THE DEVELOPMENT OF ASPECTS OF COMMUNICATION STRATEGY USE:
A STUDY OF EARLY FRENCH IMMERSION STUDENTS
AT THE PRIMARY/ELEMENTARY LEVEL

MARIE-LOUISE GREENE, B.A., B.Ed.
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THE DEVELOPMENT OF ASPECTS OF COMMUNICATION STRATEGY USE:
A STUDY OF EARLY FRENCH IMMERSION STUDENTS
AT THE PRIMARY/ELEMENTARY LEVEL

by

∂ Marie-Louise Greene, B.A., B.Ed.

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St. John’s Newfoundland
This study is dedicated to my Grade One and Grade Two French Immersion students in Gander and in St. John's who taught me so much, gave me such joy, and whose second language learning experiences served as the inspiration for this study.
This study was an attempt to explore aspects of the development of communication strategy (CS) use in the interlanguage (IL) of young second language (L₂) learners. The investigation examined the frequency and patterns of CS use by successful language learners (SLLs) and by less-successful language learners (LLLs) at two points in time, in an attempt to document inter-group and intra-group patterns of change over developmental time. The eight subjects of the study were students in an Early French Immersion (EFI) Program in an urban Newfoundland school and data was collected at the end of the Grade Two Year (Time 1) and again at the end of the Grade Five Year (Time 2). The subjects provided taped speech samples by means of picture description elicitation tasks at both times.

The speech samples were transcribed and analyzed for CS use, using a typology of CS based on those developed by a number of second language (L₂) researchers. The information obtained through the analysis was converted into table format, showing individual and group strategy use at Time 1 and Time 2.

As well as a quantitative description of CS use, a qualitative description was undertaken. The results of the study indicated that both groups of subjects showed evidence of variation over time in the frequency of use of particular strategies and in the percentage of use of these strategies. Over time, most subjects decreased their use of reduction strategies, cooperative strategies and retrieval strategies and increased their use of L₁-based (interlingual) and L₂-based (intralingual) strategies.

The analysis also indicated that the pattern of use of categories and subcategories CSs changed over time for both groups. Both groups used more achievement strategies and fewer reduction strategies at Time 2 than at Time 1. The LLLs dramatically increased their use of L₂-based strategies, indicating that change was in the direction of the target
language (French). The SLLs, however, showed a much slighter increase in their use of L₂-based strategies.

Analysis of the surface realization or quality of strategies used at Time 1 and Time 2 did not indicate any clear-cut differences between the two groups of subjects, nor between Time 1 and Time 2 strategies. Both groups did, however, use more qualitatively superior strategies (intralingual strategies) at Time 2 than at Time 1, but for the SLLs the degree of change over time was less than for the LLLs.
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CHAPTER ONE
SECOND LANGUAGE ACQUISITION AND COMMUNICATION STRATEGY USE

Rationale for the Study

Second language acquisition (SLA) is a complex process, with many interrelated variables involved. It is the product of many factors, some related to the learning situation and others related to the learner. The interaction of these two sets of factors results in diversity, as the variability and individuality of SLA demonstrates.

Early theories of SLA emphasized the "input", that is, the language the learner is exposed to, or the linguistic environment. More recent theories, however, treat SLA as the result of interaction between the learner and the linguistic environment. They take into consideration the internal processes and strategies which determine how learners deal with input and how the second language (L₂) is then used to produce output. This linguistic output is known as the language learner's interlanguage (IL).

A number of studies (e.g., Huebner, 1985; Littlewood, 1981; Tarone, 1982; Frauenfelder & Selinker, 1976) have investigated systematicity and variability in IL and have identified factors which influence the learner's communicative competence in a L₂. Changes in a learner's competence over time have been studied, as has the variability evidenced between individual learners.

One area in which individual differences are found, and in which many researchers have recently conducted investigations is the use of communication strategies (CSs), "which operate when the learner needs to compensate for inadequate means" (Ellis, 1986, p. 165). The role of CSs in promoting or facilitating L₂ communication has recently been suggested by some of the literature (e.g., Faerch & Kasper, 1983b). The results of the small number of empirical studies on CS use by L₂ learners (e.g.,
Bialystok, 1983) indicate that some CSs may be more effective than others in enhancing communication and that CS use is influenced by such factors as proficiency level in the L₂, the learner's personality and the type of communication problem encountered.

Second language teaching and learning theory, with an emphasis on communicative competence, has also recently highlighted the role of CSs in the SLA process. The importance of teaching L₂ learners to use CSs appropriately has been stressed by a number of researchers (e.g., Faerch & Kasper, 1983b). Several studies (e.g., Tarone, 1984b) have even suggested that poor language learners may benefit from instruction about CSs and from practice in using them.

Background to the Study

As Chapter 2 will show, research in the area of CSs has led to the identification of a number of different strategies and to the development of various typologies of CSs. Within the framework of the study of L₂ learners' communicative competence and IL development, research on CS use has become more extensive. CS use has been shown to influence the IL of L₂ learners, and is providing further insight into the SLA process. The literature on CSs has suggested a number of factors which affect an individual's choice of CSs and has explored the relationship between CS use and proficiency in the L₂.

Most studies of CS use have been conducted with adolescent or adult L₂ learners, in a "core" or traditional L₂ learning situation. The area of CS use by child L₂ learners in a French immersion (FI) situation has not yet been explored on a large scale. The present study focuses on the use of CSs by young L₂ learners, with the aim of documenting the development of, and patterns of change in, CS use over a 36-month period.

The present study is, in a sense, a response to the call by Tardif and Weber (1987) for more process-oriented research in FI and for studies of SLA in the FI context. It also responds to the need (Paribakht, 1985; Skehan, 1989) for longitudinal studies of the development of strategic
A number of studies have found a correlation between CS use and proficiency level; however, as Skehan (1989) points out, no causal relationship is clear:

Since the research design was cross-sectional we do not know whether the strategies came first, and had brought about the proficiency level, or that those who were more proficient, for whatever reason, accordingly had the potential to use strategies. Only a longitudinal research design which monitors changes in strategies and proficiency over time in the same group of learners can address this issue. (p. 97)

This study, then, investigates the hypothesis that CS use and L₂ proficiency are related.

The investigation of individual variation in CS use is called for by a number of researchers. This study also responds to that call for research on CS use and personal variables (Faerch, 1984; Haastrup & Phillipson, 1983; Tarone 1983). Such research would presumably have implications for the L₂ learning/teaching process. As Littlewood (1984) has indicated, "In view of their importance in enabling communication to take place and the links between communication and learning, the study of communication strategies ought to provide important theoretical and practical insights in the future" (p. 87).

Purpose of the Study

This study investigates the SLA processes of young children and considers factors possibly involved in the degree of success or non-success experienced by these young children as they attempt to express themselves in their L₂. The study focuses on the developing strategic competence of anglophone students learning French in an Early French Immersion (EFI) Program. Its intent is to shed light on the patterns of development evidenced in the CS use of successful (SLLs) and of less-successful (LLLs) second language learners. Through an investigation of patterns of CS use and of changes in CS use over time, the present study will hopefully add to a growing body of research on SLA, on IL and on individual differences in SLA. It is also hoped that this study will provide some further insight into how the L₂ learning situation affects the
development of communicative competence, in particular the development of strategic competence.

**Significance of the Study**

This study of the development of strategic competence in young FI students contributes to the field of research in CS use. While most studies of CS use have focused on adolescent or adult students in more traditional kinds of L₂-learning situations, this study of FI students at Grades 2 and 5 follows the development of young learners in an intensive L₂-learning situation.

The longitudinal dimension of this study contributes to its usefulness in providing information on the development of strategic competence and on changes in CS use over developmental time.

The information gathered in this study will also contribute to the growing body of research on FI, and may shed some light on the development of communicative competence, most particularly of strategic competence, by young FI students.

Evidence obtained in this study pertaining to the differences in CS use between SLLs and LLLs will possibly have some implications for FI methodology and may provide some insight for teachers on the role of CSs in communication and on the need to provide training in the use of effective CSs.

**Definition of Terms**

It is felt that the definition of certain terms which are used in this study would be useful in providing clarification to the reader.

- **ESL**: English as a second language
- **FL**: French as a first or native language
- **FL₂**: French as a second language

**Interlanguage**: The evolving language system of a second language learner, sometimes referred to as an "approximate system" (Nemser, 1971) or "learner's language" (Hanzeli, 1975).
A term used to refer to the first or native language of a speaker.

**L₁** - based strategies: Communication strategies which are interlingual in nature, that is, based in the native language (L₁) of the speaker, rather than in the L₂, the language of communication. Examples include literal translation or code-switch.

A term used to refer to the second language being learned; synonymous with "target language".

**L₂** - based strategies: Communication strategies which are intralingual in nature, that is, based on the L₂, the language in which communication is taking place. Examples include paraphrase or approximation.

Less-successful language learners (LLLs): The four subjects who, during the Grade 2 year, obtained the lowest oral proficiency ratings in their class.

Pattern of communication strategy use: A picture of overall strategy use, based on use of the various categories and subcategories of communication strategies.

Proficiency: A combination of knowledge about the language and its communicative use and ability for using this knowledge in actual communication; often used interchangeably with "competence".

Successful language learners (SLLs): The four subjects who, during the Grade 2 year, obtained the highest oral proficiency ratings in their class.

Surface realization of strategies: The quality or success of strategies. Following Paribakht (1985), the surface realization of strategies is determined by the level of grammatical accuracy and the informative value of the strategy.

Limitations of the Study

The present study provides some valuable information on the use of
CSs by eight young L₂ learners, classified as either successful or less-successful language learners, and documents changes in the pattern of their CS use over time. This case study may generate some useful information. However an awareness of the limitations of the study is essential for an appropriate interpretation of the results and of the relevance of the findings. The following limitations should, therefore, be considered:

1) The number of subjects in the present study limits the generalizability of results and the applicability of findings to other situations and to other groups of students.

2) The elicitation task used in this study was developed by the researcher and may have produced different results than other elicitation tasks or other instruments.

3) The elicitation task used in this study may have been interpreted by the subjects as being a type of test and may have influenced the discourse produced and the communication strategies used.

4) The taping of the oral narratives may have caused anxiety in some subjects and influenced their discourse and choice of communication strategies.

5) The subjects of this study all had the same classroom teacher in Grade 2 and the same classroom teacher in Grade 5. Results may have been different if the subjects had had another teacher or a variety of other teachers.

6) The subjects of this study were all aware that the experimenter/researcher is a bilingual anglophone. Alternate CS may have been used had the experimenter/researcher been francophone.

7) It was assumed by the researcher that the L₂ proficiency of the subjects would be higher at Time 2 than at Time 1. However, no attempt was made to determine the accuracy of this assumption.

8) Given the difficulty in ascertaining use of the strategy of indirect appeal, the results may not show a completely accurate portrayal of
the use of this strategy.

9) The only non-linguistic strategy considered in this study is sound imitation. The inclusion of other strategies in this category may have altered the results somewhat.

Organization of the Report

This report of the study will be organized as follows:

1. In Chapter Two, a theoretical framework for the study is developed; the recent literature on communication, communicative competence, interlanguage and second language acquisition, strategic competence, including communication strategy use, fluency in discourse, and French Immersion is reviewed, and the need is demonstrated for studies of second language acquisition involving children, particularly of the development of children's strategic competence and their use of communication strategies. CS use is shown to be an integral part of strategic competence, and an area which has implications for the development of \( L_2 \) proficiency. Individual patterns of CS use are shown to be related to \( L_2 \) proficiency, personality and personal variables, the language learning setting, and the interactions in which the learner engages.

2. In Chapter Three, the research procedures are discussed, including the research questions, the sample, the instrument, and the procedures for the collection and analysis of data.

3. In Chapter Four, the results of the study are presented. Both quantitative and qualitative descriptions are provided for the CS use of individual subjects and for the CS use of the two groups of subjects at Time 1 and Time 2. Patterns of CS use and patterns of change in CS use over time are discussed.

4. In Chapter Five, a brief summary of the study is presented, the results of the study are interpreted and a number of implications discussed. As well, recommendations for further research are made.
CHAPTER TWO

REVIEW OF THE LITERATURE: A THEORETICAL FRAMEWORK

Communication

Communicative approaches to language teaching stress the necessity not only of learning about the language, but also of being able to use the language in meaningful situations. Basic to a communicative approach are the principles of communication, which Canale (1983), following Breen and Candlin (1980), Morrow (1977, cited in Canale, 1983), and Widdowson (1978), describes as follows:

Communication:

(a) is a form of social interaction, and is therefore normally acquired and used in social interaction;
(b) involves a high degree of unpredictability and creativity in form and message;
(c) takes place in discourse and sociocultural contexts which provide constraints on appropriate language use and also clues to correct interpretations of utterances;
(d) is carried out under limiting psychological and other conditions such as memory constraints, fatigue and distractions;
(e) always has a purpose (for example, to establish social relations, to persuade, or to promise);
(f) involves authentic, as opposed to textbook-contrived language, and
(g) is judged as successful or not on the basis of actual outcomes. (pp. 3, 4)

Communication is understood to be the exchange and negotiation of meaning between two or more people; as a condition of effective language learning, the learner must become actively involved in communication, and develop the ability to interpret, express and negotiate meaning.

Communicative Competence

First coined by Hymes in the mid-sixties, the concept of "communicative competence" has come to have a pervasive impact on the work of language teachers, researchers and others interested in language and has inspired many of the recent communicative approaches to L2 learning and
of it, and our knowledge shapes the way in which language is used" (p. 261).

Allan (1983) suggests that the aim of a communicative curriculum is "to teach not merely the abstract idealized aspects of language structure, but the actual use of language in real-life social interaction". (p. 34) Likewise, Canale and Swain (1979) state that the primary objective of a communication-oriented L2 programme must be "to provide the learners with the information, practice and much of the experience needed to meet their communication needs in the second language" (p. 52). If language is viewed as a means of expression and communication, then L2 pedagogy must take this into account and provide for the development of communicative competence. The four components of communicative competence (grammatical competence, sociolinguistic competence, discourse competence and strategic competence) must be emphasized, with the language learning environment making provision for the development of all four competencies. Savignon (1983) supports this view and states that each of these components of communicative competence is extremely important as a goal in the foreign-language classroom - a student who has failed to develop competence in any one of these components cannot truly be said to be proficient in the foreign language. (p. 129)

**Interlanguage**

Although Corder (1967b) referred to the "transitional competence" of the language learner, it was Selinker (1969) who introduced the term "interlanguage" (IL) to refer to a linguistic system based on the output of L2 learners. Selinker (1969, 1972) elaborated on the concept of IL as being a system separate from both the native language (L1) of the learner and the target language (L2), claiming that it is "a separate linguistic system based on the observable output which results from a learner's attempted production of a TL [target language] norm" (Selinker, 1972, p. 35).

The IL hypothesis claims that the learner of a L2 internalizes a system of rules, differing from the systems of both the L1 and the L2. It
teaching. Hymes (1972) proposed a theory of communicative competence which includes knowledge of and ability to use rules of language use in context. His theory comprises four types of knowledge and ability; communicative competence is viewed as the interaction of grammatical, psycholinguistic, sociocultural and probabilistic systems of competences. Competence in a L₂, then, is seen not just as a knowledge of linguistic forms such as semantics, morphology, phonology and lexicon; it is considered, rather, a combination of knowledge and ability for use: knowledge about the language and its communicative use and ability for using this knowledge in actual meaningful communicative situations.

A framework for communicative language proficiency proposed by Canale and Swain (1979, 1980), and revised by Canale (1983), subsumes four constituent competencies: grammatical competence (mastery of the language code and the knowledge and skill necessary to understand and express the literal meaning of language); sociolinguistic competence (the extent to which utterances are produced and understood appropriately in various sociolinguistic contexts); discourse competence (the ability to achieve unity in discourse through cohesion in form and coherence in meaning); and strategic competence (the ability to use communication strategies or repairs, verbal or non-verbal, to compensate for breakdowns in communication or to enhance the effectiveness of communication). Of prime importance in communicative competence is the ability to use language appropriately for communication according to specific topic, setting, and cultural context (cf Hornberger, 1989; Spolsky, 1978).

The concept of communicative competence has had far-reaching implications for L₂ learning and teaching, for SLA research, for syllabus and materials planning and for applied discourse analysis (Davies, 1989). It has focused attention on the goals to be achieved and on the procedures required for meeting those goals. As Romaine (1984) states, "communicative competence must be built into the very core of a theory of language because the way in which language is used affects our knowledge
holds that errors are an inevitable and necessary part of the language learning process and it suggests that L2 learners form rules which are tested and revised through successive stages. The evolving system of the L2 learner has been referred to as "learner’s language" (Hanzeli, 1975), as an "idiosyncratic dialect" (Corder, 1974), as an "approximate system" (Nemser, 1971), as well as "interlanguage", and is claimed to be both systematic and predictable. The concept of IL reflects the idea of language universals, while emphasizing the learner’s creativity. According to Byrnes (1987), L2 acquisition, from an IL viewpoint, "involves a creative process in which the learner constructs the grammar of the target language according to certain (possibly universal) principles of hypothesis-testing" (p. 46).

Systematicity and Variability in Interlanguage

Part of the on-going research in SLA has been the study of the nature of IL. A number of early IL researchers (Corder, 1971; Nemser, 1971; Richards, 1971; Selinker, 1969) hypothesized that systematicity is a characteristic of IL. This hypothesis has been supported by many other researchers including Dickerson (1975), Selinker, Swain and Dumas (1975), Adjemian (1976), Tarone, Frauenfelder and Selinker (1976), Hylenstam (1977, 1985), Frith (1982), and Tarone (1982).

Linguistic variability has also been noted as an important characteristic of IL by a number of researchers (Corder, 1977a; Dickerson, 1975; Ellis, 1984, 1987; Huebner, 1985; Labov, 1969; Selinker, 1972; Selinker & Douglas, 1985; Tarone, 1979, 1982, 1983a, 1985; Tarone, Frauenfelder & Selinker, 1976). Of interest to SLA researchers is not only the variation between learners, but also the variation within the same learner’s performance. In this latter category, two kinds of variability in learner speech have been identified: the variability reflecting a change in the learner’s knowledge of the language over time, and the variability shown at a particular point in time. Variability over
time, caused primarily by "changes in knowledge, including the amount, nativeness, and analysis of that knowledge" (Bialystok & Sharwood Smith 1985, p. 109), has been named cognitive variability or diachronic variability (Bialystok & Sharwood Smith, 1985) or horizontal variability (Ellis, 1984). This type of variability has also been referred to as "instability" (Tarone, Frauenfelder & Selinker, 1976). Variability at a point in time has been called control variability or synchronic variability (Bialystok & Sharwood Smith, 1985) or vertical variability (Ellis, 1984).

Vertical or synchronic variability is a function of the degree of formality or level of attention to language use. The distinction between formal/informal and planned/unplanned is central to an understanding of this type of variability. IL moves along a continuum depending on levels of formality and amount of planning in discourse. Horizontal or diachronic variability refers to changes in linguistic output over time and the developmental path which occurs in communicative speech. The learner progresses through a series of developmental stages involving formulaic speech, propositionally-reduced speech, syntactic utterances, morphologically marked utterances and complex utterances (cf Ellis, 1984).

Central to a variationist perspective is the view that language is a dynamic process which evolves through time and space. This process-based or process-oriented approach contrasts with the static paradigms of structuralism and later of transformationalism which dominated the field of language acquisition from the 1940's until the early 1970's.

It has been hypothesized that IL changes gradually over time, developing along a continuum towards the target language (Corder, 1977; Dickerson, 1975; McLoughlin, Rossman & McLeod, 1983; Tarone, 1985). Other studies (Chesterfield & Chesterfield, 1985; Huebner, 1985; Tarone, 1982) suggest that variability in IL may be systematic over developmental time. Chesterfield and Chesterfield (1985), for example, report considerable systemacticity in the emergence of strategies among their subjects, young
Mexican-American children in their first year of school, with receptive
and self-contained strategies preceding interactive and metacognitive
strategies.

**Second Language Acquisition**

Until about the mid-1960’s, the field of SLA was dominated by
behaviourist ideas of habit formation. The change in orientation to a
more "creative construction" approach was largely influenced by the domain
of L₁ acquisition. SLA, like L₁ acquisition, has come to be viewed as a
process wherein language rules are actively constructed from the data
encountered and gradually adapted in the direction of the target (or
adult) language. A prevailing view is that first and second language
acquisition are cognitively similar processes (Garcia, 1983; McLaughlin,
1984; Nelson, 1981; and Taylor, 1974). A number of studies have indicated
that the acquisition of a first or a second language is multi-dimensional
and is related to the interaction of linguistic, social, and cognitive
domains. The differences between the two types of language acquisition
are related, it is claimed, to factors such as cognitive maturity,
previous language experience and affective orientation.

According to some researchers, including Dulay and Burt (1974),
Corder (1977c), and Ellis (1986), many of the strategies used by children
acquiring their L₁ are also used by learners of a L₂, namely generalization
(often resulting in errors of over-generalization), transfer of rules from
previous knowledge of language (from the L₁ in the case of L₂ learners),
and simplification. In language acquisition, the application of these
strategies underlies the development of the language and of competence in
the language; in the case of a L₂, as in L₁ acquisition, use of these
strategies often results in errors.

In an attempt to achieve a truly holistic perspective on the process
whereby learners acquire a L₂, researchers such as Krashen (1980), Larsen-
Freeman (1985b), and Tarone (1988) have approached the study of
acquisition from a variety of perspectives. Recent theories of SLA have
attempted to be interactive (rather than linear) and to include the many variables known to play a significant role in SLA. Some of these theories have also attempted to account for the fact that not all input is integrated into the learner’s developing IL, that a learner’s IL system may go beyond the actual input, that there exists individual variation in skill development and in achievement, and that the interaction of a number of variables will influence the acquisition process.

The broadening scope of SLA inquiry includes the influence of the learning environment on the development of L2 competence, with a focus on the kinds of input available to the learner and on how the input is integrated by the learner, to become the learner’s output or IL.

SLA is dynamic and interactive in nature, and involves many complex and interrelated factors. (cf. Bialystok, 1978; Littlewood, 1981; Tarone, 1988) Although some research has indicated that there may be universal processing strategies of L2 acquisition or a "natural" sequence for some aspects of language development (Dulay & Burt, 1974; Krashen, 1981) it is also clear that there is wide individual variation in the SLA process, and that different developmental routes exist. It is hypothesized that individual differences are the result of the interaction of a number of variables. Individual differences in the way a learner approaches the L2 learning situation, and in the ways s/he subsequently benefits from it, are regarded by many researchers as being due to personal differences in areas such as personality (Naiman, Fröhlich, Stern & Todesco, 1978; Vogel & Vogel, 1986), attitude and motivation (Beebe, 1985; Gardner, 1968; Gardner & Lambert, 1972), interactional patterns (Seliger, 1977; Wong Fillmore, 1979), cognitive and metacognitive development (Bialystok & Bouchard Ryan, 1985; Bialystok & Sharwood Smith, 1985; Cook, 1980), prior knowledge and experiences (Cook, 1980; Corder, 1978b), social style (Strong, 1983), strategy use (McLaughlin, 1984), situational anxiety (Horwitz, Horwitz & Cope, 1986); learning style (Titone & Danesi, 1985), risk-taking behaviour (Beebe, 1983), home and community environments
According to Gass (1988), "the ultimate goal of second language acquisition research is to come to an understanding of what is acquired (and what is not acquired) and the mechanisms which bring second language knowledge about" (p. 198). Gass argues that a global view of SLA must incorporate sociolinguistic, psycholinguistic and linguistic aspects.

**Variation and Individual Differences in Second Language Acquisition**

In recent years, individual differences in SLA between learners of different personality types and of differing interaction patterns have been a topic for speculation and research. As Selinker (1972) has noted, "a theory of second language learning which does not provide a central position of individual differences among learners cannot be considered acceptable" (p. 213).

Language behaviour differences are apparent in the varying degrees of success which learners experience in a L2. Certain longitudinal studies (Pienemann, 1979, cited in Meisel, Clahsen & Pienemann, 1981; Wong Fillmore, 1979;) have found considerable variation between L2 learners in L2 development and have indicated that even L2 learners with the same L1 follow different paths in the development of the L2. While most studies aimed at explaining this variability between L2 learners have been carried out on adolescent or adult L2 learners, several researchers have conducted studies of pre-school or primary-aged children. Wong Fillmore (1979), and Nicholas (1985, 1987) found that individual differences in L2 learning by children resulted in variation between L2 acquirers at the same stage of SLA and in overall rate of acquisition. These studies have suggested that factors such as L1 development, age, learning style tendencies and orientation, and certain personal characteristics influence the acquisition of the L2. Variables such as strategy use, personality and sociopsychological factors have also been identified as affecting rate of
Research seems to suggest that the differences between children acquiring a L₂ are not limited to differences in the speed of acquisition; Nicholas (1985) and Hatch, Wagner Gough and Peck (1985) have suggested that differences also exist in the paths followed by different acquirers. Their research suggests that not all L₂ learners have the same orientation to the L₂ learning process; in fact, different learners process language differently and use differing strategies for solving the same communication problem. Nicholas (1985) suggests that variation between learners is indicative of differences in orientation to the L₂ development process and can be found in four different areas, one of which is the choice of strategies for interaction in the L₂.

A number of researchers have investigated the role of metacognition in L₂ learning and have hypothesized that the level of metacognitive development of an individual will influence success in the L₂, particularly in the selection and evaluation of strategies for communication in the L₂ (Bialystok, 1984; Bialystok & Bouchard Ryan, 1985; Wenden, 1986a, 1986b).

As indicated by Flavell (1979), metacognition is considered to play an important role in "oral communication of information, oral persuasion, oral comprehension, reading comprehension, writing, language acquisition, attention, memory, problem solving, social cognition, and various types of self-control and self-instruction" (p. 906). While many different definitions of metacognition have been proposed, Brown (1978), Cavanaugh & Perlmutter (1982), Cazden (1972), Flavell (1977) and Wong (1985) all refer to it as a reflective awareness of cognitive processes. Further, "metacognition refers to strategic regulation of our own cognitive processes" (Gordon & Braun, 1985, p. 2). It also "refers to subjects' awareness of how task, subject and strategy factors can influence performance ... more generally, metacognition can be seen to be involved in performance evaluation or monitoring, strategy switching, and plan or strategy selection" (Kirby, 1984a, p. 55). Metacognition, then, is
reportedly the process that underlies the efficient and appropriate use of strategies. For efficient learning to take place, metacognition, with its emphasis on awareness and appropriate use, seems necessary.

Research has shown that metacognition increases with age (Chipman, 1985; Flavell, 1977) and that after the age of eight, children show a progression in the ability to reflect on language (Chipman, 1985). As noted by Wenden (1987), "knowledge about and the ability to regulate cognition has begun to emerge in preschool children and ... efficiency of use and complexity of knowledge and skill increase with age" (p. 587). In areas other than SLA, comparisons of good and poor learners have shown that level of megacognition can account for differences in performance (cf. A.L. Brown, 1981; Cavanaugh & Peremutter, 1982; and Forrest-Pressley & Gilles, 1983). Not only younger learners, but also poorer learners, then, are said to be deficient in metacognitive knowledge and skills. In the domain of SLA as well, some researchers claim that metacognition is a variable which can distinguish between successful and less successful language learners (e.g., Wenden, 1987). While few studies have investigated metacognition and L₂ success, a number of researchers (e.g., Bialystok, 1984; Faerch, 1984; and Tarone, 1983) have identified strategy use as a variable associated with success. One of the reasons postulated for the lack of success of some language learners is their limited and/or inappropriate use of strategies (Stern, 1983a; Wenden, 1987).

Studies of the characteristics of L₂ learners and of the factors which promote success in learning a L₂ have identified a number of variables which influence the development of the learner's IL and strategic competence. The variation noted between individual L₂ learners is accounted for in terms of cognitive, affective, social and personal variables.

A number of other studies have identified strategy use as a variable which influences SLA and as an area in which individual differences are evidenced. Given the place of strategic competence in a model of
communicative competence (cf. Canale, 1983), a great deal of interest has recently been shown in the investigation of strategies in SLA. While some of the variables which affect L₂ development are apparently unalterable, others, such as strategy use, are reportedly teachable (e.g. Tarone, 1984b).

Strategic Competence

The literature on strategic competence and strategy use in a L₂ contains many definitions of "strategies." Some definitions refer solely to strategies of language learning, others refer to strategies used in communicating, and still others refer to both. Wenden (1985c) signals the fact that the definition of strategies is not clear and hence strategies have been referred to as "'language learning behaviours', 'steps, routines, procedures', 'conscious enterprises', 'potentially conscious plans', 'tactics', 'cognitive abilities', and 'learning skills'" (p. 4).

Such inconsistencies exist because the types of strategies being referred to are different. Although the term "strategic competence", as defined by Canale and Swain (1980) and others, includes only ability to use CSs, some of the literature indicates that other language-related strategies should also be included (H.D. Brown, 1980; Frauenfelder & Porquier, 1978; Morley, 1987; Paribakht, 1985; Wenden, 1985c).

Learner Strategies

Creative construction theory suggests that language learners formulate hypotheses about the target language and, step by step, build their own language system which, under ideal conditions, gradually approximates native language. This hypothesis formulation or creative construction process is considered a necessary part of the language learning process (Brown, 1973; Corder, 1967b, 1975; Dulay & Burt, 1974; Dulay, Burt & Krashen, 1982; Selinker, 1969). Corder (1975) maintains that the nature of a L₂ learner's hypotheses about the language will be determined largely by the interaction of three main factors, namely 1) the learner's existing cognitive structures and language experience, 2) the
type of linguistic environment to which the learner is exposed, and 3) the language learning strategies employed by the learner.

The recent interest in strategy use stems largely from a desire to identify variables which contribute significantly to success in the SLA process. Carrol (1977) addresses the role of strategy use:

Successful second language learning ... depends on the particular strategies employed by the learner to achieve the desired degree of success ... it is through the adoption of appropriate learning sets and strategies that learners can often be successful even when the talents they bring to the task are only moderate, or indeed only minimal. (p. 2)

Researchers such as Bingham-Wesche (1979), Naiman et al. (1978), Rubin (1975) and Stern (1975) have reported on the characteristics and strategies which characterize good language learners. Their reports and subsequent studies have delineated strategies which underlie the language learning process and have provided direction for L₂ teaching. Learner strategies have been divided into various categories by SLA researchers (Bialystok, 1979a, 1979c; O'Malley et al., 1985b; Rubin, 1985; Stern, 1983a, 1984; Wenden, 1985c). While these subcategorizations vary somewhat, they all include reference to strategies which may be considered CSs. Many researchers claim that strategy use differentiates successful and less-successful L₂ learners and that strategies shown to be effective in L₂ learning can indeed be taught to less successful language learners (Bialystok & Fröhlich, 1977, 1978; Breen & Candlin, 1980; Faerch & Kasper, 1983b; Hébert, 1986; Hosenfeld, 1976, 1979; O'Malley et al., 1985b; Prokop, Fearon & Rochet, 1983; Wenden, 1985a, 1986a). The study of strategy use in SLA has therefore been shown to be useful not only for psycholinguists and other theorists, but also for L₂ teachers and learners.

