 1978. 'On routines and patterns in second language acquisition and performance'. *Language Learning* 28: 283-300.

Krashen, S, Jones, C., Zelinksi, S. and Usprich, C. 1978. 'How important is instruction?' *English Language Teaching Journal* 32: 257-61.

Krashen, S., Long, M. and Scarcella, R. 1979. 'Age, rate and eventual attainment in second language acquisition'. *TESOL Quarterly* 13: 573-82.

Krashen, S., Long, M. and Scarcella, R. (eds.). 1982. *Child-adult Differences in Second Language Acquisition*. Rowley, Mass. : Newbury House.

Krashen, S. and Terrell, T. 1983. *The Natural Approach: Language Acquisition in the classroom*. Oxford: Pergamon.

Labov, W. 1969. 'The Logic of Non-standard English'. *Georgetown Monographs on Language and Linguistics 22*. Washington D.C. : Georgetown University, Center for Applied Linguistics.

Labov, W. 1991. 'The intersection of sex and social class in the course of linguistic change'. *Language Variation and Linguistic Change* 2: 205-51.

Lambert, W. E. and Tucker, G.R. 1972. *Bilingual Education of Children: The St. Lambert Experiment*. Rowley, Mass.: Newbury House.

Larsen-Freeman, D. and Long, M. 1991. *An Introduction to Second Language Acquisition Research*. London: Longman.

Lenneberg, E. 1967. *Biological Foundations of Language*. New York: Wiley and Sons.

Lennon, P. 1989. 'Introspection and intentionality in advanced second language acquisition'. *Language Learning* 39: 375-95.

Le Page, R.B. 1992. 'Sociolinguistic aspects of literacy' in Bolton, K. and Kwok, H. (eds.) *Sociolinguistics Today: International Perspectives*(120-145). London: routledge.

Lewis, E. G. and Massad, C. E. 1975. *The Teaching of English as a Foreign Language in Ten Countries*. New York: Wiley.

Lightbown, P. 1983. 'Exploring relationships between developmental and instructional sequences in L2 acquisition' in Seliger and Long (eds.) 1983.

Lightbown, P. 1987. 'Classroom language as input to second language acquisition' in Pfaff, C. (ed.). *First and Second Language Acquisition Processes* (pp. 90-102). Rowley, Mass. : Newbury House.

Lightbown, P.1991. 'What have we here? Some observations on the effect of instruction on L2 learning' in Phillipson et al. (eds.) 1991.

Lightbown, P. 1998. 'The importance of timing in focus on form' in Doughty, C. and Williams, J. (eds.) 1998 *Focus on Form in Classroom Second Language Acquisition* (177-196).

Lightbown, P., Spada, N. and Wallace, R. 1980. 'Some effects of instruction on child and adolescent ESL learners' in Scarcella, R. and Krashen, S. (eds.) *Research in Second Language Acquisition* (pp. 162-72). Rowley, Mass. : Newbury House.

Lightbown, P. and Spada, N. 1990. 'Focus on form and corrective feedback in communicative language teaching: Effects on second language learning.' *Studies in Second Language Acquisition* 12(4): 429-448.

Lightbown, P. and Spada, N. 1993. *How languages are learned.* Oxford: Oxford University Press.

Lin, A. 1988. 'Pedagogical and para-pedagogical levels of interaction in the classroom: a social interaction approach to the analysis of the code-switching behaviour of a bilingual teacher in an English language lesson.' *Working Papers in Linguistics and Language Teaching* , no. 11. University of Hong Kong Language Centre.

Lim, S.E., Gan, L. and Sharpe, P. 1997. 'Immersion in Singapore preschools' in Johnson, K. and Swain , M. (eds.) *Immersion Education: International Perspectives* (190-209). Cambridge: Cambridge University Press.

Long, M. 1981. 'Input, Interaction and Second Language Acquisition' in Winitz, H. (ed.) *Native Languages and Foreign Acquisition.* Annals of the New York Academy of Sciences 379: 259-278.

Long, M. 1983. 'Does second language instruction make a difference? A review of the research'. *TESOL Quarterly* 17 : 359-82.

Long, M. 1985. 'Input and second language acquisition theory' in Gass and Madden (eds.) 1985.

Long, M.1988. 'Instructed interlanguage development' in Beebe (ed.) 1988.

