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AUTHOR Hansen, Donald A.; Fillmore, Lily Wong


INSTITUTION California Univ., Berkeley. Graduate School of Education.

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ABSTRACT A study of the role of classroom lessons in the acquisition of English as a second language by Spanish speakers that compared language acquisition at school and during the summer months is reported. An introductory chapter outlines fundamental assumptions about the loci and intentionality of second-language learning, and the second chapter describes the research design. Chapter three examines the contexts of second language acquisition in terms of language use and learning behaviors. The fourth chapter, on the central importance of lesson value and lesson confidence, looks at past research, the competence-incompetence paradox examined through interviews with teachers, and the interaction influences of lesson value and lesson confidence. The fifth chapter focuses on strategies of learning and non-learning in the classroom as a measure of the interactive influences of lesson value and lesson confidence. Chapter six examines the relationship between learning strategies and language attitudes, and chapter seven discusses engaging language learning opportunities in the classroom through the interplay of language orientations and learning strategies. A summary chapter and a list of references are included, and appended materials include the quantitative instruments for children used in the study, the learning strategies Q-sort, and the teacher and principal interviews. It is concluded that classroom lessons do increase language learning, and that the interactive variables are complex and require further research. (MSE)

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LOCATING LEARNING

THE SOCIAL CONTEXTS
OF SECOND-LANGUAGE
ACQUISITION

Final Report

The Social Contexts of
Learning in Bilingual Classrooms

September 1983

U.S. DEPARTMENT OF EDUCATION
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Donald A. Hansen  
Project Director and  
Principal Investigator

Lily Wong Fillmore  
Co-Principal Investigator

Vicky A. Johnson  
Project Manager
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Chapter One

Introduction

A persistent puzzle in the study of second-language acquisition in elementary school children is that some learn English quickly and with comparative ease, while others learn slowly or hardly at all. Intelligence, cognitive facility and affective capacity help to explain the differences, but they fall short of full explanation: students of apparently equal abilities differ markedly in language attainments and other classroom learning.

Motivation also makes a difference, but alone it too fails to resolve the puzzle. The desire to learn does not alone assure learning, and even in children of equal abilities its effects are unpredictable. Often high levels of motivation accelerate second-language acquisition, but at times they lead to frustration, confusion and self-doubt.

Other influences on second-language learning are equally clear and equally inadequate. Teaching abilities and styles, curricular strategies and school environment play their parts, as do a myriad of other significant instructional features. So, too, do peers and parents, homes and communities. Each can be championed as the vital element in learning, and many have been demonstrated to correlate, at low to moderate levels, with second-language learning.

Such correlations tend to raise more questions than they answer, however. This report concerns some of those questions, with particular attention to the methods of inquiry they imply. If so many diverse influences can be identified, how are we to determine which one or which array is most important? If an array is indicated, how are we to determine the influence of each component and how are we to untangle the webs of their interactive
influences? Is there any way that we might move toward an understanding of the basic causal processes of learning English as a second language?

Section A

Fundamental Assumptions:
The Loci of Second-Language Learning

In our approach we assume that the processes of learning English as a second language have no distinct and singular locus. By this we mean, first, that second language learning may occur in any or all aspects of an individual's life, in his or her private moments, in casual and intense interactions, through diverse situations and times. Second, and perhaps even more important, we mean that within any one setting the influences of any or all of these diffuse loci of learning may be discovered.

For those who share our interest in classroom learning, this assumption would require that closer and more persistent attention be given to the diverse situational influences that may contribute to the classroom behavior of each individual child. As we began our study we were already convinced that what goes on in the classroom can make a striking difference in what is learned. Our conviction was not one of simple faith, but rather had emerged from years of classroom observation and research. We were not convinced, however, that this general influence of classrooms would be seen in second language acquisition.

In learning arithmetic and mathematics, for example, it is reasonable to expect teacher and classroom variables to be of considerable importance. Although the child may exercise and expand control of addition and multiplication while shopping in the supermarket and may
Introduction

even employ basic algebra and geometry in solving everyday problems, but most of his or her intentional efforts to learn math are located within the classroom and the assignments that attend it. Similarly, though less distinctly, the student's emerging understandings of American literature may be exercised in summer reading, or in front of the television set, or in conversations around the dinner table. For most students, most of the time, however, the classroom is the central locus of that learning.

Second-language acquisition may be a different matter, but here a fundamental distinction must be made. The student who is learning a little-studied foreign language is as heavily dependent on classroom instruction as the student learning calculus. Once leaving the classroom or language lab it may be difficult if not impossible to find someone who shares this strange set of symbols and logic. The distinct locus of language learning for this student, as for the student of math and literature, is the classroom and its attendant assignments.

By contrast, the students in our study are learning a second language that surrounds them once they are outside their classrooms. English pervades the halls and playgrounds of their schools and the larger communities in which they live. Even in their homes, although conversation may be dominated by Spanish or Cantonese, few avoid English for long: their parents ask them to translate a note from the teacher or a newspaper story, they search through advertisements and catalogues, they turn to television for the Dukes of Hazard or the Saturday morning "kid soaps".

Even for these students the classroom may be an important part in second language learning, and at least for some students it may be the most important single part of the learning process, at least for some students. If our goal is to understand second language learning, however, we must look beyond the classroom to the other loci of language learning. And even if our goal is more modest -- to understand the role of the classroom in second language acquisition -- we must take a perspective that moves beyond the classroom and into the situations,
relationships and interchanges that make up the day-to-day lives of second language learners. For what the learner does in the classroom is influenced by perspectives, commitments and understandings that were both learned and supported by other contexts.

Section B

Fundamental Assumptions:

The Intentionality of Second-Language Learning

Almost all humans learn a first language seemingly without effort and with little choice. But learning a second language is a different matter. One chooses to learn, and must work to learn a second language. The choice must be made not just once, but repeatedly, even continuously. In this perspective, it is of little use to ask why so many immigrant children fail to learn the language of our country adequately. If learning is a matter of choice and of considerable effort, the question is not why people fail to learn English adequately. The question is why they bother to learn English at all.

To those of us who have already mastered the language reasonably well, whether as a first or second language, the answer to this question may appear obvious. The English language is essential to effective functioning and success in this country. Without a working knowledge of English, we cannot hope to succeed in any but the most menial of jobs; without English, all possibility of educational achievement vanishes; without at least a minimal knowledge of everyday English, we cannot even negotiate the simple necessities of life at the grocery store, the gas station and the physician's office. From this pers-
In perspective, anyone who fails to learn the language must be incompetent, lazy, undisciplined, or simply ignorant of the way the world works.

Our judgments are less harsh, and often more accurate, when we are the ones who lack the language of our social and cultural surrounds. Living for a week, a month or a year in a country such as Greece, Finland, or Cambodia, we may enjoy learning and using a few everyday expressions. We may even make a concerted effort to understand the fundamentals of the language, or succeed in learning as much of the language as we "would like to". Unless we have a particular purpose—such as the need for language in our business transactions or our research, or simply the desire to add one more language to our repertoire of multilingual tools—in our moment-to-moment choices we will often choose not to learn new words, or even to exercise those we have already accumulated.

Faced with a foreign language, it is surprising how many things can be said without words, how simple intentions and desires can be communicated through non-verbal gestures. It is also surprising how many things we would like to say don't really don't need to be said after all, and how many others can be said so much more effectively through an interpreter. We would like to learn more, and perhaps when we return home we will wish we had, but at the time it is much easier to not learn, or is more effective to rely on our friends to translate.

If we intend permanent residency, things might be somewhat different, but even then intentions are often vague and flexible. Deep down, we know we may return home sooner or later: why go to all the trouble and pain to learn this difficult tongue? In these circumstances, we may consider ourselves a little lazy, and we may feel a bit inferior in some situations where we are the only ones who can't speak the language. But we recognize a larger truth about our failure to learn: it simply is not worth the effort. What we have to gain from knowing the language may be valuable, but not nearly valuable enough to make up for all the pain, deprivation and frustration that
the learning will require. If we believe that we lack an ability to learn, the ratio of payoff to effort is even more discouraging.

In making our choices to learn or not learn, and in attempting to understand those choices, we tend to exercise broader and more complex perspective than those we use to explain the failure of immigrant children to use English. We tend to look more closely at our own individual habits, tastes and capabilities, and we try to locate those individual characteristics, and our moment-to-moment decisions, in larger social contexts. Seen within those contexts, it is not at all surprising that we did not bother to learn the language. What is surprising, and what we need to explain, is the fact that other people of similar backgrounds and abilities have made the effort and have mastered the foreign tongue.

That is the question addressed to this study. The challenge, we believe, is not to unravel the "causes of failure", but rather to identify the ways children interweave their individual abilities, interests and desires with the opportunities, challenges and constraints of the situations. The major thrust of our analyses is that through these interweaving processes the child succeeds in varying degrees in acquiring English as a second language.

Section C

Overview

In this study, our goal was to better understand the contribution of classroom lessons to the acquisition of English in elementary school children from homes in which Spanish is the dominant language. The diverse loci of
second language learning are represented through a variety of methods, and in our basic design, which is longitudinal and comparative.

That design is described in Chapter Two, which also details the results of our comparison of learning during the school year and during the summer months. The differences in learning during these periods suggest that classroom learning does make a difference on the average, at least in some aspects of language learning.

In Chapter Three we attempt to gain perspective on the relative importance of the classroom when seen within those larger contexts, as represented by peer and family variables. As expected, the data suggest that family variables directly affect language learning in the classroom, and that peer variables are most influential in the summer months. What was surprising was the apparent lack of direct peer influence during the school year, for our extensive classroom observations had suggested considerable peer influence on language use in the classroom.

This apparent conflict in our data sets grows even more intriguing in Section Two of this report. In that section, we specify two sets of variables that we believe will help us both to understand the influence of classrooms on language learning and sensitize us to more effective teaching practices. The first of these sets concerns students' language orientations; the second students' lesson strategies. Chapter Four presents the rational for our attention to these two sets of variables. Chapter Five presents the theoretical and methodological arguments for our Language Orientation instruments; Chapter Six the arguments for our Q-Sort of Lesson Strategies.

When these measures are employed in predictions of school-year language learning, peer influences once again emerge. Their influence, however, is not direct; language use with peers during the school year appears to influence language acquisition indirectly, primarily by influencing language attitudes, which in turn influence the student's efforts to learn. In the final chapter of this report, interpretation of these data are extended and implications for classroom practice are discussed.
In this report, our analyses rest on quantitative data and instrumentation. Throughout, however, our instruments and theoretical arguments are grounded in qualitative analyses and our interpretations emerge from our qualitative understandings. In Chapter Two, then, the qualitative as well as the quantitative components of this three-year project are described.
Section One

THE LOCI OF LEARNING
Chapter Two

Research Design

and Strategies of Analysis

To achieve the goals identified in the concluding sections of Chapter One, we designed a study of unusual complexity. Our initial task was to frame our analyses of classroom learning in a way that allowed linkages with large-scale quantitative analyses of the effects of schooling and non-schooling. Our design and data, we planned, would be similar to those in the best of quantitative traditions, but our subject population would be closely delimited and considerably smaller than those of the studies with which we hoped to link.

In this report we have targeted our analyses on children from homes where Spanish is the dominant language. The children are members of six elementary school classrooms in the greater San Francisco Bay area. In each of the classrooms such students comprise the majority of the student body, which also includes a sizeable number of children from homes where English dominates or is the only language spoken. Extensive data were gathered on all students in each classroom, both to provide comparisons and to allow contextual analyses of the classroom milieu. To allow further contrastive comparisons, the same sets of quantitative and qualitative data were gathered in two elementary classrooms in which students
Research Design

In total, 265 students were studied over the two-year period of data gathering; of these 180 remained in their schools for the entire period, allowing us to gather a full set of the test data. Of these, 105 came from homes in which Spanish is the dominant language; these are the central focus of the following analyses.

Our second task was to enhance our capabilities for identifying previously unrecognized processes of learning and nonlearning in the classroom. Quantitative designs usually are more appropriate to verification of established theories than to the discovery of unsuspected patternings of behavior or the generation of new theory. Here we were again served by the delimitations described above: by focusing closely on relatively small cohorts of students we were able to root our quantitative data in closely developed qualitative observations. With these qualitatively-based quantitative data we expected to increase our abilities to identify the central loci of second language learning.

We have assumed that second language learning is a continuing process that may occur in a variety of contexts, while schooling is intermittent and offers only a limited array of the child's learning contexts. Our first fundamental task, then, was to determine whether this assumption is viable. Substantive arguments have located second language learning in classroom contexts, in peer and community contexts, and in family contexts.

The question is not so much whether each of these contexts is of importance: reasonable arguments have been advanced for each, and all seem fairly well established in research. Rather, the question is whether any of these contexts is of more fundamental influence than the others. Given that families, peers and communities are indeed important to language learning, is their influence mediated through classroom interaction? Given that classroom interaction and training is important, is their influence mediated through informal peer communications, or perhaps through family relations? And if one or more contexts is established as fundamental or fulcrum in one life setting, will the same relationship be displayed in other settings?
In short, we have assumed that there is no single locus of classroom learning and that the diverse loci can be identified only in a contextual perspective which includes peer, family and community processes. In Chapters Two and Three of this report this assumption is put to the test. Once we have established the location of language classroom learning we begin the second and larger project of identifying how these contexts come to influence second language acquisition. In this, again, we employ quantitative data, including a variety of measures of language attitudes and a Q-sort quantification of children's learning strategies in the classroom.

At a more fundamental level, however, our examination of the contexts of language learning is grounded in qualitative data. We believe that current understandings of classroom learning are in need of fresh ideas, and are best advanced through an interweaving of qualitative and quantitative procedures. We have backed up that belief with our decisions on research design. Given the inevitable limitations on energies, imaginations and sheer person-power that confront every study, at each point of design critical decisions had to be made. We have already identified the first of these decisions; in our quantitative design we opted for a richness of data on the individual subject, rather than a larger-scaled population.

Since this was a study of contexts of language learning rather than of the subtle processes of language acquisition, we next decided to employ gen-
eral tests of language ability that provided standardized scores carefully established on a national scale. This decision facilitated a third decision which we thought critical to our overall argument and design: the repeated application of our language measures. These standardized tests were administered in the Fall of 1981, the Spring of 1982 and again in the Fall of 1982.

(In the Spring of 1983, a fourth wave of tests was administered, under the funding supplied by the University of California. These data will be employed in future analyses, however, and will not be included in this report.) This test-retest-retest sequence provides data for two fundamental aspects of our quantitative analysis:

First, the Fall-Spring-Fall sequence of testing allows us to assess and compare rates of learning. The first round of testing (Fall, 1981) provides a baseline from which changes in the school year can be assessed in the second wave of testing (Spring, 1982). That second wave, in turn, provides a baseline for assessing change over the summer months, using the third (Fall, 1982) set of language data.

Second, the test-retest-retest sequence provides a summary proxy for such elusive variables as intelligence, disposition to learn, language learning facility, etc. By essentially controlling for earlier levels of test performance, these variable and tendencies to learn language are effectively represented.

In a regression equation, which will be a primary vehicle of analysis in the following chapters, in most cases and as expected the previous test score proved to be the first entered and most powerful predictor of the subsequent test score. Given this control for prior achievement, the relationship of variables subsequently entered can be presumed to reflect something other than differences in capabilities or prior levels of learning. Although we have obtained IQ scores and other measures of ability and achievement from the students' school records, we were not eager to use them in this aspect of our study. Tests of intelligence and achievement are notoriously inaccurate for the school population at
By serially employing parallel forms of a single test, then, we have been able to reduce the biasing influences of ability assessment. Put in another way, by applying the test-retest-retest sequence, we have essentially introduced a summative measure in which the differing abilities and levels of prior achievement are represented. Of course, with this design it is impossible for us to disentangle differences in intelligence from the other contributing influences that have gone into the first test scores, but that is not the intent of our research.

A further advantage of the decision to delimit the size of our subject population is that all the data included in this analysis were gathered by a single and closely coordinated research team, with only minimal personnel turnover between the first and third waves of data collection. Training of classroom observers, test administrators and interviewers, as well as coordination of all data gathering were conducted by the principal investigator and project manager. All group tests were administered by a team of two or three researchers. In each of the 48 administrations of group tests (that is, two sessions for each wave of testing in each of eight classrooms) at least two of the test administrators were individuals well known to the children. (This was true in even the first wave of testing, as classroom observations had begun in the final two months of the previous term.)

Data on children's language acquisition activities and language use were gathered in a variety of ways. During individual interviews, the children themselves were asked to identify the persons they most often worked with on classroom projects, liked to sit with and play with at recess and after school, and to identify the languages they used in interacting with these children. Language use was rated on seven-point scales, ranging from "exclusively English to "exclusively home language". Similar identifications and ratings were made for the individuals the children most wanted to be like and would most like to take with them on a trip to the moon. The factoring and scale indices that derived from these measures, and from the others to be identi-
The techniques described immediately below are discussed in Chapter Three.

From another perspective, teachers were asked to rate the language acquisition behaviors of the children in their classrooms, again using a 7-point scale. In classrooms in which the teacher was assisted by an instructional aide a second set of ratings was obtained on the following items:

Asks the teacher how to say things in English.
Asks the teaching aide how to say things in English.
Asks other children how to say things in English.
Is willing to risk mistakes rather than not use English.
Actively tries to learn English.
Asks the meanings of words in English.

Further, as part of extensive family interviews (see Appendix A) mothers and fathers (or parent surrogates) were asked a series of questions about the child's use of English and the use of English in the home around the child. These interview responses were qualitative, and at the end of discussions parents were asked to summarize them quantitatively on a seven-point scale.

In addition to these measures, extensive data were collected on individual children in classrooms through observational procedures. Training of the classroom observers began in January of 1981, and continued through April of that year. Classroom observation began in mid-April and continued until the end of school in June, 1981, when the initial cohorts of children were in either second or fourth grades. Weekly observations resumed at the opening of school in the Fall of 1981, continuing through the school year to the Spring of 1982.

Throughout this period, two researchers were assigned to each of the eight classrooms. In all, each researcher spent approximately six hours weekly in classroom
Research Design

observation or individual interviewing for approximately forty weeks for a total of almost 4000 hours of observation or face-to-face contact with individual students. In addition to this work and the group testing at the classroom level over 300 hours of classroom interaction were videotaped. Larger-scaled community contexts of the children's out of school activities and the characteristics of school populations and districts were studied in earlier phases of the project, and have been described in our first-year report to NIE (Hansen, et al., Classrooms in Context, 1981).

Section B

Language Acquisition Variables

Of the various language instruments administered during the school year 1982-83, two tests were taken as our primary measures of language change through the school year and through the summer. Both are sub-tests of the Stanford Diagnostic Reading Tests (SDRT). The SDRT was selected among various standardized instruments that are available primarily because of the ease of administration and the availability of multiple forms and multiple levels of the test, which have been carefully standardized and which are reasonably equivalent from form to form and from level to level.

The first of these tests is a measure of vocabulary (Test One, Red and Green levels, SDRT). The words in this test represent different parts of speech and in the test construction were sampled from three different content areas: Reading and Literature, Mathematics and Science, and Social Studies and the Arts. Students were asked to select the word or words that best fit the meaning of the sentence when the items, stems and the three options are all dictated. The test thereby provides information about language competence without requiring the students to read.
Selection of words to be included in the auditory vocabulary test was based on criteria concerning the nature of the word (syntactic function and definition) and frequency of use by students in relevant grades.

The second test used for our analysis of acquisition required reading comprehension (combined tests Four and Five, Red level; test Five, Green level). On the Red (less advanced) level, students were required to recognize words and attach meaning to them, allowing assessment of "applied" reading for children who cannot read sentences or paragraphs (by asking them to identify words that describe a particular illustration) and to read and comprehend sentences and short reading passages (by identifying pictures that best illustrate the meaning of the printed sentence and by identifying the ability to read and understand short passages presented in multiple-choice cloze format.) Students at more advanced levels (roughly, at a fourth grade equivalent) were tested for literal and inferential comprehension, both by short reading passages presented in a multiple-choice cloze format and by short passages followed by questions. At both levels the materials were oriented toward language familiar at the grade level of the students being tested.

In our choice of tests, it was recognized that the SDRT, as all available standardized tests, appears to be culturally biased to the disadvantage of children in immigrant homes. It has, in recent years, become fashionable to argue that this simply represents the realities of the world to which the child must adjust; hence the cultural bias of the test is turned into an advantage for assessing probable success. Except in its most narrow application (assessing the child's levels of acquisition of the meaning and mechanisms of advancement in the dominant culture) this argument begs a question and diverts attention from critical concerns of both research and application.

In the current research, for example, our concern is with identifying environmental influences and correlates of English acquisition, not of cultural acquisition. If we blind ourselves to this by pretending, in essence, that the cultural biases of our assessment instruments are pragmatically irrelevant, we are also blinding ourselves to the identification of those con-
textual variable that may influence language acquisition but not cultural acquisition. Similarly, in interpreting our results, we are blinding ourselves to programs of application that may effectively enhance the acquisition of English and burdening ourselves with the added (and arguable) requirement of enhancing the movement of the child into the cultural meanings and values toward which the test is biased. It should be noted, in passing, that most children are to some degree disadvantaged by this bias, since the language of school children, like all language, is dynamic and changing. The meanings and values that have been built into standardized tests are oriented toward children of an earlier era, giving full advantage only those who have experienced a somewhat defunct language environment. This more general disadvantage, of course, is minor compared to the disadvantage of the child from another culture.

For purposes of the current research, however, we believe that this and other shortcomings of standardized tests such as the SDRT are outweighed by their advantages. We have designed a study to reduce the biasing influence of levels of cultural acquisition through our test-retest-retest sequence, in which the earlier test serves as a base against which change can be assessed by the later test. This, of course, does not fully remove the cultural bias, and we are aware of the need to consider this in the interpretation of our results. Were this a study of language acquisition per se, we would remain fundamentally concerned with cultural bias and the other limitations of our standardized tests. Again, however, we remind the readers that we are not studying language acquisition; rather we are attempting to identify and explore the contextual processes that relate to efforts to learn a language. The purpose of the standardized test scores, then, is simply to help us to determining if it is reasonable to argue that our indicators of acquisition of language behavior are indeed, related to language acquisition. Keeping this delimited purpose in mind, we turn to the evidence of acquisition offered by vocabulary and comprehension tests.
Section C

Second-Language Acquisition
in the Schoolyear and the Summer

The basic evidence of variations in second-language acquisition is presented in two forms, first in Figure 2.1 and second in Table 2.1. In both cases, data represent only those children who are from homes in which Spanish is the dominant language and who participated in all three waves of testing.

The findings depicted in Figure 2.1 suggest that all aspects of language learning are not uniformly influenced by schooling or summer experiences. Of our two indicators, the acquisition of "auditory vocabulary" (assessed in ways that did not require the child to read) shows a consistent rise through the school year and on through the summer. By contrast, the acquisition of comprehension skills appears to have advanced somewhat faster than vocabulary through the school year, but essentially leveled off through the summer months.

In Table 2.1, the discrepancies in acquisition are even more clearly represented. In this table, the standardized scores presented in Figure 2.1 have been converted to their grade equivalents, relative to the national norms, presented by the SDRT scale constructors (see Karlson, Madden, and Gardner, 1976; Red Level page 92, Green Level, page 93). It will be noted that the grade level performance of these children in English vocabulary and comprehension are considerably lower than might be expected from
Figure 2.1

Mean Standard Scores.
Auditory Vocabulary and Comprehension,
Fall 1981/Spring 1982/Fall 1982

Solid line = Comprehension
Dotted line = Vocabulary
Table 2.1
Mean Grade Equivalent Scores and Change in Schoolyear and Summer, Comprehension and Auditory Vocabulary

<table>
<thead>
<tr>
<th></th>
<th>Fall 1981</th>
<th>Spring 1982</th>
<th>Fall 1982</th>
<th>School Change</th>
<th>Summer Change</th>
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<td>1.3</td>
<td>1.9</td>
<td>1.9</td>
<td>.6</td>
<td>0</td>
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<tr>
<td>Auditory Vocabulary</td>
<td>1.8</td>
<td>2.2</td>
<td>2.5</td>
<td>.4</td>
<td>.3</td>
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*Students from Spanish Dominant Homes. N = 109.
their chronological ages. It should be recalled that approximately half of our subject population was attending school in the fifth grade at the time of testing; the other half was in the second grade, yet the mean overall grade equivalent of their scores mid-year is at the second grade level. This, of course, was expected; the students in our subject population were selected precisely because they are limited in their English capabilities.

What is most interesting in Table 2.1 is, again, the difference in rates of acquisition of vocabulary and comprehension skills. In the six months that intervened between the first and second waves of testing in the 1981-82 school year, the levels of performance on auditory vocabulary increased from a grade equivalent of 1.8 to an equivalent of 2.2, or somewhat less than might be expected in the national norms. More precise interpretation of this is impossible to offer, partly because of the ways in which the grade equivalencies have been constructed (as will be briefly discussed below.)

Over the three-and-one-half months that separated the Spring and the Fall testing the vocabulary scores increased from a grade equivalent of 2.2. to 2.5 or slightly more than would be expected. All in all, given the difficulties of interpretation of these grade equivalencies, it can be said that the acquisition of auditory vocabulary skills appears to have proceeded uninterruptedly through the school year and summer. The acquisition of comprehension skills, however, showed a higher rate of increase during the school year than would be predicted from the national norms; during the summer months, however, there is virtually no change in the overall mean. Before further discussing these differences in vocabulary and comprehension acquisition, a few methodological notes and cautions are in order.

First, since we are dealing with students at two different age levels, it is reasonable to suppose that there are somewhat different rates of acquisition in our sub-populations. There are indeed differences between the second and the fifth grade populations, with the younger children showing somewhat more rapid increase in vocabulary levels than their fifth grade counterparts, and
Research Design

the older students showing a somewhat more rapid increase in comprehension skills through the school year Consis-
tently, however, the differences are not great enough to justify separate tables and figures, given the fact that we are using these tests as simple approximations, rather than as precise measurement instruments. The figures and tables in this chapter, then, should be taken as reasonable approximations of the relative change in both second and fifth grade cohorts.

Second, it should be noted that, although we do present grade equivalents in Table 2.1, we are advancing our argument in this chapter primarily on the basis of standard scores, rather than either raw scores or grade equivalents. Given the current state of understanding of the metrics of standardized tests, the reasons for this choice must be presented.