Communication Strategies

Communication Strategies Defined

In recent years, research on CSs has expanded considerably. Since the term "communication strategy" was first coined by Selinker (1969, 1972), researchers have attempted to clarify its meaning. Corder (1983),
for example, suggests that "communicative strategies... are a systematic technique employed by a speaker to express his meaning when faced with some difficulty" (p. 16). Tarone, Cohen and Dumas (1976) propose that CSs should be defined as systematic attempts by the language learner to express or decode meaning in the target language in situations where the appropriate target language rules have not yet been formed. Varadi (1973, cited in Tarone, 1977) uses the term communication strategy to mean "a conscious attempt to communicate the learner's thought when the interlanguage structures are inadequate to convey that thought" (p. 195), while Paribakht (1985) defines CSs as "vehicles through which speakers use their different kinds of knowledge to solve their communicative problems" (p. 134). According to Faerch et al. (1984), they are compensatory or problem-solving devices called into play "in order to bridge the gap between communicative needs and limited communicative resources". (p. 154). Ellis (1986) defines CSs as "psycholinguistic plans which exist as part of the language user's communicative competence; they are potentially conscious and serve as substitutes for production plans which the learner is unable to implement" (p. 182), while Brown (1980) defines them as "the conscious employment of verbal or nonverbal mechanisms for communicating an idea when precise linguistic forms are for some reason not readily available to the learner at some point in communication" (p. 178). Tarone (1983b, 1984b) views CSs as being interactional in nature and describes them as relating "to a mutual attempt of two interlocutors to agree on a meaning in situations where requisite meaning structures do not seem to be shared" (Tarone, 1983b, p. 65). Other researchers (Ellis, 1986; Faerch & Kasper, 1983a, 1983b) do not consider interaction or cooperative endeavour as necessary conditions for CSs. They claim that learners can use CSs as much in monologue as in dialogue and that learners can make use of CSs without the awareness of the interlocutor. Faerch and Kasper's definition reflects this learner-focused orientation: "communication strategies are potentially conscious plans for solving what to an individual presents
itself as a problem in reaching a particular communicative goal." (Faerch and Kasper, 1983b, p. 36).

As pointed out by Blum-Kulka and Levenston (1983), Tarone (1984b) & Ellis (1986), L₂ learners are not the only ones to use CSs. Native speakers often resort to their use when they encounter problems in conveying information. According to Tarone (1984b), native speakers typically use the strategies of circumlocution and approximation, strategies which require certain basic vocabulary and sentence structures useful for describing shape, size, colour, texture, function, analogy, hyponymy and so on.

The value and importance of the use of CSs to L₂ learners is emphasized in much of the recent literature. Appropriate use of CSs can, according to Faerch and Kasper (1983b), and Tarone (1984), facilitate communication by compensating for an imperfect L₂ system. A number of empirical studies of CS use have been conducted and various categorizations or typologies of strategies proposed (Bialystok, 1983; Blum-Kulka & Levenston, 1983; Corder 1978b, 1983; Faerch & Kasper, 1983b, 1984; Faerch et al., 1984; Haastrup & Phillipson, 1983; Paribakht, 1982, 1985; Poulisse, 1987; Stevens, 1984; Tarone, Cohen & Dumas, 1976; Tarone, 1977, 1980, 1981, 1984b; Varadi, 1983; Willems, 1987).

According to researchers such as Faerch & Kasper (1983b) CSs may be success-oriented or avoidance-oriented; that is, they may be classed as achievement (compensatory or resource expansion) strategies or reduction strategies; they may be L₁-based (interlingual) or L₂-based (intralingual), they may be linguistic or paralinguistic in nature, and they may be cooperative or non-cooperative. They may also be more or less efficient in communicating an intended meaning, depending on a complex interaction of a number of variables (Corder, 1983; Faerch & Kasper, 1983a; Faerch et al., 1984). Corder (1983) claims that reduction strategies are risk-avoidance strategies, while achievement strategies are risk-running strategies. Avoidance or reduction strategies reduce the intended
communication; they can occur on any level, but always involve a change of goal or giving up. Achievement strategies are alternative routes tried by the speaker in order to communicate what is actually intended.

**Communication Strategies: A Description of the Categories and Types**

In this section, a description of various categories and types of CSs will be given. While diversity of definition of many of these strategies currently plagues the literature on CSs, synthesis of these definitions is attempted.

**Reduction Strategies**

Reduction strategies are generally considered to be governed by avoidance behaviour, an attempt to eliminate a problem in communication, often by changing the communicative goal.

**Formal Reduction Strategies**

Formal reduction strategies make use of formal education strategies involves communicating by means of a reduced system, in order to avoid producing non-fluent or incorrect utterances (cf. Faerch & Kasper, 1983b). Formal reduction can occur on the phonological, morphological, syntactic or lexical levels, and may result in increased fluency and correct or appropriate language. Most taxonomies do not include these strategies, and those which do (Faerch & Kasper, 1983b; Willems, 1987), note the extreme difficulty in identifying their use. For this reason, formal reduction strategies have not been included in the taxonomy developed for this study.

**Functional reduction strategies**

Functional reduction strategies are used when the learner reduces his communicative goal in order to avoid problems in planning or execution. While some researchers also classify meaning replacement, semantic avoidance and message reduction as avoidance or reduction strategies, many taxonomies include only the following:
1. Topic avoidance

Topic avoidance is the avoidance of communication about topics that are linguistically problematic. It may take the form of a change of topic or no verbal response at all, may involve not talking about certain concepts (Tarone, 1984b), and is used in the planning phase (Faerch & Kasper, 1983b), rather than during the execution phase.

2. Message abandonment

Message abandonment is considered a less extreme form of topic avoidance; it involves trying but giving up (Corder, 1983). Communication on a topic is initiated, but then cut short because of linguistic difficulty. The learner stops in mid-utterance, with no attempt to try alternate means or appeal for help (Tarone, 1984b).

Achievement Strategies

The category of achievement strategies subsumes both compensatory and retrieval strategies. Under compensatory strategies, it includes the non-cooperative strategies of L₁-based, L₂-based, and non-linguistic strategies. It also includes the cooperative strategies of direct and indirect appeal. Retrieval strategies include pause/hesitation, repetition, retrieval via semantic field and retrieval via other languages.

In contrast to reduction or avoidance strategies, achievement strategies involve the expansion of communicative resources (Corder, 1983) and are success-oriented. Compensatory achievement strategies are aimed at solving problems in the planning stage, while retrieval achievement strategies are adopted to aid in the solution of execution or retrieval problems (Faerch & Kasper, 1983b).

Compensatory Strategies

Non-Cooperative Strategies

As mentioned earlier, non-cooperative strategies are those L₁-based, L₂-based, and non-linguistic strategies used in an attempt to convey an
intended meaning.

**L₁-based strategies.** L₁-based strategies are interlingual in nature in that the learner's L₁ is used as a basis for solving communication problems in the L₂. The following is an overview of the L₁-based strategies commonly identified in the literature.

1. Code-switch

Grosjean (1982) defines code-switching as "the alternate use of two or more languages in the same utterance or conversation" (p. 145). This strategy is different from borrowing or foreignization, where a word is integrated phonologically and morphologically into the target language utterance. Many bilinguals use the strategy of code-switch when they lack facility in one language when talking about a particular topic. This may happen when they do not know or cannot find an appropriate word or expression in the language being used, when the language itself does not have the item for the desired concept (Grosjean 1982; Lindholm & Padille 1977; McLure, 1977) or when the two interlocutors share the same languages (Beebe, 1977; Garcia, 1983). In a review of the literature on code-switching, Baetens Beardsmore (1982) cites the work of Lattey (1981) on a continuum of intentionality. Lattey (1981, cited in Baetens Beardsmore, 1982) considers that speech-error substitution in unilinguals and code-switching substitution in bilinguals both occur on a kind of continuum ranging from unintended (or unaware) substitution to fully attended (or intended) substitution. In both monoglot and bilingual speech, attended and unattended slips, interferences or switches are determined by their utterance potential:

given a possibility of choice between two types of output, the element with the strongest internally or externally motivated association is likely to be most readily available for insertion in discourse... For both types of speaker [unilinguals and bilinguals] the slip of the tongue or interference feature is due to inadequate screening of the available material in a given social setting. (Lattey, 1981, cited in Baetens Beardsmore, 1982, pp. 115-116)

A strong desire to communicate, as postulated by Stevens (1984), may then be one of the reasons why such inadequate screening takes place in
the speech of FL students; inadequate screening and the strong association of English lexis may help explain cases, such as those noted by Stevens (1984), where a child retrieves some fairly sophisticated expressions in French, but does not retrieve simple L2 vocabulary, switching to English instead.

2. Literal translation

According to Faerch and Kasper (1983b), literal translation refers to the adjustment of an L1 lexical item or structure at the lexical level of the IL system and can be defined as "translating compounds or idiomatic expressions from L1 verbatim in L2" (p. 47).

The strategy of literal translation was first identified by Tarone (1977) who refers to it as a form of conscious transfer, occurring when an L1 expression is translated word for word into the L2. While literal translation makes use of the learner's IL knowledge, the point of departure is the learner's L1. Although the use of literal translation may result in comprehensible speech, there is considerable risk that it will not be comprehensible by a native speaker (Faerch et al., 1984).

3. Foreignization

Bialystok (1983) defines foreignizing as "the creation of non-existent or contextually inappropriate target language (L2) words by applying L2 morphology and/or phonology to L1 lexical items" (p. 105). Foreignization is an L1-based strategy, and as such it nearly always leads to partial or non-comprehension (Haastrup & Phillipson, 1983, p. 155).

L2-based strategies. L2-based strategies are intralingual in nature in that the learner's L2 is used as the basis for solving communication problems in the L2. Commonly identified L2-based strategies are described below.

1. Generalization

In the use of generalization, "the learner assumes that his original goal can be reached by using a generalized IL item or, in other words, that the generalized item can convey the appropriate meaning in the given
situation/context" (Faerch & Kasper 1983b, p. 48). While Faerch and Kasper's definition includes the use of superordinate terms as an example of the strategy of generalization, they do not limit their definition to superordinate terms. Varadi (1983) however, limits his definition to "the use of a super-ordinate term in reference to its hyponym" (p. 92). He considers generalization to be a type of intentional reduction, in that it results in lack of precision caused by the use of forms whose meanings are related to the optimal meaning, but fall short.

In its broader sense, generalization shares some of the characteristics of semantic contiguity (Bialystok, 1983), approximation (Tarone, 1977, 1983), and lexical substitution (Tarone, Cohen & Dumas, 1976). In its narrower application, it is similar to Blum-Kulka and Levenston's (1983) categorization of superordinate terms as a sub-type of overgeneralization and to Paribakht's (1985) classification of superordinates as a type of semantic contiguity.

2. Approximation

Blum-Kulka and Levenston (1983), define approximation as using a word in the target language (or simplified text) which does not convey the concept required in the context - a concept for which a single term may exist that is commonly used by native speakers - but which shows enough semantic elements with the derived concept to more or less convey its meaning in the given context" (p. 130).

Other definitions proposed in the literature include, under approximation, high-coverage words, low-coverage words, and general, but inappropriate, approximations (Tarone, 1977). Still other definitions classify approximation as a sub-type of generalization (Faerch & Kasper, 1983b).

Approximation can be considered to have commonalities with Bialystok's (1983) semantic contiguity and Paribakht's (1985) comparison, a type of semantic contiguity. In Paribakht's taxonomy, comparison can involve either positive comparison (analogy and synonymy) or negative comparison (contrast and opposition, and antonymy).

According to Varadi (1983), approximation can be considered as an
attempt to reconstruct the optimal meaning by explicating or referring to part of its semantic component. It may even be achieved through poetic licence or ingenious associations.

3. Circumlocution

Varadi (1983) distinguishes between approximation and circumlocution, noting that if enough of the semantic components have been given for the offered form to convey the optimal form inherently, it should be considered as circumlocution rather than approximation. In the same vein, Blum-Kulka and Levenston (1983) suggest that circumlocutions are expected to specify all the semantic features of the defined word. They note, however, that circumlocutions can also exploit the various semantic relationships of oppositeness of meaning. Other researchers do not always make this distinction. Tarone (1977, 1983), for example, combines Varadi's circumlocution and description under the heading of circumlocution, and defines the strategy as "the description of characteristics or elements of the object or action instead of using the appropriate target language structure" (Tarone 1977, p. 198); she does not specify the degree of semantic fit necessary.

Paribakht (1985) limits her definition of circumlocution to the description of certain characteristics of the concept, specifying six types of description: physical, constituent features, locational, historical, functional or other features. Still other taxonomies include circumlocution as a type of paraphrase (Faerch & Kasper, 1983b; Tarone, Cohen & Dumas, 1976).

4. Paraphrase

As used by Blum-Kulka and Levenston (1983), the term paraphrase is similar to circumlocution, the difference being that paraphrase does not necessarily specify all the semantic components required by the context. They consider paraphrase to be less accurate and less acceptable than circumlocution.

Paraphrase is, however, defined differently by other researchers.
Tarone (1977), for example, defines paraphrase as "the rewording of the message in an alternate, acceptable target language construction, in situations where the appropriate form or construction is not known or not yet stable" (p. 198). Under the heading of paraphrase she includes approximation, word coinage and circumlocution. Faerch and Kasper (1983b) subsume descriptions, circumlocutions and exemplification under the heading of paraphrase. Descriptions involve focusing on the characteristic properties or functions of the concept, while in exemplification a hyponymic expression is used instead of the superordinate term. Use of trade names or the provision of examples are considered exemplification.

The use of paraphrase has been found to be related to proficiency in the L2 (Bialystok, 1983) and to characterize a correcting, rather than a planning, style of speech behaviour (Seliger, 1980).

5. Word coinage

The strategy of word coinage has been described as "the creation of a non-existent lexical item in the target language in situations where the desired lexical item is not known" (Tarone, Cohen & Dumas, 1976, p. 84). Varadi (1983) considers word coinage to be a type of approximation, while Tarone, Cohen and Dumas (1976) and Tarone (1977) consider it to be a type of paraphrase. Faerch and Kasper (1983b) and Willems (1987), however, both consider word coinage to be a L2-based strategy which does not belong to either of these categories.

6. Restructuring

Restructuring refers to the repeating of an utterance or its parts, with changes made in structure. According to Faerch and Kasper (1983b), a restructuring strategy is used "whenever the learner realizes that he cannot complete a local plan which he has already begun realizing and develops an alternative local plan which enables him to communicate his intended message without reduction" (p. 50). This phenomenon is referred to as "repair" by Tarone (1980), as "corrections" by Fathman (1980), and
as "self repair" by Willems (1987), and may be considered similar to the alteration strategy and the conceptualizing strategy of Stevens (1984). Stevens uses the term alteration to refer to changes made due to non-linguistic concerns (i.e. perhaps changing one's mind about the story line), while she uses the term conceptualizing to describe false starts due to linguistic concerns (i.e. a search for particular words). Tarone (1980) maintains that repairs which focus on better communication of intended meaning are CSs, while those that focus on correction of linguistic form (phonological or morphological repairs) are not CSs.

7. Egocentric strategy

Stevens (1984) is perhaps the only researcher to include the egocentric strategy in a list of CSs. She considers this strategy to be used when "a verb or another word is used which only has meaning for the speaker" (p. 214). In her analysis of the strategies used by young FI students in naturalistic speech, she found several cases of aberrant expressions whose exact meaning is not immediately evident. These strategies, used without hesitation by learners who obviously expected to be understood, and which have been classified as egocentric, may share certain characteristics with the strategy of word coinage. Learner use of word-coinage involves creating words in the second language; however, use of an egocentric strategy involves creating a word with no apparent linkage to the L2.

Non-linguistic strategies. The term paralanguage is often used as an umbrella term to refer to all aspects of nonverbal communication, including kinesics, proxemics and paraverbal features. It subsumes gestures, body movement, facial expressions, voice quality and modification, touching, vocalization of sounds, among other features. It is, according to Pennycook (1985) "a primary facet of communicative competence" (p. 259). Aspects of paralanguage, referred to as non-linguistic strategies, are included in many taxonomies of CSs.

While some taxonomies include only mime (Paribakht, 1985; Tarone,
1977) or gesture (Corder, 1983; Haastrup & Phillipson, 1983), others include all non-linguistic features such as mime, gesture, and sound-imitation (Faerch & Kasper, 1983b; Willems, 1987). While Willems (1987) specifies that non-linguistic strategies are used to replace speech, other researchers state that they may be used either to support other verbal strategies or to replace them (Faerch & Kasper, 1983b; Faerch et al., 1984; Paribakht, 1985). Faerch and Kasper suggest that an important function of non-linguistic strategies is to signal an appeal to the interlocutor.

One commonly identified non-linguistic strategy, and one which is utilized in this research is sound imitation. This strategy is generally defined as the vocalization of sounds, either to replace speech or to support verbal strategies.

**Cooperative Strategies**

Cooperative strategies generally refer to an attempt to solve a linguistic problem by signalling difficulty to the interlocutor. These appeals can be either direct or indirect (Faerch & Kasper, 1983b; Raupach, 1983), explicit or implicit (Faerch & Kasper 1983a; Willems, 1987) and have been defined as "self-initiated other-repairs" (Schegloff, Jefferson & Sacks, 1977, p. 363, cited in Faerch & Kasper, 1983b, p. 51). Tarone (1977) suggests that some language learners will show a preference for the strategy of appeal, while others will prefer to use avoidance strategies. Faerch et al. (1984) support this view, pointing out that there are advantages to using appeal rather than just giving up.

1. Direct appeal

The strategy of appeal to authority or appeal for assistance (Tarone, 1977; Tarone, Cohen & Dumas, 1976; Tarone, Frauenfelder & Selinker, 1976) "occurs when the learner asks someone else to supply a form or lexical item, asks if a form or item is correct, or else 'looks it up' in a dictionary" (Tarone, Cohen & Dumas, 1976, p. 83). These appeals are direct or explicit in orientation, and correspond with the direct appeal of Raupach (1983), Faerch and Kasper (1984) and Willems (1987).
2. Indirect appeal

In some cases the learner may signal uncertainty through use of rising intonation, hesitations, drawls, non-verbal signs, pauses or repetition (Raupach, 1983; Willems, 1987). These appeals are considered implicit or indirect. While not all taxonomies include implicit or indirect appeals, good arguments for including them have been presented by Faerch and Kasper (1983b) and Raupach (1983).

**Retrieval strategies**

Problems experienced in the execution of a linguistic plan may lead to the use of achievement strategies which have been classified as retrieval strategies (Faerch & Kasper, 1983a, 1983b, 1984; Haastrup & Phillipson, 1983). They are used when the learner decides to persevere in the location or retrieval of a required or desired item. Most taxonomies do not include retrieval strategies; however, the researchers who do include them, make a good case for doing so.

Glahn (1980, cited in Faerch & Kasper, 1983b) identifies a number of retrieval strategies, including waiting for the term to appear (pause), appealing to formal similarity, retrieval via semantic fields, searching via other languages, retrieval from learning situations, and sensory procedures, such as staring at the floor. As Faerch and Haastrup (1983a) and Ellis (1986) point out, the identification of retrieval strategies is not always possible without introspection. However, certain performance features such as pauses, drawls, false starts, repetitions, or the use of a L₁ lexical item as a prime, may indicate that a retrieval strategy is being used.

1. Pause/Hesitation

Pause or hesitation occurs when a desired L₂ item is not immediately available or retrieved. Pauses may be filled (contain sounds such as umm, er, uh) or be unfilled (silent). According to Seliger (1980), extensive use of pause characterizes the discourse of learners who are low input generators (LIGs), who are passive in the language learning process, and
who do not generally experience a great deal of success in the L₂ learning process.

2. Repetition

The strategy of repetition involves the repetition without change of syllables, words, phrases or complete sentences. Fathman (1980) views repetition as an indication of speech planning, and suggests that they allow the speaker time to plan the next part of the utterance. Seliger (1980) claims that repetition is characteristic of the speech of high input generators (HIGs), learners who are active in the language learning process and who experience success.

3. Retrieval via semantic field

Glahn (1980, cited in Faerch & Kasper, 1983b) identifies retrieval via semantic field as a retrieval strategy. It involves trying to retrieve a desired or required L₂ item by locating semantically related words. It may or may not result in successful retrieval of the desired item. This strategy is similar to the overt word searching of Seliger (1980).

4. Retrieval via other languages

Glahn (1980, cited in Faerch & Kasper, 1983b) also identifies retrieval via other languages as a retrieval strategy. This strategy involves searching for a desired or required L₂ item by first locating the item in another language.

Communication Strategies and Learning

Since the distinction made by Selinker (1972) between learning strategies and communication strategies, many researchers have kept the two separate. CSs, sometimes referred to as production strategies (Rubin, 1985), are, however, regarded by some theorists as contributing to learning, albeit perhaps indirectly (Bialystok, 1983, 1984; Corder, 1983; Ellis, 1986; Kasper, 1984; Rubin, 1985; Selinker, 1984). In a language learning framework, "a strategy of communication may be relevant since practising the language in real communicative exchanges promotes learning"
In many cases, then, strategies of communication may also serve as strategies of learning. Faerch and Kasper (1983b) support this view and argue that "the more communicative situations the learner engages in and the greater their variety, the more possibilities he has not only for practising his IL but also for constructing hypotheses about L₂ and getting them tested" (p. 26). They do, however, lay down a basic condition for the inclusion of CSs under learning strategies: they must be "governed by achievement, rather than avoidance behaviour" (Faerch & Kasper, 1983b, p. 54).

Selinker has rethought his initial distinction (1972) and has more recently stated (Selinker, 1984) that "it is reasonable to suppose that IL communication strategies must at times further learning" (p. 340). As Kasper (1984) points out, CSs can serve as learning strategies by functioning as new hypotheses about the L₂. Ellis (1984) points out that strategies such as paraphrase or message adjustment (restructuring) may help learners to become more fluent with the language they possess and that strategies such as appeal or word coinage may lead to learning about what is appropriate or permissible in the L₂. In many cases, then, a particular CS may serve to promote learning.

**Empirical Studies of Communication Strategy Use**

Empirical studies undertaken since the mid-1970's have isolated a number of variables related to CS use. Some of these studies have also shed light on the effectiveness of certain strategies and have led to the proposal of various hierarchies of strategies, according to communication potential.

Factors such as proficiency level in the L₁ and in the L₂, personality characteristics, experience, age, the L₂ learning context, and other personal variables such as socio-psychological factors have been shown to influence CS use.

Bialystok (1983), Haastrup and Phillipson (1983) identify L₁-based strategies as the least effective CSs, and L₂-based strategies as the most
effective and of inherently greater communicative value. L₁-based strategies, it is claimed by Haastrup and Phillipson (1983), nearly always lead to partial or non-comprehension, while L₁-based strategies often lead to full comprehension. Bialystok (1983) identifies the best strategies to use as "those which are based in the target language and take account of the specific features of the intended concept" (p. 116). It has been suggested that CS use, like IL, is transitional, and that it is characterized by certain features at different developmental stages. A study of the CS use of adult ESL learners led Paribakht (1985) to conclude that "learners seem to abandon or adopt certain CS, and also alter their proportional use of certain strategies as they approach the target language. Learner behaviour in terms of strategy use seems, therefore, to be transitional and dynamic" (p. 141). Tarone, Frauenfelder and Selinker (1976) also note the same phenomenon in their report of a longitudinal study of French immersion students. Data collected at the end of the second grade and again at the end of the third grade year indicated that the learners, as a group, demonstrated variability or instability, clearly classifiable as improvement, over time in their CS use.

Certain patterns of CS use have also been noted by other researchers (Bialystok, 1983; Faerch et al., 1984; Paribakht, 1982; Poulisse, 1987; Tarone, 1977), who have investigated the CS use of L₂ learners of differing proficiency levels. All levels of learners tend to use the same strategies, but learners of lower proficiency levels tend to use more L₁-based and non-linguistic strategies, while learners of higher proficiency levels tend to use more L₂-based strategies, exploiting a greater range of strategies.

Tarone (1977) notes that reduction strategies are used more than achievement strategies by the less proficient students in her studies. Faerch et al. (1984) lend support to this view that CS use varies according to the learner's linguistic skills. They conclude from a study of CS use that those learners who have the most limited linguistic skills
are also the least efficient strategy users: "a prerequisite for using the more efficient IL based achievement strategies is the presence of IL knowledge" (Faerch et al. 1984, p. 164). From her own study of CS use by Grade 12 and adult L2 learners, Bialystok (1983) concludes that "the effective use of communication strategies is unambiguously related to formal proficiency" (p. 116). In her study, the more proficient learners tended to use more L2-based strategies and fewer L1-based strategies than did the less proficient learners. She also notes that some strategies were more successful or effective when used by the more proficient learners. In reporting the results of a longitudinal study of strategy use, Ellis (1983, cited in Ellis, 1986) notes that one of the subjects initially used reduction strategies but used progressively more achievement strategies as his L2 proficiency increased.

L2 proficiency is viewed, then, as an intervening variable between the appropriate selection of a CS and the effective implementation or realization of the strategy (Bialystok, 1983). According to Bialystok (1983), "the same strategies were more effective when used by learners who had greater formal control over the target language" (p. 116). Paribakht (1985) also considers target language knowledge to affect the surface realization or implementation of CSs. She claims that idiosyncratic patterns in strategy use may be due to target language knowledge:

The learners’ limited or lacking target language knowledge may not merely preclude (in terms of type) or reduce (in terms of frequency) the adoption of certain CS which require that knowledge, but also affect the surface realization of their strategies in terms of, for example, grammatical accuracy and informative value. These differences may cumulatively affect speakers’ success and effective use of CS in the conveyance of their meaning. (Paribakht, 1985, p. 142)

Age, cognitive development, and L1 proficiency have also been shown to be related to CS use in the L2. Paribakht (1985) suggests that CSs develop in the L1 with increasing language experience and are freely transferable to the L2 situation. Most adults, then, would enter a L2 learning situation with a certain strategic competence. Child L2 learners would, however, be in a different position; their strategic competence in
their mother tongue would still be developing. As Willems (1987) notes, "what they do not command in the L1 they cannot put to use in the L2" (p. 352).

In reporting a series of studies on FL students between the ages of 6 and 13, Stevens (1984) notes that younger children tend to use more global verbs and conjugated English verbs, while older children use synonyms to express the nature of the action more precisely or qualified global verbs with appropriate adverbs or locatives. According to Stevens (1984), "the lexical items retrieved by the youngest children were more ad hoc or all-purpose than those which children more familiar with language are able to muster" (p. 201). She concludes that "the more familiar a child is with the language, the more vocabulary has been assimilated, and the more choices are available with which to express notions" (p. 201). Intragroup differences in pattern of strategy use also existed, leading Stevens to suggest that level of cognitive development might be an intervening variable.

Personality and personal variables are other factors which research has identified as influencing CS use (Corder 1983; Haastrup & Phillipson, 1983; Seliger 1977; Tarone, 1977). Corder (1983) notes that different learners will typically resort to favourite strategies - some are determined risktakers, others value social factors of interaction above the communication of ideas, but one may assume that there is a general preference for maintaining one’s intended message. Just how hard one tries will vary with personality and speech situation. (p.18)

Tarone (1977) also notes that L2 learners exhibit preferences for certain CSs and suggests that "personality factors may correlate highly with strategy preferences" (p. 202).

The type of learning situation has also been shown to influence CS use. According to Willems (1987), and Oxford, Lavine and Crookall (1989), individuals who learn a L2 in a naturalistic environment or in a communicative, student-centred classroom develop greater ease in communication and compensate for inadequacies in their IL more than do learners in traditional L2 classrooms.
Research on CSs has largely been limited to studies of adult L2 learners. Paribakht (1985) suggests that studies of the development of children's strategic competence would be useful in shedding light on the relationship between cognition and strategy use, as well as on the developmental stages of strategic competence.

**Communication Strategies: Implications for the Classroom**

Competence in the use of CSs permits flexibility in finding ways to communicate effectively in real interactions. As Littlewood (1984) and others point out, L2 learners who are skilled in the use of appropriate CSs may communicate more effectively than learners who are considerably more advanced in purely linguistic terms. Faerch and Kasper (1983b) also emphasize the importance of learner use of CSs:

Communication strategies can be seen as devices which enable learners to bridge the gap between classroom interaction and various communicative situations outside the classroom, thereby increasing their communicative competence in a way which is specific for IL communication. In other words, by learning how to use communication strategies appropriately, learners will be more able to bridge the gap between formal and informal learning situations, between pedagogic and non-pedagogic communicative situations. (p. 56)

A number of other L2 researchers also point out the value of CSs in L2 learning and suggest the inclusion of CS training in L2 programs (Faerch & Kasper, 1983b; Haastrup & Phillipson, 1983; Hüllen, 1983; Oxford et al. (1989); Tarone, 1984b; Willems, 1987). Haastrup (1986), for example, posits the view that in the interest of developing strategic competence, teachers must encourage risk-taking in the classroom and "breed" achievers and risk-takers, rather than reducers. This view is supported by Hüllen (1983) and Willems (1987) who recommend that the use of achievement strategies, particularly L2-based strategies, be stimulated in the classroom. These researchers maintain that CS training must be explicit and that practice in the use of appropriate CSs must be undertaken in the classroom.

Intervention research on strategy use in areas other than SLA has
highlighted the importance of metacognition. Without a metacognitive component, strategic training has been found to have limited effects, whereas the inclusion of a metacognitive component influences learners' choice and use of strategies, and even the maintenance of strategies and their transfer to other situations (cf. Wenden, 1987). This position is supported by Flavell (1979), Peterson and Swing (1983), Cullen (1985), O'Malley et al. (1985), Wenden (1987) and Oxford et al. (1989).

Much of the literature on learner strategies points to the importance of the strategy of functional practice, and actively engaging in the negotiation of meaning. This strategy can be encouraged in the classroom situation through the use of a variety of techniques which require the interactive use of language in negotiating meaning. As indicated by Ellis (1984), Enright (1984), and Swain (1985), interaction and output are necessary in the development of L₂ proficiency. These same conditions are necessary for the development of proficiency in CS use.

The classroom can facilitate the development of strategic competence and of CS use through the provision of opportunities which maximize interaction among learners. Littlewood (1981), Enright (1984), Kramsch (1987), Rivers (1987) and Nunan (1988) claim that teacher-dominated classrooms cannot be interactional; what is needed are learner-oriented or group-oriented classes in which the students deliberate and negotiate meaning. Large-group, small-group and pair work are recommended in promoting interaction and in broadening learners' discourse options. The division of a class into pairs or small groups for work in the L₂ is recommended by much of the literature (Brumfit, 1984; Larsen-Freeman, 1986; Savignon, 1972; Walz, 1986) as an optimal way for students to learn to negotiate meaning, a condition necessary for the development of successful and effective CS use.

Savignon (1976), Tarone (1984) and Willems (1987) suggest that a number of different exercises or activities can be used to provide practice in using CSs, all of them requiring that the speaker alone have
information that the listener(s) require(s) in order to complete a certain task. Activities which work on the "Jigsaw Puzzle" principle (Littlewood 1981; Morrow, 1981; Omaggio 1976), "Information Gap" tasks (Doughty & Pica, 1986; Ellis, 1984; Oxford et al., 1989), and description or instruction activities (Tarone, 1984) can facilitate the development of strategic competence. These types of tasks require the exchange of real information and promote the modification of interaction through the use of strategies. SLA is thus promoted through the development of competence in CS use.

Activities requiring the sharing and processing of information would also promote the use of CSs. Such activities would include the many types of role-playing (Ellis, 1984; Savignon, 1983), drama, simulations, (Cunningsworth & Horner, 1985; Jones, 1982; Oxford et al., 1989; Sturtridge, 1981) and scenarios (DiPietro, 1987). By involvement in such activities, the L2 learner will supposedly be better able to cope with the reality of communication as it takes place outside the classroom, due to development in all aspects of communicative competence.