Long, M. 1990. 'Maturational constraints on language development'. *Studies in Second Language Acquisition* 12: 251-86.

Long, M. 1996. 'The role of the linguistic environment in second language acquisition' in Ritchie, W.C and Bhatia, T.K. (eds.). *Handbook of second language acquisition.* Academic Press: New York.

Lowenberg, P. H. 1984. English in the malay archipelago: Nativization and its functions in a sociolinguistic area. Ph.D dissertation, University of Illinois at Urbana-Champaign.

Ludwig, J. 1983. 'Attitudes and expectations: a profile of female and male students of college French, German and Spanish'. *The Modern Language Journal* 67: 216-27.

Mackey, W.F. 1970. 'A typology of bilingual education' in *Foreign Language Annals* 3: 596-608.

Mahadeo, S.K. 1981. 'Decreolization in Mauritian Creole.' M. A. thesis. McGill University, Canada.

Maltz, D. and Borker, R. 1982. 'A cultural approach to male-female miscommunication' in Gumperz (ed.) 1982.

Le Mauricien – 15 February 1993.

Le Mauricien – 21 November 2001.

Mauritius Examinations Syndicate (M.E.S.). 1988. *Report of the Mauritius Examinations Syndicate 1988*. Réduit, Mauritius.

McKay, S.L. 1997. Multilingualism in the United States. *Annual Review of Applied Linguistics*, 17, 242-262.

McLaughlin, B. 1978. *Second Language Acquisition in Childhood*. Hillsdale, N. J. : Lawrence Erlbaum Associates, and New York: Wiley.

McLaughlin, B. 1978. 'The monitor model: some methodological considerations.' *Language Learning* 28: 309-332.

McLaughlin, B. 1987. *Theories of second language learning*. London: Edward Arnold.

McNamara, J. 1973. 'Nurseries, Streets and Classrooms: Some comparisons and deductions'. *Modern Language Journal* 57: 250-55.

Meade, J. 1961. *The Economics and Social Structure of Mauritius*. London: Cass.

Meisel, J. 1991. 'Principles of Universal Grammar and Strategies of language learning: some similarities and differences between first and second language acquisition' in Eubank (ed.) 1991.

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. 1995. *The Guided Construction of Knowledge: talk amongst teachers and learners*. Clevedon: Multilingual Matters.

Ministry of Education, Arts and Science. 1991. *Education: Master Plan for the year 2000, 160p.*

Moag, R. 1982. 'The life cycle of non-native Englishes: A case study' in Kachru, Braj B. (ed.), 270-88.

Mysken, P.1981. 'Creole tense/mood/aspect systems: The unmarked case' in Muysken, P. (ed.) *Generative studies on creole languages*. Dordrecht.

Muysken, P. 1988. 'Are creoles a special type of language?' in Newmeyer, F. (ed.) *Linguistics : The Cambridge Survey* Vol II: 285-301. Cambridge.

Naiman, N., Fröhlich, M., Stern, H. and Todesco, A. 1978. *The Good Language Learner: Research in Education Series No.7.* Toronto: The Ontario Institute for Studies in Education.

Napal, D. 1962. *Les constitutions de l' île Maurice.* (Mauritius Archives' Publications 6) Port Louis : The Mauritius Printing.

Neufeld, G. 1979. 'Towards a theory of language learning ability.' *Language Learning* 29: 227-241.

Newport, E., Gleitman, H. and Gleitman, L. 1977. 'Mother, I'd rather do it myself': some effects and non-effects of maternal speech styles' in Snow and Ferguson (eds.).

Obler, L. 1989. 'Exceptional second Language learners' in Gass et al. (eds.).

Oller, J. (ed.). 1983. *Issues in Language Testing Research.* Rowley, Mass: Newbury House.

Oller, J. and Perkins, K. 1978. 'Intelligence and language proficiency as sources of variance in self-reported affective variables'. *Language Learning* 28: 85-97.

Oller, D.K., Eilers, R.E., Pearson, B., Gathercole, V., Cobo-Lewis, A. and Umbel, V. 1997. Poster Symposium, Language and Literacy in Bilingual Children, at the Biennial Meeting of the Society for Research in Child Development, Washington, DC.

Olshtain, E., Shohamy, E., Kemp, J. and Chatow, R. 1990. 'Factors predicting success in EFL among culturally different learners'. *Language Learning* 40: 23-44.