In the longitudinal study of change, the choice of measurement metrics is currently under debate. Some researchers opt to use simple raw scores in the study of class differences in acquisition of language skills over time. The raw score is simply a summation of the number of items that were correctly answered; these are converted into scale scores (sometimes called standard scores) by normalizing the distribution and fitting intervals to standard units. On the SDRT, the scale scores are converted into grade equivalence scores by plotting them against the grade levels of students in the norming sample, and imputing intervals based on relationships over time. All of these scales, of course, are ordinal measures, and the order of students is preserved from one transformation to another. In some cases, however, the choice of raw score, scale score or grade equivalency score can influence results and, hence, the most recent of interpretations.

In her study of word acquisition during the school year and over the summer, for example, Heyns (1978) opted to base her analyses on raw scores. In this choice, she sought to strengthen the metric assumptions that under- lay her rigorous statistical argument. Raw scores tend toward conservative estimates of change, and if anything, are biased toward a regression to the mean for high-scoring children. By opting for raw scores, she avoided the charge that she had biased her results by accepting metrics that overemphasize change.
Heyns nonetheless used grade equivalence scores for heuristic purposes, since they are more easily interpreted by the reader. Although this usage is common, most researchers have moved away from the use of grade equivalents for analysis, as they generally are seen as unreliable and falling into non-normal distributions. For these reasons, Lindquist and Hieronymus, (1964), for example, opted instead for standardized scores. In the current study, there is an additional reason for opting for the use of standard or scale scores, over either raw scores or grade equivalent scores.

The use of scale scores allows us to deal when appropriate (and as has been argued, with the particular sets of data we have, it is generally appropriate) with our entire subject population, rather than breaking them into the smaller age cohorts. Further, the scale scores allow easy comparison between the cohorts when they are treated in separate analyses.

Having decided to employ scale scores, we turned to our preliminary analyses, which indicated that with our particular set of data the choice was of little consequence. With the particular range and distribution of scores among our tested students, the correlations between the raw scores, grade equivalents and scaled scores is near unity. Further, it should be noted that our analyses rely on various elaborations of correlation procedures (including regression analyses). These have been shown to be quite robust across ordinal transformations of scale (Labovitz, 1970).

Returning, with the above cautions in mind, to the interpretation of Figure 2.1 and Table 2.1, what are we to make of the difference in change scores in vocabulary and comprehension tests? Recall that our purpose in this study is to identify and explore possible contextual influences on language learning behaviors. The data that we have presented so far suggest that the comprehension variable offers a far more likely vehicle for identifying contextual influences than does the vocabulary measure. Heyns (1933) and others have fairly well established that contextual influences are likely to be more pronounced during summer months than during school years. Neither Heyns nor any other researcher, however, has established that
contextual influences are exerted equally in all areas of language learning or any other kind of learning.

Given the relatively persistent acquisition in the vocabulary area, with little difference between summer and school year rates of change, we would expect that multivariate analyses of the relationship of various contextual variables to vocabulary change will be less useful to our purposes than will the corresponding analyses of comprehension change. This interpretation is supported by Table 2.2, in which the level of association between testing waves one and two and between two and three are presented.

The earlier table evidenced that, on the average, there is a steady change in vocabulary skills. This leaves open the question of which individuals are changing. Possibly some students are changing rapidly, while others are changing only slowly or even declining in their skills. If so, it is possible that during the summer months there is a greater variability in the learning or non-learning of vocabulary than there is during the school year. If this is the case, the vocabulary measure may still be useful in identifying the contextual loci of learning.

Table 2.2, however, suggests that this is not the case. This table essentially identifies whether the child's relative ranking compared to his classmates at one point of time differs from his relative ranking at the next point. Do the highest scorers on wave one also score highest on wave two? Are the same children consistently the lowest scorers? And, most important for our purposes, is there a closer correlation between the rankings on the first and second waves of the testing than there is between the rankings on the second and third waves?

Table 2.2 evidences that for both auditory vocabulary and comprehension there is fairly high level of correspondence between the rankings on waves one and two (beta = .78 and .81 respectively). Again, however, we see difference in the two measures during the summer months: the beta between comprehension wave two and wave three is only .56, while the corresponding figure for the vocabulary measure remains at the relatively high level of .80. To be sure, even a beta of .80
Table 2.2

Association of Test Scores

Between Waves 1 and 2 and Waves 2 and 3

Auditory Vocabulary and Comprehension: Beta, (Beta-squared)

<table>
<thead>
<tr>
<th></th>
<th>Waves 1 &amp; 2</th>
<th>Waves 2 &amp; 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Auditory Vocabulary</td>
<td>.78 (.61)</td>
<td>.80 (.64)</td>
</tr>
<tr>
<td>Comprehension</td>
<td>.81 (.66)</td>
<td>.56 (.31)</td>
</tr>
</tbody>
</table>
suggests that the earlier test "explains" only about two thirds of the variance in the later test. Clearly something other than earlier levels of acquisition are influencing the level of achievement on the third testing of auditory vocabulary and on the second testing of both vocabulary and comprehension. Of the four relationships presented in Table 2.2, however, the third testing of comprehension is clearly discrepant, with only approximately one fourth of the grades explained by the earlier test.

Table 2.2, then, suggests the possibility that the acquisition of comprehension skills in these students is more affected by schooling than is the acquisition of vocabulary skills. At this point it is useful to remember the orientation to language learning that was presented in Chapter One: To learn a second language requires persistent choice and effort. It is reasonable to assume that the acquisition of comprehension skills is a more difficult task than is the acquisition of simple vocabulary recognition skills. It is also reasonable to speculate that, when neglected, comprehension will deteriorate more rapidly than auditory vocabulary skills. This interpretation would help us understand the drop in comprehension scores by so many students during the summer months.

In all, then, the data in this section suggest that contextual influences are stronger for the acquisition of comprehension than auditory vocabulary. Nonetheless, the remaining unexplained variance in the auditory vocabulary scores allows the possibility of contextual influences. In the following chapter, then, we focus on both of these variables as we search for clues to the contextual loci of language learning.

In this preliminary data analysis at least one point is already clearly evidenced. It is commonly acknowledged in research, as well as everyday life, that language learning is not uni-dimensional, but involves multiple and diverse aspects. Only two of these have been represented in the foregoing analyses, but they suggest something of considerable educational importance: various aspects of second-language acquisition may differ significantly in their vulnerability to teaching and other contextual influences.
Chapter Three

Language Use and Language Learning Behaviors:
Identifying the Contexts
of Second Language Acquisition

The results of the previous chapter can be summarized succinctly: In the absence of schooling the children in our sample continued to acquire skills in auditory vocabulary at about the same rate as they did during the school year. By contrast, the rate of growth in comprehension skills dropped dramatically during the summer months.

Further, the changes in rates of comprehension learning were far more erratic than the changes in rates of auditory vocabulary learning. Most of the students appeared to increase their auditory vocabulary over the summer at the about the same relative pace as they had during the school year. This was not the case with comprehension: in this area the data reveal only a modest relationship between levels of school-year learning and summer learning.

This suggests that the comprehension variable is more interesting for the task that now confronts us. That task is to identify the relationship between our language learning variables and our measures of language learning activities. Clearly, both the mean rates of learning presented in Table 2.1 and the variability in summer learning, from student to student, pose intriguing questions.

Nonetheless, the comparatively stable rates of auditory vocabulary acquisition may be useful to our task, particularly in the comparisons and contrasts they will offer with analyses of the comprehension variables.
Identifying the Contexts

Although the relationship of language learning behaviors and actual language learning remains largely mysterious, it is less so than the questions we will undertake in future chapters. In this level of analysis, it is possible to subject our quantitative data to established and relatively rigorous statistical procedures. Keeping in mind the various limitations that have been discussed to this point, and others that we will add below, we will use the quantified procedures in this chapter to suggest the viable locations of variables that may be critical to second language acquisition.

These locations, as we have suggested in Chapters One and Two, include not only variables that relate teachers to students, but also variables of peer relationship, family relationships, and larger community involvements. To repeat the theme introduced earlier; although each of these areas has been identified in isolated arguments as important to second language acquisition, we lack empirical demonstration that they are, indeed, all involved in the language learning process. Lacking such demonstration, the possibility remains open that any one or perhaps all of these reputed influences in fact lack influence.

To put this in statistical terms, it is possible that the apparent relationship to language learning of any one or more of these is in fact spurious. For example, it is reasonable to expect a significant correlation between the child's use of English in the home and the child's relative rate of language acquisition during the school year. But what happens when both classroom variables and family variables are included in the statistical equation? Do both continue to demonstrate statistical significance or does the more immediate influence of classroom variables wash out the influence of the family language use variables? Or the reverse?

The research strategy in this chapter is to compare the language acquisition rates of children during the school year with those during the summer, and further to compare the differential rates of acquisition of auditory vocabulary and comprehension skills. We turn first to the comprehension test variables, then to the auditory vocabulary.
Section A

Estimating the Influence
of Language Learning Behaviors
on Changes in Comprehension Skills

In the first step of this analysis, a multiple regression was run on the scaled scores for the Spring 1982 test comprehension. Included in the regression were the corresponding scores on the Fall 1981 comprehension test, an indicator of the child's use of English at home, two variables representing the child's use of English with peers and a number of variables representing language use and learning behavior in the classroom.

The nature of the comprehension test scores has been described in Chapter Two. The language use at home index was constructed from parental responses to a series of questions such as "When your child talks to you, what language does he or she use?" Through factor analysis, a four item index was constructed with factor loadings ranging from .50 to .89.

The language use with peers variable was constructed from students' responses to a semi-structured interview, administered individually. In this interview, the students were asked to identify who they would most like to spend their time with after school, on weekends, and at recess. Among the other information gathered during discussion was the language used in talking with these favored peers. Through factor analysis, two indices were constructed, one of language use with leisure-time peers, the other of language use with peers in collaborative projects.

The child's language behavior and learning behavior in the classroom are represented in our analysis by two sets of measures. The first is structured from the teachers' ratings of each child, compared to his or her classmates on behaviors that might reasonably be related
to language acquisition, such as "ask the teacher or aide how to say things in English" or, "puts a lot of time into learning how to write English". These items formed a single weighted factor index, with loadings ranging from a low of .39 to a high of .90.

In all then, the regression analyses were conducted with variables that are thought to reasonable represent language use in the home, language use with peers both outside the classroom and during class time in informal interchanges, and language use within the classroom, as well as measure of the child's previous language acquisition.

The results of the regression analyses are seen in Table 3.1. Because of the debate concerning the use of unstandardized versus standardized coefficients, the tables in this chapter present both. Unstandardized coefficients are represented with the symbol b; their standard errors with the symbol se; standardized quotations with the symbol b*.

The table is interesting in a number of respects. First, note the extremely high r-squared yielded by the equation. Of course, by far the largest contributor to this r-squared is the prior test, which accounts for .608 of the variance in the Spring test scores. But the combined weight of the language use variables increases the r-squared to .883.

This r-squared might appear to suggests that with this set of variables we are nearing a perfect prediction, but such a conclusion is preliminary if not unwarranted. It should be remembered that with few exceptions the indices used in this regression are at best approximations. Only the prior test score can make claims of validity and reliability required for such interpretation. Our other indices are simply preliminary approximations of language use behavior.

For example, our index of language use at home depends on parental reports of child behavior, and in only a limited range of the many categories of language use available to the child. In constructing this and the other indices in this regression we did not hope or intend to develop precise scales; rather, we sought representational indices that would help us to identify the viability of closer attention to such things as the
Table 3.1

Regression Coefficients of Comprehension Scores (Spring, 1982) on Prior Scores, Language Use at Home, in Classroom and With Peers (by order of entry)

<table>
<thead>
<tr>
<th>Prior Test</th>
<th>Home Language</th>
<th>Classroom Language</th>
<th>Casual Peer Language</th>
<th>Task-oriented Peer Language</th>
</tr>
</thead>
<tbody>
<tr>
<td>b</td>
<td>.6633</td>
<td>16.479</td>
<td>11.428</td>
<td>---</td>
</tr>
<tr>
<td>(se)</td>
<td>.0407</td>
<td>1.553</td>
<td>1.675</td>
<td>---</td>
</tr>
<tr>
<td>b*</td>
<td>.9299</td>
<td>.5722</td>
<td>.4246</td>
<td>---</td>
</tr>
<tr>
<td>r² Total</td>
<td>.609</td>
<td>.792</td>
<td>.883</td>
<td></td>
</tr>
<tr>
<td>r² Change</td>
<td>.609</td>
<td>.183</td>
<td>.091</td>
<td></td>
</tr>
</tbody>
</table>

@Coefficients at least twice as large as their standard error.
1Variables did not enter the equation.
(b = unstandardized coefficients;  se = their standard errors;  
b* = standardized coefficients.)
child's familial involvements and language use at home.

Given these cautions, Table 3.1 offers clear and compelling evidence that the exploration of interactive influences in family and classroom learning behaviors is in order. Having removed from consideration the large amount of variance accounted for by prior tests, the first variable to enter the equation is that of language use at home, which introduces a .18 change in the r-squared. The next set of variables to enter are those that have to do with distinct language learning behaviors in the classroom, which account for another 9 per cent of the remaining variance. The precise loadings of each of these variables is not particularly important. What is important is the clear indication that both language at home and classroom variables are involved in acquisition of comprehension skills during the school year.

Table 3.1 is also interesting for what it does not include: it offers no indication of the influence of language use with peers. This may be due in part to the great amount of variance that has been explained by the variables entered; quite simply there is nothing left to explain. Yet the peer variables had met the levels of probability (beta level) required for entry into the equation; it is premature, then, to suggest that there is no important peer influence on the acquisition of comprehension skills during the school year.

What the table does suggest is that however influential peer interaction might be at this time, it is of less importance than either classroom or familial influences. This suggestions takes on additional interest when we look at the estimation of changes over the summer in comprehension skills. Table 3.2 represents the results of a regression employing the same set of variables as 3.1, with the exclusion of the classroom indices. Here, the array of indices available in our analyses to date are clearly less adequate to the analytic test.

In Table 3.2, as we have seen in chapter 2, the prior test accounts for only for .32 of the variance in the Fall measurement of comprehension. The striking thing about this table, however, is that the only other variable to enter the equation is language use in "project-oriented" peer interaction. Our index of language use at home nears the beta level required for entrance into the equation, but fails to achieve it when nested within this
Table 3.2

Regression Coefficients of Comprehension Scores
(Fall, 1982) on Prior Scores, Language Use at
Home and With Peers (by order of entry)

<table>
<thead>
<tr>
<th>Prior Test</th>
<th>Task-oriented</th>
<th>Casual Peer</th>
<th>Home Language</th>
</tr>
</thead>
<tbody>
<tr>
<td>b</td>
<td>.4730(^@)</td>
<td>3.2514(^@)</td>
<td>---</td>
</tr>
<tr>
<td>(se)</td>
<td>.1327</td>
<td>1.6025</td>
<td>---</td>
</tr>
<tr>
<td>b(^*)</td>
<td>.5564</td>
<td>.3166</td>
<td>---</td>
</tr>
<tr>
<td>r(^2) Total</td>
<td>.315</td>
<td>.416</td>
<td></td>
</tr>
<tr>
<td>r(^2) Change</td>
<td>.315</td>
<td>.101</td>
<td></td>
</tr>
</tbody>
</table>

\(^@\)Coefficients at least twice as large as their standard error.
\(^*\)Variables did not enter the equation.

(b = unstandardized coefficients; se = their standard errors; b\(^*\) = standardized coefficients.)
array of variable. As in the case of Table 3.1, however, it is not legitimate to conclude that the familial variables are of little or no influence in the acquisition of comprehension over the summer. It is, for example, entirely possible that our index is an inadequate representative of the child's use of language at home. What Table 3.2 does suggest, however, is that, given the indices employed in these regressions, the influence of the language used in peer interaction was stronger than that of language use at home.

Tables 3.1 and 3.2 are represented diagramatically in Figure 3.1. The overall implication of this diagram and of the combined Tables 3.1 and 3.2 is that the child's language and learning behaviors in the classroom do influence the acquisition of comprehension skills, particularly as they interact with language use at home, but the influences of peer language use predominate during the summer.

This raises the possibility that one of the effects of schooling, at least with elementary level students with limited English skills, is to interrupt the influence of peer interaction during the school year. In absence of the regimens and requirements of school participation, peer influences gain in relative importance.

Our analysis of the influences on the acquisition of auditory vocabulary skills contributes further to this interpretation.

Section B

Language Use And The Acquisition
Of Auditory Vocabulary Skills

As anticipated, the results of our regression analysis of vocabulary acquisition are quite different from those yielded by regressions on comprehension variables. In the two analyses, the same sets of predictor variables were entered into the regression, but in the case of
vocabulary acquisition, the effects of the entire testing was considerably more powerful.

Table 3.3 presents the results of the regression on the measure of auditory vocabulary skills in the Spring of 1982. Only two variables entered into the equation, and none of the others even approached the beta levels required for entrance. The first variable entered was again the prior test, which accounted for .64 per cent of the variance in the Spring scores. The index of language use at home accounted for an additional 10 per cent of the variance, for combined r-squared of .75. None of the classroom variables nor any of the peer interaction variables even approached the level required for entrance into the equation.

Table 3.4, however, once again evidences the influence of peer interaction over the summer. Language use at home was the second variable entered into the equation, this time accounting for only a 2.4% of the variance in the Fall scores on auditory vocabulary. The index of language use with peers in free time contributed an additional 3 per cent to the total r-squared of .69.

The results of Tables 3.3 and 3.4 are presented diagramatically in Figure 3.2. These data, then, offer additional evidence of the influence of language use at home, both during the school year and through the summer months; they also evidence the contributing influence of peer interaction during the summer, but not during the school year.

The most striking contrast between the two figures in this chapter is in classroom language behaviors, which are absent from Figure 3.2. Although we may again point to the shortcomings of our language use indices to carry the burden of explanation, we must also explain why the classroom variables appear so dominantly in the regressions on comprehension.

Note that although peer indices enter into each of the figures, the indices differ in their character. In the case of vocabulary, it is the index of language use with peers during leisure time that enters; in the case on comprehension, it is the use of language with peers in collaborative projects that enters. The one implies casualness and relaxation, the other intent and effort. It is possible that this links to the absence of class-
Table 3.3

Regression Coefficients of Auditory Vocabulary Scores (Spring, 1982) on Prior Scores, and Language Use in Classroom, at Home and With Peers (by order of entry)

<table>
<thead>
<tr>
<th></th>
<th>Prior Test</th>
<th>Home Language</th>
<th>Classroom Language</th>
<th>Casual Peer Language</th>
<th>Task-oriented Language</th>
</tr>
</thead>
<tbody>
<tr>
<td>$b$</td>
<td>1.900$^6$</td>
<td>9.927$^6$</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>$(se)$</td>
<td>.1788</td>
<td>2.3509</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>$b^*$</td>
<td>.5983</td>
<td>.3796</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>$r^2$ Total</td>
<td>.652</td>
<td>.752</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$r^2$ Change</td>
<td>.652</td>
<td>.100</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

$^6$Coefficients at least twice as large as their standard error.

$^1$Variables did not enter the equation.

(b = unstandardized coefficients; se = their standard errors; $b^*$ = standardized coefficients.)
Table 3.4

Regression Coefficients of Auditory Vocabulary Scores (Fall, 1982) on Prior Scores, Language Use at Home and With Peers (by order of entry)

<table>
<thead>
<tr>
<th>Prior Test</th>
<th>Home Language</th>
<th>Casual Peer Language</th>
<th>Task-oriented Peer Language</th>
</tr>
</thead>
<tbody>
<tr>
<td>( b )</td>
<td>1.050(^{\text{b}} )</td>
<td>7.432(^{\text{b}} )</td>
<td>1.587</td>
</tr>
<tr>
<td>( (se) )</td>
<td>.1343</td>
<td>3.543</td>
<td>.7993</td>
</tr>
<tr>
<td>( b^* )</td>
<td>.9415</td>
<td>.2549</td>
<td>.1743</td>
</tr>
<tr>
<td>( r^2 ) Total</td>
<td>.638</td>
<td>.662</td>
<td>.691</td>
</tr>
<tr>
<td>( r^2 ) Change</td>
<td>.638</td>
<td>.024</td>
<td>.028</td>
</tr>
</tbody>
</table>

\(^{\text{b}}\) coefficients at least twice as large as their standard errors.

1Variables did not enter the equation.

(\( b = \) unstandardized coefficients; \( se = \) their standard errors; \( b^* = \) standardized coefficients.)
room variables in the auditory vocabulary regression, for these variables, too, imply intention and effort.

Recall, too, that in Chapter Two we identified an increase in the mean scores for our group in auditory vocabulary skills through the summer that matched and even slightly exceeded the rate of growth during the school year. By contrast, the growth of comprehension skills increased during the school year, but not during the summer.

The evidence presented so far, then, suggests the possibility that differing aspects of language acquisition require differing levels of intention and effort by the learner. Further, they suggest the possibility that what goes on in classrooms contributes or thwarts the acquisition of these skills in different ways. In our analyses we have looked at only two of the many aspects of language acquisition, but these two there present clear differences in the influences of classroom behaviors.

The data suggest the possibility that some aspects of second language acquisition require comparatively active involvement and effort on the part of the learner while others can be acquired more casually. Perhaps they are some kind of a byproduct of other interactions, of perhaps they are simply absorbed or assimilated in the course of living in a society and with media saturated with the English language. We will discuss this and other possibilities in Chapter Eight.

The major purpose of these analyses was to consider the viability of further study into the child's environment, both within the classroom and outside it. Our data clearly indicate that the language behavior of the child in the family and with peers, both outside the classroom and within it, relate to the acquisition of both auditory vocabulary and comprehension skills.

In brief, then, the analyses in Section One suggest that language learning is located not only within the structured settings of the classroom, but within the family and peer relationships as well. They further suggest that the locus of learning is clearer for some aspects of language acquisition than others, and we have speculated that the difference may have to do with the
Identifying the Contexts

complexity of the processes of learning and the inten-
tional effort required to learn.

The implication of these findings and interpreta-
tions is that, if teaching is to be effective these wider
contexts of learning must be taken into account and where
possible employed to enhance language learning behavior
within the classroom, and to facilitate it in the child's
life outside school.

In its more complex and subtle aspects, language
learning must be self motivated. Classroom situations and
teaching strategies may enhance the levels of self moti-
vation, particularly if the teaching is informed by a
knowledge of the child's world outside the classroom. The
real promise in language instruction, we believe, is in
the identification of manipulable factors within the
classroom that in turn catalyze or facilitate language
learning efforts throughout the child's daily life.

If we are to seek teaching strategies that encourage
intentional language learning efforts, we must be able to
identify (1) What it is in the individual that leads to
intentional effort and (2) What it is within the indi-
vidual's living contexts that support and constrain those
intra-individual influences. We turn to the first of
these tasks in the next section.
Section Two

EXPLORING LEARNING STRATEGIES
Chapter Four

The Basic Model:
The Central Importance
of Lesson Value and Lesson Confidence

Our focus is on second-language acquisition in the classroom. We have asked why some NES and LES students learn English and other classroom subjects quickly, while others learn slowly or hardly at all. Our approach to this question emphasizes the importance of the learner's living contexts, and our data have supported this approach. Put simply, classroom learning cannot be understood with a perspective that ignores the influences of the child's peer, familial and community involvements. The child's family and closest friends may not be present in the classroom, but their influence may be significant.

The methodological and theoretical problem is to identify those fulcrum variables through which the child's learning and living contexts are expressed. These variables, of course, are located within the individual child. Most adequately they might be represented in phenomenological terms, but such theoretical constructs have proved difficult to pin down in research specifications. Our goal is to understand the social contexts of second-language learning in the classroom not simply as an academic exercise, but as a means to facilitate learning.
Our approach to this problem draws on the convergence of three distinct phases of our project, each of which has been pursued by a separate set of researchers, with differing methodological commitments: our literature review team, our staff interviewers, and our classroom ethnographers. Despite the differences in personnel and approach, each of these three component analyses suggested that, whatever else is involved, two sets of interacting variables relate to learning behavior and learning outcome. The first set of variables refers to lesson value, the second to lesson confidence.

Before turning to the theoretical and methodological elaboration of these sets of concepts (in Chapters Five and Six), it may be useful to more clearly identify their nature. To do this, we will discuss, briefly, the ways in which these concepts have been identified in our review of the literature on language learning and language attitudes, and in our interviews with teachers, principals and other school staff.

Section A

Lesson Confidence

and Lesson Value

in Past Research

Over the past twenty years, Lambert and his associates (Gardner, 1960; Anisfeld and Lambert, 1961; Peal and Lambert, 1962; Lambert, Gardner, Olton, and Tunstall, 1968; Gardner and Lambert, 1972), have examined the influence of attitudes on learning a second or foreign language. In their social-psychological theory of language learning, a successful language learner also adopts various aspects of behavior which characterize members of the target language. Ethnocentric tendencies, attitudes toward the other group and perspectives on language learning are considered to be sources of motivation for learning a new language and to contribute to or inhibit
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eventual success.

This theory was tested in three American states: Maine, Connecticut, and Louisiana. In all three settings, strong motivation and desire to learn French were associated with good grades in French courses for the English Americans. The attitudinal foundation was different in each, however. In Louisiana, the positive force was parental encouragement combined with personal satisfaction; in Maine, the motivation was fostered by students' identification with the French teacher and sensitivity to others' feelings; in Connecticut, where there was no local French-speaking community, the motivation stemmed from integrative orientations toward the study of the language and the realization of its potential usefulness. In Maine and Louisiana, the authors concluded:

"The attitudes of French/American adolescents toward their own ethnolinguistic group and the American way of life can influence their linguistic development in both French and English, leading in some instances to a dominance of French over English, and in other cases of English over French, and still others bilingual competence."

The work of Lambert and his associates on integrative and instrumental motives in language learning continues to stimulate this area of study. In Canada, where the work originated with French and English language students, integrative attitudes (a willingness or desire to be like representative members of the "other" language community) seemed to facilitate language acquisition more than did instrumental attitudes (in which a second language is viewed as a means to gain social recognition or economic advantage). The argument is thrown into question, however, by the success of military language schools during World War II, in which military personnel learned foreign languages with remarkable speed, an accomplishment that is more readily explained by "instrumental" attitudes than "integrative."