Fluency and Communication Strategy Use

Fluency is considered a characteristic of native-like speech and a goal of L2 teaching. In their discussion of communicative competence, Faerch et al. (1984) identify fluency as one of its four components. They state that "fluency refers to speakers' ability to express what they want to say with ease .... fluency covers speakers' ability to make use of whatever linguistic and pragmatic knowledge they have" (p. 168).

Although defined in various ways (cf. Brumfit, 1984; Sajavaara & Lehtonen, 1980), fluency has to do with the normal tempo of speech and is often concerned with temporal and sequential aspects of speech production. Sajavaara (1981) states that it is impossible to distinguish between fluency and communicative competence.

According to Bialystok and Bouchard Ryan (1985) fluency requires automaticity in the retrieval of existing information, and not necessarily
any new or different information. Where access to, or control over, knowledge is not automatic, as in the early stages of L₂ learning, the effort to retrieve knowledge is great and disfluent speech is produced. Bialystok and Bouchard Ryan (1985) claim that practice in using the language improves access to knowledge and results in greater fluency. Where L₂ learners experience limitations or deficiencies in analyzed knowledge or control, they can compensate through use of strategies which allow them to communicate "in situations that exceed their mastery of the language in terms of one of the underlying dimensions" (p. 223).

Used effectively, CSs can give an effect of greater fluency in the sense that there is little silence (Ellis, 1984; Varadi, 1983). According to Sajavaara and Lehtonen (1980), "a speaker who commands the communicative strategies in the proper way is able to overcome the critical moments in the flow of communication, while 'strategy failures' in the process of communication result in disruptions" (p. 73).

**French Immersion and Second Language Acquisition**

In Early French Immersion (EFI) programs in Canada, non-French-speaking children receive a substantial portion of their education via the medium of their L₂, French. In Kindergarten, Grade One and usually Grade Two, as close to 100% as possible of the curriculum if offered in French. English Language Arts is generally introduced in Grade Three and other subjects taught in English are subsequently introduced at the various grade levels. Throughout the elementary grades, between 50% and 80% of instruction is usually offered in French; in later years, between 30% and 50% of instruction tends to be in French.

FI is a functional approach to L₂ learning (as compared with the formal approach which concentrates on transmitting the L₂ code). Although bilingual, the teachers speak only the L₂ in class, and the students are expected to speak to each other and to the teacher in French, once they have reached a certain level of proficiency, generally from the middle or end of Grade One on. The program follows the regular school curriculum,
with the $L_2$ as the medium of instruction rather than a separate subject. Structured $L_2$ lessons tend to be avoided in the early grades, with the focus being placed on communication and active learning. Stevens (1984) describes the FI situation as follows:

The learner is put into a position which is similar to the one in which the mother tongue is acquired. The environment is not linguistically ordered, but is organized around activities, content and communication. Language is therefore experienced directly, not rehearsed for later use. The learner has to infer more from both situation and context, and must improvise and take risks with the language. (p. 6)

According to Stern (1978), it is this functional approach to language learning which accounts for the success of FI programs. Extensive research on FI has been undertaken by educators and researchers across Canada since the first FI project or experiment in 1965. (See, for example, Barik & Swain, 1974; Cummins, 1979a; Genesee, 1975, 1976, 1978a, 1979, 1987; Lambert, 1974; Lambert & Tucker, 1972; Lapkin & Swain, 1984; Spilka, 1976; Swain, 1974). Studies have shown FI programs to be successful; Cohen and Swain (1979) describe the results of their studies as follows:

The students involved acquire a high level of competency in a second language, while keeping up with peers ... in native language development. They also make normal progress in the content subjects although these are taught primarily, or exclusively, in a second language. Their cognitive or intellectual development shows no signs of a deficit. The students develop a healthy attitude toward the second language and toward their own language and culture. Furthermore, they enjoy school and are motivated to continue studying rather than dropping out. (p. 148)

By Grade 6, EFI students have generally reached near-native proficiency in listening and reading comprehension in French; however, their speaking and writing skills remain somewhat weaker than those of native francophone students (cf Cummins, 1983). Studies undertaken by researchers at The Ontario Institute for Studies in Education, related to the development of bilingual proficiency, have shown that EFI students perform significantly less well than native French speakers on oral production tasks which test grammatical, discourse and sociolinguistic
features (Swain, 1985). The weaker production skills of EFI students were the focus of a study by Harley and Swain (1984) who note that "after six to seven years of an immersion program, productive use of the second language still differs considerably in grammatical and lexical ways from that of native speakers" (p. 291). Other research on IL development in FI programs also indicates that students attain less than native-like competence in French (Genesee, 1978a; Pawley, 1985; Pellerin & Hammerly, 1986; Swain, 1985). Lapkin (1984) reviews several studies of FI students' speech and concludes that while FI students can speak well enough for effective communication, their way of doing so is non-nativelike. Findings such as this indicate the need for additional research to investigate ways of fostering more native-like oral communication in the FI setting. Genesee (1987) suggests that the IL of FI students is influenced by "1) their first language grammar system, 2) the communication demands made on them in immersion classrooms and 3) the type of native speakers they have available" (p. 47).

Although there is currently some indication or perception that the IL of FI students fossilizes fairly early on (Hammerly, 1987; Pellerin & Hammerly, 1986), Harley and Swain (1984) claim that it does not and suggest that non-linear U-shaped development may be responsible for this perceived "backsliding" or fossilization. A large body of data collected by the Modern Language Centre of The Ontario Institute for Studies in Education seems to indicate that the IL of FI students continues to develop as they move through the grades and that "at any grade level ... there is new development relative to earlier grades" (Harley & Swain, 1984, p. 300). Harley and Swain claim that substantial L2 development appears to take place at the various levels of FI programs, and that no evidence of fossilization in any L2 domain at any grade level is evidenced.

Writers such as Johnson (1979), Morrow (1981), and Stevens (1983) stress the importance of providing opportunities for extended discourse among peers in the L2 classroom. In traditional FI classes, it may be, as
Swain (1985) suggests, that students have relatively little opportunity to engage in two-way, negotiated meaning exchanges. While FI students may receive comprehensible input, what is missing, according to Swain (1985), is the opportunity for comprehensible output. This hypothesis would seem to be supported by a more recent study of classroom processes by Swain and Lapkin (1989), who report on an analysis of the classroom speech of FI students, where utterances were categorized according to length. They note that "excluding students' reading aloud, less than fifteen percent of student utterances were sustained, that is, greater than a clause in length. Furthermore, a substantial portion of their utterances (forty percent) consisted of minimal one- or two-way responses to teacher initiations" (Swain & Lapkin, 1989, p. 157).

Swain (1985) argues that comprehensible output is a necessary mechanism of acquisition, independent of the role of comprehensible input. She proposes that the negotiation of meaning needs to incorporate "the notion of being pushed toward the delivery of a message that is not only conveyed, but that is conveyed precisely, coherently and appropriately" (pp. 248-249). FI students are not, Swain suggests, being pushed in their output; they use certain strategies for getting their meaning across, strategies which are adequate for communication with teachers and peers, but are not being pressured to produce more appropriate or precise language. The input received by FI students, then, is comprehensible but does not contain appropriate feedback regarding their own language comprehensibility or acceptability. The role of comprehensible output is, according to Swain (1985), to "provide opportunities for contextualized, meaningful use, to test out hypotheses about the target language, and to move the learner from a purely semantic analysis of the language to a syntactic analysis of it" (p. 252).

CS use by FI students would seem, thus, to be related to the comprehensible output required. If, in FI classes, it is the case that teachers talk and students listen, it might not be surprising that the
strategies used by students will result in vague, imprecise, and inappropriate language. Emphasis on comprehensible output in interactional exchanges may be what is missing in many FI classes. As Swain and Lapkin (1989) state, "Consistent and creative error correction strategies, broadening the functional range of classroom discourse, and insisting on varied and extended opportunities for second language use should be three essential components of immersion methodology" (p. 158).

Luria and Yudovich (1971) have noted that the creation of an objective necessity for communication paves the way for the acquisition of a language system. However, in FI classes it may be that the necessity is not strong enough to take the students beyond a certain level of proficiency. Students may be able to communicate the basic message, but their communicative competence may be weak in some areas. Harley and Swain (1978, cited in Swain & Lapkin, 1982) note that "once the children have reached a point in their language development where they can make themselves understood to their teacher and classmates (as they clearly have), there is no strong incentive to develop further towards native speaker norms" (p. 38). A number of researchers suggest that FI students engage in relatively little self-initiated use of the language (Genesee 1978b; Swain & Lapkin 1982), that their use of French is reactive rather than active (Genesee, 1980, cited in Swain & Lapkin 1982) and that they have inadequate opportunity for sustained interaction in French (Netten & Spain, 1989; Swain 1978, 1985).

The implications of these findings for the classroom are rather varied; not only is more comprehensible output and feedback required (Swain, 1985), but perhaps also a greater allotment of student time spent in the L2 (Cummins & Swain, 1986). In-school contact time in French has been identified as a factor which influences L2 performance (Genesee, 1978b), and therefore merits consideration by program planners and administrators.

Classroom discourse analysis has led to the identification of a
particular type of discourse which is prevalent in teacher-centred classrooms. Known as three-phase discourse or IRF (for initiate-response-feedback), this type of discourse consists of exchanges in which the teacher initiates, the student responds, and the teacher provides feedback (cf. Ellis 1986). Not surprisingly, this type of discourse is associated with a transmission mode of education (Barnes, 1976, cited in Ellis, 1986) and with teacher-centred classrooms. However, as Ellis (1986) points out, this kind of discourse may still predominate in FI classes.

The type of discourse which usually occurs in teacher-centred classrooms is distorted in that insufficient interaction and negotiation of meaning takes place. Learner-centred or activity-centred programs can, however, provide input and interaction which closely resembles the kind of discourse and interaction which occur in natural settings (cf. Ellis, 1986). The exact role of input and interaction in SLA is not clear. However, a growing body of research suggests that they may be necessary for successful language acquisition and for the development of communicative competence, with its component parts, including strategic competence.
CHAPTER THREE

PROCEDURE FOR THE STUDY

This chapter includes a discussion of the research questions which guided this study, the sample, the data collection procedure, and the data analysis procedure.

Scope of the Research: Research Questions

If CS use is transitional or variable over developmental time in adult L₂ learners, as Paribakht (1985) and Ellis (1983, cited in Ellis, 1986) indicate, then it is logical that CS use by young L₂ learners should share the same characteristics.

If CS use is indeed a feature which can distinguish between good and poor second-language learners, as Stern (1983a) indicates, and if certain patterns of CS use are characteristic of L₂ use at varying proficiency levels, as suggested by Tarone (1977) and Bialystok (1983), then patterns of CS use for successful and for less-successful young L₂ learners should theoretically show differences over developmental time.

According to Bialystok (1983) and Paribakht (1985), the quality or effectiveness of strategy use is influenced by the level of language proficiency of the user. If this is the case for young L₂ learners, then even though successful language learners may be more effective strategy users than less-successful language learners, both groups should demonstrate more effective use of strategies over time.

The aim of this research, therefore, is to determine whether the results of studies on adult L₂ learner CS use are generalizable or applicable to young L₂ learners learning French in an EFI program.

The working hypotheses - that CS use in children is variable over developmental time, is related to proficiency and can differentiate between successful and less-successful L₂ learners - was translated into the following questions:
1. Does the percentage of use of particular communication strategies change over developmental time for successful and for less-successful young second language learners?

2. Does the overall pattern of communication strategy use change over developmental time for successful and for less successful young second language learners? If so, how?

3. Does the quality of communication strategy use change over developmental time for successful and for less successful young second language learners?

The present study attempted firstly to determine the particular communication strategies used by eight EFI students, four considered to be successful and four to be less-successful second language learners at two points in time: at the end of the Grade Two year (Time 1) and again at the end of the Grade Five year (Time 2). Both individual and group patterns of use were noted.

Secondly, this study attempted to determine the pattern of development of aspects of strategic competence in these young second-language learners. Proportional use of the various categories and subcategories of communication strategies were examined. Both individual and group patterns of change in CS use over time were noted.

Finally, the quality or success of the communication strategies used at Time 1 (Grade 2) and at Time 2 (Grade 5) was investigated. Following Paribakht (1985), this involved examining the level of grammatical accuracy and the informative value of the strategy. As well, the qualitative analysis involved investigating use of those CSs considered in the literature (Bialystok, 1983) to be qualitatively superior. Again, both individual and group results were noted.

Research Design

The Sample

The subjects for this study came from an EFI class in an urban
they all had a middle-class socio-economic background and were judged by their teachers to be normal students. Permission was granted by both the school board and the administration of the school for these children to be involved in the study. The letter of request to the school board and their letter of response are found in Appendix A.

A total of eight children from the same class took part in this case study, providing speech data at the end of the Grade Two Year and at the end of the Grade Five year. The Grade Two data were collected as part of a study on oral and written proficiency in EFI (Greene & Marrie, 1986) and were taken from a large data set which included speech samples of all Grade Two and Grade Three FI students of the school. The Grade Five corpus includes speech data from all students in the class, and includes most of the students involved at Grade Two.

For the purpose of this study on CSs, the speech of four successful language learners (SLLs) and four less-successful language learners (LLLs) was analyzed. The classification of "successful" or "less-successful" reflected the students' standing in oral language proficiency during the Grade 2 year and was based on two criteria:

1. ranking in an oral assessment (Greene & Marrie, 1986), based on independent assessments by the two researchers, following procedures and criteria outlined in Appendix B.

2. teacher assessment, based on classroom interaction patterns, quality of speech, and overall ability to negotiate messages or information, as well as approach and attitude to second-language learning and second-language use.

In all cases, however, the assessment of the Grade 5 teacher corresponded with that of the Grade 2 teacher. Those students considered to be good or successful language learners (SLLs) in Grade 2 were assumed to retain the same status at the Grade 5 level; those considered to be less-successful language learners (LLLs) were also assumed to retain the
same status in Grade 5. The researcher felt that it was unnecessary to further substantiate this classification.

The eight children who participated in this case study were selected based on a ranking of all children who had provided speech samples at the Grade Two level. Children were ranked according to oral proficiency, based on the two criteria outlined earlier. The four highest ranking and the four lowest ranking children who were still enrolled in the same school at the Grade 5 level were selected.

The SLLs were considered to exhibit many of the traits which Rubin (1975), Naiman et al. (1978), Stern (1980, 1983a) and Reiss (1985) have isolated as characterizing good language learners. They were all viewed by their classroom teachers as having an active approach and a positive attitude to language learning and a willingness to use the second language to communicate. These subjects were also regarded as being good listeners and being alert to the form and meaning of the language. The subjects identified as LLLs were not considered to share these same characteristics.

While no measures of cognitive ability or of academic achievement were used in the selection process, it is perhaps noteworthy that the academic performance of the four subjects identified as SLLs was judged by their teachers as being high-average or above average at Grades 2 and 5, while the academic performance of the four subjects identified as LLLs was judged by their teachers as being low-average or below average at the same grade levels. The only achievement measure available is the Tourond Test Diagnostique de Lecture which was administered at the Grade 2 level. The results of this test, provided in the following section, show the difference in ratings of these SLLs and LLLs. It is also worth noting that the four SLLs are female, while, of the four LLLs, two are female and two are male.

At the time of the oral assessment (Grade 2), all students in the class were assigned numbers. This system of number identification has
been retained for the present study and is used to identify subjects on the oral narratives on the audio cassette (Appendix D). Subjects 38, 40, 45 and 47 were considered to be SLLs, while Subjects 25, 30, 39 and 46 were considered to be LLLs.

Subjects: Successful Language Learners

Subject 38.

This female subject was aged eight years, four months at the time of the Grade 2 data elicitation and eleven years, four months at the time of the Grade 5 data elicitation. She was considered a good language learner and an above average student with an out-going personality and an obvious motivation to do well in school. According to her teachers, she was always eager to participate in class discussion and activities and spoke French willingly. Her confidence, interactional behaviour, personality characteristics, work habits and risk-taking behaviour were all considered by her teachers to contribute to her overall success. This subject obtained percentile rankings of 80, 95, 99 and 80 on the four subtests of the Tourond Test Diagnostique de Lecture for Grade 2.

Subject 40.

This female subject was aged seven years, eleven months at the time of the Grade 2 data elicitation and ten years, eleven months at the time of the Grade 5 data elicitation. She was considered a good language learner and an above-average student. According to her teachers, she had good work habits, was enthusiastic about school and participated actively in group discussions and activities. She expressed herself well in French and exhibited risk-taking behaviour, often initiating conversations and discussions with her peers and teachers. On the Grade 2 Tourond Test Diagnostique de Lecture subtests she obtained percentile rankings of 80, 90, 80 and 80.
Subject 45.

This female subject was aged eight years, two months at the time of the Grade 2 data elicitation and eleven years, two months at the time of the Grade 5 data elicitation. She was considered a good language learner and an above-average student in most academic areas. According to her teachers, this subject was not extremely outgoing, but demonstrated risk-taking behaviour and overall self-confidence. She used French exclusively in class and appeared to be very careful with her oral and written expression. On the subtests of the Grade 2 Tourond Test Diagnostique de Lecture she obtained percentile rankings of 90, 90, 95 and 90.

Subject 47.

This female subject was aged eight years, five months at the time of the Grade 2 data elicitation and eleven years, five months at the time of the Grade 5 data elicitation. She was considered by her teachers to be a good language learner, an above-average student in all areas, and highly interested and motivated. She had an outgoing personality and exhibited a high level of self-confidence and risk-taking. Her level of participation in class discussions and activities was considered exceptional, as was her interest in increasing her competence in oral and written French. This subject obtained percentile rankings of 90, 80, 90 and 80 on the subtests of the Grade 2 Tourond Test Diagnostique de Lecture.

Subjects: Less-Successful Language Learners

Subject 25.

This female subject was aged seven years, seven months at the time of the Grade 2 speech elicitation and ten years, seven months at the time of the Grade 5 speech elicitation. She was considered a poor language learner and a low-average student overall. According to her teachers, she was timid and reticent to speak in class, exhibiting self-consciousness and embarrassment when called upon to do so. This subject appeared to be a very low risk-taker, often reluctant to speak unless absolutely sure of
the answer and the "correct" way to say it. On the subtests of the Grade 2 Tourond Test Diagnostique de Lecture she scored percentile rankings of 95, 40, 80, and 50.

Subject 30.

This female subject was aged seven years, nine months at the time of the Grade 2 speech elicitation and ten years, nine months at the time of the Grade 5 speech elicitation. She was considered a poor language learner and a low-average student in most academic areas. This subject was considered by her teachers to be a low risk-taker, as she rarely spoke in class and required encouragement to express herself in French, often limiting herself to expressing the bare minimum of information. Except in some small-group situations, she exhibited extreme self-consciousness in class. She rarely interacted with her teachers, preferring to limit her interactions to two or three classmates. On the subtests of the Grade 2 Tourond Test Diagnostique de Lecture, she scored percentile rankings of 95, 70, 60, and 50.

Subject 39.

This male subject was aged eight years, three months at the time of the Grade 2 speech elicitation and eleven years, three months at the time of the Grade 5 speech elicitation. He was considered by his teachers to be a poor language learner and a below-average student overall, although a mid-to-high-average student in Mathematics. This subject exhibited low risk-taking behaviour, was extremely reluctant to speak in class and, when prompted to speak, often responded in monosyllables. His oral French was often difficult to understand because of mumbling, perhaps caused by shyness or self-consciousness. On the subtests of the Grade 2 Tourond Test Diagnostique de Lecture this subject scored percentile rankings of 95, 70, 50 and 60.

Subject 46.

This male subject was aged eight years, two months at the time of the Grade 2 speech elicitation and eleven years, two months at the time of
the Grade 5 speech elicitation. He was considered a poor language learner and a low-average student overall. According to his teachers, this subject exhibited timidity and self-consciousness in class, expressing himself very reluctantly. He was considered a low risk-taker in that he required prompting to engage in group discussion or to answer questions and often refused to speak when unsure of what to say or how to express it. On the subtests of the Grade 2 Tourond Test Diagnostique de Lecture he scored percentile rankings of 90, 99, 80 and 70.

Data Collection Procedure

Second-Language Data Collection

The literature on L2 research recognizes that language data collected in a formal experimental situation are not necessarily representative of the learner’s linguistic system. Tarone (1979) discusses this situation in relation to Labov’s (1969) "Observer’s paradox" in which five methodological axioms are proposed. Briefly, the five axioms are as follows: 1) style-shifting (speakers shift linguistic and phonetic variables according to the social situation and topic); 2) attention (the amount of attention paid to speech changes the style of speech); 3) vernacular (this style, where a minimum amount of attention is given to speech, has the most regular and systematic phonological and grammatical patterns); 4) formality (in a formal context such as systematic observation, more attention is paid to speech); and 5) good data (individual tape-recorded interviews, a formal context, provide best access to good data).

Tarone (1979) describes the Observer’s Paradox as follows: "the aim of applied linguistic research is to describe the way people talk when they are not being systematically observed - yet such data can only be obtained by systematic observation" (p. 181). This phenomenon makes it very difficult to gain access to spontaneous speech or vernacular IL. Although elicited and intuitional data are easier to obtain than recorded
spontaneous speech, these sorts of data may lead to descriptions of
different linguistic systems or of different norms of the underlying
system.

While IL research attempts to describe the way L2 learners speak, the
fact of being observed apparently causes them to speak differently.
Tarone (1979, 1988) suggests that researchers can gain access to the
"vernacular IL" and minimize the effects of this paradox by following
certain procedures; the variables of physical surrounding, interlocutors
and topic can be used to "divert the S’s [subject’s] attention away from
speech and focus it on other matters" (Tarone, 1979, p. 189). Tarone
advises an informal setting, unobtrusive placing of the tape recorder, and
topics which stimulate genuine response. She also suggests discarding the
first 5 to 10 minutes of conversation after the tape recorder has been
turned on and, where possible, using peer-group interaction instead of a
one-to-one interview. Tarone also cautions extreme care in the reporting
of how data are gathered. She suggests that the dimensions of task,
interlocutor, physical surroundings and topic should be specified.

The present researcher attempted to use data-gathering and reporting
procedures which respect Tarone’s (1979,1988) recommendations as much as
possible. Although peer-group interactions recommended by Tarone were not
used, the data were collected in a relatively informal situation, where
the children’s attention was focused away from speech and on the content
of their stories. While only the taped data (oral narratives) were used
for the study, the researcher did chat informally with the students for
several minutes before the tape recorder was turned on, and attempted to
make them feel at ease with regard to the upcoming task of telling a story
based on a picture presented to them.

Faerch (1984) voices his reservations about the type of elicitation
tasks used in some studies of CSs. He considers to be problematic those
tasks which are devised to force the subject to make use of CSs. In
keeping with his recommendations, this study engaged subjects in
communicating in a natural situation, with the speech data later screened for use of CSs.

The researcher does not claim that the speech samples obtained for this study are totally spontaneous. They are, however, natural in the context (the school), in the sense which Wolfson (1976) suggests: they are "appropriate to a situation and the goal" (p. 202). The story-telling task is one with which the subjects were familiar and in which they had previously engaged in class.

Ellis (1987) and Tarone (1985) both use the unplanned oral narrative as one of several speech elicitation tasks. One of Ellis' hypotheses, later supported by his research, was that learners display consistently higher accuracy levels in interlanguage morphology in planned narrative discourse than in unplanned narrative discourse. While the story-telling task of the present study may not be completely equivalent to the unplanned oral narrative, the researcher considers that the task provided samples of unplanned discourse, discourse which is natural to the story-telling task in a school situation and which reflects the classroom IL of these EFI students.

In this story-telling task, an elicitation technique recommended by Ramirez (1986), Ellis (1987) and Tarone (1985), the subjects were given a picture, allowed to look at it for up to two minutes, then asked to record an oral version of the story without further preparation. Both content and expression were therefore planned rather spontaneously.

This task was designed to focus the subjects' attention on communication of subject matter rather than on correctness of linguistic form. Tarone (1985) points out that narratives have often been found to be effective in eliciting the vernacular; this story-telling task may also have approached that goal.

The present research also respects the research design recommended by Rosansky (1976), Tarone (1979, 1988), Meisel, Clahsen and Pienemann (1981) and Burmeister, Ufert and Wode (1983) in its longitudinal
dimension. These researchers question the validity of cross-sectional studies in SLA and recommend longitudinal investigations.

The analysis of the longitudinal data was both quantitative and qualitative. In this regard, it respects the recommendations of a number of SLA researchers such as Tarone, Frauenfelder and Selinker (1976), and Faerch (1979), who caution against using purely quantitative analysis in IL studies. Faerch (1979) concludes that this type of analysis is inadequate, while Tarone, Frauenfelder and Selinker (1976) state that "over-reliance upon numerical analysis can also obscure important patterns" (p. 124). Tarone (1988) suggests that qualitative methods are useful in describing patterns of variability in the behaviour of a group or of an individual; used in variability studies, they may even allow the identification of certain types of learners.

**Task**

Prior to the individual sessions, the experimenter/researcher spoke to the entire class of children about the task. At the Grade 2 level, the children were told that they would be asked to tell a story in French and that it was the story which was of interest to the experimenter/researcher. It was made clear to the children that their performance in the story telling would in no way influence their school grades or marks; they were encouraged to think of the task not as a "test" but as an enjoyable activity. They were also told that the stories would be recorded on tape. At the Grade 5 level, the children were given the same explanation, but the experimenter/researcher also explained that their stories were needed for comparison purposes.

At both grade levels, the subjects were individually presented with a large colourful picture and asked to narrate a story based on what was shown in the picture. They were asked to include what had happened prior to the scene depicted in the picture, what was happening in the picture, as well as what might happen next. All subjects were given approximately two minutes to examine the picture and plan their story before the tape
recorder was turned on. Although no minimum times were suggested to subjects, they were encouraged to speak for at least three minutes; they were, however, permitted to speak longer if they desired. When subjects hesitated for long periods, questions were asked of them. Every attempt was made to ensure that all subjects provided an adequate sample of language.

**Experimenter/Researcher**

When the Time 1 (Grade 2) data were obtained, the experimenter/researcher was the classroom teacher of all eight subjects. The thirty-year-old female was a bilingual anglophone who taught the entire Grade 2 curriculum in French, with the exception of music, physical education and library skills, which were taught by English-speaking specialists. The experimenter/researcher had been on the school staff for a number of years and hence had been known by the subjects since their kindergarten year.

In the Time 2 (Grade 5) data collection, the experimenter/researcher was the same female bilingual anglophone. Although she was no longer employed as a teacher at the school, her position was such that she had continued to visit the school and the FI classes periodically during the years the subjects were in Grades 3, 4 and 5.

**Physical Surroundings**

All subjects were assessed individually, in a classroom in the school in the case of the Time 1 (Grade 2) data, and in an office in the school in the case of the Time 2 (Grade 5) data. In both cases, the room was familiar to the students, and the exercise took place during the regular school day.

During each session, the researcher and the subject sat on the same side of a table on which both the picture and an audio recorder were placed.
Materials

At each grade level, two different coloured pictures, measuring 26.5 cm x 43.5 cm, were used in the story-telling task. Half the subjects (half the class) were presented with one picture, and half with the other. One picture depicted a scene in which two girls discovered a fire which had just broken out, while the other picture showed a store scene which involved a young girl or woman and a bottle of preserves.

Although the pictures used for the story-telling tasks were not exactly the same for the two data sets, they showed similar situations. This similarity required the use of the same or similar lexical items in both stories, facilitating a comparison of communication strategy use and effectiveness over time. The pictures were considered by the researcher to involve topics which students at both grade levels would be comfortable with. Appendix C contains reduced black and white copies of the pictures used for the story-telling tasks at Time 1 and at Time 2.

Method

Because the experimenter/researcher was known to all subjects and familiar with working with children of the particular levels, no pre-testing procedures were used. Similar story-telling tasks were undertaken by the classroom teacher during class time prior to the data collection with the subjects at the Grade 2 level, and it was considered that they were familiar with the format and requirements of the task.

Prior to each session, the experimenter/researcher attempted to put the subjects at ease by carrying on several minutes of informal conversation before beginning the data collection procedure. During the story-telling sessions, subjects were provided with appropriate feedback cues (i.e. nods, laughter, signs of interest); when they asked for help (i.e. used the strategy of direct appeal), they were encouraged to find an alternate means of expressing their idea.

The oral narratives were recorded on audio tapes (see Appendix D) and later transcribed. The transcripts of the oral narratives were then
used to tabulate the CSs used by each subject during the story-telling task (see Appendix E). This data on CS use was then analyzed to provide information on the use of CSs by successful and by less-successful child L₂ learners over time.

**Procedure for Analysis of the Data**

The speech samples of the eight subjects were transcribed and then analyzed for CS use, using a typology of observable CSs (see Figure 1).

**Typology of Communication Strategies**

For the analysis, the researcher used a typology of communication strategies, adapted from typologies developed by Tarone (1977, 1980, 1983, 1984b), Corder (1978b, 1983), Paribakht (1982, 1985), Bialystok (1983), Blum-Kulka and Levenston (1983), Faerch and Kasper (1983b, 1984), Varadi (1983), Stevens (1984), and Willems (1987). The typologies used in the development of the typology for this study are found in Appendix F.

As seen in Figure 1, in this typology, CSs have been classified as either reduction strategies or achievement strategies, following Corder (1978b, 1983), Faerch and Kasper (1983b, 1984), Faerch et al (1984) and Willems (1987). Within the category of reduction strategies, only functional reduction strategies (Faerch & Kasper, 1983b) have been included, while within the achievement strategies classification, following Faerch and Kasper (1983b), strategies have been labelled as either compensatory or retrieval. Within the compensatory strategy subgroup, strategies have been subdivided into non-cooperative or cooperative, following Faerch and Kasper's (1984) classification. Noncooperative strategies include L₁-based (interlingual) and L₂-based (intralingual) strategies (Willems, 1987), as well as non-linguistic strategies (Faerch & Kasper, 1983).

Figure 1. Typology of communication strategies.

I. REDUCTION STRATEGIES
   . Topic Avoidance
   . Message Abandonment

II. ACHIEVEMENT STRATEGIES
A. Compensatory Strategies
   1. Noncooperative Strategies
      a. L₁-based (Interlingual) Strategies
         . Code Switch
         . Literal Translation
         . Foreignization
      b. L₂-based (Intralingual) Strategies
         . Generalization
         . Approximation
         . Circumlocution
         . Paraphrase
         . Word Coinage
         . Restructuring
         . Egocentric Strategy
      c. Non-linguistic Strategies
         . Sound Imitation

   2. Cooperative Strategies
      . Direct Appeal
      . Indirect Appeal

B. Retrieval Strategies
   . Pause/Hesitation
   . Repetition
   . Retrieval via Semantic Field
   . Retrieval via Other Language
The achievement strategies category of noncooperative compensatory strategies includes the L₁-based, L₂-based and non-linguistic strategies. The L₁-based strategies included are code switch, literal translation and foreignizing, following Bialystok (1983), Faerch and Kasper (1984) and Willems (1987). L₂-based strategies include generalization (cf. Varadi, 1983); approximation, which encompasses the lexical substitution and approximation strategies of Faerch and Kasper (1983b), the approximation and synonymy strategies of Blum-Kulka and Levenston (1983) and the comparison strategy of Paribakht (1985); circumlocution (cf. Blum-Kulka & Levenston, 1983; and Varadi, 1983); paraphrase (cf. Blum-Kulka & Levenston, 1983); word coinage (cf. Faerch & Kasper, 1983b; and Willems, 1987); restructuring (cf. Faerch & Kasper, 1983b); and egocentric strategy (cf. Stevens, 1984). The only non-linguistic strategy included is sound imitation (cf. Faerch & Kasper, 1983b); other non-linguistic strategies such as gesture, mime and facial expression have not been included in this typology since the particular data used (oral only) precluded their identification. The cooperative compensatory strategies include direct appeal and indirect appeal, following Faerch and Kasper (1984), and Willems (1987).