Parry, T. and Stansfield, C. (ed.). 1990. *Language Aptitude Reconsidered.* Englewood Cliffs, N. J. : Prentice Hall.

Patkowski, M. 1980. 'The sensitive period for the acquisition of syntax in a second language'. *Language Learning* 30: 449-72.

Paulston, C.B. 1975. 'Ethnic relations and bilingual education: accounting for contradictory data'. *Working Papers on Bilingualism* 6: 1-44.

Pavesi, M. 1986. 'Markedness, discoursal modes and relative clause formation in a formal and informal context'. *Studies in Second Language Acquisition* 8: 38-55.

Penfield, W. and Roberts, L. 1959. *Speech and Brain Mechanisms.* New York: Atheneum Press.

Phillipson, R., Kellerman, E., Selinker, L., Sharwood Smith, M. and Swain, M. (eds.). 1991. *Foreign/Second Language Pedagogy Research.* Clevedon, Avon: Multilingual Matters.

Piaget, J. 1970. *Genetic epistemology.* Columbia, OH: Columbia University Press.

Pica, T. 1983. 'Adult acquisition of English as a second language under different conditions of exposure'. *Language Learning* 33: 465-97.

Pica, T. 1985. 'The selective impact of instruction on second language acquisition'. *Applied Linguistics* 6: 214-22.

Pica, T. 1994. 'Research on negotiation: what does it reveal about second-language learning conditions, processes, and outcomes?' *Language Learning* 44: 493-527.

Pienemann, M. 1984. 'Psychological constraints on the teachability of languages'. *Studies in Second Language Acquisition* 6: 186-214.

Pienemann, M. 1987. 'Determining the influence of instruction on L2 speech processing'. *Australian Review of Applied Linguistics* 10: 83-113.

Pimsleur, P. 1966. *Pimsleur Language Aptitude Battery (PLAB).* New York: Harcourt Brace Jovanovich.

Pinker, S. 1984. *Language Learnability and Language Development.* Cambridge, MA: Harvard University Press.

Pinker, S. 1987. 'Resolving a learnability paradox in the acquisition of the verb lexicon.' Lexicon Project Working Papers 17, Centre for Cognitive Science, MIT.

Pinker, S. 1994. *The Language Instinct.* New York: Morrow.

Platt, J. 1977. The sub-varieties of Singapore English: Their sociolectal and functional status' in Crewe, W. (ed.). *The English Language in Singapore* (pp.83-95). Singapore Eastern Universities Press.

Platt, J., Weber, H. and Lian Ho, M. 1984. *The New Englishes.* London: Routledge and Kegan Paul.

Plowden Report. 1967. *Children and their Primary Schools.* London : HMSO.

Pollock, J. 1989. 'Verb movement, Universal Grammar and the Structure of IP'. *Linguistic Inquiry* 20: 365-424.

Pride, J. (ed.). 1979. *Sociolinguistic Aspects of Language Learning and Teaching.* Oxford: Oxford University Press.

Quirk, R., Greenbaum, S., Leech, G. and Svartnick, J. 1985. *A Comprehensive Grammar of the English Language.* London: Longman.

Ramdoyal, R. 1977. *The Development of Education in Mauritius*. Le Réduit: Mauritius Institute of Education.

Ramyead, L.P. 1985. *The establishment and cultivation of modern standard Hindi in Mauritius*. Moka, Mauritius.

Richards, J. (ed.) 1978. *Understanding Second and Foreign Language Learning: Issues and Approaches*. Rowley, Mass: Newbury House.

The Richards Report. 1979. *Laying the Foundations: Report on Pre-Primary and Primary Education in Mauritius*, March 1979. Mauritius, Ministry of Education, Arts and Culture.

Richardson, I. 1963. "Evolutionary Factors in Mauritian Creole". *Journal of African Languages*, 2, I: 2-14.

Ritchie, W. (ed.). 1978. *Second Language Acquisition Research*. New York: Academic Press.

Rivière, L. 1982. *Historical dictionary of Mauritius*. London.

Ruiz, R. 1988. Orientations in language planning. In McKay, S.L. and Wong , S.C.(eds.), *Language diversity: Problem or resource*? (pp.3-26). New York: Newbury House.