Recognizing the possibility of bias in their research, Lambert and his associates continued their studies, and finally found an exception to their original proposition in the Philippines, where the English language plays a particularly important role in economic life (Gardner and Lambert, 1972). Here, the Canadian relationship was reversed: instrumental attitudes toward
language acquisition were far more important than integrative. In a speculative extension of their work, they suggested that in North American settings students of foreign languages may be more motivated by appealing to their integrative attitudes, while students of minority language groups who are learning the dominant language may be more facilitated by appealing to both instrumental and integrative motives and attitudes:

"What has been most encouraging to us throughout these investigations is the fact that one can with the proper attitudinal orientation and motivation become bilingual without losing one's identity. In fact, striving for a comfortable place in cultures seems to be the best motivational basis for becoming bilingual."

The proposition that an integrative orientation toward the target language culture is more facilitative of second language learning than is an instrumental orientation has generated contradictory research results, however, leading to calls for reconceptualization, such as Savignon's (1972) suggestion that the integrative orientation may be a result rather than the cause of success in language learning, which may be seen as a variant on the general theme that behavior influences attitude.

The issue of whether a language orientation is a result or cause of learning a second language has also been raised by studies comparing students in monolingual and bilingual education programs (Pryor, 1968; Dawson and Ng, 1972; Lopez, 1972; and Covey, 1973). In a study of 200 Mexican-American ninth graders, Covey (1973) found that students enrolled in a bilingual education program had a more favorable evaluation of self, school, peers, and teachers than students in a regular educational program. The former also achieved significantly higher levels in the academic discipline of English and in the area of reading than the latter; there were no significant differences in math scores. This finding was supported by another study which indicated that Mexican-Americans in a bilingual education program had an enhanced self-concept (Lopez, 1973).

Contrary to the above findings, a more recent study involving first- to third-graders reported that bilingual education does not significantly alter the
self-concept of a Mexican-American child (Seligson, 1979). The researcher argues that it does not foster feelings of segregation and separation, nor does it provide the milieu in which a Mexican-American child's self-concept will be strengthened. Close examination of these reports yields little resolution of the issue; all that can be said with some certainty is that the different results from the above studies may be due at least in part to differences in age of subjects, in the measurements used, and to other methodological incompatibilities.

A recent study of the Gardner and Lambert concepts -- also inconclusive -- further advises that the problem is primarily methodological, and that "attitude theorists will have to find better measures, or different bases for testing their theories" (Oller, Perkins, and Murakami, 1980, page 20). A related study suggests that the problem is also conceptual, and that "a highly elegant model relating attitudes and motivations of second language learners to attain language proficiency has yet to be developed" (Johnson and Krug, 1980, page 241).

An important variable often taken for granted is the language learning environment, which may or may not be conducive to learning a second or foreign language. For example, Quebec is more conducive than San Francisco to the learning of French; the United States is more conducive to the learning of English than Chinese. In his Welsh study, Lewis (1975) found the presence of strong geographical influence which was reflected in the fact that attitudes to Welsh among the monolingual English adults were much more favorable in Welsh-speaking areas than elsewhere. The stimuli, reinforcement and enticements non-English-speaking children get from living in an English-speaking environment may act as a positive influence in motivating them to learn the new language. On the other hand, cultural bias and intolerances of the dominant English group may discourage efforts to learn English, and estrange the non-English speaker. Although the complex influences of variable learning environments are not yet understood, clearly there are profound differences in the Lambert group's samples of Americans in Maine and Louisiana, where the subjects were learning French voluntarily, compared to the non-English-speaking children in our society, who have no choice but to learn English as a second language. Those differences may be critical in the gains and losses the learners anticipate.
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in learning the new language.

Oller and colleagues (Oller, Baca, Vigil, 1977; Oller, Hudson and Liu, 1977) hypothesized that second language learners would show higher rates of achievement than foreign language learners, if both groups had positive attitudes toward learning the language. The hypothesis was sustained in studies of Chinese graduate students in Albuquerque and El Paso: positive attitude toward self and toward members of the native language group resulted in higher scores on a test of English proficiency (Oller, Hudson and Liu, 1977). Interestingly, an earlier study on Chinese students in the United States showed a negative correlation between spoken English proficiency and attitudes and motivation (Huang, 1973).

In studies of adult Japanese learners of English as a foreign language, the relationship between attitudes and attained proficiency in English was much weaker (Chihara and Oller, 1978). In fact, in some cases where positive correlations were expected, negative or insignificant correlations were observed. The authors suggest two possible explanations for the above observations. Either there is an indirect and therefore weak relationship between attitudes and attainment of proficiency in a target language or the validity of the attitude measures is in doubt.

These researchers also found that integrative attitudes towards the language played an important part in attainment proficiency. Learners did better on the ESL Proficiency Test if they saw themselves and Mexicans in general as high on factors that could be interpreted roughly as "willingness to receive instruction." They appeared to be motivated away from integrating with the Anglo-American majority. "This was strikingly apparent in the fact that if subjects rated Americans as high on a factor defined principally in terms of positive personal traits they did more poorly on the ESL test. As they became more proficient in ESL they appeared to become more negative toward Americans." This interpretation was consistent with the finding that although some traits were valued positively when attributed to one's self or native language group, they were valued negatively when attributed to Americans (Oller, Baca, and Vigil, 1977).

This research suggests a positive correlation between attitudinal positiveness and language learning.
and usage. Other studies, however, show a low or negative relationship. In research on Polish immigrants in Australia, Johnston (1963) reported a low correlation between subjective and objective assimilation in the language area. She found that many older Polish immigrants in Australia identified strongly with English, although they hardly spoke or understood it. In contrast, many young immigrants spoke English fluently and yet identified strongly with Polish, although they spoke it very poorly.

A similar negative relationship between language use and attitudinal positiveness was found in Fishman's (1965) study of language maintenance among pre-World War I European immigrants in the United States. He reported that the first and second generation individuals who had previously characterized their native languages as "ugly, corrupted, and grammarless" now viewed them positively and nostalgically. The younger second- and third-generation individuals viewed the native languages with less emotion but even more positively. However, instead of increased usage of the native languages, Fishman found "attitudinal haloization" within large segments of all generations. In other words, the increased esteem for non-English mother tongues was accompanied by the narrower domains of language use. Gumperz and Hernandez-Chavez (1972) reported a similar "stylistic embroidering" with the mother tongue in a Spanish population.

Why does attitudinal positiveness appear to lead to language learning and use in some cases and not in others? Our discussion in Chapter Three suggests that part of the answer may be an artifact of theory; i.e., conceptualizations of intentions and attitudes are not yet adequate to the complexity of the subject. But our interpretation of the literature, and even more clearly our observations and qualitative interviews suggested that there is another part to an answer: that additional critical variables are involved. Most important of these variables, our interpretation of the literature suggests, is that of behavioral confidence. The most pertinent of this literature points to an interactive effect of language attitudes and self-conceptions.

Clement, Gardner and Smythe (1977) noted that if an attitude theory of language learning -- such as the "instrumental and integrative" orientations of Lambert and Gardner -- were to be extended into a general theory
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of second language acquisition, cross-cultural validity and generalizability would be required. Abundant research has been done on the acquisition of French by Anglophones, but little research has been done of the Francophone learning English as a second language. Similarly, considerable work has been done on English as a second language in the United States, with a relative neglect of the learning of foreign language. We have seen above that there may be considerable difference in the anticipated gains and losses related to language acquisition in the two situations, depending on the economic and/or political importance of the language being learned.

To address this deficiency these researchers administered attitude and motivational scales to 304 tenth- and eleventh-grade Francophone students in Montreal. The results supported their expectation that the motivation or intention to continue studying English is related to integrative attitudes, but language attainment is more closely related to the individual's "self-confidence derived from prior experience with the language." The instrumental orientation was not directly related to achievement in English. Rather, as was found in the Philippines (see above) the instrumental orientation to second language study "was associated with feelings of alienation, suggesting that such an orientation is indicative of emotional dissatisfaction rather than a potent motivating basis for second language study. The results, however, indicate a possible socio-cultural basis of the individual's self-confidence with English, suggesting the importance of identifying the factors that are related to self-confidence in the second language.

This suggestion is consistent with, and may be subsumed under, a more general and well-established linkage of positive self-concepts and self-esteem to academic success. Despite considerable differences in definitions, instruments, research designs, age groups, time and place of research, the relationship has been identified repeatedly. As this literature has been ably reviewed elsewhere, a few examples will suffice. McDavid (1959) early identified a clear "non-accidental" linkage between level of reading and self-concept, a finding corroborated by Wattenberg and Clifford's (1964) study of changes in the reading level in kindergartners over a two and one-half year period. Brookover and Thomas' (1964) research on 1,050 urban seventh graders yielded a strong positive correlation between general self-concept
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and levels of academic attainment, as well as a linkage between conceptions of ability and achievement in specific subject areas. In short, self-esteem and self-concept have been shown repeatedly to have positive and direct relationship to educational success (see also Bledsoe, 1964; Brookover and Thomas, 1964; Gillham, 1967; Fishman, 1971).

Two methodological cautions are in order, however. First, although the correlations yielded in these studies are relatively strong by educational and sociological standards, undeniably strong correlations are rare in social research. What would in other fields be taken as only moderate relations (e.g., r = .30 to .50) are often termed "strong" in social research -- even though the amount of variance (i.e., the amount of "success" that is statistically "explained" by self-esteem) in these "strong" correlations is only 9 to 25 percent. Second, it is difficult to determine causal priority: Does success breed esteem, or does esteem breed success? Some studies have measured self-esteem early in the year, and then related the measure to grades or test scores later in the year, with the claim that this established an "antecedent" influence of self-esteem. But what of the linkage of this year's self-esteem to last year's grades? It is the chicken-and-egg conundrum once again.

These problems are endemic to social research, however, and today there is general agreement that self-esteem relates to schooling success, and particularly that negative attitudes towards self are associated with underachievement and failure (see also Bledsoe, 1964; Bodwin, 1957). Coopersmith and Feldman (1974), for example, have observed that in younger children it is the unsure child, who expects failure, who is most likely to give up early in school, and Covington (1968) has argued that failure in the classroom results in a continuous low confidence-low achievement downhill spiral. Some classroom behavior of low-achieving students -- and perhaps the low achievement itself -- may be an avoidance reaction, an attempt to avoid incurring a longer succession of disappointing academic failures which would be more damaging to the person's self-esteem. This model of failure-avoidance, as a means of reinforcing or protecting a positive self-concept of ability, implies a link between ability and self-worth. Given this assumption, avoidance of ability-threatening experiences may be understood as attempts to avert negative ability attribu-
tions, even at the expense of performance.

Rao's (1975) research suggests that competence in related skills may immunize the learner from such negative self-attributions when learning a second language. Rao hypothesized that the conflicts and cultural inconsistencies met in second language learning would lead to high maladjustment scores. He reasoned that the differences in a second culture as well as the potential irreverence held by the Telugu for the Tamil majority would inhibit their language acquisition and emotionally upset the children in the process. Thus, original cultural differences were expected to inhibit the integration of the bilingual child into the new community, and to dampen any positive motivations that may have been brought to the new situation. Rao's hypotheses, however, were not confirmed. He could find no evidence of discernible maladjustment in the bilingual children. Rao interpreted the apparent lack of maladjustment as due to a "first language" adequacy; the children were learning a second language after the first had been adequately inculcated, such that the child was capable of full self-expression in a native tongue. Thus, the child's self-concept and confidence were not eroded by the experiences of second language acquisition.

The presumed influence on language learning of confidence and self-esteem thus appears reasonable in light of available research, and today is little disputed. But more specific points nag. How much influence does self-esteem have on learning? Does the influence vary from situation to situation? Does positive self-esteem really contribute significantly to superior learning -- or is the influence basically negative, with low self-esteem making it impossible for the child to engage in classroom lessons?

Another set of studies suggests a further complication in the use of self-concept arguments: self-concept may be of more importance to understanding some cultural groups than others. The linkage of self-concept with cultural variables has been generally assumed, but the evidence is inconsistent. Like Coleman (1966), Hishiki (1969) found that the self-concept of a group of Mexican-American girls from East Los Angeles was lower than that of a group of Caucasian girls in Georgia (from a study of Bledsoe and Garrison, 1962). She also found a relationship in the Los Angeles sample between self-concept and IQ (Lorge-Thorndike), in contrast to the
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Georgia sample (in keeping with findings of Davidson and Lang, 1960, and Piers and Harris, 1964). Hishiki further found the association between self-concept and academic achievement was stronger for the Mexican-American sample. In contrast, deBlassie and Healy (1970) and Carter (1968) found no important differences in the Anglo and Mexican-American groups. Similarly, some researchers have found lower self-concept in black children compared to white, while others have found no significant difference in self-concepts, and some even have suggested that the self-concept of black children may be higher than that of whites (see, for example, Soares and Soares, 1969).

Despite the promise of the "self-concept argument," then, caution should be exercised in applying it, especially in the discussion of learning in a bilingual-bicultural classroom. In addition to difficulties of interpretation, and assignment of causal significance, Evans and Anderson (1973) offer evidence that suggests self-concept may be of differing importance to the schooling success of differing groups. These researchers were attempting to identify how much of the variance in achievement could be explained by various cultural elements, including measures of self-concept. As have other researchers, they found little difference in the achievement motivation between Mexican-American and Anglo groups of students. More surprisingly, the cultural and self-concept variables accounted for far more of the variance of the Anglo group than of the Mexican-American group. This was most marked in the area of language achievement, where .58 of the achievement variance of the Anglos but only .23 of the variance in the Mexican-American students' scores could be attributed to a self-concept formula.

Significantly, this finding suggests that other influential variables may be interacting with the self-concept variable, and that the other variables may be of lesser importance to "cultural majority" students than to cultural minority students. This insight provides another key to the synthesis that informs our discussions in this section.
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Section B

The Competence-Incompetence Paradox: Corroborative Evidence of the Importance of Lesson Value and Lesson Confidence in Qualitative Interviews with Teachers

In the literature on language attitudes and language learning, "motivation" and "esteem" concepts have been carefully isolated from one another except in speculative discussions of causal influence on one another: it is argued that "motivation" may contribute to successful learning, which may thus enhance self-esteem or it is argued that confidence contributes to success which enhances motivation.

Our reading of the literature suggests that, whatever the validity of this assumption of indirect causal relationship, it does not adequately represent the general thrusts of the research. That research indicates, first, that the value a student attaches to knowledge of a subject is, indeed, an important determinant of whether the student intentionally engages in the demands of the subject lessons. The literature also indicates that the student's confidence in his or her own competence to meet the demands of the lesson is another important determinant of whether the student will engage the lesson. The important and neglected point is this: if both complexes of variables are so basically important, neither may be adequate in itself.

The neglect of this point in research literature is paralleled in professional wisdom. Our qualitative interviews with teachers, principals and other school staff members yield virtually the same pattern of insights into the importance of motivation and confidence, and the same neglect of their interactive influences.

In this area, the most productive of our many questions to teaching professionals concerns the "competence/incompetence paradox". This paradox has posed a
persistent puzzle in the education of minority-language children. It is nicely described by Gallimore and Hu-Pei Au (1979) in a discussion of Hawaiian village children:

"While the children appear well-adjusted and entirely competent in their home environments, they often exhibit inappropriate behavior in the classroom and are slow to learn academic skills and content.... Their performance in school could be greatly improved if the ability shown in the home environment could somehow be transferred to the classroom."

Many of the explanations that have been offered to resolve this paradox have been located within the child. Lack of confidence, low self-esteem, low aspiration and weak achievement motivation are said to determine low classroom achievement in general; the child's attitudes toward English and toward his or her home language are further linked to problems in learning English as a second language. Other explanations are located more directly in the homes and communities in which the children live, and in which their self-concepts, attitudes and capabilities form. Still others are tied to political-economic structures of the larger society, particularly as these are reflected in curricular and evaluation procedures of the school.

As part of our effort to identify the attitudinal environment of the schools surrounding our target classrooms, we interviewed over 100 teachers, administrators, and other school staff personnel. Among other things we asked them to identify causal influences behind the competence-incompetence syndrome. Responses varied in nature and length. The question was somewhat difficult for some informants; many were able to mention only one or two factors involved in the competence-incompetence syndrome. Most, however, were well aware of the paradox, and recognized that it did exist at their school. Variation in responses between schools was striking, and shall be the subject of analysis in our final report. At this point, it is more pertinent to identify two themes that persist across schools: the importance of lesson confidence and lesson value.

The importance of self-image and confidence was articulated in a variety of ways. A bilingual teacher, arguing for continuation of bilingual programs, said:
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"...by giving them this kind of education that they need, we are avoiding many failures. We are preventing many students from failing. But most of all, we are giving students a sense of accomplishment, a sense that they can succeed."

Respondents most often relied on simple images of "self-worth" and "self-esteem" which could be altered through basic reinforcement schedules:

"Something that I'm very, very high on is self-esteem. The other night when I...made suggestions to the parents such as when they pick up their toys or do something, praise them. Find something to make the child feel good because it's been proven that children with a low self-esteem do not succeed as well as children that have high self-esteem..." (Interview #512)

These interviews also suggest more subtle possibilities however. One teacher noted the relation of the children's confidence to the demands placed on them:

"...If you see that you are not doing what other people are doing, in the beginning it's a different process because no one expects you to do much, but after awhile you run into a situation where you've got just enough skills to survive and people expect more of you. Then you get the stereotypes...I think the attitudinal problem comes from not understanding what was really expected of them, not being able to do it because of the difficulty, not having appropriate materials for them to do it..." (Interview #541)

Another, a bilingual aide, linked this problem of expectations and student confidence to the unequal power of student and teacher:

"Maybe too much is expected of them in their behavior. The teachers are very strong, you know. They yell at them..."look at me" (when I'm talking to you) and the kids...they bow their heads, and they are afraid."

Surprisingly, few school personnel mentioned the family as important in influencing the child's level of
confidence (although many emphasized the role of the family in shaping the child's attitudes and intentions to learn). By contrast, the influence of the child's peers was frequently mentioned. A special education teacher, with 27 years of experience saw this as vital:

"...the kid is constantly referring to what his colleagues or peers are thinking about him. And it all depends on what group you are running with. The kids they hung around with would tease them and give them a hard time. They cover that up. And others didn't know anything and they were always afraid to ask questions because they were afraid their peers would find out how stupid they were. I think that peer pressure and personal image is the most important thing with these kids. (Interview #549)

Like this teacher, most of the school personnel see the influence of peers as essentially negative. This influence can take a passive form, in which the child may experience a relative deprivation, which quietly and privately erodes self-concept and confidence:

"...They come with different, you know, different beliefs. And when they get to school it's a completely different setting with the other children. Sometimes they're amazed at how the other children act and behave and what they do and how they dress and things like that. By the way they're dressed compared to the other ones, they feel less than the other ones. (Interview #528)

More often, the teachers comment on overt acts and processes of discrimination:

"Discrimination is not too strong a word. Kids like to hassle, kids seem to accentuate differences among themselves.... I think the book Lord of the Flies in some ways is very accurate; kids tend to be vicious toward each other given the opportunity and a kid who is strange will have his accent mimicked or have his clothes made fun of. And they'll be scapegoated to some degree if the opportunity presents itself and the kid somehow doesn't show enough charisma or character or personality, I guess the word's personality, to simply overcome that."
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These teachers, then, reflect the researchers' emphasis on the importance of confidence in classroom learning. Similarly, at other points the respondents persistently pointed to the importance of values and intentions. Almost invariably, however, these variables were linked closely to the child's experience in the family and home.

"Their job expectation is very low.... 'I'm going to work in the service station' and that's it. Or 'I'm going to be a gardener, I'm going to be a.... There's very few of the e kids saying 'I'm going to be a teacher, I'm going to be a lawyer, I'm going to be a doctor.' It's the exception to the rule if... they have higher expectations for themselves. 'I'll do what my dad does, my dad is a manual laborer,' which is perfectly okay, but it would be nice if they could have higher expectations for themselves. And I think this is where many times families will say, 'Your father is a success, he does this, therefore that's good enough for you.' (Interview #532)

This same respondent, when asked what parents might do to enhance their children's classroom learning, suggested that:

"I would think first would be their attitudes towards school, because if they're eager, the kids will be more eager. I think maybe that much depends on what kinds of experiences the parents had at school. If they had positive feelings about school, the kids will also have positive feelings; if the parents had a miserable time, the kids will demonstrate this. They said school was no good therefore I don't think school is any good either.'" (Interview #532)

Some teachers also recognize that children usually have more positive attitudes and intentions toward 'activity outside the school:

"I think the interest prob' is one of the most important things. The other thing is probably choice, what they choose to do. Outside of school... it just comes; inside the school everyone is doing something to make you perform. And they might feel that it [the outside activity] is more worthwhile, something they can relate to better. There's some-
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thing more concrete. It doesn't always have to be play, it can be helping their father or mother do something at home or building a birdhouse or whatever. But they're actually involved in doing something that they can see and that has some meaning for them and a lot of things they do in school don't have that meaning.
(Interview #541)

Although many teachers recognized this discontinuity between attitude and intention towards school subjects, as compared with outside interests, only a few saw it as an opportunity for teaching. One male bilingual teacher, however, discussed this possibility in detail:

"...What we teach the student is completely irrelevant to what they have learned in the family or home environment, so what we teach them is something very irrelevant to them. They are very unfamiliar with what they are learning. I feel very strongly about teaching them first those things they are familiar with, those things they know well, and then from there we can go on and talk about many, many other things, develop other subjects. For instance, when discussing a story, I feel that a good lesson would be to talk about their family first, ...talk about their families, their community, and then from there we could talk about how they feel about school, what are some of the things they like and some of the things they don't like. So by first relating to them we can make those students that seem to be incompetent in school ... more motivated....

How can they participate in a discussion when what is being discussed is irrelevant to them or they have not seen or not experienced, for instance. Or if we are talking about how things are in Texas or how things are in any foreign country: this is going to be very unfamiliar to those students. But if we are willing to talk about their way of life, their environment, they could be more willing to participate."
(Interview #524)
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Section C

The Interactive Influences
of Lesson Value and Lesson Confidence

Both the research literature and the teachings professionals interviewed in this study displayed a clear awareness of the importance, on the one hand, "of positive attitudes toward learning" and on the other hand of "positive attitudes toward one's ability to learn". These themes emerge with regularity, and there appears to be strong evidence that the two sets of variables do, in some way, relate to both language learning in particular, and to classroom learning in general.

Each set of variables is plagued by a fundamental problem, however. Although cases may be identified in which the student with the "positive language attitude" quickly acquires the language, it is equally easy to point to cases in which positive attitudes do not lead to learning. Similarly, self-esteem or confidence in one's ability to learn relates in some cases to acquisition, but in many other cases it does not.

Part of the problem, of course, is that many other variables are related to language learning, as has been suggested by the analyses in Section One. The attempt to understand the complexities and interweavings of these influences has scarcely begun, not only in the study of language learning, but in the study of learning in general. The search for a more complete and sensitive understanding must be painstaking and laborious and we can expect that answers will be yielded only slowly.

Another part of the problem, however, can be more readily resolved. In our reading of the literature and of the responses to our interviews, we have been impressed with the unintended and often unrecognized isolation of the "motivation" and the "self
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confidence approaches to learning. This part of the problem, then, is simply that the interactive influences of these two aspects of learning attitudes have been neglected. The child who values learning and who is confident of his or her abilities to learn is most likely to engage in learning behaviors, and to actually learn. The best of intentions can be eroded by a lack of confidence; without an interest in learning, the most confident of students will learn little.

We caught the first glimmering of this insight in our interpretation of the literature on attitudes in language learning. The relationship, however, became clear and strong in our classroom observations, which evidenced again and again that the two sets of variables are not, as is suggested in the literature and in our interviews with teachers and principals, alternative explanations of learning behavior and outcome, but rather are interactive influences.

Put simply, the child who values learning a subject and is confident of his or her abilities to learn is most likely to engage in learning behaviors, and to actually learn. But intention is eroded by lack of confidence, and the child who is confident of his or her ability to learn will engage in little learning behavior if he or she lacks interest.

Competence, of course, is also involved in this relationship. With concern for parsimony, however, we would argue that confidence is more directly related to the attempt to learn. Confidence requires at least a modicum of competence if it is to endure, for the child who continually tries but fails will quickly develop self-doubts. Competence, then, can be taken to be a necessary condition of confidence. But the reverse relationship does not hold: the competent child may suffer extreme lack of confidence, and low levels of confidence can undermine the best-intentioned of competencies. We focus, then, on lesson confidence.

Although both lesson value and lesson confidence have persistently surfaced in our literature review and in our interviews with teachers and other school personnel, the two sets of variables have been carefully isolated from one another. Even respondents who in one part of an interview would raise issues relating to the
students' levels of confidence and later to issues of students' attitudes and motivations failed to join the two sets of variables into a single array.

In over 100 interviews, we found only one exception, an Anglo, fourth-grade aide who is bilingual in Spanish and English:

"There is a dynamic between the teacher recognizing laziness and a teacher recognizing inability. Shoot for a little bit less than what you think their ability is and expect that much and expect it strongly but other than that, pushing them will just make them turn inward.... when the child is not answering don't just ask the next person because you want the lesson to go on fast, but wait... do it equally, do it with everyone, don't let the shyest person off."

(Interview #726)

That only a few teachers can so clearly articulate the interactive influences of intention and confidence in the classroom should not be taken as evidence that only a few are aware, at a tacit level, of the interaction. In our classroom observations, we have often seen teachers employ strategies that evidence a tacit awareness of the interplay of confidence and intention. When questioned and encouraged, some begin to articulate that relationship. But the great majority of the articulations are ad hoc and far from systematic or consistent. The performances clearly are based on interpersonal insight and understanding. In specific instances, the performances are admirable, evidencing the potential of at least some teachers to effectively employ the kinds of comprehensive, systematic and consistent strategies we are attempting to identify in this research.
Chapter Five

Strategies of Learning and Nonlearning in the Classroom:

A Measure of the Interactive Influences of Lesson Confidence and Lesson Value

It is reasonable to argue that a student who actively engages the demands of a lesson is more likely to learn that lesson than a student who does not. In Chapter Four we have seen that both theorists and professionals have turned to two traditions of thought to explain why some students actively engage lessons while others do not. One tradition emphasizes the importance of motivation or lesson value, the other of self-esteem or lesson confidence.