Retrieval strategies include pause/ hesitation, which is similar to Faerch and Kasper's "waiting for the term to appear" (1983b); repetition, following Faerch and Kasper’s (1983a) discussion of hesitation phenomena, temporal variables, planning problems and retrieval; retrieval via semantic field and retrieval via other languages (following Faerch and Kasper, 1983b). Descriptions and examples of the strategies included in this typology are found in Appendix G.

Strategy Identification and Classification

In the process of CS identification and classification, the audio tapes, the transcripts of the oral narratives, and the typology of CSs (Figure 1) were used. Using a system of abbreviations, the CSs used were noted on the transcripts of the oral narratives. The transcripts, showing
the communication strategies identified, are included in Appendix E.

In cases where one strategy was embedded within another, both strategies were treated separately. This phenomenon occurred several times, involving a variety of strategies. For the sake of clarification, the following examples are provided:
- "pour fabri fabriquer encore" (Subject 39, Time 2): repetition, circumlocution
- "il a allé à la (-) une autre personne" (Subject 45, Time 1): pause, restructuring, generalization
- "elle ne n’est jamais entendu de ça" (Subject 47, Time 2): restructuring, literal translation
- "Ils étaient (-) comment dit? (umm) ils ne pouvaient pas travailler là" (Subject 38, Time 2): pause, direct appeal, pause, restructuring, paraphrase

The process of strategy identification and classification was conducted three separate times by the researcher, in order to ensure consistency and reliability in the rating process. As well, three FI teachers, familiar with CS use, used the audio tapes and transcripts to identify and classify the strategies used by the eight subjects.

The inter-rater reliability between the ratings of the researcher and those of the three teachers has been calculated for Time 1 and Time 2 oral narratives. The reliabilities, calculated as correlation coefficients, are reported in Figure 2.

Figure 2: Matrix of inter-rater reliability (for the researcher and three teachers) for Time 1 and Time 2, data, reported as correlation coefficients.

<table>
<thead>
<tr>
<th></th>
<th>R</th>
<th>T1</th>
<th>T2</th>
</tr>
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<tbody>
<tr>
<td>T1</td>
<td>.939 (.651)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>T2</td>
<td>.957 (.724)</td>
<td>.918 (.746)</td>
<td></td>
</tr>
<tr>
<td>T3</td>
<td>.989 (.776)</td>
<td>.938 (.836)</td>
<td>.962</td>
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<td>(.906)</td>
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Quantitative and Qualitative Analyses

A profile of CS use for each subject and for each group was constructed for Time 1 and Time 2 data (see Tables 1-14). These profiles include information on the frequency and proportional use of CSs, by category and by individual strategy. The effectiveness or quality of the strategies used was also investigated.

The two sets of data (Time 1 and Time 2) were compared and patterns of change noted. Trends in the changes in individual subjects' strategy use were sought, as were patterns specific to changes in each of the two groups of subjects: SLLs and LLLs. Specifically, the data analysis entailed a description of the quantity and quality of CSs used at both points in time. Individual and group patterns of change over developmental time were documented.
CHAPTER FOUR

RESULTS OF THE STUDY

In this chapter, the results of the study are presented. Both quantitative and qualitative descriptions are provided, followed by a synopsis of the major findings. Given the limitations of the study and the relatively small sample population involved, the researcher has attempted to be both cautious and realistic in presenting the findings of the quantitative and qualitative analyses and in discussing these results.

Quantitative Description

Using the typology of CSs (Figure 1), the particular CSs used by the subjects at Time 1 and Time 2 were ascertained. A tabulation was made of the use of particular strategies for each subject at each Time and a total count of strategies obtained (see Tables H1-H10). As well, an analysis of the use of particular strategies and categories of strategies was undertaken for each of the two groups of subjects: the SLLs and the LLLs (see Tables H11-H14). The results are presented in this section, firstly by subject and then by group. Figures 3-26 illustrate the results. A discussion of these quantitative results follows the presentation of the individual and group results.

Individual Results

For each subject, CS use at Time 1 and Time 2 is reported, separately. The reporting of the results is followed by a short discussion of the changes evidenced over time in patterns of CS use.

Successful Language Learners

Subject 38

Time 1.

Subject 38's oral narrative shows use of three categories of CSs: L1-based, L2-based, and retrieval strategies, as indicated in Table H1 and Figure 3. The total number of strategies used is relatively small (16),
Figure 3. Subject 38: Strategy use by category at Time 1 and Time 2.
and is, in fact, the smallest number used in any narration in this study. Use of $L_1$-based strategies accounts for 18.8% of the CSs used, use of $L_2$-based strategies accounts for 56.3%, and use of retrieval strategies accounts for 25%.

As shown in Table H2 and Figure 4, $L_1$-based strategy use is limited to use of foreignization, while $L_2$-based strategy use includes use of generalization (18.8%), approximation (25%) and circumlocution (12.5%). At 25%, approximation is the most frequently used CS in this narration. Retrieval strategy use is divided between pause (18.8%) and repetition (6.3%) (see Table H2 and Figure 4).

The subject provides a very fluent narrative in which there is no obvious difficulty in lexicon. The strategies used are successful in communicating the general ideas, with the possible exception of the word "garbage" which is used as a strategy of foreignization and which may not be understood by a unilingual francophone. The subject hesitates very infrequently, apparently able to incorporate strategies into the discourse in such a way that fluency is unaffected. In cases such as "défaut le feu", for example, there is no pause or hesitation to indicate that the subject experienced a problem with the lexical item (see Appendix E).

**Time 2.**

As Table H1 and Figure 3 indicate, subject 38's Time 2 speech sample shows extensive use of $L_1$- and $L_2$- based strategies, greater use of cooperative strategies and lesser use of retrieval strategies. In total, 36 strategies are used. $L_1$-based strategies account for 36.1% of the strategies used, and $L_2$-based strategies for 44.4%. Use of cooperative strategies totals 2.8%, while use of retrieval strategies totals 16.7%.

Table H2 and Figure 4 provide an analysis of CS use by this subject. The $L_1$-based strategies used are code switch (2.8%), literal translation (22.2%), and foreignization (11.1%). Literal translation is the most extensively used of all CSs in this narration. $L_1$-based strategy use includes use of generalization (5.6%), approximation (13.9%),
Figure 4. Subject 38: Strategy use at Time 1 and Time 2.
circumlocution (5.6%), paraphrase (2.8%), restructuring (13.9%) and egocentric strategies (2.8%). The only two of these L2-based strategies used extensively are approximation and restructuring, at 13.9% each. Within the category of cooperative strategies, direct appeal is the only strategy used, while pause is the only retrieval strategy used (see Table H2 and Figure 4).

Subject 38 does not appear to encounter any planning difficulties and very few lexical difficulties in her narration. She appears quite confident of her ability to narrate a story (and be understood) and does not hesitate at all or even appear aware of her language when using expressions such as "ils sont supposés _eater_ le lunch" or "_la reste de la_ life" (see Appendix C). This may in fact illustrate what Brown (1973, cited in Stevens, 1984) meant when he said that "the child expects always to be understood if he produces any appropriate words at all" (p. 72), and may be the result of inadequate screening or of the strong associations of the English words. As Table H2 and Figure 4 show, this subject makes considerable use of literal translation, foreignization, approximation, and restructuring. Although a number of pauses are used, they are short in duration and do not detract from the flow of the discourse.

Discussion.

Subject 38 shows variability or instability in her use of CSs over time, as illustrated in Figures 3 and 4. Although the number of strategies used more than doubles over time, not all categories of strategy show an increase. Her use of L1-based and cooperative strategies shows an increase from Time 1 to Time 2, while her use of L2-based and retrieval strategies decreases somewhat.

While her Time 2 speech sample, like the first one, is fluently executed, it contains a higher proportion and greater variety of L1-based strategies than the Time 1 narration. It also demonstrates use of a wider variety of L2-based strategies. In all, six strategy types not used at all at Time 1 are used at Time 2. It appears that this subject is more
concerned with the communication of her stories than with the language she uses; she is able to employ a wide variety of strategies, with very little hesitation.

This subject relies very heavily on achievement strategies; she uses no reduction strategies on either narration task. Within the category of achievement strategies, she uses more compensatory than retrieval strategies on both tasks. This trend is more obvious at Time 2, where it seems that fluency is obtained through heavy reliance on $L_1$-based strategies.

The number of CSs used by Subject 38 more than doubles from Time 1 to Time 2 (see Table H10); however the use of $L_1$-based strategies also more than doubles proportionally, detracting somewhat from the overall effectiveness of communication.

Subject 40

Time 1.

This narration contains a high number of communication strategies, with 49 being, in fact, the highest number contained in any Time narration (see Table H10). As shown in Table H1 and Figure 5, Subject 40's speech sample shows extensive use of two categories of CSs, $L_2$-based and retrieval, and lesser use of reduction, $L_1$-based, non-linguistic and cooperative strategies. Reduction strategy use accounts for 2% of the CSs used, as does $L_1$-based strategy use. $L_2$-based strategy use totals 36.7%, while use of the non-linguistic strategy of sound imitation totals 2%. Cooperative strategies account for 4.1% of the CSs, and retrieval strategies for 53.1%.

Table H3 and Figure 6 provide an analysis of CS use by Subject 40. Reduction strategy use is limited to use of message abandonment, and $L_1$-based strategy use is limited to use of literal translation. Within the classification of $L_2$-based strategies, strategy use is divided equally between use of approximation (18.8%) and restructuring (18.8%). Retrieval strategy use is divided between pause (45.8%) and repetition (6.3%), with
Figure 5. Subject 40: Strategy use by category at Time 1 and Time 2.
Strategies

Topic Avoidance
Message Abandonment

Code Switch
Literal Translation
Foreignization

Generalization
Approximation
Circumlocution
Paraphrase
Word Coinage
Restructuring
Egocentric Strategy

Sound Imitation
Direct Appeal
Indirect Appeal

Pause
Repetition
Retr. via Sem. Field
Retr. via Oth. Lang.

Figure 6. Subject 40: Strategy use at Time 1 and Time 2.
pause being used considerably more frequently. At 45.8%, pause is the most frequently used of all CSs in this narration (see Table H3 and Figure 6).

The subject provides a fairly cohesive, comprehensive narrative. Although she experiences lexical difficulty at several points, she is able to find alternate means of expressing her ideas. The extensive use of pause and repetition detracts somewhat from the overall fluency of the narrative, but because the pauses are all fairly short in duration, they do not impede comprehension.

Time 2.

In this narration, a total of 61 strategies are used by Subject 40. Extensive use is made of L₁-based strategies, L₂-based strategies and retrieval strategies, while lesser use is made of cooperative strategies. The use of L₁-based strategies totals 31.2% of the CSs used; however, this total reflects numerous uses (seven) of the same lexical item which has been classified as foreignization (see Appendix G). The use of L₂-based strategies accounts for 37.7% of the CSs, cooperative strategies for 1.6% and retrieval strategies for 29.5%.

Table H3 and Figure 6 provide a breakdown of CS use. L₁-based strategy use includes considerable use of both literal translation (16.4%) and foreignization (14.8%), while L₂-based strategy use is divided between generalization (6.6%), approximation (8.2%), paraphrase (1.6%) and restructuring (21.3%). Restructuring, at 21.3%, is the only L₂-based strategy which is used extensively. Indirect appeal is the only cooperative strategy used, while pause and repetition are the two retrieval strategies used. Use of pause (23%) is higher than that of any other CS in this narration (see Table H3 and Figure 6).

Subject 40 experiences some lexical difficulties which detract slightly from the overall fluency of the narrative. The wide use of restructuring, pause and repetition would seem to indicate that she experiences some planning difficulties as well. In the narrative, the
subject often uses pause or restructuring to precede use of another CS. In the case of literal translation, however, this is not so; the subject shows no hesitation or sign of retrieval difficulty before the use of this particular strategy. Overall, Subject 40 makes effective use of strategies to compensate for linguistic difficulties.

Discussion.
As illustrated in Figures 5 and 6, this subject shows variability or instability in the use of almost all categories of CSs over time. She decreases her use of reduction, non-linguistic, cooperative, and retrieval strategies but shows a considerable increase in the use of $L_1$-based strategies, relying heavily on the use of literal translation and foreignization. Her use of $L_2$-based strategies remains relatively stable over time. Within several of the strategy categories, this subject uses different strategies at Time 1 and Time 2; in the $L_2$-based strategies, for example, she uses generalization and paraphrase at Time 2, in addition to approximation and restructuring which are also used at Time 1.

In the Time 1 speech sample, this subject tends to favour use of pause, restructuring and approximation, but at Time 2 this changes to pause, restructuring, literal translation, and foreignization. While the subject appears to encounter fewer lexical problems at Time 2 and thus produces more fluent discourse, she also seems to rely much more heavily on $L_1$-based strategies to deal with lexical problems.

Subject 45
Time 1.
In Subject 45's speech sample, a total of 33 strategies are used. Extensive use is made of $L_2$-based strategies and retrieval strategies, and lesser use of $L_1$-based and cooperative strategies. $L_1$-based strategy use totals 12.1%, while $L_2$-based strategy use totals 51.5%. Cooperative strategies account for 3% of the CSs used, and retrieval strategies for 33.3% (see Table H1 and Figure 7).
Figure 7. Subject 45: Strategy use by category at Time 1 and Time 2.
Table H4 and Figure 8 provide an analysis of Subject 45’s CS use. While literal translation is the only L1-based strategy used, a number of L2-based strategies are used, including restructuring (24.2%), generalization (9.1%), approximation (9.1%), circumlocution (6.1%) and paraphrase (3%). Retrieval strategy use is divided between pause (24.2%) and repetition (9.1%). The most frequently used CSs are restructuring and pause, at 24.2% each (see Table H4 and Figure 8).

The subject produces a narrative which, in spite of one serious lexical difficulty and several minor ones, is largely fluent and cohesive. The extensive use of L2-based strategies contributes to the effective communication of the story; only in a couple of instances does the idea remain rather vague.

Time 2

Subject 45’s Time 2 speech sample contains a high incidence of CS use; a total of 67 strategies are used. As shown in Table H1 and Figure 7, however, only three categories of CSs are used: L1-based, L2-based and retrieval strategies. Use of L1-based strategies totals 17.9% of all CSs used, while use of L2-based strategies totals 50.8%. Retrieval strategies account for 31.3% of the CSs used.

An analysis of CS use is given in Table H4 and Figure 8. Within the category of L1-based strategies, literal translation (16.4%) and foreignization (1.5%) are used; however, there is only one occurrence of the latter. Within the category of L2-based strategies, five different strategies are used; restructuring, the most frequently used CS in this narration, accounts for 32.8% of the CSs used, while the strategies of generalization (7.5%), approximation (1.5%), paraphrase (6%) and word coinage (3%) account for a total of 18%. Retrieval strategy use is divided between pause (13.4%) and repetition (17.9%).

In spite of several lexical difficulties, this subject produces a relatively fluent, cohesive narrative. In most cases of difficulty (due to planning or to a lexical item), she restructures her initial phrase,
Strategies

- Topic Avoidance
- Message Abandonment
- Code Switch
- Literal Translation
- Foreignization
- Generalization
- Approximation
- Circumlocution
- Paraphrase
- Word Coinage
- Restructuring
- Egocentric Strategy
- Sound Imitation
- Direct Appeal
- Indirect Appeal
- Pause
- Repetition
- Retr. via Sem. Field
- Retr. via Oth. Lang.

Figure 8. Subject 45: Strategy use at Time 1 and Time 2.
often using a \( L_2 \)-based strategy to express her ideas, as in the case of "ils ont le feu s'est arrêté" (see Appendix E). In a number of instances, literal translation is used, resulting in structures which might cause difficulty for francophones, such as "l'alarme qui est allée". The pauses used are all very short and do not greatly interfere with either the fluency or the comprehensibility of the discourse.

**Discussion.**

As shown in Tables H1 and H4, and illustrated in Figures 7 and 8, Subject 45 seems to show relative stability over time in her use of \( L_2 \)-based and retrieval strategies. However, instability is evidenced in her use of \( L_1 \)-based strategies, which increases, and use of cooperative strategies, which decreases. This subject’s preference for achievement strategies, rather than reduction strategies, and for linguistic rather than non-linguistic strategies also shows stability over time.

While overall use of \( L_2 \)-based and retrieval strategies remains stable over time, there is instability in the usage of particular strategies within these categories. At Time 1, for example, this subject relies most heavily on pause, restructuring, generalization and approximation; at Time 2, her most frequently used strategies are restructuring, repetition and pause. Circumlocution is used at Time 1 but not at Time 2, while word coinage is used at Time 2 but not at Time 1. The total number of CSs used by this learner more than doubles from Time 1 to Time 2 (see Table H10), however, the pattern of CS use remains quite similar. As shown in Table H1, the biggest difference is in her use of \( L_1 \)-based strategies, which increases at Time 2.

**Subject 47**

**Time 1.**

As shown in Table H1 and Figure 9, Subject 47’s Time 1 narration contains five different categories of CSs: reduction, \( L_1 \)-based, \( L_2 \)-based, non-linguistic and retrieval. In total, 28 strategies are used.
Figure 9. Subject 47: Strategy use by category at Time 1 and Time 2.
Reduction strategy use accounts for 3.6% of all CSs used, L₁-based strategies for 14.3% and L₂-based strategies for 42.9%. Non-linguistic strategies total 3.6% of all strategies used, while retrieval strategies total 35.7%.

Table H5 and Figure 10 provide an analysis of Subject 47’s strategy use. Message abandonment, used once (3.6%), is the only reduction strategy used, and L₁-based strategy use is limited to use of literal translation (14.3%). Within the category of L₂-based strategies, four different strategies are used: generalization (7.1%), approximation (10.7%), circumlocution (14.3%) and restructuring (10.7%). The non-linguistic strategy of sound imitation is used once (3.6%), while retrieval strategy use is divided between pause (25%) and repetition (10.7%). Use of pause is considerably greater than use of repetition or of any other CS used in this narration (see Table H5 and Figure 10).

This subject experiences very few lexical difficulties and virtually no breakdown in communication; consequently, her narrative is very smooth and fluent, with the exception of a couple of minor disruptions. The L₂-based strategies of generalization, approximation and circumlocution are executed smoothly, often with no hesitation whatsoever (see Appendix D). The instances of literal translation use show non-nativelike constructions, but these do not seriously hamper overall comprehension.

**Time 2.**

At Time 2, Subject 47’s speech sample contains 81 different CSs and shows use of L₁- and L₂-based strategies, non-linguistic strategies and retrieval strategies. L₁-based strategy use totals 9.9%, while L₂-based strategy use totals 53.1%. Use of non-linguistic strategies accounts for 1.2% of all CSs used and use of retrieval strategies for 35.8% (see Table H1 and Figure 9).

As shown in Table H5 and Figure 10, the only L₁-based strategy used is literal translation. Within the category of L₂-based strategies, generalization and approximation total 7.4% and 17.3% respectively, while
Figure 10. Subject 47: Strategy use at Time 1 and Time 2.
restructuring totals 24.7%. The $L_2$-based strategies of circumlocution (1.2%) and word coinage (2.5%) are used to a lesser extent. The non-linguistic strategy of sound imitation is used once (1.2%), while the fairly extensive use of retrieval strategies is divided between pause (11.1%) and repetition (24.7%).

Subject 47 appears very confident of her ability to narrate a story in French, and, in fact, few pauses occur during the entire discourse (see Appendix E). The oral narrative contains a number of repetitions and cases of restructuring which may indicate either planning difficulties or lexical difficulties. The subject uses a wide range of $L_2$-based strategies which are generally well executed; the narrative is consequently quite comprehensible and evidences only one obvious case of the subject modifying her intended message. Overall, the narrative is quite fluently executed and the subject seems to be successful in communicating the intended ideas.

**Discussion.**

Subject 47 shows stability over time in her preference for non-cooperative strategies. She also shows stability in her usage of retrieval strategies, but in the use of reduction, $L_1$-based, $L_2$-based and non-linguistic strategies she shows instability over time. These patterns of change are illustrated in Figures 9 and 10.

While there is a decrease in her proportional use of reduction, $L_1$-based, and non-linguistic strategies, an increase is shown in the use of $L_2$-based strategies. Within the categories of $L_2$-based and retrieval strategies there is also considerable instability in the use of individual strategies, some being used more at Time 1, others more at Time 2. At Time 1, for example, the subject relies most heavily on pause, literal translation, and circumlocution; at Time 2 this changes to repetition, restructuring, and approximation.

Overall, this learner makes greater use of CSs at Time 2, more than doubling the number she uses at Time 1 (see Table 14). She relies most
heavily on $L_2$-based strategies on both tasks, but also uses retrieval strategies extensively.

Less-Successful Language Learners

Subject 25

Time 1.

Subject 25's Time 1 speech sample contains 34 examples of strategy use. As indicated in Table H1 and Figure 11, four categories of CSs are used: reduction, $L_1$- and $L_2$- based, and retrieval strategies. Reduction strategy use totals 2.9% of all CSs used by this subject at Time 1, $L_1$-based strategy use totals 8.8% and $L_2$-based strategy use 20.6%. The narration is marked by extensive use of retrieval strategies, which account for 67.6% of all CSs used.

As Table H6 and Figure 12 illustrate, topic avoidance is the only reduction strategy used, while literal translation is the only $L_1$-based strategy used. The use of the $L_2$-based strategy of generalization totals 14.7%, while use of approximation totals 5.9%. Within the category of retrieval strategies, strategy use is divided between pause and repetition. Pause, the most frequently used CS, accounts for 55.9% of all CS use, while repetition accounts for 11.8%. See Table H6 and Figure 12 for a frequency distribution.

Although hesitant throughout the narration, the subject does succeed in communicating the story. The tempo is generally rather slow, and individual utterances quite short. Although the speech sample contains few serious disruptions the subject's hesitancy throughout results in less than fluent speech. The narration ends before the story is complete; however the subject declines to provide more information or detail, despite prompting by the researcher.

Time 2.

In this Time 2 narration, 45 strategies are used by Subject 25. Extensive use is made of $L_2$-based and retrieval strategies while lesser use
Figure 11. Subject 25: Strategy use by category at Time 1 and Time 2.
Figure 12. Subject 25: Strategy use at Time 1 and Time 2.
is made of $L_1$-based and cooperative strategies. $L_1$-based strategy use totals 17.8% of all CSs used, $L_2$-based strategy use totals 46.7%, and cooperative strategy use totals 2.2%. Retrieval strategies account for 33.3% of the CSs used (see Table H1 and Figure 11).

As shown in Table H6 and Figure 12, $L_1$-based strategy use is divided equally between literal translation and foreignization, at 8.9% each. $L_2$-based strategy use includes use of generalization (6.7%), approximation (8.9%), paraphrase (4.4%), word coinage (2.2%), restructuring (22.2%) and egocentric strategies (2.2%). Cooperative strategy use is limited to use of direct appeal, while retrieval strategy use involves both pause (22.2%) and repetition (11.1%). The most frequently used strategies (22.2% each) are restructuring and pause.

Subject 25 runs into a considerable number of lexical difficulties in the narration of this story. Although her lexical limitations result in non-fluent speech, with many uses of restructuring, pauses and repetitions, the subject makes extensive use of $L_2$-based strategies to deal with the difficulties. She uses word coinage to assist with one lexical problem, and foreignization on four other occasions.

**Discussion.**

As shown in Table H1 and Figure 11, Subject 25 shows instability in CS use over time, in all strategy categories. She uses proportionally fewer reduction and retrieval strategies at Time 2 than at Time 1, with retrieval strategy use reduced to less than half at Time 2 and proportionally more $L_1$-based, $L_2$-based and cooperative strategies. The proportional use of $L_1$-based and $L_2$-based strategies doubles, in fact, from Time 1 to Time 2. She does not use non-linguistic strategies in either narration. Figures 11 and 12 illustrate these patterns of change.

At Time 2, this subject uses a much wider variety of strategies than at Time 1, particularly in the category of $L_2$-based strategies. At Time 1 she uses only six types of strategies, two of which are $L_2$-based, whereas at Time 2 she uses a total of eleven different strategy types, six of
which are classified as $L_2$-based. The total number of strategies used increases also from 34 at Time 1 to 45 at Time 2. The increase in $L_2$-based strategies, and decrease in reduction and retrieval strategies, results in greater comprehensibility and fluency, greater detail and greater overall success at Time 2.

Subject 30

Time 1.

Subject 30's short narration is preceded by a lengthy silence, totalling almost 5 minutes, (classified as topic avoidance), during which time the subject seems to have planned the story. The narrative contains relatively few CSs (26), as shown in Tables H7 and H10, but this may be due to the length of the discourse. As illustrated in Table H1 and Figure 13, extensive use is made of reduction and retrieval strategies, and lesser use of $L_1$- and $L_2$-based strategies. Reduction strategies account for 34.6% of all CSs used, $L_1$-based strategies for 7.7%, and $L_2$-based strategies for 19.2%. Use of retrieval strategies totals 38.5%.

Table H7 and Figure 14 provide an analysis of this subject's CS use. Reduction strategy use is limited to use of topic avoidance, while $L_1$-based strategy use is limited to use of literal translation. $L_2$-based strategy use includes use of generalization (3.9%), approximation (7.7%), restructuring (3.9%) and egocentric strategies (3.9%). Retrieval strategy use is divided between pause (26.9%) and repetition (11.5%). The most frequently used strategies are topic avoidance (34.6%) and pause (26.9%).

The subject seems to have lacked confidence in her ability to narrate a story. She declined any conversation with the researcher prior to the story telling and resisted the numerous comments and questions of the researcher aimed at encouraging her to tell a story. After a lengthy silence, the subject narrated her story, in one breath as it were, and then declined any further elaboration or comment. The pauses which occurred during the discourse were relatively short, but the repetition and restructuring detracted from the fluency. In spite of the use of
Figure 13. Subject 30: Strategy use by category at Time 1 and Time 2.
Figure 14. Subject 30: Strategy use at Time 1 and Time 2.
several $L_2$-based strategies, the narrative was rather vague and lacked detail and elaboration.

**Time 2.**

In this narration, 63 CSs are used by Subject 30. As shown in Table H1 and Figure 13, however, only three categories of CS are used: $L_1$-based, $L_2$-based and retrieval strategies. Use of $L_1$-based strategies totals 11.1%, use of $L_2$-based strategies totals 49.2%, and use of retrieval strategies 39.7%.

As shown in Table H7 and Figure 14, the only $L_1$-based strategy used is literal translation, while four different $L_2$-based strategies are used. Moderate use is made of the $L_2$-based strategies of generalization (11.1%), approximation (7%) and paraphrase (3.2%), while extensive use is made of restructuring (27%), the most frequently used CS in this narration. Retrieval strategy use includes use of both pause (22.2%) and repetition (17.5%).

The subject encounters a number of lexical difficulties in the narration of this story; however, through use of restructuring and other $L_2$-based strategies, such as approximation and generalization, she is able to express her ideas. While the narrative remains rather vague because of the extensive use of words such as "chose" and "ce qu'elle veut" (see Appendix E), the main ideas appear to be communicated. The frequent pauses and repetitions are distracting and detract from the overall fluency; however, they do not seriously impede communication. Even the fairly extensive use of literal translation does not cause a comprehension problem; the underlying meaning is generally fairly clear.

**Discussion.**

Subject 30 uses eight different strategies in her Time 1 narration, and seven at Time 2, but the strategies used at Time 2 would seem to be generally more successful than those used at Time 1. As shown in Tables H1 and H7, this subject eliminates use of reduction strategies at Time 2,
relying more on $L_1$ and $L_2$-based achievement strategies. Her use of retrieval strategies remains relatively constant, increasing by 1.2% at Time 2. These patterns of change are illustrated in Figures 13 and 14.

In the Time 1 speech sample, this subject relies heavily on retrieval and reduction strategies, using them more often than any other strategy, but at Time 2 she uses more $L_2$-based strategies, with retrieval strategies becoming second in order of frequency. Her use of $L_2$-based strategies shows a dramatic increase over time, more than doubling, in fact, with the strategies of generalization, approximation, paraphrase and restructuring used proportionally more at Time 2 than at Time 1. At Time 2, this subject makes extensive use of restructuring, which accounts for 54.8% of $L_2$-based strategy use and 27% of over-all strategy use on that task.

Over time, Subject 30 more than doubles her use of CSs, as shown in Table H10. While her use of some categories of CSs remain rather fairly stable over time, her use of $L_2$-based strategies shows an increase of more than 100%.

**Subject 39**

**Time 1.**

In this narrative, a total of 36 CSs are used by Subject 39. As shown in Table H1 and Figure 15, the speech sample contains extensive use of retrieval strategies and lesser use of reduction, $L_1$-based and $L_2$-based strategies. Reduction strategy use accounts for 5.6% of all CSs used, $L_1$-based strategy use for 8.3%, and $L_2$-based strategy use for 11.1%. Retrieval strategy use totals 75%.

Table H8 and Figure 16 given an analysis of Subject 39's CS use. Reduction strategy use is divided equally between topic avoidance and message abandonment (2.8% each), while $L_1$-based strategy use is divided between code switch (2.8%) and literal translation (5.6%). The $L_2$-based strategies used include circumlocution (5.6%), paraphrase (2.8%) and restructuring (2.8%). The retrieval strategies used include repetition
Figure 15. Subject 39: Strategy use by category at Time 1 and Time 2.
Figure 16. Subject 39: Strategy use at Time 1 and Time 2.
(5.6%), and pause (69.4%), the latter strategy dominating the narration (see Tables H8 and Figure 14).

The subject encounters a number of lexical difficulties in this narration. The way in which these difficulties are handled, through frequent and long pauses, renders the narration non-fluent and difficult to follow. The subject gives little detail, apparently concentrating on communicating the basic story line.

Time 2

At Time 2, a total of 38 CSs are used by Subject 39 (see Table H10). In this narrative, extensive use is made of retrieval and $L_2$-based strategies, and lesser use of reduction and $L_1$-based strategies. Reduction strategy use totals 5.3%, while $L_1$-based strategy use totals 13.1%. Use of $L_2$-based strategies accounts for 31.6% of all CSs used, and use of retrieval strategies for 54.3% (see Table H1 and Figure 15).

Reduction strategy use is divided equally between topic avoidance (2.8%) and message abandonment (2.8%). All three $L_1$-based strategies are used; however, literal translation (7.9%) is used more extensively than either code switch (2.6%) or foreignization (2.6%). In the category of $L_2$-based strategies, five different strategies are used, with restructuring (10.5%) used more than the strategies of generalization (5.3%), approximation (7.9%), circumlocution (5.3%), or paraphrase (2.6%). Retrieval strategy use includes use of pause and repetition; however, pause (39.5%) is used more frequently than repetition (10.5%) and, in fact, more frequently than any other CS used in this narration (see Table H8 and Figure 16).

Although there are no serious disruptions in communication, Subject 39's use of restructuring, repetition, and retrieval strategies results in non-fluent discourse. The ideas central to the narration are generally communicated through $L_2$-based strategies when difficulties are encountered, although all $L_1$-based strategies are also used at least once each (see Table H8). The subject uses a similar construction for most phrases and
sentences in the narration, depending heavily on the use of "et" to connect ideas. In several instances, sentence construction renders the ideas rather difficult to follow.

Discussion.

Subject 39 shows stability in the use of reduction strategies over time; however, his use of achievement strategies (L₁- and L₂-based) increases, while his use of retrieval strategies decreases considerably (see Tables H1 and H8). Use of L₂-based strategies doubles, in fact, from Time 1 to Time 2. Figures 15 and 16 illustrate the patterns of change and show that a greater variety of CSs are used at Time 2 than at Time 1, even though the total number of CSs used remains relatively constant (see Table H10).