Rutherford, W. and Sharwood Smith, M. (eds.). 1988. 'Consciousness-raising and universal grammar.' *Applied Linguistics* 6: 274-82.

Rutherford, W. and Sharwood Smith, M. (eds.). 1988. *Grammar and Second Language Teaching: A Book of Readings*. Rowley, Mass: Newbury House.

Sadtano, E. (ed.) 1991. *Language Acquisition and the Second/Foreign Language Classroom*. Singapore: SEAMEO Regional Language Centre.

Savignon, S. 1972. *Communicative Competence: an Experiment in Foreign Language, Teaching*. Philadelphia: Center for Curriculum Development.

Savord, J. G. and Laforge, L. (eds.) 1981. *Proceedings of the Fifth Conference of AILA*. Laval: University of Laval Press.

Scarcella, R. and Krashen, S. (eds.). 1980. *Research in Second Language Acquisition*. Rowley, Mass: Newbury House.

Schachter, J. 1974. 'An error in error analysis'. *Language Learning* 27: 205-14.

Schachter, J. 1984. 'A new account of language transfer' in Gass, S. and Selinker, L. (eds.) *Language Transfer in Language Learning* (pp.98-111). Rowley, Mass: Newbury House.

Schachter, J. 1988. 'Second Language Acquisition and its relationship to Universal Grammar'. *Applied Linguistics* 9: 219-35.

Schinke-Llano, L. 1990. 'Can foreign language learning be like second language acquisition? The curious of immersion' in VanPatten and Lee (eds.) 1980.

Schmidt, R. 1983. 'Interaction, acculturation and the acquisition of communication competence' in Wolfson and Judd (eds.) 1983.

Schmidt, R. 1990. 'The role of consciousness in second language learning'. *Applied Linguistics* II: 129-58.

Schmidt, R. 1992. 'Psychological mechanisms underlying second language fluency.' *Studies in Second Language Acquisition* 14(4): 357-385.

Schmidt, R. and Frota, S. 1986. 'Developing basic conversational ability in a second language: a case study of an adult learner of Portuguese' in Day, R. (ed.) *Talking to Learn: Conversation in second language acquisition*. Rowley, Mass.: Newbury House.

Schmied, J.J. 1991. *English in Africa*. London: Longman

Schonell, F.J., Watts, W.D. and Olson Willard C. 1962. *Failure in School.* UNESCO Institute for Education, Hamburg.

Schumann, J. 1975. 'Affective factors and the problem of age in second language acquisition'. *Language Learning* 25: 209-35.

Schumann, J. 1978. 'The acculturation model for second language acquisition' in Gingras (ed.) 1978.

Schumann, J. 1980. 'The acquisition of English relative clauses by second language learners' in Scarcella and Krashen (eds.) 1980.

Schwartz, B.D. 1993. 'On explicit and negative data effecting and affecting competence and linguistic behaviour'. *Studies* in *Second Language Acquisition* 15: 147-163.

Schwartz, B.D. and Gubala-Ryzak, B. 1992. 'Learnability and grammar reorganization in L2A: against negative evidence causing the unlearning of verb movement'. *Second Language Research* 8: 1-38.

Schwartz, B.S. and Sprouse, R. A. 1994. 'Word order and Nominative case in nonnative language acquisition: A longitudinal study of (L1 Turkish) German Interlanguage' in Hoekstra, T. and Schwartz, B.D. (eds.) *Language Acquisition Studies in Generative Grammar: Papers in Honour of Kenneth Wexler from the 1991 GLOW Workshops*. (pp.317-68). Philadelphia : John Benjamins.

Scribner, S. and Cole, M. 1973. 'Cognitive consequences of formal and informal learning'. *Science* 182: 553-9.

Seliger, H. 1978. 'Implications of a multiple critical periods hypothesis for second language learning' in Ritchie (ed.). 1978.

Seliger, H. 1979. 'On the nature and function of language rules in language teaching'. *TESOL Quarterly* 13: 359-69.

Seliger, H and Long, M. (eds.). 1983. *Classroom-Oriented Research in Second Language Acquisition*. Rowley, Mass. : Newbury House.

Selinker, L. 1972. Interlanguage. *International Review of Applied Linguistics* 10: 209-31.