What we would add to these traditions is the recognition that the two sets of variables can vary independently of one another. Among other things, this means there may be a tension between the two, and that learning problems and classroom interventions may be identified by considering that tension.

Toward this end, although each of the two variables may be considered a continuum, for clarity it is useful to dichotomize them and to interlink them in a simple two-by-two taxonomy. (See Figure 5.1) Four basic
### CLASSROOM LEARNING BEHAVIOR:
#### A TAXONOMY OF LESSON CONFIDENCE AND LESSON VALUE

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<td><strong>HIGH</strong></td>
<td><strong>LOW</strong></td>
</tr>
<tr>
<td>(Learning Challenge)</td>
<td>(Learning Quandary)</td>
</tr>
<tr>
<td>ENGAGING</td>
<td>DISSEMBLING</td>
</tr>
<tr>
<td>(Learning Bind)</td>
<td>(Learning Malaise)</td>
</tr>
<tr>
<td>EVADING</td>
<td>REJECTING</td>
</tr>
</tbody>
</table>
strategies of learning and non-learning are thereby identified:

Lesson Engaging. The student sees a relative value in the subject, and is relatively confident of his or her ability to meet the lesson demands. The student experiences a learning challenge, and is likely to actively engage the lesson.

Lesson Dissembling. The student sees a relative value in the subject, but lacks confidence in his or her ability to meet lesson demands. The student is in a learning quandary, having accepted the goals of the lesson, but unable to identify or accomplish the means toward those goals.

Lesson Evading. The student feels relatively confident of his or her ability to meet the demands of the lesson, but sees relatively little value in the subject. The student is in a learning bind, feeling ready and able to take on a challenge, but being unable to identify a goal of sufficient value.

Lesson Rejecting. The student both lacks confidence in his or her ability and sees little value in the assigned subject. The student is in a learning malaise, having neither a clear and valued goal nor feeling able to move toward any goal.

Once conceived, the taxonomy may appear straightforward and commonsensical, and it may seem strange that neither research nor theory has yet considered this interlinking of confidence and subject value in relationship to learning. This is the case, however, and for this reason we lack specification of the characteristic learning processes in each of the four cells. Nonetheless, drawing on relevant areas of research and theory, we can cautiously speculate about the characteristic modes of relating to lessons within each of these learning conditions. Most simply: learning challenges lead to an active engagement of classroom lessons, while the other three conditions represent learning problems and classroom processes that interfere with learning.

In Lesson Engaging the student searches for accuracy and attempts to link the novel aspects of the lesson to
establish understandings. That is, to accommodate the demands of a new lesson or experience, he or she attempts to find new and somewhat modified meanings by making slight rearrangements in understandings of the past and in expectations of the future. This is the hallmark of effective learning, characterized by an active engagement with the challenges of the lesson.

In Lesson Dissembling the student wants to learn, but doesn't know what to do or how to do it. In the desire to succeed or appear successful or to avert threats to self-esteem (cf. Covington, 1968) the child dissembles, pretending to understand, making excuses, denying, distorting, or engaging in undifferentiated thinking that includes elements that do not seem part of the situation. The challenge of the lesson is ignored and the learning, which would involve a reorganization of past understandings (even though slight), is resisted.

In Lesson Evading, the student is confident of his or her abilities but is unable to see value in the lesson or the subject. Even so, the student, constrained by the demands of the lesson and of the classroom, may go through the motions, perhaps even accomplishing the required assignments. But the lesson is neither actively engaged nor defended against; it is simply evaded. The individual is removed from the learning situation; his or her attention is scattered, given only partially to the lesson and perhaps in more important part to other competing interests such as daydreaming, teasing a neighbor, worrying about lack of money, planning a party, recalling a television drama or even mentally rehearsing another more compelling lesson in an area that is found challenging. Figuratively, the student deals with the lesson with the left hand, leaving the right hand free to deal with more important and compelling matters.

In Lesson Rejecting the student neither sees the value of the lesson nor has confidence in his or her ability to succeed in meeting its demands. Lessons are neither actively engaged nor defended against, nor even met with the automatic response that may be seen in lesson evasion. The student may appear passive, working within a closed system of understandings that are unresponsive to the present challenges of the lesson. A learning malaise is characterized by psychological withdrawal.
Every individual student (and teacher) can be expected to engage, dissemble, evade and reject in varying degrees, at various times, and in various situations. Faced with extreme threats, few individuals will resist dissembling. Faced with extreme confusion and frustration as, for example, when attempting to deal with a "mindless bureaucracy" everyone may to some degree evade or reject. The issue, then, is not the range of learning processes the individual student experiences, but the relative frequency of each. In learning lessons, the critical question is how frequently the child actively engages, rather than dissembles, evades and rejects.

Most importantly, this conceptualization calls into question the working assumption that learning and non-learning lie in a single continuum (as would be represented by a diagonal from the upper left corner to the lower right in Figure 5.1). In particular, the child who is dissembling is in quite a different condition than the child who is evading a lesson, and the two require quite different teacher interventions.

This conceptualization represents, at a structural level, an elaboration of the variables in Haan's (1977) tripartite model of ego functioning. Haan identified three qualitatively different processes: "coping" (which we have termed lesson engaging), classroom), "defending" (which represents both our evading and dissembling) and "fragmenting" (rejecting).

Haan's distinction has become familiar in social-psychological analyses, and the structural difference between children who cope, defend and fragment in the classroom is familiar to the experienced teacher. What is not so familiar in our construct is the distinction between two fundamental kinds of defending in the classroom. The conventional wisdom of motivation and classroom control has come to assume a single dimension, moving from engaging (or coping), through evading (defending), to rejecting (fragmenting or withdrawing). The distinction between evading and dissembling is ignored.

In surface-level meanings, however, the distinction is commonly made. Students often refer to lessons as irrelevant or meaningless, and conclude, "Why bother?" Others claim they couldn't do it if they tried, and conclude, "Why bother?" The conclusions may not always
be the same, but even when they appear to be, the learning conditions and processes that led to them may differ profoundly.

Section A

The Case of Dissembling:
Some Classroom Illustrations

Drawing on their own experiences and observations as students or teachers, most of our readers will be able to remember examples of lesson evading. In some classes, evading has developed into something of a minor art form; evading is as much a part of the school day as lesson engaging or rejecting and withdrawing. Dissembling appears to be another matter; in our target teacher interviews, and in our discussions with other school staff, we have repeatedly found it necessary to illustrate the concept with examples. Once provided, however, our illustrations almost always stimulate abundant examples of dissembling, and of children who habitually dissemble in the classroom. Given the fundamental importance of dissembling and of the distinction between dissembling and evading, it is appropriate to present a few observational synopses that illustrate the process.

The following interchange illustrates a rapid movement from lesson engaging to dissembling. Sylvia, a relatively interested and industrious student, has been asked to go the board, along with other students, to work a problem in long division.

Sylvia is having trouble, and has made two unsuccessful beginnings at a solution. She appears to be using trial and error, unsystematically.

Teacher: You'd better hurry up. Bob is almost done. (A few seconds later) You just used that number.
Sylvia: Oh! (Giggles and waves hand in a self-effacing manner, and quickly erases the part of her solution that was correct. While she is erasing, another student prompts her in a stage whisper with the correction to the error in her solution; she places the suggested number in the erased part, where it is incorrect.)

Teacher: Are you kidding?

Other students (in quick succession): Sylvia! (In a tone of impatient disbelief.) Oh, oh... Oh, my goodness. Oh my goodness. (In a stage exaggeration.)

Sylvia: Oh! (Giggles tensely and erases another part of her solution. As other students prompt her, she turns around to face them and again waves her hand in self-deprecation. Taking their prompts, she again giggles, turns back to the board, and uses their suggested number -- six -- in the quotient, rather than in the remainder.)

Teacher: Go the other way (i.e., use a smaller number).

Sylvia: (Turning to teacher) Minus?

Teacher: Well, you need less. (Teacher turns to another interaction, and after two or so minutes returns to Sylvia.) That's the best you can do, right? (pause) Seven times 0 is 0, not 7. It's not 287, it's .280.

Sylvia: Oh. (Giggles and quickly erases the entire 27.7, and also the rest of her solution and then the dividend, which is part of the problem set by the teacher. Again other students pretend or express disbelief and she starts to copy the dividend -- part of the set problem-- from Bob's solution.)

Teacher: Are you starting the whole thing over?

Sylvia: I was erasing ...

Teacher: Sylvia, sit down. You got it wrong. (pause) Shame on you.
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Sylvia: (Giggles and again makes the self-effacing gesture, then returns to her seat smiling and blushing. For the next few minutes she appears tuned out of the class discussion, staring at her desk top and sporadically smiling.)

[Videographic note V108, 10-5-82.]

The most persistent observation in our bilingual classrooms of situation-induced dissembling illustrates the linkage of assignment confusion to the erosion of lesson confidence. In this situation, the children want to accomplish a lesson, but are uncertain of how to do it, and hence of their ability to do it. The following synopses are typical of many that appear in our observers' notes.

**Observational Note (Synopsis):** For this lesson the teacher hands out a Pattern Blocks test card to pairs of Spanish-speaking children. The children are required to count out the number of blocks shown at the bottom of the card and construct a geometric pattern traced on the card using blocks of various shapes. The teacher instructs the children (in English) that they are to count out in English the number of blocks they need, and then to solve the puzzle.

The children are generally inattentive, do not appear to understand the directions and begin the activity while the teacher is repeating the instructions once more. At this point the teacher reprimands one of the students.

T: "Some of you like Jose always like to grab, but you have to learn to share."

The children stumble though the exercise unclear as to the task, while the teacher emphasizes that they should count in English. Few children seem to understand, but no one asks for clarification. Through what appears to be moments of insight, a few children solve the puzzle. By watching and following those who have succeed, others accomplish the task -- but without the key element of counting in English.

**Theoretical Note:** This pattern has been repeated
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often in this classroom: ESL is marked by confusion and misunderstanding when only English is used, yet children seldom approach the teacher to ask questions. Assignment confusion seems to develop out of language confusion. When the teacher insists that students follow directions accurately, the students are placed in a learning quandary, and pretend to understand (dissemble).

It is reasonable to assume that one motivation for dissembling is to avoid public humiliation, or the admission to self and others that one is unable to comprehend assignments or to complete tasks. This may be the beginning of an interactive process (at least in some classrooms where teachers use humiliation to control) in which children fall into trouble in part because they do not understand the basis of getting into trouble. That is, children who do not have an insight into the nature of the task they must complete may place themselves in situations in which they are likely to be humiliated.

An excerpt from the theoretical notes of the second observer of the situation just described illustrates this process, which was observed repeatedly in those classrooms in which teachers use humiliation as a control device.

Theoretical Note: The children were assigned a rather complex puzzle....The teacher gave a brief explanation (in English) of what she wanted. Soon it became evident (to the observer) that the children did not really understand what was expected of them. Some, as for example Pablo, just stared at the blocks and played with them, not at all doing his task. The teacher turned to him with a dry, cutting voice:

Teacher: "This boy is not supposed to be doing this."

The teacher explained the task to him again. Pablo tried once again, and once again failed.

Teacher (loudly): "You are not listening!"

The other children appear equally unsure of what they were to do. Some eventually developed an insight into the nature of the task through trial and
error.... Others looked around and only after seeing what they were doing had an insight into the assignment.

In short, the following sequence was frequently observed:

1. The assignment is made in brief, dry fashion.
2. Children do not understand the nature of the assignment.
3. Children either daydream, look around impatiently, or practice trial and error.
4. Once they develop an insight (either from within or by watching others) some children enthusiastically concentrate on their work and complete the task. Those who do not develop an insight either 'sit there' daydreaming (malaise?) or play with their blocks.

In this classroom, those who do play often get yelled at (e.g., 'This boy is not...') which often seems to further 'turn off' the child, as clearly seen in Pablo's denial of even pretending to follow the teacher when she offered a second explanation.

Because Pablo did focus on the blocks, and moved them around as if he were attempting to cope with the task, it is reasonable to tentatively characterize him as being in a learning quandary. Following the interaction of the teacher, however, Pablo apparently lost interest even in the pretense, and might be characterized as falling into a learning malaise, in which the lesson is denied or rejected.

Clearly, not all children respond to assignment confusion in the same way. Some, attempting to make sense of the task, display both value placed on the assignment itself and at least some remaining confidence in their ability to accomplish the task and, prior to that, to identify what it is that is supposed to be accomplished. In essence, they may be characterized as engaging in the challenges of the classroom -- but in this case, the challenge is not in the task assigned, but rather in the assignment itself; that is, the challenge is to identify what it was the teacher said. Another example from the
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second observer illustrates this.

Observational Note (Synopsis): Like the others, Jaime did not understand what he was supposed to do. He first checked to see what the others were doing but no one offered ideas to copy (no one knew: some played, some sat there, others tried their own version of the task). Jaime concentrated on the blocks and by trial and error came up with a version he thought good enough to show the teacher.

Jaime (whispering to teacher): "Like that?"

Teacher (apparently not hearing him; loudly): "Well, that is wrong."

Jaime once again sat down and went on, undisturbed in appearance. He kept inquiring around, in Spanish, how to do this complicated task. Finally he had an insight, and put all his energies into the task (challenge?), now seriously concentrating. Interestingly, Jaime was not able to finish the task: there weren't enough blocks for every child to complete the puzzles. Even if they all had understood the assignment, the task could not have been completed by all.

In a bilingual or ESL classroom, problems of assignment confusion are compounded by the children's limited abilities in English, in their home language, or in both.

Section B

The Development

of the Learning Process Q-Sort

Having identified the theoretical construct presented above, we face the problem of operationalization. Of the various techniques available, we eventually settled on the use of Q-sort procedures. In addition to the arguments in favor of the Q-sort that have been
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advanced elsewhere, it held particular advantage for our purposes; in both its construction and its application, we would be able to draw on the extensive knowledge of our students, teachers and classrooms that had been gained in months of careful and systematic classroom observation. The procedures we employed in turning these observations into a systematic research technique are described below.

For reasons of both theory and method, we also determined that we would not attempt to develop the measure of language learning strategies in the classroom per se. Methodologically, such an instrument would have been difficult to develop because, in its construction, a Q-sort is based on discrete subject behaviors. The attempt to identify discrete behavior that could be reasonably linked to language lesson engagement proved somewhat unprofitable. Some discrete behaviors that would apply across classrooms were readily identified, such as, "Asks the teacher how to define words in English", or, "Risks mistakes in English rather than saying nothing or using Spanish". The pool of items generated was hardly sufficient to allow the construction of reliable Q-sort instruments, however.

This methodological difficulty led us to recognize the theoretical difficulty in such an approach. Language learning, and language learning lessons in the classroom often are not explicitly distinguishable from other learning and other learning classroom activities. Indeed the basic argument we have advanced in the first chapters of this report is that language learning is not located simply in language lessons, but throughout the social contexts of the learner's daily life. Our theoretical perspective should have led us from the beginning to look with suspicion on an instrument that focused specifically on language learning strategies, rather than on learning strategies in general.

We thus abandoned our efforts to develop a language learning Q-sort, per se, and adopted the theoretically more promising and methodologically less problematic task of developing a Q-sort to identify classroom learning strategies in general. We turn now to a description of that development.

1. Construct Validity. In this research project, we
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set as a basic criterion for our quantitative variables that they be grounded in qualitative understandings. The arguments supporting this criterion are basically substantive, but they also include an important methodological consideration: the qualitative generation of our theoretical constructs and methodological operations yields construct validity.

In the case of innovative constructs, such as our learning strategy variables, content validity takes on a particular importance. With this in mind, we took exceptional care and time in the generation of our item pool for the learning process Q-sort. As described in earlier reports (Hansen and Johnson, 1981; Hansen, et al., 1981) eight research assistants spent at least a day a week in two classrooms each observing and taking notes on student behavior. Weekly meetings were held consisting of all the research assistants and researchers involved in the project. During these meetings researchers presented their observations and theoretical discussions. Notes were taken during these sessions and supplemented by audio tapes, in order to develop a list of items for the learning process Q-sort.

Items were included in the initial pool if they met three criteria: (1) the item was mentioned numerous times by researchers from different sites in efforts to describe student behavior; (2) the item was consistently used as a first-order observation rather than in response to questions; (3) the item was clearly understood by other members of the research team and appeared to have a common-sense classroom meaning. Applying these three criteria we developed a pool of 155 items.

On occasion the same observation would be expressed in several different ways. This was resolved by taking a mode of expression that most readily represented that which might be seen in direct observation. In cases where we could not decide between the competing expressions, we included both expressions in the original pool realizing that only one would be retained in the final list of items.

This process of item development emerges directly out of the grounded theory approach that informs our study. Our item pool was not developed in a laboratory or armchair and then applied to the classroom environment. Rather, the items came directly from the resear-
teachers in the field and their attempts to directly describe their observations. These items, then, are grounded in what appears to the observers to be their most salient observations. The benefits from this approach are numerous, with the most important being that the fit between the student behavior, the observer and the instrument is maximized.

2. Initial Item Selection In the foregoing step, we have established a large pool of items that describe student behavior across the eight classrooms in our study. Our procedures assured high construct validity, that is, the selected items described behaviors commonly exhibited by the children in all of the eight classrooms. The next step was to reduce the number of items to a workable number for our Q-sort, and, more importantly, to assure that the remaining items adequately represented the two fundamental variables of lesson confidence and lesson value.

In the first phase of this process, we employed three experienced researchers who had been trained in the theoretical rationale of the two continua (lesson confidence and lesson intent). Each of the three researchers rated the 155 items independently on each of the two scales, from one to five (low to high).

Ratings were first made on the degree to which items described a hypothetical student's lesson confidence. For example, the item "This student has a lot of eye contact with the teacher," was rated by each of the three judges for the degree to which this behavior evidenced lesson confidence. In this case, the item was judged by each of the three researchers to be "highly descriptive" of a student high in lesson confidence.

Subsequently, the same procedure was used to rate the items on the degree to which they displayed lesson value. Each researcher thoroughly shuffled the deck of cards before and after each sort, to assure that there would be minimal influence from the previous sort. It is reasonable to assume that ratings on lesson competence did not contaminate ratings on lesson value, and that the ratings made by one evaluator did not contaminate those of another.
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Items judged to be "extremely descriptive" or "extremely undescriptive" by two or more researchers were included in the final set of Q-sort cards. If two or more researchers considered the item to be neutral (rated "3") the item was interpreted to be irrelevant to the continuum. Items assessed inconsistently by the three researchers were also dropped.

At the end of this step of the instrument development process, fifty-five items remained. Sixteen of the items listed behaviors that had been consistently judged as evidence of either high lesson confidence or low lesson confidence. Another fourteen had been consistently judged as evidencing either high or low lesson value. The remainder had been judged as evidence of both attitudinal variables.

3. Factor Analyses: Through the steps described in two preceding sub-sections, we have established a reasonable level of construct validity and face validity. If our theoretical argument is adequate, the items that have been identified as indicative of variable lesson confidence and variable lesson value should generate, using factor analyses, four distinct sets of variables with a reasonably high internal consistency, and a reasonably low intercorrelation.

Given the character of our data, the appropriate procedure, then, was R-type factor analysis (principal component, using Varimax rotations). As predicted, the factor analysis yielded four distinct factors, each containing at least nine items which clustered tightly. The nine items in factor one, which corresponded to our theoretical construct "engaging" varied in factor loadings from .884 to .539. Factor two, our theoretical construct "rejecting", varied in loadings from .732 to .645. The final factor, "evasive", varied from .496 to .222.

The substantive character from each of the factors resulting from this analysis are seen in Table 5.1, which also identifies the reliability of each of the four types of lesson strategies.
Table 5.1

Learning Strategies: Q-sort Items and Reliability

LESSON ENGAGING
(Lesson Value: High; Lesson Confidence: High)

1. This student quickly focuses on the assigned work.
2. This student is not easily distracted by friends during lessons.
3. This student works carefully.
4. This student gets more relaxed and stays involved in the lessons as the day goes on.
5. This student "hangs in there" and tries again when he/she gets an answer or assignment wrong.
6. This student is organized and intentional in his/her work patterns.
7. This student rarely requires special attention.
8. This student often recopies his/her work to make it look neater.
9. This student completes assignments even if he/she must set aside interesting distractions.

Reliability (Cronbach's Alpha) = .911

LESSON DISSENGAGING
(Lesson Value: High; Lesson Confidence: Low)

1. This student always looks busy, but doesn't seem to get much done.
2. This student keeps trying, but can't seem to finish a sentence or idea.
3. This student haltingly answers questions.
4. This student always needs encouragement.
5. This student pays attention when assignments are made, but seems unsure of what to do.
6. This student gets confused but pretends to understand.
7. This student adapts to whatever the teacher says, even if it is inconsistent.
8. This student acts like he/she understands more than he/she does.
9. This student does better on routine and familiar assignments than on new and novel assignments.

Reliability (Cronbach's Alpha) = .725
Learning Strategies: Q-sort Items and Reliabilities

LESSON EVADING

(Lesson Value: Low; Lesson Confidence: High)

1. This student never looks around the room to see how other students are doing an assignment.
2. This student often avoids eye contact with the teacher.
3. This student knows what is going on but doesn't seem to care.
4. This student doesn't care about the right answers.
5. This student turns in sloppy work and doesn't try to make it neat.
6. This student never checks with the student or aide about progress on an assignment.
7. This student does assignments haphazardly.
8. This student is more responsive to discipline than to support.
9. This student often gives irrelevant answers or tries to change the topic.

Reliability (Cronbach's Alpha) = .746

LESSON REJECTING

(Lesson Value: Low; Lesson Confidence: Low)

1. This student is unresponsive.
2. This student seems to be in another world.
3. This student is unpredictable in his/her work.
4. This student doesn't try to answer questions when he/she is unsure of the answer.
5. This student withdraws from active involvement in the classroom lessons.
6. This student doesn't seem to hear what the teacher is saying.
7. This student rarely finishes anything.
8. This student stares into space.
9. This student never volunteers an answer.

Reliability (Cronbach's Alpha) = .818
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4. Reliability and Inter-Factor Correlations: Levels of reliability for the four learning strategy factors was established using Cronbach's Alpha. In each case reliability appears to be high, with coefficients ranging from .911 for engaging to .725 for dissembling (see Table 5.1). These Alphas will be recognized as demonstrating a high degree of internal reliability.

The final question in the construction of these learning strategy factors was whether they discriminate from one another. To determine the level of descrimination inter-factor correlations were identified. It will be recalled that our theoretical constructs posited, most importantly, a lack of relationship between dissembling and evading and between engaging and rejecting. That is, we suspect that students' modal behaviors do not change in any linear fashion from engaging to rejecting; rather, the movement is either from an initial loss of confidence to a subsequent deterioration of the values placed in lessons, or from an initial loss of value to a subsequent deterioration of confidence. These expectations were confirmed by the inter-factor correlations (.02 between evading and dissembling; -.51 between engaging and rejecting; see Figure 5.2).

In Figure 5.2 note particularly the negative correlation between engaging and rejecting, which suggests that the factors, as constructed, do effectively discriminate between the two theoretically derived constructs. Similarly, the negative correlation of engaging to evading, and the moderate correlation (-.32) of engaging to dissembling suggests that these factors are pulling at distinctly different classroom behaviors. The moderate to low correlations of evade and reject (.45) and dissemble to reject (.23) suggest that although these constructs are not so clearly distinguished from one another in the current form of our Q-sort they are adequately independent to allow the analyses and interpretations we will offer below.

It should be remembered that even in the case of the relationship of evasion to rejection, a variation in one factor explains only 18% of the variation in the other. Although we intend to continue to develop and define this Q-sort procedure for identifying classroom learning strategies, the results of our factor analyses, our reliability estimates and our inter-factor
Figure 5.2

Inter-Factor Correlation Coefficients:
Learning Strategy Factors,
All Cases (N = 191)*

- .32

ENGAGING ——— DISSE MLING

- .51

-.54

EVADING ——— REJECTING

.02

.23

.45

* Coefficients for children from Spanish-dominant homes (N = 117) differ only slightly.
Learning Strategies

correlations suggest that we have an unusually robust instrument, even in its current form.

Section C

Learning Strategies and Language Learning

In this chapter, we have argued that language learning behavior in the classroom cannot be effectively distinguished from learning behavior in general. Although in some rooms, at some specific periods of the day, teachers and students do engage in formal language training, in other classrooms they do not. In all classrooms, however, language lessons are at times intentionally, at other times unintentionally, incorporated into other lessons and into the informal interchanges of the day. This diffuse focus of language even in the classroom, then, suggests that the effort to identify a distinct instrument for measuring language learning, per se, is both theoretically and methodologically suspect.

We then described the development of our learning strategy Q-sort instrument. We anticipate that language learning will be an imperfect function of the strategies identified with this instrument. In essence, we argue that these learning strategies present a fundamental base on which effective learning may rest. That is, we believe that these general learning strategies operate as necessary but not sufficient conditions for language learning strategies.

Analytically, this suggests that we expect to see a direct relationship between our learning strategy variables and language acquisition during the school year, independent of any relationship that may be expressed through the variable representing language acquisition behavior. To recheck this proposition, we re-ran the regression analysis reported in Table 3.2, this time including the Q-sort scores among the cluster of independent variables.
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The results, reported in Table 5.3, differ little from the earlier table, except that the Q-sort factors do, indeed, load into the regression equation, accounting for a considerable portion of the variance that had remained unexplained in the earlier prediction. Table 5.3, then, may be taken as evidence that the Q-sort factors relate to language acquisition independently of the students' language learnings efforts per se. It still remains to be established, of course, whether the Q-sort factors also helped explain the language learnings behaviors, as we have argued.

If, as we suspect, general learning strategies are a necessary condition of the more specific language lesson engaging, our theoretical perspective demands that another question be addressed: Why do some children who do engage in lessons in general still fail to engage in language learning lessons? We of course do not anticipate a perfect relationship between our Q-sort factors and language lesson efforts. What we do expect is that children who fail to engage in general will fail to engage in language learning lessons.

The careful reader will have realized, however, that we do not consider this the critical question. Rather, we are concerned with explaining why children learn, rather than why they do not learn in a specific situation. Learning, we have argued, requires intention and effort. Although it also can be argued that the human, by nature, seeks to learn, such a general orientation toward growth does not explain why the individual makes the conscious effort to learn any specific subject or language. The general human tendency to learn may be posited as fundamental to first language acquisition in infancy and childhood, but it does not comfortable expand to explain the acquisition of a second language.