The greatest increase in strategy use over time occurs in the category of L₂-based strategies, which increases from 4 (11.1%) to 12 (31.6%). A greater variety of CSs are also used at Time 2, compared with Time 1. In the category of L₁-based strategies, an increase in frequency of use is accompanied by an increase in types of CSs used.

Although he uses approximately the same number of CSs at Time 1 and Time 2 (36 and 38 respectively), this subject shows more efficient use of CSs over time. Not only does his discourse show improvement in fluency, but his choice of CSs at Time 2 improves overall comprehensibility. Although he continues to use retrieval strategies to a considerable extent, this subject is also able to use achievement strategies to his advantage.

Subject 46

Time 1.

In this speech sample, a total of 46 CSs are used by Subject 46 (see Table H10). As indicated in Table H1 and Figure 17, this narrative contains extensive use of retrieval strategies and lesser use of reduction, L₁-based, L₂-based, and cooperative strategies. Reduction
Strategies

Reduction

L₁ - based

L₂ - based

Nonlinguistic

Cooperative

Retrieval

Figure 17. Subject 46: Strategy use by category at Time 1 and Time 2.
strategy use and L₁-based strategy use total 2.2% each, while L₂-based strategy use totals 8.7% and cooperative strategy use totals 4.4%. The use of retrieval strategies totals 82.6%.

Table H9 and Figure 18 provide a breakdown of CS use by Subject 46. The only reduction strategy used is topic avoidance (2.2%), while the only L₁-based strategy used is literal translation (2.2%). The L₂-based strategies used are paraphrase (2.2%) and restructuring (6.5%). Cooperative strategy use is divided equally between direct and indirect appeal (2.2% each), while retrieval strategy use is divided between pause (67.4%), repetition (8.7%) and retrieval via semantic field (6.5%). Pause is used more extensively than any other CS in this narration (see Table H9 and Figure 18).

During the narration the learner appears to encounter both lexical and planning problems. His wide use of pause, repetition and restructuring causes disjointed, non-fluent discourse. In narrating the course of events, the learner relies heavily on the use of "et" to connect ideas, in effect producing one extremely long sentence. Many of the events in the story remain quite vague despite use of a number of L₂-based strategies; only the main ideas are related, with no detail provided.

**Time 2.**

At Time 2, Subject 46's speech sample contains 80 CSs. In this narrative, L₂-based and retrieval strategies are used extensively, while L₁-based and non-linguistic strategies are used to a lesser degree. L₁-based strategies account for 13.8% of all CSs used, while L₂-based strategies account for 25% and non-linguistic strategies for 2.5%. Use of retrieval strategies totals 58.8% (see Table H1 and Figure 17).

L₁-based strategy use includes use of code switch (2.5%) and literal translation (11.5%), while the L₂-based strategy use includes generalization (1.3%), approximation (6.3%), circumlocution (2.5%), restructuring (12.5%) and egocentric strategies (2.5%). The most frequently used of these L₂-based strategies is restructuring. The non-
Strategies

- Topic Avoidance
- Message Abandonment
  - Code Switch
  - Literal Translation
  - Foreignization
  - Generalization
  - Approximation
  - Circumlocution
  - Paraphrase
  - Word Coinage
  - Restructuring
- Egocentric Strategy
- Sound Imitation
- Direct Appeal
- Indirect Appeal
- Pause
- Repetition
- Retr. via Sem. Field
- Retr. via Oth. Lang.

Figure 18. Subject 46: Strategy use at Time 1 and Time 2.
linguistic strategy of sound imitation is used on two occasions (2.5%). Retrieval strategy use is divided between pause (40%) and repetition (18.8%), with the frequency of use of pause more than double that of repetition and considerably higher than that of any other CS used (see Table H9 and Figure 18).

Subject 46 originally produced a rather short narrative, but in response to requests from the experimenter/researcher he provided greater detail. The story line itself seems rather disjointed, but although a number of lexical difficulties are encountered, there is no serious communication breakdown. The strategies utilized are generally effective in conveying the meaning, even when, for example, egocentric strategies are used. Next to restructuring, the most frequently used compensatory strategy is literal translation. This phenomenon results in a number of structures which would possibly not be immediately comprehensible to a unilingual francophone.

Discussion.

As Tables H1 and H9 indicate, Subject 46 shows instability over time in use of all categories of CSs. His use of reduction, cooperative and retrieval strategies decreases from Time 1 to Time 2, while his use of L₁-based, L₂-based and non-linguistic strategies increases, with use of both L₁- and L₂-based strategies more than doubling. At Time 2 he also uses a greater variety of L₁- and L₂-based strategies, resulting in more efficient (or proficient) transmission of the story. Figures 17 and 18 illustrate these patterns of change over time.

The decrease in proportional use of retrieval and reduction strategies indicates that Subject 46 experiences fewer serious lexical difficulties at Time 2. The Time 2 narrative is clearly more fluently executed than the earlier one and is much easier to comprehend. More achievement type CSs are used at Time 2 than at Time 1 (see Table H10), contributing to greater overall efficiency of communication.
Group Results

For each group of subjects (the SLLs and the LLLs), CS use at Time 1 and Time 2 is reported separately. The reporting of the results is followed by a short discussion of the changes evidenced over time in patterns of CS use.

Successful Language Learners

Time 1.

The SLLs used a combined total of 126 strategies in the Time 1 narratives (see Table H14). As shown in Table H11 and Figure 19, they tended to make extensive use of L₂-based and retrieval strategies, and lesser use of reduction, L₁-based, non-linguistic and cooperative strategies. Reduction strategy use totals 1.6% of the CSs used by the SLLs, L₁-based strategy use totals 9.5% and L₂-based strategy use totals 44.4%. Non-linguistic strategies account for 1.6% of the CSs used, cooperative strategies for 2.4%, and retrieval strategies for 40.5%.

Table H12 and Figure 20 provide a breakdown of strategy use. Reduction strategy use is limited to use of message abandonment (1.6%), while L₁-based strategy use is limited to use of literal translation (7.1%) and foreignization (2.4%). The L₂-based strategies used are generalization (6.4%), approximation (15.1%), circumlocution (6.4%), paraphrase (0.8%), and restructuring (15.9%). The most frequently used of these L₂-based strategies are approximation and restructuring, at 15.1% and 15.9% respectively. The non-linguistic strategy of sound imitation is used minimally (1.0%). Cooperative strategy use is limited to use of direct appeal (2.4%), while retrieval strategy use is divided between pause (31.8%) and repetition (8.7%) Pause (31.8%) is the most extensively used of all CSs by the SLLs at Time 1 (see Table H2 and Figure 20).

Time 2.

In the Time 2 narratives, the SLLs used a combined total of 245 strategies (see Table H14). They show extensive use of L₁-based, L₂-based,
Figure 19. SLLs: Strategy use by category at Time 1 and Time 2.
Figure 20. SLLs: Strategy use at Time 1 and Time 2.
and retrieval strategies, and lesser use of non-linguistic and cooperative strategies, as indicated in Table H11 and Figure 20. They do not use any reduction strategies. Use of L₁-based strategies totals 21.2%, use of L₂-based strategies totals 47.4%, and use of non-linguistic strategies totals 0.4%. Cooperative strategy use accounts for 0.8% of all CSs used by this group, and retrieval strategy use for 30.2%.

As indicated in Table H12 and Figure 20, all three L₁-based strategies are used, however code switch is used only once (0.4%). The other two L₁-based strategies, literal translation (15.1%) and foreignization (5.7%), are used more extensively. Literal translation is third highest in frequency of all CSs used by the SLLs at Time 2. All L₂-based strategies are also used, but several of these strategies are used more extensively than the others in this category. Generalization (6.9%), approximation (10.2%) and restructuring (24.5%) are used considerably more than the L₁-based strategies of circumlocution (1.2%), paraphrase (2.5%), word coinage (1.6%) and egocentric strategies (0.4%). Restructuring is the most frequently used of all CSs by this group at Time 2, while approximation and generalization rank fifth and sixth, respectively. The non-linguistic strategy of sound imitation and the cooperative strategies of direct and indirect appeal are each used only once (0.4% each). Retrieval strategy use is limited to use of pause and repetition, both of which are used extensively. Pause (15.5%) ranks second in frequency of use, while repetition (14.7%) ranks fourth (see Table H12 and Figure 20).

Discussion.

The SLLs show instability in CS use over time. Reduction strategies, used at Time 1, are not used at Time 2. L₁-based strategy use increases considerably, more than doubling in frequency of use from Time 1 to Time 2, while L₂-based strategy use increases minimally. Non-linguistic and cooperative strategy use decreases somewhat while retrieval strategy use decreases considerably (see Table H11 and Figure 19).

A wider variety of CSs are used by this group at Time 2 than at Time
1 (see Table H12). At Time 2, all achievement strategies are used, including several which were not used at Time 1. As well, a greater number of CSs are used at Time 2 (see Table H14), the Time 2 frequency almost doubling the Time 1 frequency.

The most frequently used categories of CSs remain the same at Time 1 and Time 2: $L_2$-based, first, followed by retrieval. The difference in frequency of use between these two categories becomes more pronounced over time, with $L_2$-based strategy use increasing slightly and retrieval strategy use decreasing somewhat (see Table H11 and Figure 19).

The most extensive changes between CS use for the SLLs at Time 1 and Time 2 are the increase in $L_1$-based strategy use (an increase of more than 50%) and the decrease in retrieval strategy use (a decrease of 10.3%).

**Less-Successful Language Learners**

**Time 1.**

In the Time 1 narratives, the LLLs used a combined total of 142 strategies (see Table H14). As shown in Table H11 and Figure 21, they made extensive use of retrieval strategies and lesser use of reduction, $L_1$-based, $L_2$-based and cooperative strategies. Reduction strategy use totals 9.2%, $L_1$-based strategy use totals 6.3% and $L_2$-based strategy use totals 14.1%. Cooperative strategies account for 1.4% of all CSs used by this group, and retrieval strategies for 69%.

Table H13 and Figure 22 provide a breakdown of strategy use by the LLLs. Both reduction strategies, topic avoidance (8.5%) and message abandonment (0.7%), are used; however, topic avoidance is used more extensively, ranking third in frequency of CS use by this group (see Table H13 and Figure 22). Two of the three $L_1$-based strategies are used, namely code switch (0.7%) and literal translation (5.6%) with literal translation being used considerably more than code switch, ranking fourth in frequency of use. All the $L_2$-based strategies are used, with the exception of word coinage. Generalization (4.2%), approximation (2.8%) and restructuring (3.5%) are used moderately, while circumlocution (1.4%), paraphrase (1.4%)
Figure 21. LLLs: Strategy use by category at Time 1 and Time 2.
Strategies

- Topic Avoidance
- Message Abandonment
- Code Switch
- Literal Translation
- Foreignization
- Generalization
- Approximation
- Circumlocution
- Paraphrase
- Word Coinage
- Restructuring
- Egocentric Strategy

- Sound Imitation
- Direct Appeal
- Indirect Appeal
- Pause
- Repetition
- Retr. via Sem Field
- Retr. via Oth.Lang

Figure 22. LLLs: Strategy use at Time 1 and Time 2.
and egocentric strategies (0.7%) are used minimally. Cooperative strategy use is divided equally between use of direct and indirect appeal (0.7% each), while retrieval strategy use includes use of pause (57.8%), repetition (9.2%) and retrieval via semantic field (2.1%). Pause is the most frequently used CS at Time 1, while repetition is the second most frequently used CS.

**Time 2.**

The LLLs use a combined total of 226 strategies in the Time 2 narratives (see Table H14). As shown in Table H11 and Figure 21, they use all categories of CSs at Time 2. They use L₂-based and retrieval strategies to a greater extent than reduction, L₁-based, non-linguistic and cooperative strategies. Reduction strategy use accounts for 0.9% of all CSs used, L₁-based strategies for 13.7%, and L₂-based strategies for 36.2%. Non-linguistic strategies total 0.9%, cooperative strategies 0.4% and retrieval strategies 55.4%.

Table H13 and Figure 22 provide an analysis of strategy use by LLLs. Reduction strategy use is divided equally between use of topic avoidance (0.4%) and message abandonment (0.4%), while L₁-based strategy use is divided among the three strategies of code switch (1.3%), literal translation (10.2%) and foreignization (2.2%). Literal translation, the only L₁-based strategy used extensively, is the fourth most frequently used CS by the LLLs at Time 2. All L₂-based strategies are used; however, restructuring (18.1%) is the most extensively used CS in this category and the second most extensively used CS overall. Generalization (5.8%) and approximation (7.5%) are used to a moderate extent while the other L₂-based strategies, circumlocution (1.8%), paraphrase (2.2%), word coinage (0.4%), and egocentric strategies (1.3%), are used less frequently. Direct appeal (0.4%) is the only cooperative strategy used, while pause (31.4%) and repetition (15.5%) are the only retrieval strategies used. Pause is the most extensively used CS at Time 2, while repetition is the third most extensively used CS.
Discussion.

The LLLs show instability in CS use over time. They decrease their use of reduction strategies, cooperative strategies and retrieval strategies and increase their use of \( L_1 \)-based, \( L_2 \)-based and non-linguistic strategies (see Table H11). Use of reduction and retrieval strategies is reduced considerably, in fact, while use of \( L_1 \)- and \( L_2 \)-based strategies more than doubles.

The distribution of CSs used also changes from Time 1 to Time 2 (see Table H13) for the LLLs. Three strategies not used at Time 1, namely foreignization, word coinage and sound imitation, are used at Time 2, while two strategies used at Time 1, namely indirect appeal and retrieval via semantic field, are not used at Time 2. As well, a considerably greater number of CSs are used at Time 2 than at Time 1 (see Table H14).

The most frequently used categories of CSs remain the same at Time 1 and Time 2: retrieval strategies first, followed by \( L_2 \)-based strategies. The difference in frequency of use between these two categories becomes smaller, however, over time.

The most extensive changes between CS use at Time 1 and Time 2 for the LLLs are the decreases in reduction and retrieval strategy use and the increases in \( L_1 \)-based and \( L_2 \)-based strategy use. Retrieval strategy use decreases proportionally by 22.1%, while \( L_2 \)-based strategy use increases by the same amount.

Discussion of Quantitative Results

Tables H1-13 and Figures 3-26 show that there are considerable intragroup and intergroup differences in CS use, indicating the possibility of personal preference for certain types of strategies, as well as a possible relationship between second language proficiency and CS use. Figures 23-26 allow a comparison of group results for Time 1 and for Time 2.

It is worth noting, for example, that the SLLs use considerably fewer reduction strategies than the LLLs in the Time 1 sample, and none at
Figure 23. SLLs and LLLs: Strategy use by category at Time 1.
Figure 24. SLLs and LLLs: Strategy use at Time 1.
Figure 25. SLLs and LLLs: Strategy use by category at Time 2.
Figure 26. SLLs and LLLs: Strategy use at Time 2.
all in the Time 2 sample.

The total numbers of CSs used at Time 1 and Time 2 by individual subjects are similar for the two groups of subjects (see Table H10). As well, the total and mean number of CSs used at Time 1 and at Time 2 is similar for both SLLs and LLLs (see Table H14). At Time 1, the SLLs use an average of 31.5 CSs each, while the LLLs use an average of 35.5 CSs each. At Time 2, both groups use a higher number of CSs, the SLLs using an average of 61.3 CSs each and the LLLs using an average of 56.5 CSs each. Overall, the total number of CSs used is very similar for both groups: the SLLs use a total of 371 strategies, while the LLLs use a total of 368 strategies.

An analysis of the patterns of CS use, however, reveals intergroup and intragroup differences. Certain strategies are used more frequently by one group of subjects than by the other, and more often by certain subjects than by others. This finding is similar to that of Bialystok (1983) who, in a study of adolescent and adult L2 learners, found no differences among the three groups studied in their quantitative use of the strategies. Bialystok notes that while the average number of strategies used bore no relation to proficiency, the blend of strategies, in terms of their L1 or L2 base, did relate to proficiency.

In both data sets, all subjects of this study use L2-based strategies, strategies considered to be the most effective in conveying meaning (Haastrup & Phillipson, 1983; Bialystok, 1983). However, differences occur in the incidence and frequency of these and other strategies at both Times, as shown in Tables H1 and H11.

Both groups also use the three L1-based interlingual strategies (see Tables H12 and H13), strategies considered to be less effective in conveying meaning (Bialystok, 1983; Haastrup & Phillipson, 1983). The LLLs use two strategies which are not used at all by the SLLs: topic avoidance and retrieval via semantic field. Both groups use retrieval strategies extensively, and to lesser degrees they use cooperative
strategies and non-linguistic strategies.

The SLLs use literal translation, foreignization, generalization, approximation and restructuring proportionally more than do the LLLs; the LLLs use the strategies of pause and topic avoidance more than do the SLLs. These results are illustrated in Figures 24 and 26.

An analysis of the use of categories of CSs indicates intergroup differences at both Time 1 and Time 2. At Time 1 and Time 2, the SLLs use more L1-based, L2-based and cooperative strategies than the LLLs, while the LLLs use more reduction and retrieval strategies than the SLLs. These results are shown in Table H11 and illustrated in Figures 23 and 25.

While intragroup differences also exist for both groups of subjects, similar patterns of strategy use are found for individuals within each group at each Time. As shown in Table H1, with the exception of Subject 40 at Time 1, each SLL uses proportionally more L2-based strategies on each narration, than any other category of CSs. On Time 1 narrations, all LLLs use proportionally more retrieval strategies than any other category of strategies. At Time 2, this pattern remains constant for two subjects in the group, while the remaining two subjects use proportionally more L2-based strategies.

An analysis of the group patterns of CS use and change over time reveals that the distribution of strategy use by the LLLs at Time 2 is similar to the distribution of strategy use by the SLLs at Time 1. The greatest difference between the two is that the LLLs at Time 2 use proportionally more retrieval strategies than the SLLs at Time 1. This pattern is shown by a comparison of statistics in Table H11 and is illustrated in Figures 27 and 28.

Qualitative Description

It is generally agreed that in an act of communication, achievement strategies are of inherently greater value than reduction strategies, which are considered to be an obstacle to language development, but some
Figure 27. Strategy use by category by SLLs at Time 1 and LLLs at Time 2.
Strategies

- Topic Avoidance
- Message Abandonment
- Code Switch
- Literal Translation
- Foreignization
- Generalization
- Approximation
- Circumlocution
- Paraphrase
- Word Coinage
- Restructuring
- Egocentric Strategy
- Sound Imitation
- Direct Appeal
- Indirect Appeal
- Pause
- Repetition
- Retr. via Sem. Field
- Retr. via Oth. Lang

Figure 28. Strategy use by SLLs at Time 1 and LLLs at Time 2.
research seems to indicate that not all achievement strategies are equal in communicative value. Bialystok (1983), Haastrup and Phillipson (1983), Faerch et al. (1984) and Willems (1987) claim that L₂-based strategies are the most effective, in that they often lead to full comprehension of the intended message. L₁-based strategies, on the other hand, usually lead to partial or non-comprehension. According to Faerch et al. (1984),

IL based strategies [L₂-based strategies] have a better chance of being understood than L₁-based strategies. The main risks with IL based strategies are that extensive use of paraphrasing and restructuring strategies may make considerable demands on the addressee’s patience. Generalization strategies may create an impression of vagueness. However IL based strategies offer the greatest scope for making creative use of one’s communicative resources in a way which is maximally efficient, short of knowing the appropriate word or expression. (pp. 157-158)

The other achievement strategies, namely non-linguistic strategies, cooperative strategies and retrieval strategies, are often used in conjunction with other strategies, and generally facilitate communication. Willems (1987) proposes a hierarchy of strategies in which paralinguistic strategies appear as the least effective; while use of these non-linguistic strategies may assist comprehension, he claims that it is generally preferable to solve linguistic difficulties with linguistic means.

A number of studies have indicated that CS use becomes more efficient with the development of L₂ proficiency (Bialystok & Fröhlich, 1980; Faerch et al., 1984; Paribakht, 1982, 1985). Learners who have the most developed linguistic skills, then, tend to be the most efficient strategy users — not only do the more proficient learners tend to use more L₂-based strategies, but they also tend to be able to use these strategies more effectively than less proficient learners (Paribakht, 1982, 1985). The quality of CS use would seem then, to be a function of proficiency in the L₂.

If the findings of these adolescent and adult studies of CS use are generalizable to children, then it would seem to follow that:
(1) the SLLs (who are considered more proficient in French than the LLLs) would use more L₂-based strategies on each narration task than the LLLs;

(2) both groups would show greater use of L₂-based strategies at Time 2 than at Time 1; and

(3) the surface realization or quality of the strategies used would be superior, from the point of view of informative value and grammatical accuracy, for both groups at Time 2 as compared to Time 1, and at each Time for the SLLs as compared to the LLLs.

Group results (see Figures 23 and 25) indicate that the SLLs do indeed use proportionally more L₂-based strategies on each task (i.e., at Time 1 and at Time 2) than do the LLLs. As shown in Figures 19 and 20 and in Table H11, both groups of subjects increase their proportional use of L₂-based strategies from Time 1 to Time 2. This increase is, however, much more dramatic for the LLLs who more than double their use of L₂-based strategies over time.

Given that retrieval strategies are included in so few taxonomies of CSs, it was decided to analyze the data again, omitting retrieval strategies from the tabulations and calculations. This manipulation was undertaken in order to see the impact of retrieval strategies on patterns of CS use.

When retrieval strategies are omitted from the analysis (see Figures 29 - 33 and Table H17), however, the pattern of L₂-based strategy use changes. While the LLLs still show an increase in use of L₂-based strategies from Time 1 to Time 2, the SLLs show a decrease. While the SLLs clearly use a higher proportion of L₂-based strategies at Time 1 than the LLLs, the Time 2 result depends on whether retrieval strategies are included in the tabulation. When they are included, the SLLs maintain an advantage over the LLLs, but when they are omitted the trend changes, and the SLLs are shown to use proportionally fewer L₂-based strategies than the LLLs.
Figure 29. SLLs and LLLs: Strategy use by category at Time 1 without retrieval strategies.
Strategies

- Topic Avoidance
- Message Abandonment
- Code Switch
- Literal Translation
- Foreignization
- Generalization
- Approximation
- Circumlocution
- Paraphrase
- Word Coinage
- Restructuring
- Egocentric Strategy
- Sound Imitation
- Direct Appeal
- Indirect Appeal

Figure 30. SLLs and LLLs: Strategy use at Time 1 without retrieval strategies.
Figure 31. SLLs and LLLs: Strategy use by category at Time 2 without retrieval strategies.
Figure 32. SLLs and LLLs: Strategy use at Time 2 without retrieval strategies.
Figure 33. Strategy use by category by SLLs at Time 1 and LLLs at Time 2 without retrieval strategies.
For the LLLs, at least, a higher proportion of qualitatively superior strategies are used at Time 2 than at Time 1, assuming that L₂-based strategies are indeed qualitatively superior to other CSs. The situation for the SLLs is not quite as clear, but it is obvious that even if the same direction of change exists from Time 1 to Time 2, the degree of change is minimal.

The LLLs, then, evidence a positive change in the quality of their CSs from Time 1 to Time 2, increasing their use of L₂-based strategies quite dramatically. The SLLs, on the other hand, while showing a higher use of L₂-based strategies then the LLLs at Time 1 and at Time 2, do not evidence much of a change over time.

Further investigation of the surface realization of strategies shows that the strategies used by the SLLs on any one particular task are not necessarily superior to those used by the LLLs. On the contrary, it seems that often no differences exist between the two groups and that there are even occasions when the LLLs produce superior realizations of certain strategies. The following examples, taken from the taped narratives (Appendix D), serve to illustrate this point.

<table>
<thead>
<tr>
<th>Subject</th>
<th>Time 1</th>
<th>Time 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>46 (LLL)</td>
<td>le feu est parti</td>
<td>Ils ont (-----) mis de l'eau sur le feu</td>
</tr>
<tr>
<td>45 (SLL)</td>
<td>Les pompiers étaient arrivés et ils a:</td>
<td>les personnes (-) qui a venu pour</td>
</tr>
<tr>
<td></td>
<td>all(-) Qu'est-ce que c'est? All le contraire d'alluer d'allumer? Il a:(-) faire: (--) mettre le feu pas là</td>
<td>l'incendie a pris cinq minutes. Puis ils ont le feu s'est arrêté</td>
</tr>
</tbody>
</table>

Table H20 provides a number of examples which further illustrate this finding.

An evaluation of the surface realization of CSs does not reveal any clear differences between the SLLs' and LLLs' use of strategies at either Time. In the examples given, it is clear that the SLLs do not often
produce superior realizations of the strategies used. The realizations of the various CSs of the LLLs are at times superior to those of the SLLs in terms of informative value and grammatical accuracy. In other cases, it is difficult to differentiate between the quality of the surface realizations of CSs of the two groups of subjects in terms of effectiveness. Qualitative differences between Time 1 and Time 2 strategies are also not clear. While there are certain differences between Time 1 and Time 2 realizations of strategies (as shown in Table H20), it is difficult to state that the Time 2 realizations are superior in terms of either informative value or grammatical accuracy. In fact, it might even be possible to argue that the Time 1 strategies are, in some cases, superior to the Time 2 strategies.

The quantitative and qualitative analyses described above enable the researcher to arrive at certain generalizations with respect to the research questions contained in Chapter 1. These findings will be described in Chapter 5.
CHAPTER FIVE

SUMMARY, DISCUSSION OF RESULTS, CONCLUSIONS, IMPLICATIONS AND RECOMMENDATIONS

This chapter will deal with five aspects of the present study. Firstly, it will provide a summary of the study, including the problem, the methodology and the results. Secondly, results are discussed in light of the professional literature. Thirdly, this chapter will include a discussion of the conclusions regarding the changes in CS use over time for both successful and less-successful young L2 learners. Fourthly, a number of implications for the EFI classroom are suggested and finally, recommendations are made for further research in the area of CS use of EFI students.

Summary of the Study

The change in emphasis in L2 methodology has seen communicative competence gain prominence as a major goal of L2 teaching. Strategic competence, one of four underlying competencies of communicative competence, is viewed as the way in which L2 learners solve communication problems in their developing IL. Studies of CS use with adolescent and adult L2 learners have provided some basis for the hypothesis that CS use is dynamic and variable. This particular study investigates the CS use of child L2 learners, learning French in an immersion situation, and addresses the question of changes in CS use over time.

For this study, eight students from a Grade Two French immersion class were chosen as subjects. Four of the subjects were considered to be successful L2 learners, and four were considered to be less-successful L2 learners. A speech sample was obtained for each of these eight subjects at the end of the Grade Two Year (Time 1) and again 36 months later, at the end of the Grade Five Year (Time 2).

The sixteen speech samples (oral narratives) were analyzed for CS use, using a typology of CSs developed by the researcher (see Figure 1)
and based on a number of existing typologies (Bialystok, 1983; Blum-Kulka & Levenston, 1983; Corder, 1978b, 1983; Faerch & Kasper, 1983b, 1984; Paribakht, 1982, 1985; Stevens, 1984; Tarone, 1977, 1980, 1983, 1984b; Varadi, 1983; and Willems, 1987; see Appendix F). Individual and group comparisons of CS use were made for Time 1 and Time 2, and patterns of change over time noted. The results of the analysis, as they pertain to the research questions which guided this study, indicate that while quantitative change takes place over developmental time for both groups of subjects, qualitative change is less evident.

**Question 1 (Q1)**

Does the percentage of use of particular communication strategies change over developmental time for successful and for less-successful young second language learners?

The results of the analyses related to Q1 revealed variability or instability in the use of CSs in that all but one subject used more CSs at Time 2 than at Time 1. As well, for all subjects the percentage of use of individual strategies changes from Time 1 to Time 2. At Time 1, both groups use an average of 8 different strategy types, while at Time 2 the SLLs use an average of 9.5 strategy types and the LLLs an average of 10.5 strategy types. Both groups show evidence of instability in the frequency of use of particular strategies from Time 1 to Time 2.

Both individual and group results show change over time in the use of specific strategies. In some cases the degree of change is quite small; however, in other cases a considerable degree of change is evidenced. The direction of the change, however, varies from strategy to strategy and from individual to individual. Some general trends are identifiable, though, with most subjects decreasing over time their total use of reduction strategies (topic avoidance and message abandonment), cooperative strategies (direct and indirect appeal) and retrieval strategies (pause, repetition, and retrieval via semantic field). Most subjects increase their use of L1-based strategies (code switch, literal
translation, and foreignizing) and L₂-based strategies (generalization, approximation, circumlocution, paraphrase, word coinage, restructuring and egocentric strategy). Use of the non-linguistic strategy of sound imitation increases for some subjects and decreases for others.

Some subjects decrease their use of certain strategies within a category, while increasing their use of other strategies within that same category. Overall, however, the pattern is for the strategies of avoidance, message abandonment, circumlocution, sound imitation, direct appeal, indirect appeal, pause and retrieval via semantic field to decrease in proportional usage. All other strategies tend to increase in proportional use from Time 1 to Time 2.

Patterns of change in CS use are very similar for the SLLs and LLLs. The direction of change in usage for particular strategies is usually the same; however, the percentage of change does differ considerably in several instances. Discrepancies between the two groups in the direction of change for CS use occurs for only six strategies: topic avoidance, approximation, circumlocution, sound imitation, indirect appeal and retrieval via semantic field. All other strategies show the same direction of change for the two groups.

In several cases, individual subjects use a particular CS the same amount at Time 1 and Time 2, but in general, the proportional use of particular CSs changes over time. Most subjects also use a wider variety of CSs at Time 2, dropping some CSs which were used at Time 1 and adding others. CSs added at Time 2 were almost always L₁-based or L₂-based strategies, while the CSs dropped were most often reduction strategies.

Question 2 (Q2)

Does the overall pattern of communication strategy use change over developmental time for successful and for less successful young second language learners? If so, how?

The results of the analyses related to Q2 indicate that the pattern of use of categories and subcategories of CSs, changes dramatically for
most subjects from Time 1 to Time 2. The greatest changes, however, are
evidenced in the CS use of the LLLs, both individually and as a group. In
the SLL group, individual changes are minimal for one subject (Subject
45), and group patterns of change are less dramatic than in the other
group.

The SLLs show a decrease in use of reduction strategies, cooperative
strategies, non-linguistic and retrieval strategies, but an increase in
the use of L₁-based and L₂-based strategies. The most dramatic changes
occur in the SLLs use of L₁-based strategies which increases from 9.5% to
21.2% and in their use of retrieval strategies which decreases from 40.2%
to 30.2%. The LLLs show dramatic change in their use of reduction, L₁-
based, L₂-based and retrieval strategies and minor change in the use of
cooperative and non-linguistic strategies. Use of L₁-based strategies
increases from 6.3% to 13.7%, while L₂-based strategy use increases from
14.1% to 36.2%. Reduction strategy uses decreases from 9.2% to 0.9%,
while retrieval strategy use drops from 69% to 46.9%.

The overall pattern of CS use, then, changes for both groups over
developmental time, but for the LLLs this change is more pervasive and
more dramatic than for the SLLs. These changes indicate that all subjects
use more achievement strategies and fewer reduction strategies as they
progress through the grades. They also use fewer retrieval strategies at
Time 2, a function, possibly, of increased proficiency, larger L₂-based
lexicon, and greater ease and fluency of expression. Their use of
linguistic compensatory strategies also increases over time; however, the
pattern of change appears to be different for the two groups of subjects.