Shapira, R 1978, The non-learning of English: case study of an adult' in Hatch, E.M. (ed.), 246-55.

Sharwood-Smith, M. 1981. 'Consciousness-raising and the second language learner' in Rutherford and Sharwood Smith (eds.) 1988: 51-60.

Sharwood-Smith, M. 1991. 'Speaking to many minds: On the relevance of different types of language information for the L2 learner.' *Second Language Research* 7: 118-33.

Singleton, D. 1989. *Language Acquisition: The Age Factor*. Clevedon, Avon: Multilingual Matters.

Singleton, D. 1992. 'Second Language Instruction: The when and the how.' *AILA Review* 9: 46-54.

Skehan, P. 1989. *Individual Differences in Second Language Learning*. London: Edward Arnold.

Skehan, P. 1990. 'The relationship between native and foreign language learning ability: educational and linguistic factors' in Dechert (ed.) 1990.

Skehan, P. 1998. *A Cognitive Approach to Language Learning*. Oxford: Oxford University Press.

Skutnab-Kangas, T. (ed.). 1977. Papers from the First Nordic Conference on Bilingualism. Helsingfors: Universitet.

Skutnab-Kangas, T. 1987. *Bilingual or Not: The Education of Minorities*. Clevedon: Multilingual Matters.

Smith, D. 1972. 'Some implications for the social status of pidgin languages' in Smith and Shuy (eds.) 1972.

Smith, L. E. (ed.). 1981. *English for Cross-Cultural Communication*. London : Macmillan.

Smith, D. and Shuy, R. (eds.). 1972. *Sociolinguistics in Cross-Cultural Analysis*. Washington D.C. : Georgetown University Press.

Smith, N. and Tsimpli, I.M. 1995. *The Mind of a Savant*. Oxford: Blackwell.

Snow, C. 1983. 'Literacy and Language : Relationships during Preschool Years'. *Harvard Educational Review* 53(2): 165-189.

Snow, C. and Ferguson, C. (eds.). 1977. *Talking to Children: Language Input and Acquisition*. Cambridge : Cambridge University Press.

Snow, C. and Hoefnagel-Höhle, M. 1978. 'The critical age for language acquisition: evidence from second language learning'. *Child Development* 49: 1114-28.

Sorace, A. 1985. 'Metalinguistic knowledge and language use in acquisition-poor environments.' *Applied Linguistics* 6: 239-54.

Spada, N. 1986. 'The interaction between types of content and type of instruction: some effects on the L2 proficiency of adult learners'. *Studies* in *Second Language Acquisition* 8: 181-99.

Spada, N. 1987. 'Relationships between instructional differences and learning outcomes: a process product study of communicative language teaching'. *Applied Linguistics* 8: 137-61.

Spada, N. and Lightbown, P. 1993. 'Instruction and the development of questions in the L2 classroom.' *Studies in Second Language Acquisition* 15(2): 205-221.

Spicer, A. 1980. 'The early teaching of modern languages: the British experience'. *Canadian Modern Language Review* 36: 408-21.

Spolsky, B., Green, J.B. and Read, J. 1974. *A Model for the Description, Analysis, and Perhaps Evaluation of Biligual Education*. Navajo Reading Study Progress Report No. 23. Albuquerque, N.M. : University of New Mexico.

Spolsky, B. 1989. *Conditions for Second Language Learning*. Oxford: Oxford University Press.

Stein, P. 1982. *Connaissance et emploi des langues à l'Ile Maurice*. Hamburg.

Stern, H.H. 1967. *Foreign languages in Primary Education*. (Revised version of a report originally published in 1963 as one of the International Studies in Education of the UNESCO Institute for Education, Hamburg). London: Oxford University Press.

Stern, H.H. (ed.) 1969. *Languages and the Young School Child*. London : Oxford University Press.

Stern, H.H. 1976. 'Optimal age: Myth or reality?' *Canadian Modern Language Review* 32: 283-94

Stern, H.H. 1982. *Issues in Early Core French: A Selective and Preliminary Review of the Literature, 1975-1981*. Toronto: City of Toronto Board of Education.

Stern, H.H. 1986. *Fundamental Concepts of Language Teaching*. Oxford: Oxford University Press.

Stern, H.H. 1992. *Issues and Options in Language Teaching*. Oxford: Oxford, University Press.