In the following chapter, then, our theoretical focus is on children who engage in classroom lessons in general. The critical question is why some of these children also engage in language efforts, while others do not. To approach this question we turn to theoretical and methodological considerations of language attitudes.
Table 5.2

Regression Coefficients of Comprehension Scores (Spring, 1982) on Language Use at Home, in Classroom, With Peers\(^1\) and on Learning Strategies (by order of entry)

<table>
<thead>
<tr>
<th>Prior Test</th>
<th>Home Language</th>
<th>Classroom Language</th>
<th>Engaging</th>
<th>Evaluating</th>
<th>Disseminating</th>
<th>Rejecting</th>
</tr>
</thead>
<tbody>
<tr>
<td>b</td>
<td>.6633(^\theta)</td>
<td>16.479(^\theta)</td>
<td>11.428(^\theta)</td>
<td>25.9083(^\theta)</td>
<td>29.6960(^\theta)</td>
<td>16.8812(^\theta)</td>
</tr>
<tr>
<td>(se)</td>
<td>.0407</td>
<td>1.553</td>
<td>1.675</td>
<td>5.4847</td>
<td>8.5287</td>
<td>8.1342</td>
</tr>
<tr>
<td>b(^*)</td>
<td>.9299</td>
<td>.5722</td>
<td>.4246</td>
<td>.3038</td>
<td>.2137</td>
<td>.1038</td>
</tr>
<tr>
<td>(r^2)</td>
<td>.609</td>
<td>.792</td>
<td>.883</td>
<td>.894</td>
<td>.917</td>
<td>.930</td>
</tr>
</tbody>
</table>

\(r^2\) Change:  
- Prior Test: .609
- Home Language: .183
- Classroom Language: .091
- Engaging: .012
- Evaluating: .023
- Disseminating: .013
- Rejecting: .007

\(^1\)Peer variables did not enter equation.

\(^\theta\)Coefficients at least twice as large as their standard error.

\(b = \) unstandardized coefficients;\( \) se = their standard errors; \(b^* = \) standardized coefficients.)
Chapter Six

Learning Strategies

and Language Attitudes

In Chapter Five, we focused on the students' learning strategies in the classroom. For both theoretical and methodological reasons, we argued that it is more fruitful to focus on general learning strategies rather than specific language learning strategies. If a child fails to actively engage lessons in general, it is unlikely that he or she will engage the language learning opportunities in the classroom.

This is not to say that all children who engage in lessons in general will also engage in language learning opportunities. General lesson engagement appears to be a necessary but not sufficient condition for engagement in second-language learning. Thus, the question that concerns the present chapter is posed. Why do some children who actively engage in other learning situations fail to engage in the language learning opportunities of the classroom?

Our general strategy of analysis is to move from concrete classroom behaviors to individual variables and then toward contextual variables, such as peer relations and classroom differences. In this chapter, then, we will consider the subjective qualities to the students' orientation to language learning, or what generally is termed "language attitudes".

Sensitized by past conceptualizations, we considered four distinct attitudinal sets related to language learning. A reasonable argument can be made that each of the four, either singularly or in interaction with one or more of the others, relates to the active engagement of
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language learning opportunities in the classroom. In this chapter we attempt to identify which, if any, of these attitudinal sets most effectively account for the variance in language learning engaging that remains after general lesson engaging has been considered.

Section A

Language Attitude Measures

Our approach to the construction of language orientation measures reflects the same fundamental perspective on human behavior and learning that informs the rest of this report. We conceive of attitudes as predispositions to behavior, involving cognitive, affective and evaluative processes. This conception integrates many diverse theories concerning attitudes, but in its integration it suggests a more socially-relevant and hence, educationally-relevant instrumentation.

Attitudes in general, and language orientations in specific, help individuals to define their specific social situations, and to identify in them desired goals, and potentials for negotiating pathways to goals. At the heart of our perspective is the individual attempting to "make sense" of his or her world, and of the varied situations he or she is in, and to negotiate his or her position and relationship in ways that maintain or enhance the understandings of self.

Put simply, we argue that the attitudes of most importance to second language learning are those that relate the individual to self and to others. This suggests an important redirection in thinking about language attitudes and the relationship to learning behavior. It has become commonplace to speak of one's attitude toward various objects and objects: attitudes toward one's self, toward other persons, toward one language or another, toward one culture or another.
Our conceptualization does not deny the validity or utility of such usage. It does, however, bring to central focus an important phenomenon that is obscured by this commonplace usage: one's attitude relates oneself to the "other" (other person, a language, self-as-object). Not only is the "other" defined or evaluated in one's attitude, one's "self" is defined and evaluated as well, and this is the principle process whereby self-awareness and self-esteem develop.

Attitudes, then, are seen as processes of defining and locating one's self by locating, defining and evaluating others in relation to one's self. This means, for example, that it is not enough to learn that the student believes that "English is a powerful tool for success in life." The statement reflects attitudes toward self as well as toward English, and the researcher must probe to identify what these subject-object relationships are. Is the student implying that, "By learning English I'm growing stronger"? Or is the student saying, "Since I will never learn English well, I'm not going to succeed in life."? Or perhaps, "I don't care for that kind of success and I refuse to participate in it."

Our language orientation measures are informed by this basic perspective on human behavior and learning. In addition to this basic perspective, we have been informed by a number of more delimited theoretical models, including expectancy-value theory (Fishbein, Ajzen, 1975), role theory (Biddle, 1979) personal-construct theory (Kelly, 1955) in conjunction with associative meaning analysis (Szalaly, and Deese, 1978) and cross-cultural cognition theory (Osgood, Suci and Tannenbaum, 1957; Trindis, 1972). Generously interpreted, these models are all approaches to what has been termed "subjective culture". As such they recommend themselves to the study of language usage in various cultures. The measures are also evaluated against standard psychometric criteria. Thus, content validity was a crucial consideration in the selection of measurement items. Item retention was determined in part by issues of internal scale consistency and scale stability, especially in the case of outcome beliefs.

In short, our four sets of language orientation measures tap four distinct loci of self-other identifications, which may be characterized succinctly:
Expectancies-values: Language is learned to attain valued goals or is actively resisted to avoid undesirable goals. May be thought of as identification with outcomes.

Subjective norms: Language learning is actively engaged or resisted in order to satisfy the perceived expectations and desires of significant others.

Connotative meanings of language: Language learning opportunities are engaged or resisted as a means of attaining or avoiding the positive-negative connotative associations with the language itself.

Cultural identifications: Language learning opportunities are engaged or resisted because of the learner's identification with the social culture or cultures associated with the language.

It is to be expected that each of these four approaches has its uses. In any particular study one or more will prove more effective or useful than others. This indeed was the case in the present study. Nonetheless, the development of all four sets of measures is identified below, for two fundamental reasons. First, the measures are employed for a delimited purpose in the present analysis (essentially as supplements to the measures of lesson learning behavior discussed in Chapter Five). In other applications quite different sets of these measures may prove more effective. This, in fact, is suggested by analyses discussed briefly in the following chapter.

Second, we may have been more successful in developing some measures than others. At this stage of knowledge about the relationship of attitude and orientation to learning effort, it would be a disservice to encourage the neglect of any of these approaches to sla attitudes. We do believe that the analyses reported below should be taken as encouragement as further attention to some of these variables, but with the caution that the others have not yet been sufficiently explored.
Cultural Identification Inventory (CUID)

A relationship between individuals' attitudes toward a culture and their desire to learn the associated language seems to be substantiated by a number of studies. For example, Ainsfeld and Lambert (1961) found that achievement in Hebrew was related to students' attitudes toward Jewish culture. (See also Gardner and Lambert, 1972).

This work does not address the conceptual argument that in order to impact language learning, attitudes toward culture must be imbedded in a "personal form of identification" with the culture or its representative (Robinson, 1978). Attitudes toward a culture, much like the conceptualization and measurement of social distance developed by Bogardus (1925), reflect a basic identification of self with others as well as in opposition to others. Cultural identification, just as ethnic stereotyping, involves both a sense of identification and of individuation, of defining who one is not as well as who one is.

Attitudes relate self to others along two principle dimensions: the integrative, which is based on similarity and non-contrastive judgments joining self with others and the differentiating, which is based on dissimilarity and distinction of self from others. The beliefs that bilingual children hold about the two relevant cultures have the effect of differentiating them from one culture while simultaneously integrating them with the other.

As is depicted in Figure 6.1, some beliefs join self to the assimilating culture while at the same time disjoining self from the culture of origin. Other beliefs have the complementary effect of disjoining self from assimilating culture and joining self to the culture of origin. It seems reasonable to argue that children who have strong beliefs disjoining self from the assimilating culture and joining self to the culture of origin are relatively less likely to acquire fluency in the English language. In contrast, children who have beliefs joining them to the assimilating culture and differentiating them from the culture of origin are relatively more likely to learn English.

Measures: The measurement task, then, is to develop a way to tap the beliefs and evaluations that comprise child-
Figure 6.1

Cognitive Structure of Bicultural Children’s Attitudes toward Culture

A. Cultural Origin
   \[ \Omega^* \] SELF \[ \Omega^* \]
   \[ U^{**} \] \[ \Omega^* \]
B. Cultural Origin
   \[ \Omega^* \] SELF \[ \Omega^* \]
   \[ U^{**} \] \[ \Omega^* \]

* Beliefs that differentiate.
** Beliefs that integrate.
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ren's patterns of identifications with relevant cultures. To do this we adapted Szalay and Deese's (1978) technique for cross-cultural assessment of associative meaning. This associative meaning technique has the advantage of being minimally reactive in this sensitive area.

Much like a game, children free-associate, producing beliefs about the way in which they are integrated with the assimilating culture that simultaneously differentiates them from their culture of origin. Similarly, they provide salient beliefs about the way in which they are integrated into their culture of origin that differentiates them from the assimilating culture. Thus, the child is specifically not being asked merely to discriminate one culture from the other, thereby avoiding intellectual distinctions with no self-involvement. Also, the child is not being asked merely to describe one culture or the other, but rather to describe a set of relationships among the assimilating culture, the culture of origin and self.

To accomplish our measurement goals, bicultural children were asked to provide two types of beliefs. For example, during personal interviews Spanish-speaking children were asked to free-associate beliefs about the "ways in which you and people who speak Spanish are different from people who only speak English." The children were then asked to generate beliefs about the "ways in which you and other English-speakers are different from people who only speak Spanish."

Although the associative meanings generated in this fashion may seem to have self-evident affective loadings, it is preferable to measure the child's evaluation of the associative content he or she has generated. After the associations were completed, the interviewer asked the child to indicate how each word or phrase made him or her feel. Here the child pointed to one of five faces arranged along a continuum from sad to happy.

Using this approach, two scales with high content validity were created. The first, measuring attitudes toward assimilating culture was constructed by summing the affective loadings across beliefs associated with ethnic integration/non-ethnic differentiation. Naturally, given the richness of this data-collection technique, a number of other kinds of analyses can be performed on the data base in later analyses.
Connotative Meanings of Language

Children also can be expected to have a range of feelings about the languages they are expected to speak in the classroom setting. For some, the connotations associated with their native language will yield a positive orientation. Hypothetically, in the classroom these students will be seen to have a positive reaction to opportunities to speak their first language, for example, Chinese or Spanish.

To assess children's connotative (i.e., affective) orientations to their first language (L1) in classroom setting, we turned to the considerable research that has been done on the measurement of cross-cultural universals of affective meaning (Osgood, May and Miron, 1975). Based on empirical research in approximately twenty societies world-wide, Osgood and his colleagues have established three basic orthogonal dimensions along which people make connotative judgments about any meaningful object: evaluation, potency, and activity.

Measures: For the purposes of cross-cultural comparison of children's orientations toward their first language, we must create standardized measurement instruments. Such standardization requires "circumventing the language barrier" (Osgood, et al., 1975, p. 15) The goal is to produce measures of first language orientation that are valid for each cultural group with which they are to be used.

Osgood's cross-cultural research indicates that, for English speakers, certain bipolar adjectives represent (i.e., load highly on) the three basic affective factors. However, literal translation of these adjectives does not yield valid, equivalent measures of affect in other languages of interest. Rather, based on empirical work (factor analyses of native language studies), various other sets of bipolar adjectives have been established to represent or operationalize the dimensions of evaluation, potency, and activity in different cultural groups.

Table 6.1 lists the bipolar adjectives that validly measure evaluation, potency, and activity in English-,
Table 6.1

Bipolar Adjectives Loading on the Three Basic Dimensions of Affective Meaning

<table>
<thead>
<tr>
<th>Evaluation</th>
<th>English</th>
<th>Cantonese</th>
<th>Spanish</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>nice-awful</td>
<td>lovable-hateable</td>
<td>admirable-despicable</td>
</tr>
<tr>
<td></td>
<td>good-bad</td>
<td>good-poor</td>
<td>friendly-repelling</td>
</tr>
<tr>
<td></td>
<td>sweet-sour</td>
<td>good-bad</td>
<td>agreeable-disagreeable</td>
</tr>
<tr>
<td></td>
<td>helpful-unhelpful</td>
<td>respectable-despicable</td>
<td>good-bad</td>
</tr>
<tr>
<td></td>
<td>needed-unneeded</td>
<td>kind-cruel</td>
<td>bearable-unbearable</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Potency</th>
<th>powerful-powerless</th>
<th>big-little</th>
<th>strong-weak</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>strong-weak</td>
<td>tall, big-short, small</td>
<td>big-small</td>
</tr>
<tr>
<td></td>
<td>deep-shallow</td>
<td>strong-weak</td>
<td>giant-dwarf</td>
</tr>
<tr>
<td></td>
<td>big-little</td>
<td>deep-shallow</td>
<td>major-minor</td>
</tr>
<tr>
<td></td>
<td>heavy-light</td>
<td>thick, big-thin, small</td>
<td>long-short</td>
</tr>
<tr>
<td></td>
<td></td>
<td>significant-insignificant</td>
<td>scarce-abundant</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Activity</th>
<th>fast-slow</th>
<th>agile-clumsy</th>
<th>active-passive</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>young-old</td>
<td>fast-slow</td>
<td>fast-slow</td>
</tr>
<tr>
<td></td>
<td>noisy-quiet</td>
<td>red-green</td>
<td>young-old</td>
</tr>
<tr>
<td></td>
<td>alive-dead</td>
<td>alive-dead</td>
<td>soft-hard</td>
</tr>
<tr>
<td></td>
<td>smart-dumb</td>
<td>free-restrained</td>
<td>hot-cold</td>
</tr>
<tr>
<td></td>
<td>soft-hard</td>
<td>scorching hot-cold</td>
<td>relaxed-tense</td>
</tr>
</tbody>
</table>
Language Attitudes

Spanish-, and Cantonese-speaking groups. For usefulness of presentation, the Spanish and Cantonese bipolar adjectives have been literally translated back into English.

Bilingual researchers in our project were trained to do initial interviews with children from bilingual classrooms in grades one through six. Standardized interviews were developed so that the meaning of the interview instructions would be equivalent in English, Spanish, and Cantonese. These initial interviews, where children were asked to rate their feelings about their first language indicated which bipolar adjectives were in the vocabularies of children from all three of the language groups. Interviews were back-translated and where necessary were modified to achieve equivalency across the three languages.

Psychometric Goals: The final, pre-tested interview schedules (see Appendix) each contained twelve questions, prefaced by a set of instructions designed to help the child answer the questions in a meaningful way. The first two items are open-ended and assess the conditions under which the child speaks L1 and L2 ("Do you speak Spanish at school? When? Do you speak English at school? When?") The last question is also open-ended, asking the child about the ways in which L1 and L2 are different. ("Tell me ways in which English and Spanish are not the same.") The numbered questions (one through nine) measure the child's affective reaction to L1 in the school context.

For example, the Spanish-speaking child is asked, "Is Spanish helpful or unhelpful (Simpatico or antipatico)?" The first three questions of this sort tap evaluative affect associated with L1, the second set of three taps language potency and the last three tap the activity dimension. Note that the bipolar adjectives are not literal translations across English, Spanish, and Cantonese. Rather, they were selected to be equivalent in their affective (not denotative) meanings.

Psychometric soundness was established in two ways. First, factor analysis demonstrated a pattern of factor loadings that confirmed the logic of the bipolar adjective selection process: the three sets of items for each scale were found to be loaded uniquely on their respective factors. Second, the three items on each scale interrelated reliably, with intercorrelations signifi-
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cantly higher within scales than between scales. In other words, the scales are internally reliable, with low-to-moderate correlations with one another.

Expectancies/Values About Language Learning

The final two measures in our study of the relationship between children's attitudes and language learning draw importantly from Fishbein's social cognition theory of behavior, or what he has called a "theory of reasoned action" (Ajzen and Fishbein, 1980). The theory is founded on the assumption that humans are usually rational and make careful use of the data available to them in their environment. This is not to say that they reach logical conclusions. Rather, this theory postulates that individuals consider the implications of their actions, and that the conclusions they reach affect the probability of particular kinds of behaviors.

According to Fishbein's theory the immediate determinant of an action is the person's intention to perform or not to perform that action. Intention, in turn, is a derivative of two basic antecedents, one stemming from individuals' private identity structure and the other from their social identities. In the case of a child's intention to acquire the English language, the private or personal factor is termed an "attitude toward the behavior." Attitude, as used here, refers to the child's judgment that he or she is in favor of or against acquiring the English language. Children differ in their attitude toward acquiring the English language, some having a favorable attitude and others an unfavorable attitude.

Fishbein's social cognition theory, then, would predict that children will intend to learn English to the extent that they have a positive attitude toward that behavior and that they believe that others think they should do so. However, for the purposes of this project, the measures have been constructed in such a way that they can be treated independently, as well as interactively. Fishbein's theory postulates that attitudes are a function of beliefs; beliefs underlying a person's attitude toward a particular behavior are called "behavioral beliefs." A child who believes that learning English will lead to mostly positive outcomes will hold a favorable attitude toward the acquisition of English,
while a child who thinks that learning English will produce mostly negative outcomes will hold an unfavorable attitude.

As we will amplify below, children hold myriad beliefs about the acquisition of English. Here are a few illustrations of what children told us when asked about the advantages of learning more English: "You might be trying to ask for directions and they do not understand you and you don't know where to go"; "You can't see [TV] programs that are about people who speak English." Children also have beliefs that the acquisition of English will lead to certain sorts of negative outcomes. For example, one child indicated that "If you know English you might get mixed up in Spanish."

Children form beliefs about learning English by associating it with various characteristics, qualities and attributes. At the same time they acquire an attitude toward learning English. That is, they learn to like learning English if they associate with it positive characteristics, and they acquire unfavorable attitudes toward learning English if they associate with it negative characteristics. During the child's life he or she acquires many beliefs about learning English. These beliefs may be based upon firsthand observation, they may be acquired through communication with others, and some will be self-generated through processes of induction and deduction.

Despite the large number of beliefs that a person may have about any given object, research suggests that at any given moment a person can pay attention to a relatively small number of beliefs, between five and nine. These salient beliefs are the proximate causes of the person's attitude. In order to understand a person's attitude toward language acquisition, it is necessary to determine his or her salient beliefs about learning that language. Understanding children's attitudes toward learning English requires the elicitation of salient behavioral beliefs. Since the Social Contexts Project focuses on particular populations of children, we interviewed individuals who represented these populations, namely second- and fifth-grade children whose home language was either Spanish or Cantonese.
These children, who were not part of our subsequent target sample, participated in elicitation interviews, in which they were asked for their beliefs about learning English. Subsequently a frequency count of those beliefs most often mentioned by Spanish children and by Cantonese children provided the basis for selection of items to go into a standardized interview to be used with our target sample children.

Elicitation Interviews: To specify modal salient beliefs about the positive and negative outcomes that Spanish-speaking and Cantonese-speaking children associate with learning English, our research assistants interviewed small groups of five-to-six children. In these interviews they elicited from the children things that they associate with learning English. Typically, the research assistants began elicitation interviews by asking the children, "What do you do at recess?" This helped to develop a relaxed atmosphere in which the children felt they could spontaneously offer answers to questions that we wanted to ask. The interviewer asked the boys and girls to explain what they think about speaking English:

"Some boys and girls like to speak English because they think it's fun. Can you think of some reasons why boys or girls would think speaking English is fun?"

The interviewer would pause after this question and give each child a chance to speak. The children were probed with the question:

"Can you think of some other reasons why boys or girls would like to speak English?"

Following this probe, children were asked a question that stresses the consequences of learning to speak English well:

"Because they learn to speak English well, sometimes good things happen to boys and girls. What kinds of good things do you think would happen to boys and girls who spoke English well?"

Since some children are able to provide associations more easily if they think of imaginary boys and girls
like themselves, we presented the children with a hypothetical situation:

Juan and Maria [Spanish interview] are about your age and go to a school like yours. They have learned to speak English very well and are very happy. Why do you think learning to speak English made them happy?

After the research assistants had discovered all the positive associations that were salient for the children regarding speaking English, they obtained negative associations:

Some boys and girls don't like to speak English because they think it's bad and it makes them unhappy. Can you think of some reasons why speaking English would make some boys and girls unhappy? [Probes] Can you think of some other reasons why boys and girls would not like to speak English? What kind of bad things might happen to boys or girls who speak English very well?

After the research assistants had elicited all of the children's salient beliefs about learning to speak English, they asked the children if they had any other comments, and then thanked them for helping. Once back in the office, the researchers began the transcription process. They listened to the tape that they had made of the interview, listening for statements that reflected the children's beliefs about the sorts of outcomes that are associated with learning English. These statements were typed on 4 x 6 index cards both in the language that the child used and in translation, e.g., Spanish to English. The child's original wording was retained as much as possible. Next, an informal content analysis was performed and the cards were sorted into categories of similar meaning.

For the Chinese interviews, the positive and negative outcomes that children associated with learning English were sorted into ten categories: Communication (expressing one's self and understanding others); Language per se; Aggression; Material Goods (job, money); School (academic, mental attainment, learning); Friends and Peers; Coping with Daily Activities (e.g., shopping); Travel and Recreation; Helping (e.g., translating); Being an American citizen. Modal salient beliefs about the outcomes related to learning English were de-
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terminated by examining the frequency of mention within each category. Most frequently, Chinese children mentioned outcomes related to coping with daily activities.

Elicitation interviews with Spanish children produced nine categories of outcomes: work, school, friends and peers, family, language usage, ridicule, aggression, understanding and communicating, and service.

Generally, the outcomes that Spanish-speaking children associated with learning English were similar to those generated in interviews with Chinese-speaking children. In the area of work, for example, children said, "I'll be able to find a job when I grow up." Children volunteered a number of outcomes related to school: "I will do less homework"; "I will go to school more often"; "I can speak with the teacher more often"; "I can get better grades"; "I will go to a different school." Also, children felt that learning English would affect their peer relations: "I will go to parties more"; "I will play with friends who speak English"; "I will play more games like jump rope."

A sampling of the other comments that Spanish-speaking children made will give an idea of the range and variation of the consequences that they associate with learning English. "If I don't learn English, English-speakers will laugh at me"; "Others may tell me that I don't know how to speak English"; "People who don't speak English will be jealous of you"; "I'll know what they're saying in church"; "I'll be able to watch TV cartoons in the morning"; "I won't feel shy"; "I'll be able to talk to strangers for my mother"; "My family won't know what I am saying"; "I'll get mixed up in Spanish"; "I'll be able to talk to the police when there is an accident"; "Police cannot take you away when you know English"; "I'll be able to talk to the mailman."

Methodological Considerations: As we have seen in Chapter Four, Gardner and Lambert (1972) defined a priori two classes of outcomes: integrative and instrumental. They hypothesized that these two classes of outcomes, depending on historical and cultural conditions, have differing impacts on motivation to acquire a second language. Their measure of integrative outcomes includes such items as "I think it will help me to better understand French people and their way of life." Instrumental items include, "I think it will someday be useful in getting a job." Their
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measurement approach has consisted of combining items into two "attitudinal" indexes where the face validity of items determines their scale placement.

As in most other language attitude measures, the origin of the items in Gardner and Lambert's measure is unspecified, and a long line of research has found that distinction between instrumental and integrative orientations to language learning both conceptually and empirically problematic (e.g., Oller, Hudson, and Liu, 1977). Both the content and construct validities of these measures are unknown, and it appears their discriminant validity is poor. Thus, conclusions drawn about these orientations must await the development of other valid measures.

The approach adopted here is quite different. Rather than prejudging that there are two classes of outcomes, we began with a basic interview that elicited outcomes which children associate with learning English. This inductive procedure firmly grounds our quantitative measure in qualitative data and facilitates the validity of the content of our scales by insuring that the scale items are representative of the domain of items relevant to the underlying dimension.

Scale Construction: The elicitation interview procedure resulted in two pools of statements about outcomes that Spanish- and Cantonese-speaking children associate with the acquisition of English. From these pools, statements most frequently mentioned were selected for inclusion in the interview designed to measure the target children's beliefs about English acquisition. A scale constructed on the basis of an elicitation interview has high content validity, since it comprises items that have been systematically sampled from the relevant population of items. Those items most frequently mentioned (i.e., the modal salient beliefs) were used to construct an interview schedule that could be employed to obtain from children in our target sample their beliefs about acquiring English. The final instrument for Spanish-speaking children is presented in the Appendix.

According to social cognition theory, attitude is an affective reaction toward some object and is a function of the set of salient beliefs a person holds about the object. Those beliefs have a cognitive and an evaluative dimension. The evaluative aspect is operationalized along
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a bipolar continuum (good-bad). Because we are working with children, this dimension was translated to a happy-sad continuum. Thus, for each of the modal-salent beliefs selected for their interview, children in our target sample were asked how happy or sad each of the outcomes made them feel. The cognitive aspect of behavioral beliefs is operationalized along a subjective probability continuum. The task here is to assess how confident a person is that behavior, in this case learning English, does indeed lead to each of the consequences contained in the interview. As we will see, children differ with respect to the strength of their belief that particular outcomes are associated with learning English.

A child's attitude toward learning English can be statistically predicted by multiplying his or her evaluation of each of the outcomes presented in the interview by the strength of his or her belief that learning English will lead to that outcome. These products are summed across the total set of items.