The LLLs increase their use of both L₁-based and L₂-based strategies
quite dramatically, a change which holds even when retrieval strategies
are omitted from the analysis. The SLLs, on the other hand, show an
extensive increase in L₁-based strategy use and a minimal increase in L₂-
based strategy use.

The pattern of CS use of the LLLs at Time 2 is similar to the
pattern exhibited by the SLLs at Time 1. The main differences lie in the proportional use of L₁-based and retrieval strategies, both of which are higher for the LLLs, and in the slightly lower percentage of use of L₂-based strategies by the LLLs.

If one considers only the use of reduction and compensatory achievement strategies, (i.e., if retrieval strategy use is omitted from the analysis) a somewhat different pattern of change emerges, and reveals the CS use of both groups to be similar at Time 2. Both groups evidence a decrease in use of reduction strategies and an increase in use of L₁-based and L₂-based strategies from Time 1 to Time 2, but while the LLLs increase their use of L₂-based strategies considerably, the SLLs show slight decrease. The only noteworthy difference in the Time 2 patterns is in frequency of use of L₁-based strategies which is higher for the SLLs.

For the LLLs, change in CS use is in the direction of the target language, as is evidenced by their increased use of L₂-based strategies. While their use of L₁-based strategies also increases, the change is not dramatic. For the SLLs, though, change does not appear to be so much in the direction of the target language as towards the first language, as evidenced by the large increase in L₁-based strategies and the minor increase in the use of L₂-based strategies (seen as a decrease when retrieval strategies are omitted from the analysis).

Question 3 (Q3)

Does the quality of communication strategy use change over developmental time for successful and for less successful young second language learners?

The results of the analyses related to Q3 do not indicate any clear differences in the quality of the surface realization of strategies used at Time 1 and Time 2 by the two groups of learners, but they do indicate that both groups use more of the CSs considered to be qualitatively superior (L₂-based strategies) at Time 2 than at Time 1. Overall, fewer reduction strategies and more achievement strategies are used at Time 2 by both groups.

The results of analyses of individual patterns of CS use indicate that
all the LLLs increase their use of \( L_2 \)-based strategies considerably at Time 2. Two of the four SLLs, however, show a decrease in their use of \( L_2 \)-based strategies. Interestingly, the two SLLs who reduce their use of \( L_2 \)-based strategies, increase their proportional use of \( L_1 \)-based strategies, while one of the SLLs who increases her use of \( L_2 \)-based strategies decreases her use of \( L_1 \)-based strategies at Time 2.

**Discussion of Strategy Use by Category**

In this section, the results of the study concerning the use of the five categories of CSs by the subjects in this study are discussed in light of the professional literature.

**Reduction Strategies**

In the Time 1 narrations, use of reduction strategies, by the LLLs is more extensive than that of the SLLs. At Time 2, the SLLs do not use reduction strategies and use by the LLLs is minimal. As well, there is a higher proportional use of reduction strategies by the LLLs on each task. The total use (Time 1 and Time 2 usage combined) of reduction strategies is also proportionally higher for the LLLs.

The pattern of reduction strategy use appears to possibly correspond with findings of other researchers in this regard. Tarone (1977), for example, notes greater use of reduction strategies by the less proficient students than by the more proficient students. Ellis (1983) notes a higher incidence of reduction strategies used by one learner at the early stages of language learning than at later stages. These studies suggest that strategy use is related to proficiency, with less proficient learners tending to use relatively higher numbers of reduction strategies.

**\( L_1 \)-based Strategies**

As mentioned earlier, all SLLs and LLLs use \( L_1 \)-based strategies in both narration tasks, although differences exist in the specific \( L_1 \)-based strategies used, as well as in the frequencies of use.

Much of the literature indicates that less proficient learners make
greater use of L₁-based strategies than of L₂-based strategies (e.g. Bialystok, 1983; Faerch et al., 1984), decreasing their use of L₁-based strategies as their L₂ proficiency increases. One might reasonably assume that the subjects of this study would have greater proficiency at Time 2 than at Time 1, after an additional three years of immersion education, where between 60% of their instruction (Grade 3) and 45% (Grade 5) was given in French. One might therefore reasonably expect their proportional use of L₁-based strategies to decrease from Time 1 to Time 2. The results of our analysis suggest that this is not the case for the subjects of this study.

When group results are considered, two interesting findings come to light:

1) both groups use considerably more L₁-based strategies at Time 2 than at Time 1; in fact, they more than double their proportional use at Time 2; and

2) the SLLs use proportionally more L₁-based strategies than do the LLLs at Time 1 and at Time 2, as well as on the total tabulation (combined Time 1 and Time 2 usage) of CS use.

These findings are somewhat unexpected, given the results of previous studies. If more proficient learners tend to use L₂-based strategies (Faerch, et al., 1984), one could speculate that the subjects for this study are less proficient in the L₂ in Grade 5 than in Grade 2. On the other hand, the fact that the literature on L₁-based strategy use and L₂ proficiency is limited to studies of adolescent or adult L₂ learners may help account for the discrepancy. The subjects of this study, because of their immersion experience, may also possibly be considered more proficient than the adult or adolescent subjects of other studies, also accounting for some of the discrepancy. One study of adults and adolescents (Bialystok, 1983) found that the relationship between proficiency and use of L₁-based strategies is somewhat ambiguous. Bialystok (1983) notes that although the adolescent learners in her study tended not to use L₁-based strategies, within the group, the best students were the ones who did use L₁-based strategies. Haastrup and
Phillipson (1983) note frequent use of L₁-based strategies by a group of 16-17 year olds with five years ESL learning experience, but as no longitudinal data is available, it is impossible to determine the direction of change in their CS use over developmental time. Because of its longitudinal dimension, this study may also be considered different from most other studies of CS use. The information provided by this study of two sets of oral language data is therefore not equatable with results of CS use at a single point in time.

The SLLs in this study make what could be considered extensive use of L₁-based strategies. An interesting finding from the examination of those narrations with particularly high frequency of use of L₁-based strategies concerns a possible relationship between L₁-based strategy use and retrieval strategy use. The three narrations (Subject 38, Time 1 and Time 2; Subject 40, Time 2) which evidence a high percentage of L₁-based strategy use show relatively low percentages of retrieval strategy use. In fact, the frequencies of retrieval strategy use in these three speech samples are the lowest of all samples. This finding would suggest that L₁-based strategy use is possibly related to fluency in discourse. The two subjects in question may have been so intent on narrating their stories that they used any language items (and any strategies) which would, in their opinion, communicate their ideas. They both appeared confident of their use of these L₁-based strategies and of their comprehensibility, incorporating them into their narrations with no hesitation whatsoever (see Appendix D and Appendix E).

Other subjects who used the L₁-based strategies of code switch or foreignization generally hesitated before doing so, or else gave some indication of their reluctance to use these strategies. In several cases, the use of these L₁-based strategies is either preceded or followed by a laugh, a possible indication that the speaker is not entirely satisfied with the language item used, but apparently hopes that it will communicate the intended message. This phenomenon occurs, for example, with the use of "des oeufs scramblés" (Subject 25, Time 2), which is followed by a laugh.
The strategy of literal translation generally does not cause hesitation or retrieval difficulty. In almost all cases it is used smoothly, inserted into the discourse as if it were totally acceptable language.

Occurrences of code-switch in the data are limited; of the five instances of code-switch; four were used for a single lexical item, while the fifth involved a full sentence (see Appendix E).

In four of the five cases, it seems that the strategy of code-switch is used when the appropriate French-language vocabulary is not immediately accessible, thus corresponding with the findings of Grosjean (1982), Lindholm and Padilla (1977) and Stevens (1984). One case, however, would seem to belong to the "slip of the tongue or interference" category of Lattey (1981, cited in Baetens Beardsmore, 1982); Subject 38's use of "le reste de la life" is perhaps caused by such interference or inadequate screening, or is possibly due to a strong desire to communicate and/or the strong association of the English lexical item (cf Stevens, 1984).

The use of code-switch may be related, as indicated by much of the literature (Baetens Beardsmore, 1982; Beebe, 1977; Garcia, 1983), to the identity of the experimenter/researcher. All subjects of this study were aware that the experimenter/researcher is a bilingual anglophone, and those subjects who use code-switch may have considered that their use of this strategy would certainly lead to comprehension. Had the experimenter/researcher been a unilingual francophone, some of these subjects may have used alternate strategies to communicate their meaning or to indicate their difficulty.

All subjects use the strategy of literal translation in at least one speech sample; in fact, seven of the eight subjects use it in both samples. In all cases, a phrase is translated word for word from English, resulting in structures such as "elle était peur" and "Qu’est-ce que tu es ici pour?" (see Appendix E). An interesting observation is that the one subject who does not use this strategy at all at Time 1 (Subject 38) uses it extensively at Time 2. The application of this strategy results in constructions such as "dans la fin", "l’alarme est allé" and "tout le shampoo Timotei est parti"
The strategy of foreignization is used by only one subject at Time 1; however, it is used by five subjects at Time 2. At Time 1, the only incidence of foreignization is in the use of "garbage" (Subject 38); however, at Time 2 this strategy is used to produce language such as "le shampoo" (Subject 40), "quel ile [aisle] c'est dans" (Subject 30), and "les oeufs scramblés" (Subject 25). In all of these cases, not knowing, or being unable to find, the French lexical item likely leads to the use of the strategy. One incidence of the use of this strategy does not seem, however, to fit the pattern. In "ils sont supposés eater le lunch" (Subject 38, Time 2), it is perhaps more likely due to the "slip of the tongue or interference" phenomenon (Lattey, 1981, cited in Baetens Beardsmore, 1982) referred to earlier, or to the strong desire to communicate and/or the strong association of the English lexical item (Stevens, 1984).

**L₂-based Strategies**

A number of studies, including Bialystok (1983) and Haastrup and Phillipson (1983), have indicated that L₂-based strategies are the most effective strategies in terms of communicative value and that more advanced or proficient learners prefer L₂-based strategies (Bialystok, 1983; Ellis, 1983, cited in Ellis, 1986; Faerch et al., 1984; Tarone, 1977; Tarone, Frauenfelder & Selinker, 1976). The findings of this study are not completely inconsistent with this earlier research.

In each speech elicitation task, the SLLs of this study use a higher percentage of L₂-based strategies than do the LLLs. When both narration tasks are considered together, the SLLs are shown to use a greater number (and percentage) of L₂-based strategies: 172 (46.4%), as compared to 104 (28.3%) for the LLL group. For each group of subjects, changes over time are also evident: both groups use proportionally more L₂-based strategies at Time 2 than at Time 1. The SLLs increase their usage slightly from 44.4% at Time 1 to 47.4% at Time 2, while the LLLs increase their usage from 14.1% to 36.2%.
In the case of individual subjects, all those considered LLLs use proportionally more $L_2$-based strategies at Time 2 than at Time 1. Among the SLLs, however, this general pattern is not evidenced. Two of the SLLs also show a proportional increase in $L_2$-based strategy use from Time 1 to Time 2, but the other two subjects (Subjects 38 and 45) show a decrease in proportional use of these strategies. While for Subject 45 the decrease is rather small, Subject 38 shows a considerable reduction, decreasing from 56.3% at Time 1 to 44.4% at Time 2 (see Table H1).

This finding is also somewhat unexpected, given the results of other studies (Bialystok, 1983; Ellis, 1983, cited in Ellis, 1986; Faerch et al., 1984; Stevens, 1984; Tarone, 1977; Tarone, Frauenfelder & Selinker, 1976), which conclude that $L_2$ learners tend to use more $L_2$-based strategies as their proficiency increases. However, it must be pointed out that all but two of these studies were conducted with adolescent or adult learners who had less contact time with the $L_2$ than the French immersion students in this study, and, again, that no measure of real $L_2$ proficiency was used with the subjects of this study.

When the individual $L_2$-based strategies are considered, the findings again are rather unexpected. The LLLs show an increase from Time 1 to Time 2 in the use of every $L_2$-based strategy; the SLLs, however, show an increase in their proportional use of generalization, paraphrase, word coinage, restructuring and egocentric strategies, but a decrease in their proportional use of approximation and circumlocution.

Cooperative Strategies

The cooperative strategies of direct and indirect appeal are used by both groups of subjects in both narration tasks. Although the incidence of cooperative strategy use is quite small, certain trends appear. Direct appeal is used more than indirect appeal overall, as well as by each group. The incidence of cooperative strategy use is higher for the SLLs than for the LLLs at each time. Both groups tend to reduce their use of this category of strategy over time.
The low incidence of cooperative strategy use is very likely related to the task and setting. While the subjects were told not to consider the task a form of "test", it is quite possible that some of them did perceive it that way, given the fact that the experimenter/researcher was a teacher. If this indeed were the case, it is not entirely surprising that appeal is not used by many of the subjects. The audio-taping procedure may also have caused some nervousness and a hesitation to ask for assistance or to signal difficulty.

**Retrieval Strategies**

Two of the strategies in the retrieval strategy category, namely, pause and repetition, are used extensively on both narration tasks, while retrieval via semantic field is used minimally and retrieval via other languages is not used at all.

The LLLs use pause more extensively than the SLLs on both narration tasks; however, both groups evidence a reduction over time in the use of pause. For the SLLs, pause is the most frequently used strategy at Time 1, and second most frequently used strategy at Time 2, accounting for 21.0% of total CS use. For the LLLs, pause is the most frequently used strategy at Time 1 and at Time 2, accounting for 41.6% of CS use overall. When the length of unfilled pauses is considered (see Table H16), it is found that both for individuals within the groups, as well as for the groups themselves, the LLLs have longer pauses than do the SLLs. The mean length of the unfilled pauses for the LLL group is 10.6 seconds at Time 1 and 3.1 seconds at Time 2, while for the SLLs the Time 1 mean length is 2.5 seconds and the Time 2 mean length is 1.6 seconds.

This finding indicates that both groups not only decrease their proportional use of pause over time, they also decrease the mean length of the unfilled pauses. The most dramatic decreases in mean length of pauses are found in the narrations of the LLLs, whose collective mean length decreases by 70% over time.

Overall, then, the LLLs use double the proportional amount of pause
as the SLLs, while their use of repetition is approximately the same. Both groups decrease their proportional use of pause over time, while increasing their use of repetition.

When retrieval strategies are omitted from the analysis of group strategies, some interesting patterns surface. While differences exist at Time 1 between the two groups, the overall pattern of strategy use at Time 2 is very similar for both groups. The analysis by individual strategy reveals differences in strategy use, and indicates group inclination for use of certain strategies. The breakdown according to category or strategy type, however, is not dissimilar for both groups at Time 2. The SLLs use no reduction strategies at all, whereas the LLLs show minor use of reduction, but in other regards the two groups appear to be using similar types of strategies, and to similar degrees. The analysis also indicates that the patterns of CS use are not dissimilar for the SSLs at Time 1 and the LLLs at Time 2.

Conclusions

The results of this study indicate that the CS use of the subjects, both successful and less-successful language learners, is indeed transitional and dynamic, evidencing variability in the frequency of use of particular CSs and in the overall pattern of use of CSs over time. The transitional nature of CS use seems to be related to developmental time; however, the results of this study suggest that time may not be the only mediating variable.

It was expected that the subjects' strategy use would develop in the direction of the L₂. While group results indicate an increase in L₂-based strategy use from Time 1 to Time 2, individual results show that this increase occurred for all subjects considered LLLs, but for only two of the subjects considered SLLs.

Both groups show an increase in their proportional use of L₁-based strategies from Time 1 to Time 2. All four subjects considered LLLs use proportionally more L₁-based strategies at Time 2 than at Time 1, while three of the four subjects considered SLLs use more L₁-based strategies at Time 2. For the individual LLLs, this increase generally accompanies a decrease
in reduction and retrieval strategies and an increase in L₂-based strategies, but for the SLLs the pattern is not as clear.

At Time 1, the LLLs as a group rely most heavily on retrieval strategies, followed by L₂-based strategies. This pattern remains similar for the group at Time 2, but proportionally greater use is made of L₂-based strategies.

For the SLLs, the group results indicate heaviest reliance on L₂-based strategies at both Time 1 and Time 2.

Considerable use is made of three strategy categories (L₁-based, L₂-based and retrieval) by both groups of subjects at both Time 1 and Time 2. The groups differ from each other and from Time 1 to Time 2, however, on the percentage of use of the categories of strategies. Overall patterns in strategy use show that the SLLs use proportionally more L₁-based and L₂-based strategies in total than the LLLs, who, in turn, use proportionally more reduction and retrieval strategies than the SLLs.

The SLLs seem to exhibit greater ease and fluency of expression on both tasks than do the LLLs. They hesitate and pause less and repeat fewer syllables or words than the LLLs. They restructure more words and phrases than the LLLs, indicating a possible preference for correction rather than planning behaviour (cf Seliger, 1980).

The LLLs exhibit, both individually and as a group, a higher proportional use of retrieval strategies than the SLLs on both tasks. Their discourse is marked by a considerable amount of pause and hesitation and overall is less fluent than the discourse of the other group. They restructure less, as a group, than the SLLs, at both Time 1 and Time 2; two subjects, however, from the LLL group demonstrate extensive use of restructuring at Time 2, showing a proportion of use similar to that of the SLLs.

The SLLs, then, generally exhibit greater correction or restructuring tendencies than the LLLs, who show more planning behaviour. The difference between the two groups, though, is not as acute at Time 2, where two of the LLLs show a pattern similar to that of the SLLs.

Most of the subjects (five of eight) show an improvement in the fluency
of their discourse over time, seen as a decrease in their use of retrieval strategies. Three of the subjects, however, use approximately the same proportion of retrieval strategies at both Time 1 and Time 2. It is worth noting that two of these three subjects are considered SLLs.

The surface realizations of strategies used at Time 2 are not obviously superior to those used at Time 1, for either group, nor are the strategies used by the SLLs more effectively realized than those used by the LLLs.

While the limitations of the study limit the generalizability of results and the applicability of findings to students in other situations, there are several general conclusions that can be drawn from the results of this study. The first is that CS use in young L2 learners shows variability or instability over time. For the eight subjects studied, changes in frequency, choice and proportional use of CSs were evidenced from Time 1 to Time 2. Variability in CSs use, then, would appear to be a characteristic of the communicative competence of both successful and less-successful young L2 learners. The results, therefore, correspond to the researcher's hypothesis that the subjects' CS use would be transitional and dynamic, showing variability over time.

A second conclusion to be drawn from the results is that the CS use of young L2 learners shows individual variation in frequency, choice and proportion. While intragroup differences exist in CS use for the SLLs and the LLLs at Time 1 and Time 2 and in the patterns of change from Time 1 to Time 2, there are also intergroup differences. Some of the patterns found may possibly be related to proficiency in the L2.

For subjects participating in this study, a feature which tends to differentiate the successful and less-successful language learners is use of retrieval strategies. There would seem to be a positive relationship between success in L2 learning and fluency of discourse, measured through proportional use of retrieval strategies. The possible relationship between fluency and success in the L2 has been pointed out by Seliger (1977; 1980) who claims that the speech planning behaviour of L2 learners is related to
their degree of success in the L2 learning process. Learners who prefer careful planning, and who evidence a lot of silent and filled pauses, tend to be less active participants in the language learning environment and tend to experience less success in the L2 than the learners who prefer to use correction and repetition during the speech act.

The third conclusion which can be drawn from the results is that the quality of CSs used by the young L2 learners in this study is not necessarily positively related to length of exposure to the L2 or to success in L2 learning, and may, in fact, for some learners, be negatively related. While all subjects of the study use more L2-based strategies than L1-based strategies on each narration task, and while most subjects increase their proportional use of L2-based strategies from Time 1 to Time 2, most subjects also increase their proportional use of L1-based strategies at Time 2. An analysis of the surface realizations of the CSs used by the subjects of this study does not indicate qualitative differences between Time 1 and Time 2 for each group of subjects, nor between the two groups at any single time. Progress through the grades does not, for the subjects of this study, necessarily imply qualitative improvement over time, or superiority, in all aspects of CS use.

Insofar as the LLLs increase quite considerably their use of L2-based strategies at Time 2, they can be said to have shown improvement and moved toward the L2. The SLLs, however, seem to have reached a plateau or may even be regressing in their use of L2-based strategies at Time 2.

Classroom practices in EFI, where these young students have very limited access to native French speakers and where there is a fairly limited range of speech acts, may help to explain some of the results of this study. Several studies of EFI classroom processes (e.g. Harley, 1985; Harley et al., 1987; Netten & Spain, 1988; Swain, 1987) indicate that in general relatively few opportunities exist for sustained discourse by students and that most talk is teacher-initiated. As Swain (1987) points out, "opportunities to produce sustained output in the second language are crucial to the second language learning process" (p. 322). This type of opportunity may well be limited
for the subjects of this study, and feedback on communicative success somewhat rare.

As well, there is some indication that once EFI students reach the stage of proficiency where they can communicate their ideas, there may not be any significant motivation to communicate accurately or precisely. As Stevens (1984) hypotheses, some FI children expect to be understood no matter what they say or how they say it.

Implications for the French Immersion Classroom

The findings from this study of the CS use of young EFI students may have certain implications for educators in the field of immersion education. These implications may include the following:

1. EFI students at the primary and elementary levels are capable of using CSs to bridge the gap in communication. EFI teachers may need to make their students aware of the more effective CSs and provide opportunities for practice in their use, in an attempt to lead students toward greater communicative success.

2. Given that the SLLs in this study tended to increase their use of $L_1$-based strategies over time, some EFI students may need more intensive instruction and practice in using the more communicatively effective $L_2$-based strategies.

3. Given the possible relationship between use of retrieval strategies and success in $L_2$ communication, EFI students who show a preference for use of retrieval strategies may need special practice in using compensatory-type achievement strategies. These students may also benefit from opportunities to improve their fluency, including more extensive opportunities for engaging in negotiation of meaning, for active interaction, and for participating in role-playing and other interactive situations.

4. All EFI students may benefit from receiving feedback on their CS use from their teachers, their peers and from francophone contacts and visitors.
5. The introduction of a metacognitive element within the framework of CS training may benefit EFI students in the elementary grades, most particularly those who tend to use few CSs or few types of CSs.

6. Extensive opportunities for interaction and for "comprehensible output" within the classroom, through the use of grouping techniques, simulations, role-playing, the jig-saw technique and other means, may prove beneficial in the development of strategic competence in EFI students, and promote the use of CSs.

7. Increased opportunities for interaction with francophones may highlight the greater value of L₂-based CSs, especially for those students who tend to rely heavily on L₁-based CSs in their communication.

8. Familiarity with the research on CSs and their role in the development of communicative competence may better prepare EFI teachers to provide learning experiences for their students which will assist them in the achievement of oral proficiency in the L₂.

**Recommendations for Further Research**

While recent studies have investigated CS use by L₂ learners and have explored the role of strategic competence in the development of communicative competence in the L₂, the area of CSs requires further attention and investigation. The present study raises a number of questions which can only be answered through ongoing study. The following suggestions are therefore made for further research in the area of CS use:

1. Given the small data-base of this study, it is difficult to generalize the findings to other EFI students. The undertaking of further longitudinal case studies of CS use by EFI students would therefore seem necessary in an attempt to determine whether the results of this study would be replicated in other situations.

2. Large-scale longitudinal studies of CS use by EFI students would provide more generalizable results than case-studies of small numbers of students, and are therefore also deemed necessary.

3. Given the findings of other research on L₂ proficiency and CS use,
it would be useful for further studies of CS use by EFI students to include a formal measure of proficiency.

4. This study investigated CS use in oral narration tasks only. The study of CS use in a variety of tasks, in a variety of situations, including interactional discourse, and with a variety of interlocutors, including peers, teachers and francophones, is therefore recommended. Such studies would determine whether the patterns of CS use found in this study would hold in a variety of situations.

5. This study investigated the subjects’ L₂ performance only. Some researchers claim that certain aspects of a L₂ learner’s communicative competence can only be adequately interpreted in light of his L₁ communicative behaviour (e.g. Raupach, 1983). Comparison of L₁ discourse with L₂ discourse would allow greater insight into various aspects of a learner’s communicative behaviour and is therefore recommended.

6. Given the different trends in the pattern of change in CS use for the SLLs and the LLLs, a continuation of this study would seem to be desirable. It was noticed in this present study that the pattern of CS use by the LLLs at Time 2 was similar to that of the SLLs at Time 1. A continuation would be useful in tracking the developmental routes of successful and less-successful L₂ learners in the use of CSs.

7. In this present study, a number of qualities seemed to characterize the subjects who were considered to be successful language learners. Although no attempt was made to objectively measure these qualities, or to statistically correlate them, these qualities seemed to differentiate the SLLs from the LLLs. A study of the relationship between a variety of personal variables such as personality, risk-taking behaviour and interaction patterns and CS use would be useful in shedding light on individual variation in CS use.

8. The SLLs of this study were all considered to be high academic achievers, while the LLLs were all average or low academic achievers. An investigation of the relationship between cognitive ability, academic
achievement and CS use would provide valuable information for EFI educators, as well as for researchers in the field of CSs.

9. The present study did not investigate the level of metacognition of the subjects in their CS use. Given the hypothesized relationship between metacognition and effective strategy use and L₂ success, a study which investigated metacognitive awareness and CS use in young L₂ learners is recommended.

10. This study raises a number of questions related to L₂ proficiency and developmental time. An investigation of the relationship between proficiency and length of exposure to French for EFI students would therefore be very useful for researchers and for EFI educators.


Dickerson, L.J. (1975). The learner’s interlanguage as a system of variable rules. TESOL Quarterly, 9(2), 401-408.


Appendix A

Correspondence Between Researcher and School Board
Dear Mr. Kelland:

I am presently working towards a Master's Degree in Education in the field of Curriculum and Instruction. My main area of study has been French as a Second Language and French Immersion.

While I am not currently employed as a teacher with the Avalon Consolidated School Board, I had the honour of teaching in the French Immersion program at Vanier Elementary School from 1983-1987.

While teaching Grade II French Immersion at Vanier Elementary, I had the opportunity to examine and study the use of communication strategies by my students. For my Master's thesis, I propose doing a study of the development of these communication strategies over time.

The data for this proposed study would be in the form of taped oral interviews. The students I am interested in interviewing are the Grade V French Immersion class of Vanier Elementary School, students of Ms. Joan Dohey-Spencer. I would like to request your permission to undertake the interviewing of these students for my study.

For this study, the oral language data would be elicited using two 28cm X 43cm colour pictures. Each child, however, would be shown only one of the two pictures. For your information, I have enclosed black and white reproductions of the two pictures I propose using in this oral interview exercise.

Each interview would be approximately five minutes in length. Students would not be identified on the tape of their interview, nor in the study itself. Complete confidentiality regarding students' identities and interview results would be guaranteed.
While I propose interviewing all students in the class, my study would focus on the communication strategy use of six students only. These students would not be identified in advance and would be interviewed in exactly the same manner as their classmates.

I have already discussed this proposed study with Mr. Reg Tilley, Assistant Superintendent, and with Mr. Ches Warren, Principal of Vanier Elementary School. Mr. Warren has no objection to my interviewing the Grade V students, as long as confidentiality is respected.

In consultation with Mr. Warren, the enclosed memo to parents was drafted. This memo would not be sent to parents until such time as my request concerning the collection of this oral language data has been approved by the School Board. The specific dates of the interviews would be determined in consultation with the classroom teacher, Ms. Joan Dohey-Spencer.

Your consideration of my request for permission to hold these interviews is greatly appreciated. If you would like further information on my proposed study, please do not hesitate to contact me at 576-5137 (office).

Yours sincerely,

Marie-Louise Greene
Education Consultant
French Immersion Programs
Department of Education

MLG/os
Encl.

c.c. Mr. Reg Tilley
Assistant Superintendent

Mr. Ches Warren
Principal
Vanier Elementary School
April 20, 1989

Ms. Marie-Louise Greene
P.O. Box 13461
Station 'A'
St. John's, NF.
A1B 4B8

Dear Ms. Greene:

I wish to reply to your letter to Mr. N. Kelland dated April 17, 1989. In your letter you request permission to interview pupils in the Grade V French Immersion class at Vanier Elementary School in order to study the use of communication strategies over time.

I am pleased to see that you have enclosed a parental information form to be sent to parents of the pupils to be involved in the study. You further state that confidentiality regarding students' identities and interview results would be guaranteed.

I have spoken to Mr. Ches Warren, principal, Vanier Elementary School and he is willing to have his pupils participate in the study under the conditions outlined in your letter.

Would you please contact Mr. Warren to make the necessary arrangements.

We would appreciate receiving a copy of your findings once the study is completed.

Yours truly,

H.R. Tilley,
Assistant Superintendent.

HRT/rt

c.c. Mr. Ches Warren
Appendix B

Oral Assessment Procedures from Greene and Marrie (1986)
ORAL EVALUATION PROCEDURE

Upon completion of the oral data collection, the evaluation began. The researchers independently rated the oral narratives (which are on audio-cassette) using the Oral Testing Criteria as follows:

The audio recording for each of the fifty-two subjects was played through a minimum of three times.

Items numbered 1-9 were rated on the first play through, and points assigned in accordance with the Oral Rating Process.

Item numbered 11 was rated on the second play through. A verb tally was kept as the audio-cassette was playing and the appropriate point assigned.

Item numbered 12 was rated on the third play through, a pronoun tally was kept as the audio-cassette was playing and the appropriate point assigned.

Item numbered 10, student prompts, was noted during the oral assessment.... A point for this item was assigned in accordance with the Oral Rating Process.

Item numbered 13 was assigned a point in accordance with the Oral Rating Process.

The researchers' individual ratings were then compared in accordance with the Oral Rating Process. A rating for each subject was thus obtained.
ORAL TESTING CRITERIA

1. Student produces a cohesive story, based on the given picture, which follows a logical sequence.
2. Student provides background information.
3. Student uses sentences which contain non-essential information (information other than noun-verb-complement).
4. Student uses sentences which contain correct use of noun-verb-complement.
5. Student uses varied vocabulary.
6. Student uses vocabulary specific to meaning.
7. Student speaks with expression.
8. Student uses correct pronunciation.
9. Student has good intonation.
10. Student does not require prompts.
11. Student correctly uses appropriate verb tenses.
12. Student uses correct forms of demonstrative, possessive and personal pronouns.
13. Length of student's discourse.
ORAL RATING PROCESS

The thirteen Oral Testing Criteria were rated in this manner.

Items numbered 1-9 were rated on each researcher’s observations. The scale used is as follows:

<table>
<thead>
<tr>
<th>POINTS</th>
<th>RATING</th>
</tr>
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<tbody>
<tr>
<td>5</td>
<td>Excellent</td>
</tr>
<tr>
<td>4</td>
<td>Very Good</td>
</tr>
<tr>
<td>3</td>
<td>Good</td>
</tr>
<tr>
<td>2</td>
<td>Fair</td>
</tr>
<tr>
<td>1</td>
<td>Poor</td>
</tr>
<tr>
<td>0</td>
<td>Non-applicable</td>
</tr>
</tbody>
</table>

Item numbered 10 was rated as follows:

<table>
<thead>
<tr>
<th>POINTS</th>
<th>NUMBER OF PROMPTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td>3.5</td>
<td>1</td>
</tr>
<tr>
<td>1.5</td>
<td>2</td>
</tr>
<tr>
<td>0</td>
<td>3</td>
</tr>
</tbody>
</table>

Items numbered 11 and 12 were rated by each researcher, using this percentage scale:

<table>
<thead>
<tr>
<th>POINTS</th>
<th>PERCENTAGE OF CORRECT USAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>75-100</td>
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<tr>
<td>4</td>
<td>65-74</td>
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<tr>
<td>3</td>
<td>50-64</td>
</tr>
<tr>
<td>2</td>
<td>33-49</td>
</tr>
<tr>
<td>1</td>
<td>25-32</td>
</tr>
<tr>
<td>0</td>
<td>0-24</td>
</tr>
</tbody>
</table>

Item numbered 13 was rated as follows:

<table>
<thead>
<tr>
<th>POINTS</th>
<th>LENGTH OF DISCOURSE (in seconds)</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>3.5 +</td>
</tr>
<tr>
<td>4</td>
<td>1.5 - 3.4</td>
</tr>
<tr>
<td>3</td>
<td>1.0 - 1.4</td>
</tr>
<tr>
<td>2</td>
<td>0.0 - 0.9</td>
</tr>
</tbody>
</table>

N.B. Maximum length of discourse is five minutes.