Stevick, E .1980. *Teaching Languages: a way and ways*. Rowley, Mass: Newbury House.

Stolz T. 1987. *In Dubio pro Substrato: Ein Einblick in die Negation in Portugiesisch-basierten Kreols*. Paper delivered at the Symposium on Pidgin and Creole languages, Duisburg, 25-28 March 1987.

Strong, M. 1983. 'Social styles and second language acquisition of Spanish-speaking kindergarteners'. *TESOL Quarterly* 17: 241-58.

Stubbs, M. 1976. *Language, Schools and Classrooms*. London: Methuen.

Swain, M. 1972. *Bilingualism as a first language* (unpublished Ph.D dissertation, University of California, Irvine).

Swain, M. 1978. 'Bilingual education for the English-speaking Canadian' in Alatis 1978: 141-54.

Swain, M. 1981. 'Linguistic expectations: Core, extended and immersion programs'. *Canadian Modern Language Review* 37: 486-97.

Swain, M. 1981. 'Time and timing in bilingual education'. *Language Learning* 31: 1-15.

Swain, M. 1984. 'A review of immersion education in Canada: research and evaluation studies' in Allen, P. and Swain, M. (eds.). 'Language Issues and Education Policies'. *ELT Documents* 119: 35-51.

Swain, M. 1985. 'Communicative competence: some roles of comprehensible input and comprehensible output in its development' in Gass, S. and Madden, C. (eds.) *Input in Second Language Acquisition*. Rowley, Mass.: Newbury House.

Swain, M. 1995. 'Three functions of output in second language learning' in Cook, G. and Seidlhofer, B. (eds.) *Principle and Practice in applied linguistics* (125-144). Oxford: Oxford University Press.

Swain, M. 1998.'Focus on form through conscious reflection' in Doughty, C. and Williams, J. (eds.) *Focus on Form in Classroom Second Language Acquisition.* Cambridge: Cambridge University Press (p. 64-81).

Swain, M. and Lapkin, S. 1995. 'Problems in output and the cognitive processes they generate: a step towards second language learning.' *Applied Linguistics* 16(3): 370-391.

Taggart, G. (ed.). 1975. *Attitude and Aptitude in Second Language Learning.* Proceedings of the 5th Symposium of the Canadian Association of Applied Linguistics, Toronto, May 1974.

Tay, M.W.J. 1979. 'The uses, users and features of English in Singapore' in Richards, J.C. (ed.) *New Varieties of English: Issues and Approaches.* Occasional Papers No.8 (pp.91-111). Singapore: SEAMEO Regional Language Centre.

Terrell, T., Gomez, E. and Mariscal, J. 1980. 'Can acquisition take place in the language classroom?" in Scarcella, R. and Krashen, S. (eds.) 1980: 155-61, *Research in Second Language Acquisition.* Rowley, Mass.: Newbury House.

Tickoo, M. 1993. 'When is a language worth teaching? Native languages and English in India'. *Language, Culture and Curriculum*, vol.6, no.3, pp. 225-39.

Tirvassen, R. 1993. 'Le bilinguisme créole français des enfants à l'île Maurice' in *Les Enfants, les langues, l'école : les cas du Congo et de Maurice*, Lumamwu, F., Missakiri, M., Ntsadi, C. et Tirvassen, R., Coll. Langues et Développement, Didier Erudition, Paris (75-152).

Tirvassen, R. 1998. Langues, éducation et développement : le cas de l'île Maurice. Thèse présentée pour le doctorat de nouveau régime.

Tirvassen, R. 1999. La problématique du choix des langues d'enseignement dans des pays indépendants : l'anglais dans la politique de l'école mauricienne. *DiversCité Langues* Vol. IV.

Toussaint, A. 1969. 'La langue française à l'île Maurice.' *Revue française d'Outre-Mer* 56 : 398-427.

UNESCO 1953. The use of Vernacular Languages in Education: the Report of the Unesco Meeting of Specialists. Reprinted in Fishman, J.A. (ed.) 1968. *Readings in the Sociology of Language* (688-716). The Hague: Mouton.