The resulting measure of attitudes toward learning English is thus importantly different from measures that tap only cognitive realms and subjective probabilities of what will happen when English is learned. The first section of our interview is designed to assess children's behavioral beliefs that underlie their attitude towards learning English, consisting of questions that assess the strength of an individual child's belief that the outcome is associated with acquiring English. For example, the interview asks the child: "When you learn more English, will you understand English TV programs better?", to which the child responds, "Yes" or "No," and then "Pretty Sure" or "Very Sure." The second section of the interview contains a parallel set of questions asking the child to evaluate each of the outcomes. The child is asked: "How do you feel about understanding English TV programs?" Here the child points to one of five faces arranged along a continuum from sad to happy. Expectancy and value thus are linked in a single instrument.

Children in our target classrooms were interviewed in the Fall of 1981 and again in the Spring of 1982 (Data Waves 1 and 2). Ninety-three Spanish-speaking children and 28 Chinese-speakers completed interviews in both waves regarding their behavioral beliefs (ratings of
subjective probability and evaluation of the outcomes related to learning more English) and their normative beliefs.

As can be seen in Table 6.2, the outcomes that Spanish-speaking children typically associated with learning more English differed both in subjective probabilities and evaluations. Table 1 reveals a number of things about Spanish-speaking children's beliefs regarding the acquisition of English. Subjective probability ratings were given by the children on a scale from 1 to 5, where 5 indicated that they were very sure that the outcome would occur if they learned more English and a 1 indicated they were very sure the outcome would not occur. The first 11 outcomes were rated, on the average, as being likely to occur, with ratings above 3.0.

The last four outcomes were rated as unlikely, with ratings below 3.0. That is, children thought it unlikely that learning more English would result in English-speakers laughing at them or in them getting into more fights. Significantly, although they tended to believe that they would not get mixed up in Spanish when they learned more English, the variance on the responses to this item was twice as great as on most of the other items in the interview.

Children's evaluations of these outcomes associated with learning more English varied from very positive to negative (on a scale from +2 to -2). Those outcomes that children valued most highly were related to family (interpreting for mother and the family being able to understand the child), educational and occupational success (finding a job, talking to the teacher, and getting better grades), friends (making more friends who speak English), and maintaining their home language (talking in both English and Spanish). The children negatively evaluated being ridiculed by others (English-speakers laughing at them and others calling them a bad name), and not maintaining their home language (forgetting Spanish and getting mixed up in Spanish).

Other outcomes received ratings that on the average were approximately midscale (0). However, this mean evaluation results from two distinct situations. One is indeed a neutral evaluation but the other is dissensus in evaluation, with some children feeling positive and some negative. For example, some children rated getting into
Table 6.2
OUTCOMES ASSOCIATED BY SPANISH-SPEAKING CHILDREN WITH LEARNING MORE ENGLISH: FALL 1981

<table>
<thead>
<tr>
<th>WHEN I LEARN MORE ENGLISH:</th>
<th>SUBJECTIVE PROBABILITY</th>
<th>EVALUATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>I will interpret for my mother</td>
<td>4.4</td>
<td>+1.4</td>
</tr>
<tr>
<td>My family will still be able to understand me</td>
<td>3.9</td>
<td>+1.7</td>
</tr>
<tr>
<td>I will talk to the police for example when there is an accident</td>
<td>4.4</td>
<td>+0.6</td>
</tr>
<tr>
<td>It will be easier to find a job when I grow up</td>
<td>4.4</td>
<td>+1.8</td>
</tr>
<tr>
<td>I will talk to the teacher more often</td>
<td>4.3</td>
<td>+1.1</td>
</tr>
<tr>
<td>I will make more friends who speak English</td>
<td>4.4</td>
<td>+1.3</td>
</tr>
<tr>
<td>I will be able to ask directions when I get lost</td>
<td>4.4</td>
<td>+0.8</td>
</tr>
<tr>
<td>I will talk in both English and Spanish</td>
<td>4.2</td>
<td>+1.8</td>
</tr>
<tr>
<td>I will get better grades</td>
<td>4.1</td>
<td>+1.8</td>
</tr>
<tr>
<td>I will understand when someone calls me a bad name</td>
<td>4.4</td>
<td>-1.4</td>
</tr>
<tr>
<td>I will forget Spanish</td>
<td>2.5</td>
<td>-1.1</td>
</tr>
<tr>
<td>English-speakers will laugh at me</td>
<td>2.0</td>
<td>-1.3</td>
</tr>
<tr>
<td>I will get into fights</td>
<td>1.9</td>
<td>-0.8</td>
</tr>
<tr>
<td>I will get mixed up in Spanish</td>
<td>2.8</td>
<td>-0.7</td>
</tr>
</tbody>
</table>
fights as a positive outcome while others rated it as negative. Analysis may establish sex differences in beliefs about learning English, where for boys it provides an aggressive outlet that is valued but for girls it does not. Parenthetically, this dissensus in children's evaluations of outcomes underscores the importance in attitudinal-type studies of not merely assuming the favorability of items that are to go into an attitude scale, but rather measuring these values for each respondent.

During our second data collection wave, children were re-interviewed regarding their English acquisition beliefs, and the results were strikingly similar to those of the first wave: there had been little change over this period of time in the average subjective probability and evaluation ratings being given by the children. A similar stability of the means was seen in the two waves of data gathered from the Chinese-speaking students. In all, these data can be taken as reflection of the reliability of these measures.

Reliability: An index of belief about the acquisition of English can be constructed by multiplying the evaluation component times the subjective probability component and summing across the total set of items in the interview. We have already seen that children's average ratings of subjective probability and evaluation are stable over time; but are these ratings consistent across the items that are being combined to form this belief index?

For the Chinese-speaking children, the belief index was highly reliable both with respect to Wave 1 and Wave 2 data (Cronbach's alpha = .82 and .83, respectively). However, an analysis based on item-total correlations suggested that several items should be deleted. The final belief index for the Chinese-speaking children in Wave 1 and Wave 2 is based on 23 items. The indexes based on Spanish-speaking children's ratings were not as reliable in either Wave 1 or Wave 2 (Cronbach's alpha = .38 and .61, respectively). An item analysis here too suggested that several items should be deleted; the final scales for each wave consist of ten items.

For Wave 1 data, the reliabilities of these edited indexes were for the Chinese-speakers .88 and for the Spanish-speakers .44. However, based on Wave 2 data, the final reliabilities of these behavioral belief indexes were .79 for the Spanish-speakers and .90 for the Chinese
Language Attitudes

our measures of children's beliefs about the acquisition of English are both internally reliable and stable across time.

Subjective Norms Related to Learning English

The final language attitude measure developed in this research identifies the person's perception of social pressures to learn or not learn English. Since we are dealing here with perceived prescriptions and proscriptions, this factor is termed "subjective norm". In forming a subjective norm, a child takes into account the normative expectations of people in the environment. In doing so the child considers whether there are others who think he or she should or should not engage in the behavior and then uses this information to arrive at a subjective norm.

During the elicitation interviews, children frequently mentioned that they intended to learn English in order to please a parent or relative. However, only the most salient normative beliefs influence an individual's subjective norm. Thus in our interviews children were asked in a free-response format for the names of people who feel they should or should not learn English. Once the names of these significant others had been obtained, the children were asked to indicate if each of the individuals felt they should or should not learn more English. These measures of normative belief could then be summed to represent the configuration of the individual child's normative beliefs. It is these beliefs that determine the overall subjective norm, or the social pressure the child feels to learn English.

Measures: During Wave 1 and 2 interviews children were asked who thought they should learn English and who thought they should not. Subsequently their responses were coded into four basic categories. Table 6.2 indicates the number of referent others that the children generated during Wave 1 data collection interviews. When re-interviewed during Wave 2, the typical number of referent others mentioned by children in each category remained stable (see Table 6.3).
**Table 6.3**

CHINESE- AND SPANISH-SPEAKING CHILDREN'S NORMATIVE BELIEFS ABOUT ENGLISH ACQUISITION BY REFERENT OTHER: FALL 1981

<table>
<thead>
<tr>
<th></th>
<th>CHINESE</th>
<th>SPANISH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parental figures</td>
<td>1.6</td>
<td>2.2</td>
</tr>
<tr>
<td>School figures</td>
<td>0.9</td>
<td>0.8</td>
</tr>
<tr>
<td>Family peers (e.g., siblings)</td>
<td>0.9</td>
<td>1.2</td>
</tr>
<tr>
<td>Friends</td>
<td>0.7</td>
<td>0.9</td>
</tr>
<tr>
<td>Others</td>
<td>1.1</td>
<td>0.9</td>
</tr>
<tr>
<td>Total Referent Others</td>
<td>5.2</td>
<td>6.0</td>
</tr>
</tbody>
</table>

**FALL 1981**

<table>
<thead>
<tr>
<th></th>
<th>CHINESE</th>
<th>SPANISH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parental figures</td>
<td>1.5</td>
<td>2.6</td>
</tr>
<tr>
<td>School figures</td>
<td>0.6</td>
<td>0.6</td>
</tr>
<tr>
<td>Family peers (e.g., siblings)</td>
<td>0.8</td>
<td>1.2</td>
</tr>
<tr>
<td>Friends</td>
<td>0.3</td>
<td>1.0</td>
</tr>
<tr>
<td>Others</td>
<td>0.9</td>
<td>1.0</td>
</tr>
<tr>
<td>Total Referent Others</td>
<td>4.1</td>
<td>6.4</td>
</tr>
</tbody>
</table>

**SPRING 1982**
Language Attitudes

Children were asked to report on a five-point scale whether each referent other felt the child should (5) or should not (1) learn more English. Generally children responded with either a 4 or 5 answer. An index of normative belief was constructed by counting the number of times a child reported being very sure (5) that referent others expected him or her to learn more English. On the average, Spanish-speaking children indicated that of the total number of referent figures mentioned they felt very sure that, on the average, about 3.5 expected them to learn more English. For the Chinese-speaking children, this figure approximately was 3.0.

Section B

Language Orientations And Language Learning

The language orientation instruments described in this chapter represent a variety of research interests in language acquisition. In the present analysis, these variables are employed only to address the question of why children do or do not engage in opportunities to engage language lessons in the classroom. Our theoretical construct argues that attitudes do not affect language acquisition directly, but rather influence things such as the active engagement of language lessons, and the intention to learn a language or actively engage in language lessons.

Our interest in classroom variables in this section should not obscure the analyses we have offered in the first section. The locus of language learning is diffuse and takes place in settings and places far beyond those experienced in the classrooms. It is reasonable, then, to expect to find a statistically predictive relationship of language attitude variables and second language acquisition. Note the words "statistically predictive" in the previous sentence. We are not presenting the following tables as evidence of the direct causal influence of attitudes on language acquisition. The possibility of this influence remains open; our analyses neither affirm or deny the direct causal relationship to attitude and language learning.
Language Attitudes

When the language orientation measures are entered in the predictive model presented in Chapter Three and elaborated in Chapter Five, none reached the probability levels required for entrance into the predictive equation which was presented in Table 5.3. This failure is hardly surprising. At first glance, it may appear that methodological constraints would make entry unlikely, for the earlier predictive equations left little unexplained variance.

Introduction of additional independent variables in a multiple regression, however, can cause a redistribution of the full array. Methodologically, it is possible that one of our attitude measures could have displaced any of the predictive variables in the earlier equation. It is also possible, as we have seen in the case of the lesson engaging variables described in Chapter Five that additional independent variables might simply add to the equation without disturbing the earlier established predictor variables or their sequence of entry. Thus, even though a small degree of variance remains unexplained, we saw the lesson engaging variables simply extend the previous predictive variables. In the case of the language orientation measures, they simply do not have the strength within the previous array that would be required to modify the predictive equation.

Our perspective argues that language attitudes may be involved in the language acquisition process but primarily by their influence on the independent variables represented in the prior equation. Thus, we do not expect to have a great deal of predictive power independent of the rather large array of variables we have earlier entered. To identify the predictive capabilities of our language measures, then, it is more appropriate to enter them in a multiple regression analysis of attitudinal variables on language learning.

Table 6.4 presents the results of this analysis. Each of the measures identified in this chapter was entered in the multiple regression. Once again, as must be expected, previous levels of scores on comprehension tests account for a large amount of variance in the test administered in the Spring of 1982. An additional 8% of the variance in those test scores, however, is explained by the combination of the connotative meanings
Table 6.4

Regression Coefficients of Comprehension Scores (Spring, 1982) on Language Attitude Measures (by order of entry)\(^1\)

<table>
<thead>
<tr>
<th>Prior Test</th>
<th>Connotative: Activity</th>
<th>Connotative: Evaluation</th>
<th>Expectancy/Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>( b )</td>
<td>(.6154^@)</td>
<td>(10.5142^@)</td>
<td>(14.9696^@)</td>
</tr>
<tr>
<td>( (se) )</td>
<td>(.0491)</td>
<td>(2.9738)</td>
<td>(4.5231)</td>
</tr>
<tr>
<td>( b^* )</td>
<td>(.8627)</td>
<td>(.2447)</td>
<td>(.2254)</td>
</tr>
<tr>
<td>( r^2 ) Total</td>
<td>(.609)</td>
<td>(.644)</td>
<td>(.680)</td>
</tr>
<tr>
<td>( r^2 ) Change</td>
<td>(.609)</td>
<td>(.035)</td>
<td>(.036)</td>
</tr>
</tbody>
</table>

\(^1\)All attitude measures described in this chapter were included, but only those shown entered the equation.

\(^@\)Coefficients at least twice as large as their standard error.

\((b = \text{unstandardized coefficients}; \text{se} = \text{their standard errors}; b^* = \text{standardized coefficients.})\)
Language Attitudes

of English and the outcomes associated with learning English.

As we shall see in the following chapter neither of these two sets of language orientation measures appears to relate importantly to the active engagement of language learning opportunity, at least when learning strategies in general are also entered into the model. As we enter that Chapter, then, it is well to keep in mind the part that the connotative meaning and language learning outcome measures have played in the predictive equation presented in Table 6.4.
Chapter Seven

Engaging Language Learning Opportunities in the Classroom: The Interplay of Language Orientations and Learning Strategies

The preceding two chapters identified the theoretical and methodological arguments in our effort to better understand active involvement in the language learning opportunities in the classroom. In this chapter we will first bring the variables introduced in Chapter Five together with those introduced in Chapter Six.

The discussion in those two chapters implies a number of alternative models to predict children's involvement in language learning opportunities in the classroom. Each of the models is based on a direct relationship of language learning efforts to classroom learning strategies in general (that is, the variables introduced in Chapter 5). The question is which, if any, of the language orientation measures will link to those learning strategy measures in a predicted model.

Our classroom observations and interviews suggest that each of the implicit models is demonstrated in the language learning strategies of individual children. Our qualitative notes offer abundant evidence that the individual classroom teacher must be alert to any or all of these language orientation influences in the life of any particular child. For some children, at least at specific times, anticipation of valued outcomes
that might result from learning or not learning. English may play an important role. For some, the implications of associating oneself with the language that is felt to have particular potency or value may motivate active efforts to learn; in other cases, the fear of being associated with the qualitative meanings linked to English may discourage interest in the learning effort. Some children, often encouraged by their parents and other significant adults, resist or embrace opportunities to learn English because of their desire to assimilate into the dominant culture or to hold tightly to the culture of their origin.

Section A

Learning Strategies and Language Attitudes

The question in this chapter, then, is not which of these language orientation models is valid or invalid. Our qualitative data evidence the validity of each in specific cases. Rather, the question is which of the models, if any, appears to apply most generally to the children in our target populations. Once again we approach the question through multiple regression analysis. In these analyses, all variables identified in the preceding two chapters, plus individual scores on the first wave of language comprehension testing (Fall, 1981) are included.

Table 7.1 presents the results of these regression runs for students from homes where the dominant language is Spanish. As anticipated, students' general lesson strategies enter the equation first and account for the greatest amount of variance in language learning strategies. Essentially, then, students who in general are least rejecting and most engaging in classroom lesson also tend to most actively engage in language learning opportunities.

The third variable to enter the equation is the prior test results. Again, as expected, students who have previously mastered more English are more likely
Table 7.1

Regression Coefficients of Language Learning Efforts, on Comprehension Scores (Fall, 1981), General Learning Strategies and Language Attitudes\(^1\); Children from Spanish Dominant Homes (by order of entry)

<table>
<thead>
<tr>
<th>Reject</th>
<th>Engage</th>
<th>Comprehension</th>
<th>Subject Norm</th>
</tr>
</thead>
<tbody>
<tr>
<td>( b )</td>
<td>( b^* )</td>
<td>( r^2 ) Total</td>
<td>( r^2 ) Change</td>
</tr>
<tr>
<td>2.5423(^\circ)</td>
<td>.5977</td>
<td>.274</td>
<td>.274</td>
</tr>
<tr>
<td>( .8879(^\circ)</td>
<td>.2802</td>
<td>.310</td>
<td>.036</td>
</tr>
<tr>
<td>( .0061(^\circ)</td>
<td>.2294</td>
<td>.345</td>
<td>.035</td>
</tr>
<tr>
<td>( .3113(^\circ)</td>
<td>.2032</td>
<td>.385</td>
<td>.040</td>
</tr>
<tr>
<td>( .4439 )</td>
<td>( .3310 )</td>
<td>( .0027 )</td>
<td>( .1412 )</td>
</tr>
</tbody>
</table>

\(^1\)All attitude measures described in this chapter were included, but only those shown entered the equation.
\(^\circ\)Coefficients at least twice as large as their standard error.
(\( b^* \) = unstandardized coefficients; \( se \) = their standard errors; \( b \) = standardized coefficients.)
Interplay of Attitude and Strategy

to actively engage in opportunities to further learn English. In the table the standard score on the vocabulary test is indicated; virtually the same results were obtained when this variable was replaced with an index of the student's deviation from his or her grade norms. That is, absolute levels of English acquisition appeared to be more important than is the level of acquisition relative to one's immediate classmates.

The most interesting thing about Table 7.1 is that the only language orientation measure to enter the equation is the subjective norm, which accounts for 3% of the variance unexplained by the first three entered variables. In a parallel multiple regression the subjective norm variable accounted for 3.5% of the variance that was not explained by the learning strategy variables.

Table 7.1, then, suggests that an important vehicle in encouraging second language acquisition efforts within the classroom is the facilitation of more active engagement of lesson learning in general. It also suggests the importance of the child's subjective norms. The amount of variance accounted for by this variable may be deceptive; a more adequate representation of its relative importance may be carried in the beta of .21, which is nearly as strong as that for the prior test score and only somewhat lower than that for the less engaging variable.

Once again, these tables should not be interpreted as evidence that other language orientation variables, such as outcome expectancies and connotative associations, are of no importance to language acquisition. Again, the theoretical construction we have adopted in this analysis is oriented toward identification of variables that might be influenced by teaching strategies, styles and classroom environment structuring.

It should also be recognized that these data are specific to a particular population. Most specifically the data cannot validly be generalized beyond our target population of students from homes whose dominant language is Spanish. We can argue, in our interpretations, that these students are reasonably like other students from similar home backgrounds, and, indeed, unless we were able to make this working assumption
would not have embarked on this project in the first place.

However actively we might argue for the relevance of our findings to other students of Mexican heritage who live in homes where Spanish is still dominant, we would make no claim that these studies have more than incidental relevance to students in other situations. To demonstrate this point, refer to Table 7.2 which displays the results of a parallel regression analysis for the children in our study who have a Chinese (predominantly Cantonese) heritage and who live in homes where Cantonese remains the dominant language. Even more clearly than in the case of the Spanish-speaking students, we see an interplay of language orientation variables and general learning strategy variables.

What is most striking about this table, compared to Table 7.1, is that both of the language orientation variables to enter the equation represent connotative meanings of the language itself. It might be argued that the differences in these tables express cultural differences, that children from Spanish-speaking homes are more oriented toward the expectations and desires of significant others, whereas their Chinese-heritage counterparts are more concerned with their ability to display a language which is held to be both potent and active. The argument would be speculative, however, and based on minimal data. (It should be emphasized that the multiple regression on the Chinese heritage students is particularly suspect, as it is based on a small number of cases.) The point that is carried by the comparison of Tables 7.1 and 7.2 is that our analyses in no way justify the neglect of various language orientation variables discussed in the preceding chapter.

On the more positive side, our analyses should encourage attention to the interplay of subjective norms and general classroom learning strategies in at least specific populations. Table 7.1 strongly suggests that the perceived expectations of significant others will in important part determine whether general lesson engaging will be turned to second-language learning.

In the remainder of this chapter, we will discuss other quantitative data that suggest the possible influences of other variables on language learning efforts in the classroom.
Table 7.2

Regression Coefficients of Language Learning Efforts, on Comprehension Scores (Fall, 1981), General Learning Strategies and Language Attitudes\(^1\); Children from Chinese-Dominant Homes (by order of entry)

<table>
<thead>
<tr>
<th></th>
<th>Connotative: Potency</th>
<th>Engaging Dissembling</th>
<th>Connotative: Activity</th>
<th>Rejecting</th>
</tr>
</thead>
<tbody>
<tr>
<td>(b)</td>
<td>1.1455(^@)</td>
<td>4.6288(^@)</td>
<td>4.3065(^@)</td>
<td>.9055(^@)</td>
</tr>
<tr>
<td>(\text{se})</td>
<td>.3791</td>
<td>1.1703</td>
<td>1.2668</td>
<td>.4356</td>
</tr>
<tr>
<td>(b^*)</td>
<td>.4336</td>
<td>.9781</td>
<td>.5250</td>
<td>.2965</td>
</tr>
<tr>
<td>(r^2) Total</td>
<td>.247</td>
<td>.366</td>
<td>.528</td>
<td>.604</td>
</tr>
<tr>
<td>(r^2) Change</td>
<td>.247</td>
<td>119</td>
<td>.162</td>
<td>.076</td>
</tr>
</tbody>
</table>

\(^1\)All attitude measures described in this chapter were included, but only those shown entered the equation.
\(^@\)Coefficients at least twice as large as their standard error.
\((b = \text{unstandardized coefficients; } \text{se} = \text{their standard errors; } b^* = \text{standardized coefficients.})\)
Interplay of Attitude and Strategy

Section B

Language Interaction with Peers

and Language Acquisition Efforts in the Classroom

In the analyses presented in Chapter Three, one of the most striking results was the lack of direct influence of peers on language acquisition during the school year. By contrast, language use with significant peers was one of the few types of variables to enter into multiple regressions on variable language acquisition during the summer. We speculated that one of the effects of the school year is to interrupt peer influences, and suggested that if this were the case, teaching strategies and school and classroom environmental restructurings might attempt to actively employ peer group influences on language learning.

The lack of direct predictive relationship of peers during the school year leaves open the possibility of an indirect predictive relationship that methodologically might parallel the indirect relationship of language orientations. In Table 7.1 we note that, even with the closely related variable of general learning strategies included in the equation, only 38 per cent of the variance in language learning effort is explained. It seemed reasonable, then, to explore the relationship of language use with peers not to language learning directly, but rather to language learning strategies in the classroom.

Table 7.3 presents the results of a multiple regression in which our variables of language use with significant peers are added to those variables entered in Table 7.1. The added variables introduce a slight reordering, yet the first five variables in the two tables are identical. The predictive value of the equation is considerably heightened, however, by the peer language variables. Further, introduction of these variables occasion the subsequent entry of the connotative meaning variables.
Table 7.3

Regression Coefficients of Language Learning Efforts, on Comprehension Score (Fall, 1981), General Learning Strategies, Language Attitudes and Peer Language Use; Children from Spanish Dominant Homes (by order of entry)

<table>
<thead>
<tr>
<th></th>
<th>Reject Comprehension</th>
<th>Engage Subjective Norm</th>
<th>Casual Peer Language</th>
<th>Task-Oriented Peer Language</th>
<th>Connotative Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>b</td>
<td>2.4769*</td>
<td>.0156*</td>
<td>.8699*</td>
<td>.3743*</td>
<td>.3657*</td>
</tr>
<tr>
<td>(se)</td>
<td>.3661</td>
<td>.0030</td>
<td>.2744</td>
<td>.1175</td>
<td>.0690</td>
</tr>
<tr>
<td>b*</td>
<td>.5823</td>
<td>.4210</td>
<td>.2745</td>
<td>.2443</td>
<td>1.0945</td>
</tr>
<tr>
<td>r² Total</td>
<td>.274</td>
<td>.347</td>
<td>.408</td>
<td>.450</td>
<td>.588</td>
</tr>
<tr>
<td>r² Change</td>
<td>.274</td>
<td>.073</td>
<td>.061</td>
<td>.042</td>
<td>.108</td>
</tr>
</tbody>
</table>

Note: All attitude measures described in this chapter were included, but only those shown entered the equation.

* Coefficients at least twice as large as their standard error.

(b = unstandardized coefficients; se = their standard errors; b* = standardized coefficients.)
Interplay of Attitude and Strategy

Table 7.3, then, furthered our earlier speculations about the potential utility of peer group influences on language acquisition behaviors. It further suggests that the differences in classrooms that we will identify in the following section reflect more than teaching strategies, styles and expectations.

Section C

Variations in Language Orientations and Learning Strategies within Classrooms

The foregoing analyses suggest that general learning strategies, language orientations and language use with significant peers are all in some ways related to language learning behaviors in the classroom. Further specification in detail of those analyses is in order, but they are supported in general outline by our qualitative understanding of the individual students in their classroom involvements.

The next question in this inquiry, then, is whether these predictive variables relate to qualities of teaching styles, strategies and classroom milieu. To approach this question, we have examined the differences within classrooms and between classrooms on each of the predictive variables identified in Table 7.3. The results of the majority of these analyses can be summarized succinctly: although there are differences between classrooms on each of the variables, the variation within classrooms is even more pronounced. Our measure of subjective norm, for example, ranges from a mean score of 6.3 to 8.9. Given the procedures of instrument construction, this difference is appreciable. In an analysis of variance, however, within classroom variation is considerably more pronounced, forcing the conclusion that the differences between classrooms are primarily artifacts of somewhat different student populations, rather than of differences that might be traced to the classroom itself.
Interplay of Attitude and Strategy

The one exception to this is the difference in lesson-engaging behavior. This, it will be recalled from Tables 7.1 and 7.2, is one of the predominant predictors of language learning efforts. In this section of this chapter, then, we will look more closely at the differences between classrooms in students' lesson strategies.