The researcher’s individual ratings were then compared. Where there was a discrepancy between the ratings, the median of the two ratings was assigned. Where there was a discrepancy of more than two points between the ratings, the criterion item in question was reviewed and a rating accordingly assigned.

Note: From Oral proficiency as a prediction of written proficiency at the primary level of a French immersion program (pp. 13-15) by M.L. Greene and B.L. Marrie, 1986, Unpublished paper. St. John’s: Memorial University of Newfoundland.
Appendix C

Reproductions of Pictures Used in Speech Elicitation Tasks
Reproduction of 26.5 cm x 43.5 cm colour picture used in Time 1 speech elicitation task.
Reproduction of 26.5 cm x 43.5 cm colour picture used in Time 1 speech elicitation task.
Reproduction of 26.5 cm x 43.5 cm colour picture used in Time 2 speech elicitation task.
Reproduction of 26.5 cm x 43.5 cm colour picture used in Time 2 speech elicitation task.
Appendix D

Audio Tape of Oral Narratives: Time 1 and Time 2
Appendix E

Transcripts of Oral Narratives,

Showing Classification of Communication Strategies
and Length of Pauses
## Transcripts of Oral Narratives: Key to Symbols

### Strategies

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Strategy</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Approximation</td>
</tr>
<tr>
<td>C</td>
<td>Circumlocution</td>
</tr>
<tr>
<td>Cs</td>
<td>Code Switch</td>
</tr>
<tr>
<td>D</td>
<td>Direct Appeal</td>
</tr>
<tr>
<td>E</td>
<td>Egocentric Strategy</td>
</tr>
<tr>
<td>F</td>
<td>Foreignization</td>
</tr>
<tr>
<td>G</td>
<td>Generalization</td>
</tr>
<tr>
<td>I</td>
<td>Indirect Appeal</td>
</tr>
<tr>
<td>L</td>
<td>Literal Translation</td>
</tr>
<tr>
<td>M</td>
<td>Message Abandonment</td>
</tr>
<tr>
<td>P</td>
<td>Pause</td>
</tr>
<tr>
<td>Pp</td>
<td>Paraphrase</td>
</tr>
<tr>
<td>R</td>
<td>Repetition</td>
</tr>
<tr>
<td>Rs</td>
<td>Restructuring</td>
</tr>
<tr>
<td>Rol</td>
<td>Retrieval via Other Languages</td>
</tr>
<tr>
<td>Rsf</td>
<td>Retrieval via Semantic Field</td>
</tr>
<tr>
<td>S</td>
<td>Sound Imitation</td>
</tr>
<tr>
<td>T</td>
<td>Topic Avoidance</td>
</tr>
<tr>
<td>W</td>
<td>Word Coinage</td>
</tr>
</tbody>
</table>

### Pauses

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>(-)</td>
<td>Unfilled pause 1.0 - 1.9 seconds</td>
</tr>
<tr>
<td>(--)</td>
<td>Unfilled pause 2.0 - 2.9 seconds</td>
</tr>
<tr>
<td>(----)</td>
<td>Unfilled pause 3.0 - 3.9 seconds</td>
</tr>
<tr>
<td>(-----)</td>
<td>Unfilled pause 4.0 - 4.9 seconds</td>
</tr>
<tr>
<td>(uh) (umm) :</td>
<td>Filled pauses</td>
</tr>
<tr>
<td></td>
<td>Prolongations or lengthening of syllables</td>
</tr>
</tbody>
</table>

**Note:** Numbers above unfilled pauses indicate the length (in seconds) of the pauses.
Il était une fois deux petites filles qui est à l'école. Les deux petites filles ont vu un feu dans un garbage. Ils ont dit à leur principal de leur école. Il a appelé les pompiers. Les pompiers ont venu et dit "Un feu dans un garbage? Comment est-ce que c’est passé?" Et les deux petites filles ont dit qu’ils ont vu un monsieur mettre un petit peu de bois et c’était allumé.

Mais les deux petites filles ont couru derrière les pompiers parce qu’ils n’aimaient pas être à côté du feu. Les pompiers l’ont défait le feu et tout était très bon.
Transcript of Oral Narrative

Subject 38, Time 2 (Grade 5)

Il y avait un feu et il y a deux filles qui courent dans le couloir et un fille tire le l'alarme de feu et ils courent dehors et tous les enfants sortent maintenant dans les couloirs qu'ils sont supposés manger le lunch. C'est l'heure de lunch alors ils ont juste fini de manger. Et quand ils sont dehors ils vont attendre et les (umm) camions de feu vont venir et tout va être nuit mais quand c'est fini les enfants vont pas être à l'école pour trois semaines parce que (laugh) le feu a détruit beaucoup de choses et les livres dans l'école. Et les profs vont être heureux parce qu'ils ont des jours pour préparer les (umm) tests et les examens et tout. Et dans la fin ils vont avoir l'école.

E Et qu'est-ce qui arrivera ensuite?

Ca va toute être bonne pour la reste de la life. Je pense. J'espère. (laugh)

E Est-ce que tu peux me raconter un peu plus?
Il était une foi une petite fille et une maman. Le petite fille s'appelle Lori-Beth et la maman s'appelle (uh) Suzanna. Et Lori et Suzanna demande à Lori-Beth "Est-ce que tu peux aller à l'épicerie et chercher moi (ummm) (euh) un paquet de tomates et de jus. Et: la petite fille est allée au l'épicerie et il achète elle achète des pommes mais: quand elle va de acheter de jus, elle a: elle est frappé le jus avec Avec (ummm) Qu'est-ce que c'est? (ummm) avec la tête. Et le petite fille a dit "Oh, non! Qu'est-ce que je peux faire?" Et il pense, elle pense et pense et elle pense et pense et pense. Et elle dit "Ah! je vais chercher un autre paquet." Et elle cherche un autre paquet et il va à la maison et elle dit à la à sa maman (ummm) "Maman, j'ai tom (euh) j'ai: (um) j'ai acheté les pommes et les jus mais quand j'ai allé de acheter les jus, j'ai (ummm) (ummm) Oh.
(Umm) OK. (umm) Peut-être qu'avant il qu'avant qu'il y avait un feu, quelqu'un avait un cigarette. Un des profs était dans la salle des profs et ils ont allumé un cigarette et c'est brûlé toute l'école. Et n'ons ne sont pas supposés alors M. Warren les ont dit qu'ils ne pouvaient pas travailler ici.

(laugh)

E Alors, qu'est-ce qui est arrivé ensuite?

1.56 Ils étaient (·) comment dit? (umm) ils ne pouvaient pas travailler là alors il y avait un autre prof et tous les enfants l'adoraient. Et c'était Mme Greene.

Et elle a revenue parce qu'elle voulait travailler avec les Grade 5.
qu'est-ce que c'est? (mmm) (----) (umm) j'ai frappé avec mon tête" et

(jmm) la maman dit "Oh! C'est pas; c'est dommage, dit la maman.

Je pense que tu ne dois pas aller dehors (laugh) aujourd'hui." Et la petite fille

"Oh, non! Hmmm!" (Umm) Et: la fin!
Il était une fois une petite fille que sss qui s'appelle Jojo et elle était allée à du magasin pour acheter de shampoo (umm) Timotei. Alors i: (uh) elle (uh) demande à le monsieur "Où est le shampoo?" et il dit (uh) "Excuse-moi ice le tout le shampoo Timotei est parti mais il y a du Finesse là-bas (laugh) alors si tu veux prendre le Finesse, c'est tout ce qu'on a. C'est juste deux dollars et trente-neuf cents." "Alors. Ok. Je pense que je vais (uh) acheter le Finesse. Alors. Ok. Co combien ça coute encore?" "Oui. C'est deux dollars trente neuf." "Merci. Ok." E elle va au (um um um) 2...24 E Explique comme tu peux.

chose (laugh) oui? (um) et il (um) elle do elle a donné la elle a payé pour le shampoo et puis il a elle a allée à la maison et puis son petite son petit frère (umm) (ah) 2...00 son petit frère (uh) Mathieu a ouvrir le shampoo Finesse
et mis tout dans le (umm) bouteille en plastique et c’était et le mais le bouteille en plastique avait un trou là-dedans alors tout le shampoo est allé sur le plancher. Alors Jojo ne savait pas qu’est-ce qui arrivait. Quand elle est allée pour laver ses cheveux il n’y avait pas de shampoo. Et (laugh) près après elle elle est allée avoir une autre shampoo de Finesse et puis il n’y avait pas de Timotei ou Finesse alors elle est allée à la maison et l’a lavé avec Ivory. La fin.
Transcript of Oral Narrative

Subject 45, Time 1 (Grade 2)

Il était une fois deux petites filles étaient à la maison et sa mère était au épicerie. Les enfants étaient joué avaient joué dans la chambre. Ils (-) un petite fille: allait est allée au la cuisine pour avoir quelque chose à manger.

1.53

Elle a (-) fait un (-) pe petit feu avec un: chandelle qui était: (-) là. Et il a fait un grand feu après et les deux enfants étaient: restés à la maison mais ils ne peut pas aller dehors parce que le porte était fermée. Mais quand ils ils allaient au la chambre et ils descendent de la fenêtre parce que il y avait un échelle. Après il a allé à la (-) une autre personne pour utiliser le téléphone pour téléphoner les pompiers. Les pompiers étaient arrivés et ils a: all (-)

Qu'est-ce que c'est? all: le contraire d'alluer d'allumer?

E Je ne peux pas te dire.

Il a: (-) faire: (-) mettre le feu pas là et; et il était bon maintenant. Et
quand la maman était arrivée, le pompier était là et elle a dit "Qu'est-ce que tu es ici pour?" Et le pompier a dit que il y avait un feu dans la cuisine et la maman a regardé une des petites filles et elle a dit "C'était un accident!"

(laugh) Et enfin, il n'y avait pas: de: problème.
Transcript of Oral Narrative

Subject 45, Time 2 (Grade 5)

Moi et Karen était dans la classe pour le français et puis l'al l'al l'alarme de feu est allé. On est allé dans le couloir et on a vu que il y avait un feu dans le gymnase alors on devait devait aller dans l'autre porte. Alors on doit devait courir jusqu'à l'autre porte mais c'était fermée. On devait devait aller à la première étage et ça c'était à ce l'autre côté de la (·) de l'école. On on était là finalement et on est couru dehors et on était on est allé avec notre classe. On a vu que les (-) les personnes (-) qui a venu pour: l'incendie a pris cinq minutes. Puis ils ont le feu s'est arrêté; et on pouvait p pouvait aller dedans. Le feu a des de destruct (umm) tout le gymnase et cinq cinq autres classes. Mais ça n'a point pas ça n'a pas destruct beaucoup de choses dans l'école alors on les personnes qui étaient dans ces classes qui étaient brûlées devaient aller dans les autres classes et s'asseoir
avec dans les différents bureaux. Puis dans quelques semaines les classes étaient plus bons et les personnes pouvaient aller dedans. Et ça c'était l’incendie qui était dans notre école.

**E** Est-ce qu’il y a d’autres choses qui se sont arrivées?

Quand moi et Karen étaient dans le couloir: (um) (um) on devait tirer le l’alarme parce que le alarme qui était allé c’était juste pour une côté de: le de l’école.

**E** Et qu’est-qui est arrivé ensuite?

Puis on est allé à: à les autres classes pour voir si tout le monde est parti et nous sommes allés à la porte de sortie.

**E**
Transcript of Oral Narrative

Subject 47, Time 1 (Grade 2)

Un jour Lucie va à l’épicerie pour sa maman. Elle doit acheter des de laitue, des framboises et des fraises et de viande. Elle a entré et elle a vu beaucoup, beaucoup de légumes et beaucoup de choses comme ça. Et elle a acheté toutes ses choses et elle a allée à la maison. Mais elle a oublié d’acheter des fraises et sa sa maman a dit qu’elle doit aller encore au l’épicerie acheter des fraises. Elle a allé au l’épicerie encore et elle a pris les fraises mais les fraises ont tombé. Elle a dit "Oops!" et elle ne savait pas quoi faire. Elle a dit elle a dit au (mmm) directeur de l’épicerie et le directeur a dit que ça va. Et elle a pris une autre bouteille de fraises et acheté et amené à la maison.

Cette soir-là, elle a pensé comment elle a tom (umm) laissé les fraises tomber. Et elle ne savait pas. \(2^{--}6^{0}\) Le lendemain elle est allée au l’ep au épicerie encore et acheté d’autres fraises pour voir si elle (uh) elle va (umm) laisser les fraises tomber. Mais elle n’a pas. \(4^{--}8^{7}\) (Mmm) Je ne sais pas.
Transcript of Oral Narrative

Subject 47, Time 2 (Grade 5)

Un jour Billy était à l'école pour être avec (uh) ses amis. C'était l'heure du récréation et il était très excité parce que la prof a dit qu'il y a qu'elle avait une surprise pour pour toute la classe. Quand la cloche a sonné, la prof a revenu dans la classe et a dit à toute la classe que il y aura des amis du St. Pierre qui va venir. Billy était si excité qu'il a sauté et crié pour pour crié du joie. La prof avait une liste avec des noms de toutes les personnes qui aura des (1, 1) qui (laugh) toutes les personnes (1, 49) du St. Pierre. Et Billy a choisi un gars qui (-) qui s'appelait Michael. Michael il y avait une photo de Michael et il était petit avec des cheveux bruns et des lunettes. Cette jour-là aussi toute la classe a écrit des lettres à leurs amis et dans quelques semaines ils ont déjà reçu des autres. (Uh) (laugh) Finalement le temps a a arrivé. Un autobus un autobus jaune a: a: (uh oh)
E Explique comme tu peux.

a arrivé devant la l'école avec quarante filles et garçons du du St. Pierre. Billy a couru dehors pour regarder s'il pouvait trouver Michael mais il il n'était pas là. Alors il a demandé au prof où où il était mais elle ne savait pas. Après une heure une autre autobus est arrivé avec presque cinq autres personnes du St. Pierre. Et voilà! Michael était dans cet autobus. Après l'école, Billy et Michael ont marché à la maison et pour voir pour que Michael pourrait voir les parents de Billy de Billy. Ils quand ils sont arrivés c'était presque l'heure du souper mais pour le souper il y avait le spaghetti. Mais Michael ne l'aimait pas. Alors la mère de Billy a dit "Qu'est mais qu'est-ce que tu aimes?" Il il a dit "Tout ce que j'aime, c'est les sandwiches avec le beurre d'arachides et le confiture du des bananes, pêches, (uh) fraises et bleuets."

Elle était très surpris parce qu'elle ne n'est jamais entendu de ça. Alors elle a virement conduit l'auto au supermarché pour essayer de trouver cette sorte
de confiture. Finalement elle est arrivé à Sobeys pour aller regarder mais elle a elle ne pouvait pas trouver. Elle a demandé à un monsieur mais il a dit "Tout ce qu'on a c'est le: le confiture de pommes et (uh) des raisins." Alors elle a dit "Merci, mais je vais regarder quelque part d'autre." Quand elle était là elle a pris quelque pain et du beurre d'arachides et puis elle est allée à un autre magasin. Quand elle est arrivée elle a demandé si il a si cette magasin avait des de confiture avec toutes ces choses là-dedans. Il n'en avait pas mais ce qu'elle a trouvé était sur un: dans un placard il y avait une bouteille de confiture de bananes, un de confiture de bleuets, un de confiture de fraises et (uhhh) et un de confiture de pêches. Alors elle est elle a tous acheté et puis allée à la maison, mélange ensemble et Michael avait un sandwich. La fin.
KEY TO SYMBOLS

PAUSES:

(-)  0.0 - 1.9 sec
(--)  2.0 - 2.9 sec
(---)  3.0 - 3.9 sec
(----) 4.0 - 4.9 sec
(-----) 5.0 sec and longer

(uh) (umm) Filled pauses

Prolongations or lengthening of syllables
Transcript of Oral Narrative

Subject 25, Time 1 (Grade 2)

Il était une fois une fille qui est allée au pâtisserie. Il a cassé une bouteille de fraises. Elle a pensé: que elle doit aller au: policiers. La fille ont couru dehors. Elle en a allé à la maison. Le maman a dit "Ça c'était très vite. La fin.

E Okay. Qu’est-ce qui est arrivé ensuite?

La maman allait à la pâtisserie avec la petite fille.

E Y-a-t’il d’autres choses qui se sont passées là?

Elle a trouvé la bouteille de fraises par terre. La maman a dit "Est-ce que tu as fait ça?" Et la petite fille a dit non. Le policier ont trouvé la petite fille et elle a dit oui qu’elle a fait ça.

E Pourrais-tu me raconter un peu plus?

(-----)
Transcript of Oral Narrative

Subject 25, Time 2 (Grade 5)

OK. La mère a allée a regarde dans le réfrigérateur pour voir s’il y a
avait de lait et des œufs. Alors il n’y avait pas alors elle a allée au
super marquette quette pour acheter de lait et des œufs.

Mais les œufs larges, il n’y avait pas alors elle devrait aller à un autre. Alors
elle a cherché de lait et puis de des œufs. Et puis elle a allée au

Qu’est-ce que c’est?

Explique comme tu peux.

au bureau pour les acheter et ça coûtait trois dollars et vingt-cinq. Puis elle
a allée à la maison et tout le monde avait des œufs scramblés (laugh) et du
lait pour leur petit déjeuner.

Est-ce qu’il y a d’autres choses qui se sont passées?
Et puis c'était il y avait juste six œufs qui restent et un demi de le carton de lait. Alors la mère a dit à les enfants de des ach de les acheter maintenant parceque elle n'est elle est (ummm) parce qu'elle ne veut pas le faire: encore.

E Est-ce que tu peux me raconter un peu plus?

Parce que c'est trop (unintelligible) d'aller encore. Alors le frère et le soeur allaient à le magasin et le frère a acheté (ummm) du lait et la soeur et le soeur a acheté des œufs. Mais maintenant ça coûte trois dollars et soixante cinq parce que il parce que qu'il a allé à un autre magasin. Puis ils allaient à la maison et la mère a dit "Bien maintenant tu vas tout le famille va acheter les choses qu'il veut pour le reste de la vie."
Transcript of Oral Narrative

Subject 30, Time 1 (Grade 2)

44.17

E Peux-tu commencer l’histoire maintenant, M __?

24.21

E Okay. Vas-y.

40.27

E Peux-tu commencer maintenant?

25.07

E Vas-y. Raconte-moi une petite histoire.

55.02

E Vas-y. Raconte une petite histoire.

1:20.87 21.78

Il était un fois deux petites filles qui va au magasin. Quand ils arrivent
ils voir un feu. Des petites sœurs avaient été à l'escalier. Elle a dit à sa sœur de regarder. Alors il va à la téléphone pour téléphoner les pompiers. Et quand il a fini de téléphoner il va à la maison.

Et (-) sa maman a dit "Avez-vous téléphoné les pompiers? Et ils ont dit oui."

E Qu'est-ce qui est arrivé ensuite?

E Y-a-t-il d'autres choses qui se sont passées?

E Est-ce que tu peux me raconter un peu plus?
Transcript of Oral Narrative

Subject 30, Time 2 (Grade 5)

Sur lundi matin il y avait une femme qui voulait faire des biscuits. Elle cher
(umm) elle va chercher son ses choses et elle ne pouvait pas trouver une
chose alors elle devait aller au magasin pour le chercher. Elle va au
magasin et elle voit quelque chose d’autre qu’elle veut alors elle achète
tout ce que elle veut et elle ne pouvait pas voir ce qu’elle voulait pour faire
des biscuits alors elle va demander où (uh) (umm) personne qui: (umm). (---)

E Explique comme tu peux.

quel quelqu’un qui (umm) travaille dans le magasin et il dit quel il c’est dans
et elle va le chercher et elle arrive. Alors elle l’a cherché et puis elle est allée
pour le (umm) (-) pour payer et elle a trouvé elle a oublié quelque chose alors elle devait aller encore pour se chercher. Elle a pris le (umm) le lait et puis elle a payé pour le lait aussi et elle est allée à
la maison et faire fait des biscuits. Et puis après ça, son petits enfants voulaient (umm) faire des des autres biscuits alors elle ne elle dit que qui qu'elle n'avait pas tout ce que qu'elle veut alors elle dois elle doivent aller au magasin encore et elle a cherché les choses pour ses biscuits pour se son enfants. Et elle a fait des biscuits quand elle a est arrivée à la maison et (umm) le petits enfants avaient tout mangé avant le souper alors elle elle a dit que qu'elle ne va jamais faire des biscuits encore parce qu'ils ne pouvaient pas manger son souper.

E Et qu'est-ce qui est arrivé ensuite?

Ils étaient punis. (laugh)

E Et comment?

(Umm) Ils ils ne pouvaient par regarder la télévision pour une semaine.

E Est-ce qu'il y a d'autres choses qui se sont arrivées?

(Umm) Après une semaine elle la mère a dit qu'il qu'elle peut faire des autres
biscuits si ils ne regardent pas (uh) ne mangent tous les biscuits avant le souper.
Transcript of Oral Narrative

Subject 39, Time 1 (Grade 2)

Il était deux filles (mmm) (-) (mmm) (-) habitent dans grande maison.

(----) Une soir un fille a fait un feu. Et (---) et (mmm) (-) la maison a

brûlé et il a (---) téléphoné les: (umm) les: (mm) (-) pompiers de

mis la feu disparu. (----) Et les f: filles a va dans

autre maison et (-----) (umm) (-----)

E Qu’est-ce qui est arrivé ensuite?

They were adopted. (-----) (mm) Et et les per: le père et le mère est

très gentils. (-----)

E Y’a-t-il d’autres choses qui se sont passées?

Et ils habitent à côté d’un: (--) parc. Et tous les samedis il a va

jouer dans le parc. (-----)

E C’est tout?

(-----)
Il y a trois filles qui étaient dans la salle de bains et ils fumaient et
une a fait tomber sa cigarette et un feu a arrêté et les trois filles ont
allées dehors et n'a pas dit à quelqu'un. Et puis quelqu'un allait dans la salle
de bains et il a vu un feu alors il a courir et mis le alarme et puis tout
le monde était dehors sauf une personne et c'était une petite fille et elle ne
savait quoi faire parce qu'elle était peur. Et le un des filles qui a fumé a
courir dedans et elle a sauvé le fille. Et
E Qu'est-ce qui est arrivé après ça?
et puis les trois filles qui a fumé a été sus (umm)
E Explique comme tu peux.
ne peut pas aller à l'école pour (uh) deux semaines (uh) quand le l'école était
fabriqué encore. Et (uh) et puis le petit fille qui a été dans le l'un qui était
restée dans à être l’ami de la fille qui a sauvé.  

E Est-ce qu’il y a d’autres choses qui se sont arrivées?

Non

E Non? Qu’est-ce qui est arrivé à l’école, par exemple?

(Um) (Eh) C’était brûlé et il (euh) il a prendre un mois pour fabri fabriquer encore.

E C’est tout?

Oui.
Transcript of Oral Narrative

Subject 46, Time 1 (Grade 2)

Il était un fois deux petites filles (mmm) 8.14 (-----) (mmm) 9.61 (-----) Il était un fois deux petites filles (mmm)

P P P P

11.83

P

qui habitent toutes seules. (-----) Et ils a: il a un (-----) grande maison

5.00

P

Et ils a: il a un (-----) grande maison

13.00

P

E Qu'est-ce qui arrive aux filles?

Il va dans ils va en bas et: (-----) chercher chercher de pap du papier

6.70

P

chercher chercher de pap du papier

8.95

P

Et le papier était (umm) 22.62 (-----)

3.94

P

P

E Je ne peux pas t'aider.

était

18.47

P

E Continue.

(umm) 9.37 (-----)

P

E Cherche un autre mot.
a été fumé et un fille a dit "Je vais appeler aux policiers" et l'autre fille a dit "Je vais appeler aux (ummm) qu'est-ce que c'est?"

aux acendies et enfin tous les policiers a arrivé et il a dit "Allez dehors". Et après ça le acendie a arrivé et il a dit "Bonjour" et après tout ça les petites filles a allées dans la maison encore et le feu est parti. C'est la fin.

E Y-a-t'il d'autres choses qui se sont arrivées?

(Mmm) Non.
Transcript of Oral Narrative

Subject 46, Time 2 (Grade 5)

(Umm) (Sigh) Une nuit deux filles ont restées à la maison quand leurs parents ont allés au magasin et ils ont essayé de fait faire un souper mais le: le: l'eau a tombé sur la four et a commencé un feu et alors un le plus grand fille a: allée (sigh)

E Explique comme tu peux.

allée tirer le (uh) alarme de feu et les pompiers ont vené. Ils ont mis de l'eau sur le feu et fait disparu et maintenant les deux filles sont heureux avec leurs parents.

E Est-ce qu'il y a d'autres choses qui se sont arrivées dans cette histoire?

(Umm) (Uh) Le petit fille a tombé et elle a presque eu de brûlé par le feu.

E Qu'est-ce qui est arrivé après ça?
Le grand fille (uh) elle sa pris elle a: lui a pris et elle a: sauvé. (laugh)

E Est-ce qu'il y a d'autres choses qui se sont arrivées?

13.69 (-----) Oui, les filles m'ont (uh) passé tous les coron coriels dans le

le maison alors les deux filles ont sorti de la maison. (laugh)

E Qu'est-ce qui est arrivé après ça?

(Uh) Par le quand il a sorti les pomiers les pomiers étaient dans le

bâtiment et il il (uh) mis de l'eau sur le feu.

E Et après ça, qu'est-ce qu'il y avait?

Les parents de les deux filles ont (--) ont ont (--) ont été ont été téléphoné par

les pomiers. Ils ont revenus à la maison et maint (uh) (--) pour les deux

filles. Il y était (--) OK. (laugh)

E Et après tout ça, qu'est-ce qui est arrivé?

Ils ils étaient heureux avec leur famille.
Okay. Pourrais-tu me raconter un peu plus - peut-être sur les filles? ou sur ce soir-là?

C'était vendredi treize. (laugh) Et ils faisaient le souper parce que c'était la fête de leur père. Ils ont essayé de faire un gâteau et quelque chose a tombé sur le four. Il a commencé un feu et un spark a tombé sur le grand fille et elle a presque eu de brûlés comme l'autre mais le petit lui a sauvé avec le fire extinguisher.

Est-ce que tu peux me raconter un peu plus sur ce que tu disais?

C'était l'ici ce n'était pas un accident. Les deux filles avons bataille.

Ils un voulait faire celui-là et un voulait celui-là aussi. Et ils ont pris quelque chose et faisions bataille et c'est tombé sur le four.

Autre chose? Y-a-t-il d'autres choses qui se sont passées?

Puis ils ont fait les amis encore. Ils ont essayé de sortir de la maison.

La fin.
Appendix F

Typologies of Communication Strategies Used in Formulation of the Typology for This Study
Bialystok's Typology of Communication Strategies

1. L₁-based strategies
   a) Language switch (the insertion of a word or phrase in another language, usually the native language);
   b) Foreignizing of L₁ items (the creation of non-existent or contextually inappropriate L₂ words by applying L₂ morphology and/or phonology to L₁ lexical items);
   c) Transliteration (the use of L₂ lexicon and structure to create a literal translation of an L₁ item or phrase).

2. L₂-based strategies
   a) Semantic contiguity (the use of a single lexical item which shares certain semantic features with the target item);
   b) Description (incorporates the classifications of general physical properties, specific features, and interactional/functional characteristics);
   c) Word coinage (the creation of a L₂ lexical item by selecting a conceptual feature of the target language and incorporating it into the L₂ morphological system).

3. Non-linguistic or contextual strategies

Note: Adapted from "Some factors in the selection and implementation of communication strategies" by E. Bialystok, in Strategies in Interlanguage Communication (pp. 205-207) by C. Faerch and G. Kasper (Eds.), 1983, London: Longman.
Blum-Kulka and Levenston’s Typology of Communication Strategies

Group A: Potentially process initiating

1. Overgeneralization realized by:
   a) the use of superordinate terms (to replace a lexical term) either qualified or unqualified
   b) approximation (the use of a word which does not convey the concept required but which shares enough semantic elements to more or less convey its meaning in the context)
   c) the use of synonymy (the replacement of a word by a common-level or familiar word which is similar in semantic context to its meaning in the context)
   d) word coinage
   e) the use of converse terms

2. Transfer (the attribution to a L₂ lexical item all the functions of its L₁ equivalent)

Group B: Situation bound

1. Circumlocution (specifying all the semantic features of a word) and paraphrase (supplying the referential meaning of a word, but not necessarily specifying all the semantic components of a word)

2. Language switch (using a L₁ term with no attempt to adjust the morphology or the phonology)

3. Appeal to authority

4. Change of topic

5. Semantic avoidance

Note: Adapted from "Universals of lexical simplification" by S. Blum-Kulka and E. Levenston, in Strategies in Interlanguage Communication (pp. 124-136) by C. Faerch and G. Kasper (Eds.), 1983, London: Longman.
Corder's Typology of Communication Strategies

Message adjustment (risk-avoidance strategies)
- topic avoidance (refusal to enter into or continue a discourse because of linguistic inadequacy)
- message abandonment (trying but giving up)
- semantic avoidance (saying something broadly relevant but slightly different from what is intended)
- message reduction (saying less, or less precisely, what is intended)

Resource expansion strategies (risk-taking strategies)
- borrowing (using linguistic sources other than the target language or attempting to use invented or borrowed terms)
- switching to another language
- paraphrase
- circumlocution
- paralinguistic strategies (gesture)
- appeal for help

Note: Adapted from "Strategies of communication" by S.P. Corder, in Strategies in Interlanguage Communication (pp. 17-18) by C. Faerch and G. Kasper (Eds.), 1983, London: Longman.
Faerch and Kasper’s Typology of Communication Strategies

A. Reduction strategies

1. Formal reduction strategies. These involve the avoidance of rules of which the learner is not certain or to which he cannot readily gain access.

2. Functional reduction strategies. These involve avoiding certain speech acts or discourse functions, avoiding or abandoning or replacing certain topics, and avoiding modality markers.
   a) topic avoidance (avoiding topics which are problematic from a linguistic point of view)
   b) message abandonment (initiating communication but cutting it short)
   c) meaning replacement (preserving a topic but referring to it through a more general expression)

B. Achievement strategies

1. Compensatory strategies. These involve deciding to keep to the original communicative goal but compensating for insufficient means.
   a) Non-cooperative strategies (compensatory strategies which do not call for the assistance of the interlocutor)
      i) $L_1/L_3$-based strategies (making use of a language other than the $L_2$)
         - code switching (using a form in a non-$L_2$ language)
         - foreignizing (using a non-$L_2$ form adapted to make it appear like a $L_2$ form)
         - literal translation (translating an $L_1/L_3$ form verbatim into the $L_2$)
      ii) $L_2$-based strategies (making use of alternative $L_2$ forms)
         - substitution (replacing one $L_2$ form with another)
         - paraphrase (replacing an $L_2$ item by describing or exemplifying it)
         - word coinage (replacing an $L_2$ item with an item made up from $L_2$ forms)
         - restructuring (developing an alternative constituent plan)
   (iii) Non-linguistic strategies (compensating using non-linguistic means such as mime, gesture or sound imitation)
b) Co-operative strategies (a joint problem-solving effort by the learner and his interlocutor)
   i) Direct appeal (overtly requesting assistance)
   ii) Indirect appeal (indicating the need for help by means of a pause, eye gaze, etc.)