Vainikka, A. and Young-Scholten, M.1994. 'Direct access to X' – theory : Evidence from Korean and Turkish adults learning German' in Hoekstra, T. and Schwartz, B.D. (eds.) *Language Acquisition Studies in Generative Grammar: Papers in Honour of Kenneth Wexler from the 1991 GLOW Workshops* (pp.265-316). Philadelphia: John Benjamins

Vainikka, A. and Young-Scholten, M. 1996. 'Gradual development of L2 phrase structure'. *Second Language Research* 12: 7-39.

Valdman, A. 1973. "Some aspects of decreolization in Creole French". *Current Trends in Linguistics* 11, 507-36.

VanPatten, B., Dvorak, T. and Lee J. (eds.) 1987. *Foreign Language Learning: A Research Perspective.* New York: Newbury House/Harper and Row.

VanPatten, B. and Lee, J. (eds.). 1990. *Second Language Acquisition-Foreign Language Learning.* Clevedon, Avon: Multilingual Matters.

Watts, W.D, Schonell, F.J. 1962. *Failure in School.* UNESCO Institute for Education, Hamburg

Weinert, R. 1987. 'Processes in classroom second language development: the acquisition of negation in German' in Ellis (ed.) 1987.

Weinstein, B. 1987. 'Language planning and interests' in *Proceedings of the International Colloquium on Language Planning, Ottawa, May 1986.* Quebec: Les Presses de l'Université Laval.

Wells, G. 1981. *Learning Through Interaction*, Vol.1. Cambridge: Cambridge University Press.

Wells, G. 1985. *Language Development in the Pre-School years.* Cambridge: Cambridge University Press.

Wells, G. and Nicholls, J. (eds.). 1985. *Language and Learning: an interactional perspective.* London, Philadelphia: Falmer Press.

Wesche, M. 1981. 'Language aptitude measures in streaming, matching students with methods, and diagnosis of learning problems' in Diller (ed.) 1981.

Weslander, D. and Stephany, G. 1983. 'Evaluation of English as a second language program for Southeast Asian students'. *TESOL Quarterly* 1983: 473-80.

White, L. 1981. 'The responsibility of grammatical theory to acquisitional data' in Hornstein and Lightfoot (eds.). 1981.

White, L. 1985. 'The pro-drop parameter in adult second language acquisition'. *Language Learning* 35: 47-62.

White, L. 1987. 'Against comprehensible input: the input hypothesis and the development of second language competence'. *Applied Linguistics* 8: 95-110.

White, L. 1989. *Universal Grammar and Second Language Acquisition.* Amsterdam: John Benjamins.

White, L. 1991. 'Adverb placement in second language acquisition: some effects of positive and negative evidence in the classroom'. *Second Language Research* 7: 133-61.

White, L. 1995. 'Universal Grammar and Second Language Acquisition: Current Trends and New Directions' in Ritchie, W.C. and Bhatia, T.K. (eds.) *Handbook of Second Language Acquisition* (pp.85-120). Academic Press, Inc.

White, L., Spada, N., Lightbown, P. and Ranta, L. 1991. 'Input enhancement and question formation'. *Applied Linguistics* 12: 416-32.

White, L. and Genesee, F. 1996. 'How native is near-native? The issue of ultimate attainment in adult second language acquisition.' *Second Language Research* 12: 233-265.

Whorf, B.L 1956. Language, Thought and Reality: Selected Writings of Benjamin Lee Whorf. Edited and introduced by Carroll, J. B. Cambridge, Mass: M.I.T. Press.

Wode, H. 1978. 'The L1 Vs L2 acquisition of English interrogation'. *Working Papers on Bilingualism* 15: 37-57.

Wolfson, N. and Judd, E. (eds.). 1983. *Sociolinguistics and Second Language Acquisition*. Rowley, Mass.: Newbury House.

Wong, I.F.H. 1982. 'Native-Speaker English for the Third World today?' in Pride, J. (ed.), 259-86.

Wong, Fillmore, L.W. and Valadez, C. 1986. 'Teaching Bilingual Learners' in Wittrock, M.C. (ed.). *Handbook of Research on Teaching*. New York: MacMillan.

Young, R. 1988. 'Variation and the interlanguage hypothesis'. *Studies in Second Language Acquisition* 10: 281-302.

Young, R. 1991. *Variation in Interlanguage Morphology*. New York: Peter Lang.

Young-Scholten, M. 1999. Focus on form and linguistic competence. Why Krashen is still right about acquisition. Paper presented at AAAL Stamford, CT, 8 March.