Table 7.4 presents the results of four separate analyses of variance of learning strategies by classroom. Each of the relations, with the exception of lesson rejection, shows distinct and highly significant differences between classrooms. The differences are summarized in Table 7.5 in which the continuous lesson engagement variables have been grouped into predominant lesson strategy types. This table should be recognized as being offered for heuristic purposes only. Both the theory and methodology of our lesson strategy variable suggests that it is inappropriate to categorize an individual learner by "learning strategy type".

Rather, we have suggested that each learner may sometimes engage, sometimes evade, sometimes dissemble and at other times reject. Our Q-sort measure, then, attempts to identify strategies, rather than type learners. Nonetheless, to more clearly identify the differences between the classrooms in our study, it is useful, for this purpose only, to reduce the sets of learning strategy scores for each individual student to a single type that represents the general disposition of the student toward classroom lessons. Of the 117 children from Spanish-dominant homes, only 8 could not be comfortably typed in this way.

The results of this reduction into types of predominant learning strategies are presented in Table 7.6. In this table a general similarity is seen between classrooms 1, 2, and 8. In each, the predominant lesson strategies of the students appears to be engaging, and the next most frequent strategy is dissembling. By contrast, in classroom 6, approximately half of the students tend, predominantly, to dissemble in their lessons. Classroom 7 offers the unusual combination of a high percentage of both engagers and rejecters, while classroom 5 is characterized by a relatively high percentage of dissemblers, rejecters and evaders.

In concert, these tables suggest that the differences between classrooms cannot be adequately understood
Table 7.4

Learning Strategies by Classroom:

Analyses of Variance (Children from Spanish-Dominant Homes)¹

<table>
<thead>
<tr>
<th>Overall Mean</th>
<th>Inter-Room Range</th>
<th>F</th>
<th>Df</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engaging</td>
<td>3.5</td>
<td>2.9-4.0</td>
<td>2.59</td>
<td>5</td>
</tr>
<tr>
<td>Dissembling</td>
<td>3.4</td>
<td>3.0-3.7</td>
<td>3.14</td>
<td>5</td>
</tr>
<tr>
<td>Evading</td>
<td>4.1</td>
<td>3.6-4.6</td>
<td>5.28</td>
<td>5</td>
</tr>
<tr>
<td>Rejecting</td>
<td>4.0</td>
<td>3.7-4.2</td>
<td>.83</td>
<td>5</td>
</tr>
</tbody>
</table>

¹Each row represents a separate analysis of variance
² 1 = most descriptive; 5 = least descriptive
Table 7.5

Individual Modal Learning Strategies,
by Classroom, Children from Spanish-Dominant Homes

<table>
<thead>
<tr>
<th>CLASSROOM</th>
<th>Engaging</th>
<th>Dissembling</th>
<th>Evading</th>
<th>Rejecting</th>
<th>Mixed</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>57</td>
<td>29</td>
<td>7</td>
<td>7</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>47</td>
<td>35</td>
<td>0</td>
<td>6</td>
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Interplay of Attitude and Strategy

as artifacts of differing student populations, or of the indirect influence of differing home and community environments. Rather, at least in important part, understanding of these differences between classrooms must be based within the classrooms themselves. Just as our analyses in the early chapters of this report pointed clearly to the need to consider the diffuse loci of classroom learning, so the analyses in this chapter point clearly to the importance of continued research that is sharply focused within the classroom, on such variables as classroom environments, styles of teaching and processes of negotiation and control.
Chapter Eight
Summary and Discussion

We have asked in this study why some second-language learners master English quickly and easily while others of equal abilities learn slowly or hardly at all. Our focus was not on language attainment, per se, but rather on the variable effort made by students to acquire English as their second language. Nonetheless we looked to tests of language abilities and acquisition for evidence of contextual influences on language learning.

In this final chapter we present a summary overview of our approach and findings and discuss their implications for research and classroom teaching.

Summer Learning One of the most persistent beliefs held by teaching professionals as well as researchers and theorists is that peer relations and home environments are fundamentally important to what is learned and not learned in school. Does that belief have any substance in fact? We sought evidence in rate of language acquisition during the school year, compared to the summer. Our population included all children from eight classrooms in the Greater San Francisco Bay Area. In the analyses summarized here, focus was on those children who lived in homes where Spanish was the dominant language.

In this phase of our research, our design called for serial administration of language proficiency tests in the Fall of 1981, the Spring of 1982 and the Fall of 1982. By identifying changes not only during the school year, but over the summer, we were able to ask the question, "Does school-year learning endure when the
Summary and Discussion

child is out of the classroom, and exposed more fully to family and community contexts?"

Chapters Two and Three addressed this question, and presented a few surprises. For one thing, we expected students from Spanish-dominant homes to show a greater language gain during the school year than during the summer. Indeed, we anticipated that the elementary school children in our study would show little gain during the summer, and perhaps even lose some of the skills developed during the school year.

In this "summer learning" component of our research, we followed the lead of Heyns' Summer Learning and the Effects of Schooling (1978). Throughout the year, Heyns found, children from economically advantaged families increased their word recognition skills more rapidly than did disadvantaged children. But Heyns also found that this familiar gap widened disproportionately during the months when schools were not in session, evidencing the continuing influence of family and community attitudes and relationships.

Heyns relied on a single measure of language acquisition. In this study, guided by the belief that intentional effort is required to learn second-language skills, we employed two basic measures, one of comprehension skills, which require considerable learning effort, the other of auditory vocabulary skills, which require less.

As expected, a lower rate of growth during the summer was displayed in our measure of comprehension (SDRT: Tests 4 and 5 on the Red level; Test 5 on the Green level). But the pace of learning on the measure of auditory comprehension (SDRT: Test 1, both levels) was as fast during the summer months as the school year. Schooling, these data suggest, may facilitate acquisition of some second-language skills more fully than others. We interpret these findings to suggest that those skills requiring the greatest intentional effort are most stimulated or repressed by classroom contexts and teaching variables.

Contextual Influences on Classroom Learning: In Chapter Three we turned to identification of contextual influences on summer and schoolyear language learning. Again,
Summary and Discussion

our goal was to better understand classroom learning, but our experience in schools, our past research and our theoretical understandings had led us to believe that what goes on in the classroom cannot be understood apart from the larger contexts within which the students and teachers live their daily lives. In particular, we expected that family and peer relationships would be reflected in both school year and summer learning, but more strongly during the summer.

Our expectation rested in part on the belief that schooling does make a difference for most children, especially in second-language acquisition. But we also expected that family and peer influences would be greater during the summer, and that children would be more likely to rely on the more familiar language of their homes during those months. Thus, language use in the home, and language use with friends and siblings should relate most strongly to language learning and non-learning during the summer months.

The data confirmed our general expectations, but again presented some tantalizing surprises. Our method of analysis was multiple regression analysis, with scores on the first of three waves of language tests included as predictors of later scores. Not surprisingly, the earlier score was the first entered into the predictive equation, and accounted for the majority of the explained variance. Also not surprisingly, language use in the family was a strong predictor during the school year, confirming the now familiar hypothesis that teachers of young children must be sensitive to their students' home environments. Further, as expected, peer relations appeared to be influential during summer months.

What was surprising, however, was the lack of peer influence on language learning during the school year and the relative lack of family influence during the summer months. We speculated that schooling serves to interrupt peer influences, and forces increased parent-child interchanges on schooling matters and heightens the necessity for negotiations over such things as homework and bedtime. This interpretation is consistent with our observations during home visits and school observations, with one important exception.
Peer Influences on Second-Language Learning: In our observations in classrooms, on playgrounds, and in school lunch rooms and halls we were impressed with the differences within our subject group in use of English vs. home language for everyday conversation with peers. We had expected that children who relied most fully on English in their peer conversations would more quickly acquire second-language skills.

We had assumed that language use stimulates language acquisition, which should be reflected in a direct statistical (predictive) relationship. Although the lack of such a relationship could be due to measurement problems, it is also possible that current understandings of the relationship of language use to acquisition are faulty or lacking in detail. Perhaps some kinds of language use do little to stimulate further learning. To be specific: the uses of language employed by peers in their day-to-day lives may enhance facility in using those skills being exercised, but contribute little to advances in comprehension or even vocabulary.

This interpretation has considerable implications for both research and classroom practices. It is possible, for example, that the hours of classroom drill and recitation aimed at enhancing vocabulary and word recognition are inefficient means of encouraging second-language acquisition. It is possible that the classrooms have little to contribute beyond the influences of the surrounding culture in the acquisition of some language skills such as auditory vocabulary building.

Perhaps the fundamental contribution of the classroom to second language acquisition is to focus intention and effort on activities that contribute to the more demanding tasks of language learning such as text comprehension. If this is the case, the many hours of vocabulary and pronunciation drill we have observed in the course of our research may have been misspent and the many curricular materials that are aimed at similar aspects of language acquisition may be misdirected, serving to distract the teachers and students from more productive efforts.

Let us return to the possibility that the classroom essentially interrupts peer influences during the school year, at least at the elementary level. (The onset of adolescence may quite change this relationship.) The most
obvious implication of this interpretation is that second language acquisition can be enhanced through programs aimed at peer interaction groups. One form these might take is summer school, but it is also possible that less formal and more recreational programs would be equally effective in enhancing and focusing the child's acquisition of the more demanding aspects of the second language.

Less obvious, but perhaps even more promising, is the possibility that peer interaction might be mobilized during the school year within the classroom. In our many hours of observation, we have seen few instances in which teachers intentionally employ small group processes involving friendship subgroups. If children are learning with and through one another during the summer months, it is possible they might learn even more effectively during the school year if their processes of friendship interaction and communication are mobilized within the framework of the teacher's instructional strategies. (For an example of this kind of mobilization of peer processes in the classroom, see Gallimore and Hu-Pei, 1979).

**Language Attitudes and Learning Strategies:** To the student immersed in attitude theories our regression equations may present another surprise: attitudes do not enter as direct predictors of second-language acquisition, in either the schoolyear or summer. Our theoretical perspectives and our classroom experience both had suggested they would not, but the persistence of the belief in direct attitudinal influence led us to run our regression analyses with our attitude scales included in the list of eligible variables. The equations emerged unaltered: although there is a moderate to moderately-high zero-order correlation of these attitude scales with second-language proficiency and change, the relationship of attitudes to language learning in our population appeared to be either spurious or indirect.

Our theoretical suspicion was that attitudes do in fact play an important part in second-language acquisition, but that influence is expressed through other variables that more immediately and directly relate to learning. To explore this and related possibilities we turned our attention more closely to classroom behavior and interaction.
Summary and Discussion

In Chapter Four, based on our interpretive review of the extant literature as well as our own original observations and interviews with teachers, we developed a theoretical model of the "language learning effort". Among other things, the model helps explain why past research into the relationship of "language attitudes" to language learning has been so elusive.

The problem, we believe, is the theoretical constructs in the past have been overly simplified, particularly in positing a direct relationship between language learning attitudes and language acquisition. Our model allows for such direct influence, and argues that the major influence of values and attitudes emerges from their interaction with the student's confidence in his or her ability to learn.

In Chapter Five we describe the development of an instrument to assess the "learning strategies" that derive from this interaction of the desire to learn and the belief in one's ability to learn. In our subsequent analyses, these learning strategies emerged as fulcrum variables, though which the diffuse contextual influences in the child's life are expressed in the classroom.

Even language attitudes, which had played no effective part in our quantitative analyses to this point, exerted an influence on language learning efforts when they were linked to our measures of general learning strategies. Our observations had supported the general belief that attitudes make an important difference in second-language acquisition, but our quantitative measures had demonstrated that this influence is not direct. Now it began to appear that language attitudes do indeed play a role in language learning, but their influence is expressed indirectly.

The interested reader can turn to Chapter Five for a more complete discussion of the strategies. At this point, let us consider the implications of the strategies for classroom teaching.

Learning Strategies and Classroom Interventions: Most students use all of these classroom strategies -- engaging, dissembling, evading and rejecting -- at one time or another in their school careers. Even during a single lesson a student may shift back and forth between two or
more of these strategies. Such shifts do not necessarily reflect individual caprice or instability, for changes in teaching style or pace, or other variations in the classroom may draw out different kinds of student behavior.

At one point a student may be fully engaging a lesson; then the lesson grows disjunctive or accelerates too quickly. The student may lose confidence and resort to dissembling. The alert teacher may recognize this as dissembling and, aware of its roots, attempt to re-engage the student through encouragement, while identifying connections, slowing the pace, or dividing complexities into parts the student can handle more successfully.

In a contrasting situation, a student may move from engaging to evading; in evading the student loses track of the value or rationale for the lesson and attempts to distance him or herself from it. Confidence may be little affected, and the student may believe that he or she is capable of learning the lesson. If this evading is misinterpreted as dissembling, and the teacher attempts to increase the student's confidence, or to divide the lesson into easier parts, the evading student's perceptions are only reinforced.

If the teacher correctly identifies evading, he or she might first check for redundancy in the lesson: if the student already knows, or has known and already forgotten, the lesson material, it is simply boring. Redundancy is frequent, even commonplace in complex schools and school systems; even within the same school, there is often a lack of curricular articulation between grade levels, and a shortage of curricular materials. Students may be inadvertently exposed to the same materials and ideas year after year.

If redundancy is not the problem, the teacher has other basic options that may be used singularly or in concert. Attention may be focused on the student, with attempts to make explicit those aspects of day-to-day life that directly relate to the lesson. Or the teacher may attempt to modify the lesson itself; most often this would involve demonstrating how the lesson fits into a larger framework which is intellectually and/or emotionally relevant to the student's self-perception.

Both of these first two options require a thorough
understanding of the history, culture, language, values and expectations of the student. A further option is to change lessons. This may seem obvious, yet teachers often feel bound to continue a lesson even though all possibilities have been exhausted for constructing a learning situation that has value for the student.

It is likely that both dissembling and evading are highly unstable. The child who suddenly displays considerable dissembling or evasion of classroom lessons may quickly move toward malaise, unless the teacher is able to present lessons that the child does find challenging. Even the child who is actively engaging needs to be watched carefully: as the difficulties of the lesson or the ambiguity of instructions increases, the child may begin to dissemble, and if the learning quandary persists, move into rejecting (malaise).

For example, as the child recognizes prejudice in a teacher toward his or her culture, or experiences relationships that suggest that knowledge of English has fewer benefits and/or more costs than was once believed, the child may move into a language learning bind, still confident of his or her abilities, but less interested in the lessons or the subject area. Over time, if this evasion persists, it is likely the child will drift into what might be called a Second Language Malaise, actively or passively rejecting opportunities to learn English. Similarly, the child's confidence in his or her abilities can be seriously and quickly threatened by teaching and interpersonal strategies that essentially deride the child's language achievements, or demand more effort than the child can or is willing to make.

This sudden deterioration is frequently seen as children make the transition from grade school to junior high school and confront either more demanding and confusing assignments, or more powerfully competing interests from peers and the general school ambience, or both. If our observations and arguments are valid, it is important not only to notice the deterioration, but to determine the direction it takes, i.e., from engaging into dissembling and on to malaise, or from engaging to evasion and perhaps toward malaise.

Malaise, of course, is the most disruptive of learning conditions, and it offers the teacher least to work with. Fortunately, it is rare to find a student who is
Summary and Discussion

persistently rejecting, and it is often possible to identify whether the rejecting student tends toward evading or dissembling. In those rare cases of chronic rejection across lessons and time, the malaise may not be situational, and the teacher may be alerted to problems outside the normal boundaries of the lesson and/or classroom, and seek outside help.

In short, while these learning processes are to some degree habitual they do relate to specific variables in a situation such as teacher behavior, the content of the lesson, the structure of the lesson, the physical presentation of the lesson, the student's immediate emotional state, and the student's reserve of self-esteem. Effective intervention and lesson modifications designed to reverse or forestall learning deterioration requires close and sensitive knowledge not only of the individual child, but of the child's relationship to other individuals in the classroom, and of the home and community context within which the child lives.

In the bilingual classroom, this further requires a knowledge and deep understanding of both the child's home culture and of the dominant, majority culture. For in the bilingual classroom, if the child is to be challenged by language learning, the two cultures must converge. The neglect of one or the other threatens either a child's confidence, or the value he or she attaches to learning one language or the other. At worst, it threatens both.

In learning strategies, then, we see an expression of contextual influences that are located outside the classroom and school. But in these strategies we also see an expression of classroom influences. The most arresting demonstration of those classroom influences was presented in Chapter Seven: our classrooms differ strikingly in their modal learning strategies, and the differences appear to arise in important part from within-classroom variables.

In our quantitative analyses to date we have not been able to more closely identify or locate these classroom influences, or to test our theoretical assumption that the inter-classroom differences emerge from the interactive effects of (1) individual child variables, (2) family and peer contextual variables, and (3) teaching and other classroom variables. Although our quantitative data will allow us to explore this assump-
tion in future analyses, we recognize that teasing such complex interactions from quantitative data is a demanding and tricky business. Stamina and credulity both suffer when quantitative data are forced beyond their limits.

Quite literally, quantitative methods by themselves are no match for the challenges to educational knowledge and developmental theory that are posed by a seven-year-old Chicana reading from a book in an inner-city school room. Today's understandings of the complex processes of human learning may seem sophisticated when compared to the understandings of a century or two ago. Advances have been made, many of them as a result of quantitative research efforts. It cannot be denied that at some phases of growth in knowledge about human development, quantitative research is the better tool. Indeed, at most every phase it has important uses, as we have tried to demonstrate in this report.

In the effort to understand the processes of learning English as a second language what is needed at this time is not so much the "demonstration and verification" kinds of studies that quantitative methods allow. What is needed now is exploration, flexible enough to allow discovery of processes that have remained unsuspected, and grounded in close of the lives lived by children and teachers both within the classroom and beyond it.

Building on the insights and questions generated by the quantitative analyses described in this report, we are now turning our major efforts to qualitative explorations of the rich qualitative data we have gathered over the past three years on our subject children. In the interpretations that we have offered in this chapter we have identified some of the directions those explorations are taking us.
References


APPENDIX A

Quantitative Instruments for Children

Each of these instruments was translated into both Cantonese and Spanish. Interviews were administered in the language preferred by the individual child.
# Interview Record

1. Date: ________________

2. Child's name: ______________________________________

3. Sex: Male _____ Female _____

4. School and Grade: ______________________________________

5. Interviewer's name: ______________________________________

6. Length of interview (in minutes): ________________

7. Child's Comprehension (circle one): Good 1, Fair 2, Poor 3

8. Child's Attitude: Cooperative 1, Indifferent 2, Negative 3

9. Interview Language(s): ________________________________

APPLE - Spanish

TD # _____ (1-3)
Additional Student Questions

1. When you think about it, some boys and girls try to learn English every day and others do not. IF IT HELPS THE INTERVIEW, USE THE STICK FIGURE CARDS PROVIDED WITH THIS BOOKLET. TELL THE CHILD THAT ON ONE CARD ARE BOYS AND GIRLS WHO TRY TO LEARN ENGLISH EVERY DAY AND ON THE OTHER ARE BOYS AND GIRLS WHO DO NOT. Which group are you in? Do you try to learn English every day or do you do something else instead?

IF "EVERY DAY": Do you try all the time each day or some of the time each day?

all the time 1 (16)

some of the time 2

IF "SOMETHING ELSE": Do you mean that you don't try to learn English at all or that you try once in a while?

once in a while 3

not at all 4

2. Are there things that you like to do better than learning English?

IF YES: Are there many things you like to do better than learning English or are there just some things you like to do better?

many things 1 (17)

some things 2

IF NO: Do you mean that there is nothing that you like to do better than learning English or that there are perhaps one or two things that you like to do better?

one or two things 3

nothing 4
3. Can you think of 'friends of yours who don't want you to learn English or who don't care whether you learn English?

IF YES: Do lots of your friends feel this way or just a few?

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<td>just a few</td>
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IF NO: Do you mean that none of your friends feel this way or that perhaps one or two feel this way?

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<tr>
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4. Of all the things that you do every day, do you enjoy learning English?

IF YES: Do you enjoy it the very best of all the things that you do or are there a few things that you enjoy more?

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<td>a few things</td>
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IF NO: Do you mean that you don't enjoy it at all or that you enjoy it a little bit?

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<td>not at all</td>
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5. Can you think of grownups who don't want you to learn English or who don't care whether you learn English?

IF YES: Do lots of grownups feel this way, or only a few?

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IF NO: Do you mean that none of the grownups you know feel this way or that perhaps one or two feel this way?

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FOR THE FOLLOWING QUESTIONS, THE CHILD MAY RESPOND EITHER BY POINTING TO A HAPPY-SAD FACE OR BY INDICATING A NUMBER (FROM 1 TO 5). YOU DO MANY THINGS EVERY WEEK IN (TEACHER'S) CLASS. DURING THE TIME THAT YOU ARE DOING THESE THINGS, YOU MAY FEEL GOOD OR YOU MAY FEEL BAD. FOR EXAMPLE, WHILE YOU ARE PLAYING AT RECESS YOU MAY FEEL GOOD OR BAD. HAND THE CHILD THE HAPPY-SAD FACE CARD. IF YOU FEEL VERY GOOD YOU WOULD (POINT TO THIS FACE)(CHOOSE NUMBER 5). IF YOU FEEL SOMewhat GOOD YOU WOULD (POINT TO THIS FACE)(CHOOSE NUMBER 4). IF YOU FEEL VERY BAD YOU WOULD (POINT TO THIS FACE)(CHOOSE NUMBER 1). IF YOU FEEL SOMewhat BAD YOU WOULD (POINT TO THIS FACE)(CHOOSE NUMBER 2). IF YOU DON'T FEEL ONE WAY OR THE OTHER YOU WOULD (POINT TO THIS FACE)(CHOOSE NUMBER 3). DO YOU UNDERSTAND? OK, HOW DO YOU FEEL WHEN:

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<td>6. you are playing at recess?</td>
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<td>7. you talk in front of the class?</td>
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<td>8. you are doing a math exercise?</td>
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<tr>
<td>9. you are doing a reading lesson?</td>
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<tr>
<td>10. you first arrive in Mrs. (teacher's name) class each day?</td>
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<td>11. it's nearly time to go home?</td>
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<td>12. Mrs. (teacher's name) calls on you to answer a question?</td>
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<td>13. Mrs. (teacher's name) reads or tells a story?</td>
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<td>14. your parents come to school?</td>
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<tr>
<td>15. you have to ask Mrs. (teacher's name) a question?</td>
<td>1 2 3 4 5</td>
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<tr>
<td>16. Mrs. (teacher's name) shows the class how to do math on the board?</td>
<td>1 2 3 4 5 (31)</td>
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</table>
17. You take your report card home?  
18. Mrs. (teacher's name) is absent?  
19. You take a math test?  
20. Mrs. (teacher's name) works with your reading group?  
21. You go home in the middle of the day?  
22. You work with other students on a project?  
23. You get your homework back from Mrs. (teacher's name)?  
24. OK, now tell me how you would feel if your brother or sister was going to be in Mrs. (teacher's name) class next year?  
25. How would he/she feel?
26. Imagine that the last class of the day is P.E. That morning your mother told you to come home right after P.E. But later, your teacher told you to come back after P.E., to stay after school. What would you do?

(41) 1 Would you do what your mother said and come home?

OR

2 Would you do what your teacher said and stay after school?

27. What if you told your friends you'd meet them after school for a game, but your teacher told you to stay after school. What would you do?

(42) 1 Would you do what your teacher said and stay after school?

OR

2 Would you meet your friends after school?

28. What if your mother told you to come home right after school, but your friends said you had to meet them after school to get ready for a game the next day? What would you do?

(43) 1 Would you do what your mother said and go home after school?

OR

2 Would you meet your friends after school?
Now I'd like to talk with you about words and sentences and the ways that people talk to one another. Don't worry whether what you say is right or wrong, there are lots of ideas about languages and talking. I just want to know what you think, because it is really important and interesting.

(44) What language are we talking now? ________________________________

(45) Where do you think ________________ comes from? __________________

______________________________

(46) Where did ________________ get it? ________________________________

______________________________

Interviewer: follow up with questions that use the child's answers and build on them. (E.g.: Child: "They made it up." Interviewer: "How did they do that?" Child: "They saw something and named it." Interviewer: "Can you make up a language?" Child: "Yes." Interviewer: "How would you do it?" ETC...)

When the child has reached the end of these lines of thought, go on:

(47-50) Are there any other languages? (If yes: What are they?) ____________________________

______________________________

(51-54) Where do you think ________________ comes from? ____________________________

______________________________

(55-58) Where did ________________ get it? ________________________________

______________________________

Interviewer: probe, as above

Each time the child names another language, go through the above sequence of questions, probing as above. Go on until the child says there are no more languages, or the child mentions four languages.

You said there are (number) languages: ____________________________

______________________________, and ____________________________.

(59-60) What languages do you speak? ________________________________

Why do you speak __________ and not ____________________________?

(61) Are there people in the world who do not speak any language at all?

1 If no: Why is that?

2 If yes: How would you talk to these people if you had to?
**Interview Record**

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<tbody>
<tr>
<td><strong>1.</strong></td>
<td>Date</td>
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<td><strong>2.</strong></td>
<td>Child's Name</td>
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<td><strong>3.</strong></td>
<td>Sex</td>
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<td><strong>4.</strong></td>
<td>Year in School</td>
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<td><strong>5.</strong></td>
<td>Ethnicity</td>
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<td><strong>6.</strong></td>
<td>Interviewer's Name</td>
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<tr>
<td><strong>7.</strong></td>
<td>Length of Interview (in minutes)</td>
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<td><strong>8.</strong></td>
<td>Child's Comprehension (circle one)</td>
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<tr>
<td><strong>9.</strong></td>
<td>Child's Attitude</td>
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<td><strong>10.</strong></td>
<td>Interview Site (e.g., name of school)</td>
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<tr>
<td><strong>11.</strong></td>
<td>Location of Interview (e.g., classroom)</td>
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**Additional Comments**

*BEST COPY AVAILABLE*
Beliefs About Acquisition of Second Language (BAASL)

Spanish Interview

Now I'd like to find out more about what you think about learning English. When you learn more English than you know now, what will happen? For example, when you learn more English, will you look at comic books more often? Yes or no? ONCE THE CHILD HAS CHOSEN A YES OR NO RESPONSE, ASK: "Are you very sure or pretty sure? FOLLOW THIS PROCEDURE FOR ALL THE FOLLOWING QUESTIONS. CIRCLE THE APPROPRIATE NUMBER FOR EACH QUESTION. IF THE CHILD CANNOT DECIDE BETWEEN YES AND NO, CIRCLE #3 FOR DON'T KNOW. IF THE CHILD CANNOT DECIDE BETWEEN VERY SURE AND PRETTY SURE, CIRCLE EITHER 1 AND 2 OR 4 AND 5.