2. Retrieval strategies. These involve deciding to persevere in locating a required item rather than use a compensatory strategy.
   a) Waiting (waiting for the item to appear)
   b) Using semantic field (identifying the semantic field to which the item belongs and running through items belonging to this field until the item is located)
   c) Using other languages (thinking of the form of the item in another language and then translating it into the L2).

Paribakht's Typology of Communication Strategies

I. Linguistic approach (which exploits the semantic features of the target item)

A. Semantic contiguity
   1. Superordinate
   2. Comparison (exploiting similarities between two items)
      a. Positive comparison
         i. Analogy
         ii. Synonymy
      b. Negative comparison
         i. Contrast and opposition
         ii. Antonymy

B. Circumlocution (description of the characteristics of the concept)
   1. Physical description
      a. Size
      b. Shape
      c. Colour
      d. Material
   2. Constituent features (reference to the underlying semantic elements of the concept)
      a. Features
      b. Elaborated features
   3. Locational property
   4. Historical property
   5. Other features
   6. Functional description

C. Metalinguistic clues
II. Contextual approach (exploiting contextual information about the item rather than its semantic features)

A. Linguistic context
B. Use of TL idioms and proverbs
C. Transliteration of L₁ idioms and proverbs
D. Idiomatic transfer

III. Conceptual approach (exploiting the speaker’s knowledge of the word and of particular situations)

A. Demonstration
B. Exemplification
C. Metonymy

IV. Mime (the use of meaningful gestures in communication)

A. Replacing verbal output
B. Accompanying verbal output

Note: From "Strategic competence and language proficiency" by T. Paribakht, 1983, Applied Linguistics, 6(2), pp. 144-145.
Stevens' Typology of Communication Strategies

Production strategies (Verbs: elicited responses)

1. A stock strategy. Using standard verbs (one normally used by a francophone to express an action) or frequently used common verbs.

2. A passe-partout strategy. Using global verbs (i.e. aller and être) which can serve many purposes or cover a wide range of meanings. Often using a qualifier (locative or adverb) to make meaning more precise.

3. An adaptation strategy. Conjugating an English verb as if it were a French verb.

4. A process strategy. Using either synonyms of the standard verb or more specific verbs to describe a moment of the action.

5. A scanning strategy. Examining the event from all angles to find an aspect for which appropriate language is retrievable.

Production strategies (Verbs: naturalistic speech)

1. A substitution strategy. Inserting an English verb for a French one.

2. An egocentric strategy. Using a word which only has meaning for the speaker.

3. An alteration strategy. Changing one's mind about the turn of events in the story.

4. A conceptualization strategy. False starts indicating a search for words to express a particular idea essential to the story.

Note: Adapted from Strategies in Second Language Acquisition (pp. 213-214) by F. Stevens, 1984, Montreal: Eden Press.
Tarone’s Typology of Communication Strategies

1. Avoidance
   a. Topic avoidance. The learner simply tries not to talk about concepts for which the target language item or structure is not known.
   b. Message abandonment. The learner begins to talk about a concept but cannot continue and stops in mid-utterance.

2. Paraphrase
   a. Approximation. The learner uses a single target language vocabulary item or structure, which the learner knows is not correct, but which shares enough semantic features in common with the desired item to satisfy the speaker (e.g., use of superordinate term: pipe for waterpipe; use of analogy: like an octopus).
   b. Word coinage. The learner makes up a new word or phrase in order to communicate a desired concept (e.g., airball for balloon).
   c. Circumlocution. The learner describes the properties of the object or action instead of using the appropriate target language item or structure (e.g., "It’s oval and shiny"; "She is, uh, smoking something ... that’s Persian").

3. Borrowing
   a. Literal translation. The learner translates word-for-word from the native language (e.g., "He invites him to drink" for "They toast each other.").
   b. Language mix. The learner uses the native language term without bothering to translate (e.g., Turkish tirtil for caterpillar.).

4. Appeal for Assistance. The learner asks for the correct term (e.g., "What is this? What called?").

5. Mime. The learner uses nonverbal tactics in place of a lexical item or action (e.g., clapping one’s hands to illustrate applause), or to accompany another communication strategy (e.g., "It’s about this long.").

Note: From "Teaching strategic competence in foreign language classrooms" by E. Tarone, in Initiatives in Communicative Language Teaching (p. 131) by S. Savignon and M.S. Berns (Eds.), 1984, Reading, MA: Addison Wesley.
Varadi's Typology of Communication Strategies

Intensional reduction

1) generalization (the use of a superordinate term in reference to its hyponym)

2) approximation (an attempt to reconstruct the optimal meaning by explicating or referring to part of its semantic component; may involve word coinage or other strategies)

Formal replacement

1) circumlocution (supplying enough semantic components to convey the optimal meaning)

2) paraphrase

3) semantic replacement

Note: Adapted from "Strategies of target language learner communication: Message adjustment" by T. Varadi, in Strategies in Interlanguage Communication (pp. 92-95) by C. Faerch and G. Kasper (Eds.), 1983, London: Longman.
Willems' Typology of Communication Strategies

Reduction Strategies

Formal
- Phonological: Avoidance of words containing "difficult" segments or clusters of segments.
- Morphological: Avoidance of talking about yesterday to avoid past tense forms.
- Syntactic: Avoidance of speaking about what might happen for fear of using conditionals.
- Lexical: Avoidance of certain topics because the necessary vocabulary is lacking.

Functional
- Message abandonment: "Oh I can’t say this, let’s talk about something else."
- Meaning replacement: Saying almost what you want to say: saying something less politely than you would in your L1 ("Modality reduction").
- Topic avoidance: Saying nothing at all.

Achievement Strategies

Paralinguistic strategies
- the use of mimetic gestures, facial expression etc. to replace speech.

Interlingual strategies
- Borrowing or "code switching": a native language word or phrase is used with a native language pronunciation.
- Literal translation: a literal translation from L1 to L2 of lexical items, idioms or compound words.
- "Foreignizing": Using a word or phrase from the L1 with L2 pronunciation.

Intralingual strategies
- Approximation (Generalization): The use of an L2 word which shares essential semantic features with the target word: "birds" for "ducks", "animals" for "rabbits", "rose" for "flower" or "lorry" for "van".
- "Word Coinage": An L2 word is made up on the basis of a supposed rule: "intonate" from "intonation", "inonded" for "flooded".
- Paraphrase
  a) description:
    1. physical properties: colour, size, spatial dimensions;
    2. specific features: "It has a motor...";
    3. functional features: "It is used in...";
    4. locational features: "You find it in a factory";
    5. temporal features: "It’s between summer and autumn".
  b) circumlocution: subordinate terms used instead of unavailable superordinate terms
  c) exemplification: use of trade names; "Puch" for "moped"
- Smurfing: The use of empty or meaningless words to fill gaps in vocabulary command like: "thing, what do you call
- Self repair (restructuring): Setting up a new speech-plan when the original one fails.

- Appeal for assistance
  a) Explicit: "What d'you call": "Speak more slowly": "I am foreign": "Do you understand?";
  b) Implicit: pauses, intonation, drawls, repetition or "I don't know what to call this" and the like;
  c) Checking questions: To make sure something is correctly understood: questions: "Do I hear you say..."; "Are you saying that...";

- Initiating repair: "I am sorry, there must be some misunderstanding. Does...mean...? I took it to mean...I hope you don't mind my asking..." (p. 355)

Appendix G

Typology of Communication Strategies Used in This Study with Descriptions and Examples
Typology of Communication Strategies with Descriptions and Examples

I. REDUCTION STRATEGIES

- Topic Avoidance (avoiding topic by saying nothing at all)
- Message Abandonment (initiating communication but stopping in mid-utterance: "le papier était ...")

II. ACHIEVEMENT STRATEGIES

A. Compensatory Strategies

1. Noncooperative Strategies

(a) L₁-based (Interlingual) Strategies

- Code Switch (using a L₁ item or phrase with native pronunciation: "un spark a tombé")
- Literal Translation (translating word for word from the L₁: "pour utiliser le téléphone")
- Foreignization (using a L₁ item or phrase with L₂ pronunciation: "/garbáj/" from L₁ "garbage")

(b) L₂-based (Intralingual) Strategies

- Generalization (using a L₂ item which is a semantic superordinate: "personne" for "homme")
- Approximation (using a single L₂ item which is similar in semantic content to replace the desired or required item)
  - Positive (using analogy and synonomy: "fermé" for "barré" or "fermé" à clé")
  - Negative (using antonymy, contrast and opposition: "le contraire d’allumer")
- Circumlocution (using a phrase to describe all the semantic features of a L₂ item; at times involves using generalization or approximation with a qualifier)
  - Positive (exploiting the actual meaning: "un petit peu de bois")
  - Negative (exploiting oppositeness of meaning: "mettre le feu pas là")
- Paraphrase (using a phrase to describe only certain semantic features of a L₂ item; less accurate than circumlocution)
  - Description
    - Physical Features (size, colour, shape, material)
    - Specific Features (constituent features)
    - Functional Features (description of item’s use: "les personnes qui a venues pour l’incendie")
    - Locational Features (reference to item’s location)
- Temporal Features (reference to position in time)
  - Exemplification (reference to examples i.e., trade names: "elle l’a lavé avec Ivory")

- Word Coinage (making up a L₂ word from L₂ forms or rules: "elle a vitement conduit")

- Restructuring/Message Adjustment (breaking off speech and starting in a new way: "quand elle est arrivée à la ... à sa maison")

- Egocentric Strategy (using a word or words which only have meaning for the speaker: "Des filles avaient été avai de l’escalier.")

(c) Non-linguistic Strategies

- Sound Imitation (using sound to support or replace verbal strategies: "Elle dit ‘Oh, non: Hmmm!’")

2. Cooperative Strategies

- Direct Appeal (asking for a L₂ item or requesting assistance: "qu’est-ce que c’est?")

- Indirect Appeal (indicating a problem or the need for help without an explicit appeal for assistance (using tone, intonation, facial gesture, etc.))

B. RETRIEVAL STRATEGIES

- Pause/Hesitation (filled or unfilled pauses: "mmmmmmmm ...")

- Repetition (repetition of sounds or words with no restructuring: "p..pà..pâtisserie")

- Retrieval via Semantic Field (searching for related words: "incendie" for "pompier")

- Retrieval via Other Languages (searching via other languages: "heavy ... lourd")

Note: Other non-linguistic strategies, such as gesture and mime, have been omitted from this typology due to the nature of the data (audio only). Formal reduction strategies have also been omitted due to the necessity of introspection in their identification.
Appendix H

Tables
Table H1

Frequency Distribution and Percentage of Communication Strategy Use by Category by Subject

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<th>Retrieval</th>
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**Subject 45: Frequency Distribution and Percentage of Communication Strategy Use**

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**Retrieval via Semantic Field**

**Retrieval via Other Languages**
Table H5

Subject 47: Frequency Distribution and Percentage of Communication Strategy Use

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Table H6

Subject 25: Frequency Distribution and Percentage of Communication Strategy Use

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Subject 30: Frequency Distribution and Percentage of Communication Strategy Use

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Subject 39: Frequency Distribution and Percentage of Communication Strategy Use

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Subject 46: Frequency Distribution and Percentage of Communication Strategy Use

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Table H10

Frequency of Communication Strategy Use by Subject

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Table H11

Frequency Distribution and Percentage of Communication Strategy Use by Category by Group

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Table H12

SLLs: Frequency Distribution and Percentage of Communication Strategy Use

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Table H13

**LLFs: Frequency Distribution and Percentage of Communication Strategy Use**

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<td>5(2.2)</td>
<td>5(1.3)</td>
</tr>
<tr>
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<td>13(5.8)</td>
<td>19(5.2)</td>
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<td>Approximation</td>
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<td>17(7.5)</td>
<td>21(5.7)</td>
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<td>4(1.8)</td>
<td>6(1.6)</td>
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<td>5(2.2)</td>
<td>7(1.9)</td>
</tr>
<tr>
<td>Word Coinage</td>
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<td>1(0.3)</td>
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<tr>
<td>Restructuring</td>
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<td>46(12.5)</td>
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<tr>
<td>Sound Imitation</td>
<td></td>
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<td>2(0.5)</td>
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<tr>
<td>Direct Appeal</td>
<td>1(0.7)</td>
<td>1(0.4)</td>
<td>2(0.5)</td>
</tr>
<tr>
<td>Indirect Appeal</td>
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<td></td>
<td>1(0.3)</td>
</tr>
<tr>
<td>Pause</td>
<td>82(57.8)</td>
<td>71(31.4)</td>
<td>153(41.6)</td>
</tr>
<tr>
<td>Repetition</td>
<td>13(9.2)</td>
<td>35(15.5)</td>
<td>48(13.0)</td>
</tr>
<tr>
<td>Retrieval via Semantic Field</td>
<td>3(2.1)</td>
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<td>3(0.8)</td>
</tr>
<tr>
<td>Retrieval via Other Languages</td>
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</table>
Table H14

Total and Mean Frequencies of Communication Strategy Use by Group

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<tr>
<th>Group</th>
<th>Time</th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>1</td>
<td>2</td>
<td>Total</td>
</tr>
<tr>
<td>SLLs</td>
<td>126(31.5)</td>
<td>245(61.3)</td>
<td>371(92.8)</td>
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</tr>
<tr>
<td>LLLs</td>
<td>142(35.5)</td>
<td>226(56.5)</td>
<td>368(92.0)</td>
<td></td>
</tr>
<tr>
<td>Strategy</td>
<td>1</td>
<td>2</td>
<td>Total</td>
<td></td>
</tr>
<tr>
<td>--------------------------------</td>
<td>-------</td>
<td>-------</td>
<td>--------</td>
<td></td>
</tr>
<tr>
<td>Topic Avoidance</td>
<td>12(4.5)</td>
<td>1(0.2)</td>
<td>13(1.8)</td>
<td></td>
</tr>
<tr>
<td>Message Abandonment</td>
<td>3(1.1)</td>
<td>1(0.2)</td>
<td>4(0.5)</td>
<td></td>
</tr>
<tr>
<td>Code Switch</td>
<td>1(0.4)</td>
<td>4(0.8)</td>
<td>5(0.7)</td>
<td></td>
</tr>
<tr>
<td>Literal Translation</td>
<td>17(6.3)</td>
<td>60(12.7)</td>
<td>77(10.4)</td>
<td></td>
</tr>
<tr>
<td>Foreignization</td>
<td>3(1.1)</td>
<td>19(4.0)</td>
<td>22(3.0)</td>
<td></td>
</tr>
<tr>
<td>Generalization</td>
<td>14(5.2)</td>
<td>30(6.4)</td>
<td>44(6.0)</td>
<td></td>
</tr>
<tr>
<td>Approximation</td>
<td>23(8.6)</td>
<td>42(8.9)</td>
<td>65(8.8)</td>
<td></td>
</tr>
<tr>
<td>Circumlocution</td>
<td>10(3.7)</td>
<td>7(1.5)</td>
<td>17(2.3)</td>
<td></td>
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<tr>
<td>Paraphrase</td>
<td>3(1.1)</td>
<td>11(2.3)</td>
<td>14(1.9)</td>
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</tr>
<tr>
<td>Word Coinage</td>
<td></td>
<td>5(1.1)</td>
<td>5(0.7)</td>
<td></td>
</tr>
<tr>
<td>Restructuring</td>
<td>25(9.3)</td>
<td>101(21.4)</td>
<td>126(17.1)</td>
<td></td>
</tr>
<tr>
<td>Egocentric Strategy</td>
<td>1(0.4)</td>
<td>4(0.8)</td>
<td>5(0.7)</td>
<td></td>
</tr>
<tr>
<td>Sound Imitation</td>
<td>2(0.7)</td>
<td>3(0.6)</td>
<td>5(0.7)</td>
<td></td>
</tr>
<tr>
<td>Direct Appeal</td>
<td>4(1.5)</td>
<td>2(0.4)</td>
<td>6(0.8)</td>
<td></td>
</tr>
<tr>
<td>Indirect Appeal</td>
<td>1(0.4)</td>
<td>1(0.2)</td>
<td>2(0.3)</td>
<td></td>
</tr>
<tr>
<td>Pause</td>
<td>122(45.5)</td>
<td>109(23.1)</td>
<td>231(31.3)</td>
<td></td>
</tr>
<tr>
<td>Repetition</td>
<td>24(9.0)</td>
<td>71(15.1)</td>
<td>95(12.9)</td>
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</tr>
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<td>Retrieval via Semantic Field</td>
<td>3(1.1)</td>
<td></td>
<td>3(0.4)</td>
<td></td>
</tr>
<tr>
<td>Retrieval via Other Languages</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>268(100.0)</td>
<td>471(100.0)</td>
<td>739(100.0)</td>
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</tr>
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</table>

Table H15: Total Frequencies and Percentage of Use of Communication Strategies
### Table H16

**Frequency and Mean Length (in Seconds) of Unfilled Pauses**

<table>
<thead>
<tr>
<th>Subject</th>
<th>Time</th>
<th>Successful language learners</th>
<th>Less-successful language learners</th>
</tr>
</thead>
<tbody>
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<td></td>
<td></td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>38</td>
<td>n</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>M</td>
<td>1.2</td>
<td>1.6</td>
</tr>
<tr>
<td>40</td>
<td>n</td>
<td>6</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>M</td>
<td>3.3</td>
<td>2.1</td>
</tr>
<tr>
<td>45</td>
<td>n</td>
<td>8</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>M</td>
<td>1.9</td>
<td>1.2</td>
</tr>
<tr>
<td>47</td>
<td>n</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>M</td>
<td>3.7</td>
<td>1.4</td>
</tr>
<tr>
<td>SLLs</td>
<td>n</td>
<td>17</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td>M</td>
<td>2.5</td>
<td>1.6</td>
</tr>
<tr>
<td>25</td>
<td>n</td>
<td>16</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>M</td>
<td>3.0</td>
<td>2.0</td>
</tr>
<tr>
<td>30</td>
<td>n</td>
<td>16</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>M</td>
<td>21.7</td>
<td>2.6</td>
</tr>
<tr>
<td>39</td>
<td>n</td>
<td>19</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>M</td>
<td>6.2</td>
<td>3.4</td>
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<tr>
<td>46</td>
<td>n</td>
<td>18</td>
<td>18</td>
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<tr>
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<td>M</td>
<td>11.5</td>
<td>4.9</td>
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<td>LLLs</td>
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<td>69</td>
<td>35</td>
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<td>M</td>
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### Table H17

**Frequency Distribution and Percentage of Communication Strategy Use by Category by Group Without Retrieval Strategies**

<table>
<thead>
<tr>
<th>Category</th>
<th>Reduction</th>
<th>L₁-based</th>
<th>L₂-based</th>
<th>Nonlinguistic</th>
<th>Cooperative</th>
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<td><strong>SLLs</strong></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time 1</td>
<td>2 (2.7)</td>
<td>12 (16.0)</td>
<td>56 (74.7)</td>
<td>2 (2.7)</td>
<td>3 (4.0)</td>
</tr>
<tr>
<td>Time 2</td>
<td>3 (0.8)</td>
<td>64 (26.0)</td>
<td>72 (69.9)</td>
<td>3 (1.2)</td>
<td>5 (2.0)</td>
</tr>
<tr>
<td>Total</td>
<td>5 (0.8)</td>
<td>64 (26.0)</td>
<td>72 (69.9)</td>
<td>3 (1.2)</td>
<td>5 (2.0)</td>
</tr>
<tr>
<td><strong>LLSs</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time 1</td>
<td>13 (29.5)</td>
<td>9 (20.5)</td>
<td>20 (45.5)</td>
<td>2 (4.5)</td>
<td></td>
</tr>
<tr>
<td>Time 2</td>
<td>2 (1.7)</td>
<td>31 (25.9)</td>
<td>34 (70.0)</td>
<td>2 (1.7)</td>
<td>1 (0.8)</td>
</tr>
<tr>
<td>Total</td>
<td>15 (9.1)</td>
<td>40 (24.4)</td>
<td>104 (63.4)</td>
<td>2 (1.2)</td>
<td>3 (1.8)</td>
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Table H18

<table>
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<th>LLLs</th>
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<td>12(27.3)</td>
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<tr>
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<td>1(2.3)</td>
</tr>
<tr>
<td>Code Switch</td>
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<td>1(2.3)</td>
</tr>
<tr>
<td>Literal Translation</td>
<td>9(12.0)</td>
<td>9(18.2)</td>
</tr>
<tr>
<td>Foreignization</td>
<td>3(4.0)</td>
<td></td>
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<tr>
<td>Generalization</td>
<td>8(10.7)</td>
<td>6(13.6)</td>
</tr>
<tr>
<td>Approximation</td>
<td>19(25.3)</td>
<td>4(9.1)</td>
</tr>
<tr>
<td>Circumlocution</td>
<td>8(10.7)</td>
<td>2(4.5)</td>
</tr>
<tr>
<td>Paraphrase</td>
<td>1(1.3)</td>
<td>2(4.5)</td>
</tr>
<tr>
<td>Word Coinage</td>
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<td></td>
</tr>
<tr>
<td>Restructuring</td>
<td>20(26.7)</td>
<td>5(11.4)</td>
</tr>
<tr>
<td>Egocentric Strategy</td>
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<td>1(2.3)</td>
</tr>
<tr>
<td>Sound Imitation</td>
<td>2(2.7)</td>
<td></td>
</tr>
<tr>
<td>Direct Appeal</td>
<td>3(4.0)</td>
<td>1(2.3)</td>
</tr>
<tr>
<td>Indirect Appeal</td>
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Table H19

Frequency Distribution and Percentage of Communication Strategy Use by Group at Time 2 Without Retrieval Strategies

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<th>LLLs</th>
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<tr>
<td>Message Abandonment</td>
<td>1(0.8)</td>
<td></td>
</tr>
<tr>
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<td>3(2.5)</td>
</tr>
<tr>
<td>Literal Translation</td>
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<td>23(19.2)</td>
</tr>
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<td>Foreignization</td>
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<td>5(4.2)</td>
</tr>
<tr>
<td>Generalization</td>
<td>17(9.9)</td>
<td>13(10.3)</td>
</tr>
<tr>
<td>Approximation</td>
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<td>17(14.2)</td>
</tr>
<tr>
<td>Circumlocution</td>
<td>3(1.8)</td>
<td>4(3.3)</td>
</tr>
<tr>
<td>Paraphrase</td>
<td>16(3.5)</td>
<td>5(4.2)</td>
</tr>
<tr>
<td>Word Coinage</td>
<td>4(2.3)</td>
<td>1(0.8)</td>
</tr>
<tr>
<td>Restructuring</td>
<td>60(35.1)</td>
<td>41(34.2)</td>
</tr>
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<td>Egocentric Strategy</td>
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<td>3(2.5)</td>
</tr>
<tr>
<td>Sound Imitation</td>
<td>1(0.6)</td>
<td>2(1.7)</td>
</tr>
<tr>
<td>Direct Appeal</td>
<td>1(0.6)</td>
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</tr>
<tr>
<td>Indirect Appeal</td>
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</table>
Table 20

Surface Realizations of Strategies for Certain Target Items by Group

<table>
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<th>LLLs</th>
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<td></td>
</tr>
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</table>

1. à la caisse /au comptoir

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<tbody>
<tr>
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</tr>
</tbody>
</table>

"E elle va au (um um um) (um) et il (um) elle do (um) elle do elle a donné la elle a payé pour le shampoo (Subject 40)"

et puis elle all oui? allé pour le (umm) (--) pour payer (Subject 30)

elle a allé au (--) Qu’est-ce que c’est? au bureau pour les acheter (Subject 25)

2. un employé du magasin

<table>
<thead>
<tr>
<th>Time</th>
<th>SLLs</th>
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</thead>
<tbody>
<tr>
<td>2</td>
<td></td>
</tr>
</tbody>
</table>

"Elle a demandé à un monsieur" (Subject 47)

"elle (uh) demande à le monsieur" (Subject 40)

elle va demander du (uh) (umm) personne qui (--) (umm) (--) quelqu’un qui (umm) travaille dans le magasin (Subject 30)

3. éteindre le feu

<table>
<thead>
<tr>
<th>Time</th>
<th>SLLs</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

Les pompiers étaient arrivé et ils a: all (-) Qu’est-ce qu’c’est? All le contraire d’alluer d’allumer? Il a: (--) faire: (---) mettre le feu pas là: et il était bon maintenant (Subject 45)

il a (--) téléphone les: (umm) les: (--) pompiers de (-----) (umm) (---) mis la feu disparu (Subject 39)

Les pompiers l’ont défait le feu (Subject 38)

le feu est parti (Subject 46)

(Table continues)
<table>
<thead>
<tr>
<th>Time</th>
<th>SLLs</th>
<th>LLLs</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>les camions de feu vont et tout va être nuit (Subject 38)</td>
<td>les pompiers ont venir vené. Ils ont (------) mis de l’eau (laugh) sur le feu et fait disparu (Subject 45)</td>
</tr>
<tr>
<td></td>
<td>les (-) les personnes (-) qui a venu pour (---) l’incendie a pris cinq minutes. Puis ils ont le feu s’est arrêté (Subject 45)</td>
<td></td>
</tr>
</tbody>
</table>

4. sonner l’avertisseur d’incendie

<table>
<thead>
<tr>
<th>Time</th>
<th>SLLs</th>
<th>LLLs</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>un fille tire le l’alarme de feu (Subject 38)</td>
<td>il a courir et (------) mis le éarme (Subject 39)</td>
</tr>
<tr>
<td></td>
<td>on: on devait tirer le l’élar l’alarme parceque s: le éarme qui était allé (Subject 45)</td>
<td>et alors un plus grand fille a: allée (--) (sigh) allée tirer le (uh) (----) alarme de feu (Subject 46)</td>
</tr>
</tbody>
</table>

5. retourner

<table>
<thead>
<tr>
<th>Time</th>
<th>SLLs</th>
<th>LLLs</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>elle doit aller encore au l’épicerie (Subject 47)</td>
<td>les petites filles a allées dans la maison encore (Subject 46)</td>
</tr>
<tr>
<td></td>
<td>elle a allée au l’épicerie encore (Subject 47)</td>
<td>elle ne veut pas le faire encore (Subject 25)</td>
</tr>
<tr>
<td>2</td>
<td>elle est allée avoir une autre shampoo (Subject 40)</td>
<td>d’aller encore (Subject 25)</td>
</tr>
<tr>
<td></td>
<td>puis dans quelques semaines [.....] les personnes pouvaient peuvaient aller dedans (Subject 45)</td>
<td>elle devait aller encore pour s:le chercher (Subject 30)</td>
</tr>
<tr>
<td>Time</td>
<td>SLLs</td>
<td>LLLs</td>
</tr>
<tr>
<td>------</td>
<td>------</td>
<td>------</td>
</tr>
<tr>
<td>6. des ingrédients</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>de confiture avec toutes ces choses là-dedans (Subject 47)</td>
<td>Elle cher (ummm) elle va chercher son ses choses et elle ne pouvait pas trou trouvé une chose (Subject 30) et elle a cherché les choses pour ses biscuits (Subject 30)</td>
</tr>
<tr>
<td>7. demandé</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>et elle a dit &quot;Qu’est-ce que tu es ici pour?&quot; (Subject 41)</td>
<td>La maman a dit (---) &quot;Est-ce que tu a fait ça?&quot; (Subject 25) Et sa maman a dit &quot;A: (...) est-ce que vous avez (-) téléphone les pompiers? (Subject 30)</td>
</tr>
<tr>
<td></td>
<td>Les pompiers ont venu et dit &quot;Un feu dans un garage? Comment est-ce que c’est passé? (Subject 38)</td>
<td></td>
</tr>
<tr>
<td>8. entrer/sortir en courant</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Billy a couru dehors (Subject 47)</td>
<td>&quot;Et le le un des filles qui a fumé a courir dedans&quot; (Subject 39)</td>
</tr>
<tr>
<td></td>
<td>&quot;ils courrent dehors&quot; (Subject 38)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>&quot;on est couré dehors&quot; (Subject 45)</td>
<td></td>
</tr>
</tbody>
</table>

(Table continues)
9. rentrer/retourner chez lui (elle)

<table>
<thead>
<tr>
<th>Time</th>
<th>SLLs</th>
<th>LLLs</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>il va à la maison (Subject 40)</td>
<td>il va à la maison (Subject 30)</td>
</tr>
<tr>
<td></td>
<td>Elle a allée à la maison (Subject 47)</td>
<td>Elle on a allée à la maison (Subject 25)</td>
</tr>
<tr>
<td>2</td>
<td>Alors elle est elle a tous acheté et puis allée à la maison (Subject 47)</td>
<td>Puis ils allaient à la maison (Subject 25)</td>
</tr>
<tr>
<td></td>
<td>elle a allée à la maison (Subject 40)</td>
<td>elle est allée à la maison (Subject 30)</td>
</tr>
</tbody>
</table>

10. après (après avoir)

<table>
<thead>
<tr>
<th>Time</th>
<th>SLLs</th>
<th>LLLs</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>quand c'est fini (Subject 38)</td>
<td>et quand il a de fini de téléphoner (Subject 30)</td>
</tr>
</tbody>
</table>

11. le feu a pris/prendre feu

<table>
<thead>
<tr>
<th>Time</th>
<th>SLLs</th>
<th>LLLs</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Elle a (--) fait un (-) de petit feu avec un: chandelier qui était là. Et il a fait un grand feu après (Subject 45).</td>
<td>un fille a fait un feu (Subject 39)</td>
</tr>
<tr>
<td>2</td>
<td>&quot;ils ont allumé un cigarette et c’est brulé toute l’école&quot; (Subject 38)</td>
<td>le: le: l’eau a tombé sur la four et a commencé un feu (Subject 46)</td>
</tr>
<tr>
<td></td>
<td>&quot;une a fait tomber son (--) cigarette et un feu a arrivé (Subject 39)</td>
<td></td>
</tr>
</tbody>
</table>

(Table continues)
<table>
<thead>
<tr>
<th>Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time</td>
</tr>
<tr>
<td>-------</td>
</tr>
<tr>
<td>12.</td>
</tr>
<tr>
<td>2</td>
</tr>
<tr>
<td>13.</td>
</tr>
<tr>
<td>1</td>
</tr>
<tr>
<td>2</td>
</tr>
<tr>
<td>14.</td>
</tr>
<tr>
<td>1</td>
</tr>
<tr>
<td>2</td>
</tr>
<tr>
<td>(Table continues)</td>
</tr>
</tbody>
</table>
15. aller chez le voisin

il a allé à la(-) une autre personne (Subject 45)

"Et les f:filles a va dans autre maison (Subject 39)

16. brûlait/était en flammes

"un petit peu de bois et c'était allumé (Subject 38)

le papier était (ummm) (----) était (---) (ummm) (---) a été fumé (Subject 46)

17. suspendu/mis à la porte

ils étaient (-) comment dit? (umm) ils ne pouvaient pas travailler là (Subject 38)

les trois filles qui fumé a été (---) sus (---) (ummm) ne peut pas aller à l'école pour (uh) deux semaines (Subject 39)

18. seulement/ne... que

C'est juste deux dollars trente-neuf cents (Subject 40)

il y avait juste six e t œufs qui restent (Subject 25)

c'était juste pour une côte de: de le de l'école (Subject 45)
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