<table>
<thead>
<tr>
<th>Yes</th>
<th>Pretty Sure</th>
<th>Don't Know</th>
<th>No</th>
<th>Pretty Sure</th>
<th>Very Sure</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. When you learn more English, will you talk to people who only speak English?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>2. When you learn more English, will you interpret for your mother?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>3. When you learn more English, will you forget Spanish?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>4. When you learn more English, will you understand when someone calls you a bad name?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>5. When you learn more English, will your family still be able to understand you?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>6. When you learn more English, will you talk to the police, for example, when there is an accident?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>7. When you learn more English, will it be easier to find a job when you grow up?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
8. When you learn more English, will you talk to the teacher more often?
<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

9. When you learn more English, will you make more friends who speak English?
<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

10. When you learn more English, will English speakers laugh at you?
    | Yes | No |
    |-----|----|
    | 1   | 2   | 3   | 4   | 5   |

11. When you learn more English, will you get into fights?
    | Yes | No |
    |-----|----|
    | 1   | 2   | 3   | 4   | 5   |

12. When you learn more English, will you get mixed up in Spanish?
    | Yes | No |
    |-----|----|
    | 1   | 2   | 3   | 4   | 5   |

13. When you learn more English, will you be able to ask directions when you get lost?
    | Yes | No |
    |-----|----|
    | 1   | 2   | 3   | 4   | 5   |

14. When you learn more English, will you talk in both English and Spanish?
    | Yes | No |
    |-----|----|
    | 1   | 2   | 3   | 4   | 5   |

15. When you learn more English, will you get better grades?
    | Yes | No |
    |-----|----|
    | 1   | 2   | 3   | 4   | 5   |
Now, here are some faces. SHOW THE CHILD THE HAPPY-SAD FACE CARD. ASK EACH OF THE FOLLOWING QUESTIONS AND CORRECT THE CHILD IF THE RESPONSE IS INCORRECT. Which is the happiest? Which is the next most happy face? Which is the saddest face? Which is the next most sad face? Which face is neither happy nor sad? Okay, when I ask you a question you point to the face that tells me how you feel.

1. How do you feel about talking to people who only speak English?
   SAD: 1 2 3 4 5
   HAPPY: 5

2. How do you feel about interpreting for your mother?
   SAD: 1 2 3 4 5
   HAPPY: 5

3. How do you feel about forgetting Spanish?
   SAD: 1 2 3 4 5
   HAPPY: 5

4. How do you feel about someone calling you a bad name?
   SAD: 1 2 3 4 5
   HAPPY: 5

5. How do you feel about your family understanding you?
   SAD: 1 2 3 4 5
   HAPPY: 5

6. How do you feel about talking to the police, for example, when there is an accident?
   SAD: 1 2 3 4 5
   HAPPY: 5

7. How do you feel about finding a job when you grow up?
   SAD: 1 2 3 4 5
   HAPPY: 5

8. How do you feel about talking to the teacher more often?
   SAD: 1 2 3 4 5
   HAPPY: 5

9. How do you feel about making more friends who speak English?
   SAD: 1 2 3 4 5
   HAPPY: 5

10. How do you feel about English speakers laughing at you?
    SAD: 1 2 3 4 5
    HAPPY: 5

11. How do you feel about getting into fights?
    SAD: 1 2 3 4 5
    HAPPY: 5
<p>| | | | | | |</p>
<table>
<thead>
<tr>
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<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>12. How do you feel about getting mixed up in Spanish?</td>
<td>SAD</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>13. How do you feel about being able to ask directions if you get lost?</td>
<td>SAD</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>14. How do you feel about talking in both English and Spanish?</td>
<td>SAD</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>15. How do you feel about getting better grades?</td>
<td>SAD</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>
Who do you know who wants you to learn English? IN THE BLANKS BELOW RECORD THE PEOPLE'S NAMES AND THEIR RELATIONSHIP TO THE CHILD. Okay, are there any other people who want you to learn English? WHEN YOU HAVE DETERMINED ALL OF THE PEOPLE WHO THE CHILD CAN THINK OF THAT WANTS HIM OR HER TO LEARN ENGLISH, DRAW A LINE UNDER THE LAST NAME ACROSS THE PAGE. Now, who are the people who do not want you to learn English? RECORD THE NAMES OF THE PEOPLE AND THEIR RELATIONSHIP TO THE CHILD. Okay, are there any other people who you think do not want you to learn English?

Does (PERSON IN FIRST BLANK) feel that you should or should not learn English? Are you very sure or are you somewhat sure? IF THE CHILD CANNOT DECIDE WHETHER THE PERSON THINKS THE CHILD SHOULD OR SHOULD NOT LEARN ENGLISH CIRCLE #3 FOR DON'T KNOW. IF THE CHILD CANNOT DECIDE BETWEEN BEING VERY SURE AND SOMewhat SURE, CIRCLE EITHER 1 AND 2 OR 4 AND 5.

<table>
<thead>
<tr>
<th>Name</th>
<th>Relationship</th>
<th>should not</th>
<th>should</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>very sure</td>
<td>somewhat</td>
</tr>
<tr>
<td></td>
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<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

BEST COPY AVAILABLE
<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Date</td>
</tr>
<tr>
<td>2</td>
<td>Child's Name</td>
</tr>
<tr>
<td>3</td>
<td>Sex</td>
</tr>
<tr>
<td></td>
<td>Male</td>
</tr>
<tr>
<td>4</td>
<td>Year in School</td>
</tr>
<tr>
<td></td>
<td>1</td>
</tr>
<tr>
<td>5</td>
<td>Ethnicity</td>
</tr>
<tr>
<td>6</td>
<td>Interviewer's Name</td>
</tr>
<tr>
<td>7</td>
<td>Length of Interview (in minutes)</td>
</tr>
<tr>
<td>8</td>
<td>Child's Comprehension (circle one)</td>
</tr>
<tr>
<td></td>
<td>GOOD</td>
</tr>
<tr>
<td>9</td>
<td>Child's Attitude</td>
</tr>
<tr>
<td></td>
<td>COOPERATIVE</td>
</tr>
<tr>
<td>10</td>
<td>Interview Site (e.g., name of school)</td>
</tr>
<tr>
<td>11</td>
<td>Location of Interview (e.g., classroom)</td>
</tr>
</tbody>
</table>

Additional Comments

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162
Survey of Connotative Meanings of Language (SCOML)

Cantonese Interview

Now I'm going to ask you what you think about some things. I want you to choose between two words I'll say. First, think about recess. Is recess good or bad? Okay, and what about your classroom? Is it little or big? IF THE CHILD SAYS THE CLASSROOM IS BIG, SAY: "Okay, is the classroom very big or kind of big?" IF THE CHILD SAYS THE CLASSROOM IS LITTLE, SAY: "Okay, is the classroom very little or kind of little?" IF THE CHILD SAYS "DON'T KNOW," HE OR SHE MAY NEED MORE PRACTICE. USE THE SAME QUESTION FORMAT, FIRST WITH OBJECTS SELECTED FROM THE ROOM IN WHICH THE INTERVIEW IS TAKING PLACE (E.G., THE BLACKBOARD) AND THEN MOVE TO MORE SUBJECTIVE JUDGMENTS (E.G., ARITHMETIC).

Now, suppose a little boy hits someone. Is that nice or awful? IF THE CHILD SAYS IT IS NICE, THEN ASK THE CHILD: "Okay, can you think of something that is awful? Is it very awful or just kind of awful?" WHEN THE CHILD SEEMS CLEAR ABOUT THIS PROCEDURE GO ON TO THE FOLLOWING QUESTIONS ABOUT LANGUAGE.

Now I want you to think about speaking English and Cantonese at school. BE SURE THE CHILD UNDERSTANDS THAT CANTONESE MEANS CHINESE. Sometimes boys and girls speak English and sometimes they speak Cantonese at school.

Do you speak Cantonese at school? When?

Do you speak English at school? When?


BEST COPY AVAILABLE
1. Is Cantonese helpful or unhelpful?  very little DK little very
2. Is Cantonese bad or good?  helpful 1 2 3 4 5 unhelpful
3. Is Cantonese nice or awful?  bad 1 2 3 4 5 good
4. Is Cantonese powerful or powerless?  nice 1 2 3 4 5 awful
5. Is Cantonese weak or strong?  powerful 1 2 3 4 5 powerless
6. Is Cantonese big or little?  weak 1 2 3 4 5 strong
7. Is Cantonese fast or slow?  big 1 2 3 4 5 little
8. Is Cantonese quiet or noisy?  fast 1 2 3 4 5 slow
9. Is Cantonese young or old?  quiet 1 2 3 4 5 noisy

Tell me ways in which English and Cantonese are not the same.
<table>
<thead>
<tr>
<th>Question</th>
<th>Option 1</th>
<th>Option 2</th>
<th>Option 3</th>
<th>Option 4</th>
<th>Option 5</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Is English helpful or unhelpful?</td>
<td>helpful</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>2. Is English bad or good?</td>
<td>bad</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>3. Is English nice or awful?</td>
<td>nice</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>4. Is English powerful or powerless?</td>
<td>powerful</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>5. Is English weak or strong?</td>
<td>weak</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>6. Is English big or little?</td>
<td>big</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>7. Is English fast or slow?</td>
<td>fast</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>8. Is English quiet or noisy?</td>
<td>quiet</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>9. Is English young or old?</td>
<td>young</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
APPENDIX B

Learning Strategies Q-Sort
Q-Sort Instructions

Take the deck of 53 descriptions and choose one of your subjects for a "sort." Shuffle the cards. Read each statement and decide whether it describes your subject or not. If it does, start a pile on the left; if it does not, start a pile on the right. If it is neither descriptive nor undescriptive of the child or if it just does not apply, then start a pile in the middle. Read the next statement and continue the procedure, adding to the appropriate piles as you go through the deck of cards. Bear in mind that you should finally end with 18 descriptive statements and 18 undescriptive statements.

When you have sorted through the deck once, take the pile of descriptive statements and choose nine that are "more descriptive;" then you should have nine that are simply "descriptive." If you have fewer than nine go through the middle pile and find enough to make up the difference; if you have more than nine discard the extra into the middle pile.

Next, take the pile of "more descriptive" and pick out the three that are "most descriptive."

Then go the the "undescriptive" pile and choose nine that are "more undescriptive." (Make sure you have exactly nine "undescriptive" cards left.) Finally, take the "more undescriptive" pile and pick out the three that are "most undescriptive."

This completes the sort. You should now have the following distribution of cards:

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>6</td>
<td>9</td>
<td>17</td>
<td>9</td>
<td>6</td>
<td>3</td>
</tr>
</tbody>
</table>

On the record sheet, FIRST list the cards under each category. Then list the category value (from 1 to 7) in the boxes on the bottom half of the sheet. The numbers from 1 to 53 represent the cards.
<table>
<thead>
<tr>
<th>Most Descriptive</th>
<th>More Descriptive</th>
<th>Descriptive</th>
<th>Neither</th>
<th>Undescriptive</th>
<th>More Undescriptive</th>
<th>Most Undescriptive</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<td></td>
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<td></td>
</tr>
</tbody>
</table>

**FIRST:** List Card numbers under each category (Above)

**SECOND:** Record Category value (from 1 to 7) for each card (below).

A value of "1" indicates "most descriptive"

A value of "7" indicates "most undescriptive"
APPENDIX C

Teacher Interviews

The Interview Schedule was administered to over 100 teachers, administrators and other school staff at the five target schools. Teachers in our eight target classrooms were also given the schedules that refer to individual students in their class.
Social Contexts of Learning
University of California, Berkeley

Classroom Behavior Inventory (CBI)

There are various ways that children can show that they are trying hard to learn English in the classroom. For example, they might be seen looking up words in the English dictionary or sounding out words in a book. I would like you to rate the children in this class relative to each other. For example, if a child tries harder than anybody in the class to learn English by sounding out words you would assign a rating of 7. If they never try to sound out English words, or if they do it less than anyone else in the class, you would assign a 1. A child in the middle of the class on this behavior would be assigned a 4. You can use the other numbers to indicate intermediate frequencies of the behavior.

OK. Here is a list of the students in this class. At the top of the sheet is the behavior that I want you to rate each child on. HAND THE RESPONDENT BEHAVIOR 1 SHEET: "ASKS THE TEACHER OR AIDE HOW TO SAY THINGS IN ENGLISH." Circle one number for each child, indicating how often that child asks (TEACHER) and (AIDES) how to say things in English in comparison to other children in the class. If you simply don’t have enough information to make the judgment, or if the item doesn’t apply to the child, skip on to the next name. But try to make an estimate for each child if you can.

AFTER THE RESPONDENT HAS MADE THE RATINGS FOR BEHAVIOR 1, GO ON TO BEHAVIOR 2 AND SO ON THROUGH THE OTHERS. Here is the (second, third...) behavior I would like you to rate the children on. Now that you are used to the task, you will find that the rating process is more rapid and easier.

BEHAVIOR 2: ASKS THE TEACHER OR AIDE WHAT ENGLISH WORDS MEAN

BEHAVIOR 3: ASKS OTHER CHILDREN HOW TO SAY THINGS IN ENGLISH

BEHAVIOR 4: WILLING TO RISK MISTAKES IN ENGLISH RATHER THAN USING L1 OR SAYING NOTHING

BEHAVIOR 5: PUTS A LOT OF TIME INTO LEARNING TO WRITE ENGLISH
<table>
<thead>
<tr>
<th>ID</th>
<th>NEVER/LESS THAN ANYONE ELSE</th>
<th>MIDDLE OF THE CLASS</th>
<th>MORE THAN ANYONE ELSE</th>
<th>NOT APPLICABLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4 5 6 7 NA</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 2 3 4 5 6 7 NA</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 2 3 4 5 6 7 NA</td>
<td></td>
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<tr>
<td>1 2 3 4 5 6 7 NA</td>
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<td>1 2 3 4 5 6 7 NA</td>
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<td>1 2 3 4 5 6 7 NA</td>
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<td>1 2 3 4 5 6 7 NA</td>
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<td>1 2 3 4 5 6 7 NA</td>
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<td>1 2 3 4 5 6 7 NA</td>
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<tr>
<td>NEVER/LESS THAN ANYONE ELSE</td>
<td>MIDDLE OF THE CLASS</td>
<td>MORE THAN ANYONE ELSE</td>
<td>NOT APPLICABLE</td>
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<td>1 2 3 4 5 6 7 NA</td>
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<td>1 2 3 4 5 6 7 NA</td>
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</table>
I'd like to ask you to make two ratings of the children in your class: first, on how much they value their lessons on reading, writing, and math; and second, on how confident they are of their abilities to do the lessons. HAND RESPONDENT THE 2 X 2 SHEET. Here is a simple table, with "high value" and "low value" along the side and "high confidence" and "low confidence" across the top. As you know, many children value their lessons and are full of confidence in their abilities to do them. In your class this year, who would be an example of this? OBTAIN THE CHILD'S NAME. Let's put (his) (her) name in this box as an example of a child who is high in confidence and who places high value on their lessons. POINT TO CELL #1 AND HAVE THE RESPONDENT WRITE IN THE CHILD'S NAME. THEN POINT TO CELL #2.

Some children seem to think they can do just about any lesson, but they just don't seem to care much. They may know what's expected and if they're pushed they'll do a lesson; but they don't seem to place much value on doing it. Is there anyone in your class who is more or less an example of this? HAVE THE RESPONDENT WRITE THE CHILD'S NAME IN CELL #2. THEN POINT TO CELL #3.

Other children seem to value their lessons a great deal. They try to understand assignments and do what's expected but they never seem to feel confident that they can do the work right. They ask for directions and feedback at every point, often seem confused, and freeze up when it's their turn to answer questions. Can you think of anyone in your class who is an example of this, more or less? HAVE THE RESPONDENT WRITE THE CHILD'S NAME IN CELL #3. THEN POINT TO CELL #4.

Finally, some children seem to place little value on reading, writing, or math lessons and they also seem to have little confidence in their abilities to do them. Is there anyone like that in your class? HAVE THE RESPONDENT WRITE THE CHILD'S NAME IN CELL #4. THEN TALK ABOUT THE 2 X 2 UNTIL YOU ARE CERTAIN THAT THE TEACHER IS CLEARLY DISTINGUISHING LESSON VALUE FROM LESSON CONFIDENCE AND ACCEPTS THE POSSIBILITY THAT THE TWO CAN VARY INDEPENDENTLY.

OK. Here is a list of the students in your class. I would like you to rate each one on confidence and lesson value relative to the other students in your class. HAND THE RESPONDENT THE LESSON VALUE SHEET. First, I'd like you to go through the list and indicate how much each one values the lessons in each of three subjects: math, reading, and writing. Circle a 1 if the child attaches no value to the lessons in a subject, a 7 if the child places more value on the subject than anyone else in the class, and a 4 if the child places an average amount of value on the subject. Use the other numbers to indicate intermediate values. AFTER THE RESPONDENT COMPLETES THIS TASK, TAKE BACK THE LESSON VALUE SHEET AND GIVE HER/HIM THE LESSON CONFIDENCE SHEET.

Go through the class list one more time and this time circle numbers to indicate how confident each student is in his or her abilities to do the lessons in each of the three subjects, and to understand the assignments.
## Lesson Confidence

<table>
<thead>
<tr>
<th></th>
<th>Is Confident</th>
<th>Lacks Confidence</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Lessons</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Have Real Value</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>eg: __________</td>
<td>eg: __________</td>
</tr>
<tr>
<td>Have Little Value</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>eg: __________</td>
<td>eg: __________</td>
</tr>
</tbody>
</table>

*Student is confident of abilities to understand assignments and to do lessons correctly.*
<table>
<thead>
<tr>
<th>LESS THAN ANYONE ELSE</th>
<th>MIDDLE OF THE CLASS</th>
<th>MORE THAN ANYONE ELSE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Math 1 2 3 4 5 6 7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reading 1 2 3 4 5 6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Writing 1 2 3 4 5 6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Math 1 2 3 4 5 6 7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reading 1 2 3 4 5 6</td>
<td></td>
<td></td>
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<tr>
<td>Writing 1 2 3 4 5 6</td>
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<td></td>
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<tr>
<td>Math 1 2 3 4 5 6 7</td>
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<tr>
<td>Reading 1 2 3 4 5 6</td>
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<tr>
<td>Writing 1 2 3 4 5 6</td>
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<tr>
<td>Math 1 2 3 4 5 6 7</td>
<td></td>
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<tr>
<td>Reading 1 2 3 4 5 6</td>
<td></td>
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<tr>
<td>Writing 1 2 3 4 5 6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Math 1 2 3 4 5 6 7</td>
<td></td>
<td></td>
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<tr>
<td>Reading 1 2 3 4 5 6</td>
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<tr>
<td>Writing 1 2 3 4 5 6</td>
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<tr>
<td>Math 1 2 3 4 5 6 7</td>
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<tr>
<td>Reading 1 2 3 4 5 6</td>
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<td>Writing 1 2 3 4 5 6</td>
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<tr>
<td>Math 1 2 3 4 5 6 7</td>
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<tr>
<td>Reading 1 2 3 4 5 6</td>
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<td>Writing 1 2 3 4 5 6</td>
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<td>Math 1 2 3 4 5 6 7</td>
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<td>Math 1 2 3 4 5 6 7</td>
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<td>Math 1 2 3 4 5 6 7</td>
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<td>Math 1 2 3 4 5 6 7</td>
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<td>Math 1 2 3 4 5 6 7</td>
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<td>Reading 1 2 3 4 5 6</td>
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<td>Writing 1 2 3 4 5 6</td>
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<td>Math 1 2 3 4 5 6 7</td>
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<tr>
<td>Reading 1 2 3 4 5 6</td>
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<td>Writing 1 2 3 4 5 6</td>
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<td>Math 1 2 3 4 5 6 7</td>
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<td>Reading 1 2 3 4 5 6</td>
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<td>Math 1 2 3 4 5 6 7</td>
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<tr>
<td>Reading 1 2 3 4 5 6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Writing 1 2 3 4 5 6</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

176
I'd like to ask you a few questions about how the children in your class get along.

First, will you give me the names of the children who the other students go to for help with their schoolwork? IF THE TEACHER GIVES MORE THAN ONE NAME, TRY TO GET A RANK ORDER.

<table>
<thead>
<tr>
<th>Most Sought:</th>
</tr>
</thead>
<tbody>
<tr>
<td>2nd</td>
</tr>
<tr>
<td>3rd</td>
</tr>
<tr>
<td>4th</td>
</tr>
</tbody>
</table>

Who are the children that seem most popular, who attract others on the playground or during free time?

<table>
<thead>
<tr>
<th>Most Popular:</th>
</tr>
</thead>
<tbody>
<tr>
<td>2nd</td>
</tr>
<tr>
<td>3rd</td>
</tr>
<tr>
<td>4th</td>
</tr>
</tbody>
</table>

Now who are the children that the others often pick on or tease or make fun of in some way?

<table>
<thead>
<tr>
<th>Most Picked On:</th>
</tr>
</thead>
<tbody>
<tr>
<td>2nd</td>
</tr>
<tr>
<td>3rd</td>
</tr>
<tr>
<td>4th</td>
</tr>
</tbody>
</table>

Finally, who are the children that tend to be isolated from the others—who are ignored or who tend to choose to stay off by themselves?

<table>
<thead>
<tr>
<th>Most isolated:</th>
</tr>
</thead>
<tbody>
<tr>
<td>2nd</td>
</tr>
<tr>
<td>3rd</td>
</tr>
<tr>
<td>4th</td>
</tr>
</tbody>
</table>
Groups are defined as follows:

1 = (High)  
3 = (Middle)  
5 = (Low)

<table>
<thead>
<tr>
<th>Sept., 1981 to Xmas Vacation</th>
<th>Xmas Vacation to Easter Vacation</th>
<th>Easter Vacation to End of Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4 5</td>
<td>1 2 3 4 5</td>
<td>1 2 3 4 5</td>
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<td>1 2 3 4 5</td>
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<td>1 2 3 4 5</td>
<td>1 2 3 4 5</td>
</tr>
</tbody>
</table>
We're interested in your perspectives on various aspects of education in general and specifically about bilingual education here at (school). We need information from many persons; this information will be summarized to help us make recommendations to Washington. You can see that we need you to answer our questions as accurately as possible.

If you can't answer a question, just say something like, "I'd like to skip this one and go on to the next question." The answers you give are entirely confidential.

We have assigned a code number to this interview; from here on you will be known only by that number. To further safeguard your right to privacy, we will never associate orally or in writing what you say here today with your name. Your answers will not be revealed to other teachers or to school administrators. Do you have any questions?

A. First, one of the most important goals of our research is to discover what might help raise the achievement of students in general and especially those students whose first language is not English. Can you think of things here at (school) that help students do well in class? What changes could be made to help them do better?

(T1.1 to T1.8 BLANK)

<table>
<thead>
<tr>
<th>Initial Answer</th>
<th>Global Probes</th>
<th>Direct Probes</th>
</tr>
</thead>
<tbody>
<tr>
<td>T1.9 Classroom curriculum and resources</td>
<td></td>
<td></td>
</tr>
<tr>
<td>T1.10 School administration</td>
<td></td>
<td></td>
</tr>
<tr>
<td>T1.11 Bilingual teachers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>T1.12 Other teachers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>T1.13 Children's interests or attitudes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>T1.14 Children's intelligence or abilities</td>
<td></td>
<td></td>
</tr>
<tr>
<td>X T1.15 BLANK</td>
<td></td>
<td></td>
</tr>
<tr>
<td>T1.16 Home, parents</td>
<td></td>
<td></td>
</tr>
<tr>
<td>T1.17 Other</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
B. One of the most puzzling things about some children in bilingual classrooms is what we might call the "competence-incompetence paradox": some children who seem bright and capable in activities outside of school seem slow and incompetent in school. They never seem to understand assignments, they learn slowly, and they don't seem to learn much. If you had to identify the MOST important cause of this, what would you mention first?

Interviewer: Probe globally, e.g., "I know there are many things at work, but which one deserves to be at the top of the list?"

After one has been identified, probe globally for more: "What would be the next most important cause?"

Probe globally for at least five responses. Put a check next to the following areas as the teacher mentions them. Then when she/he has finished, probe directly in the areas not checked off. Finally probe again where there may be additional information. If the teacher mentions one or more things not on the list, check "other" and list.

<table>
<thead>
<tr>
<th>Initial Answer</th>
<th>Global Probes</th>
<th>Direct Probes</th>
</tr>
</thead>
<tbody>
<tr>
<td>T1.18 Classroom curriculum and resources</td>
<td></td>
<td></td>
</tr>
<tr>
<td>T1.19 School administration</td>
<td></td>
<td></td>
</tr>
<tr>
<td>T1.20 Bilingual teachers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>T1.21 Other teachers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>T1.22 Children's attitudes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>T1.23 Children's intelligence</td>
<td></td>
<td></td>
</tr>
<tr>
<td>T1.24 Home, parents</td>
<td></td>
<td></td>
</tr>
<tr>
<td>T1.25 Difference in expectations. for sexes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>T1.26 Peers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>T1.27 Cultural factors</td>
<td></td>
<td></td>
</tr>
<tr>
<td>T1.28 Media</td>
<td></td>
<td></td>
</tr>
<tr>
<td>T1.29 Other</td>
<td></td>
<td></td>
</tr>
<tr>
<td>X T1.30 BLANK</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

BEST COPY AVAILABLE
C. Now we'd like to know more about the students whose first language is not English here at (school). (Hand teacher Card T1.) For example, in comparison to the other students, what would you say about the self-esteem of students whose first language is Spanish? Is it typically higher? about the same? lower that other students? Indicate your answer by telling me the number from 1 to 5. So you're saying, that relative to other students, these students are ________ in self-esteem, correct? O.K. go ahead and tell me numbers for the rest of the items.

1=Far more; 2=Somewhat more; 3=About the same. 4=Somewhat less; 5=Far less;
far higher somewhat higher the same somewhat lower far lower

Compared to other students in this school:

<table>
<thead>
<tr>
<th>SPANISH</th>
<th>CHINESE</th>
</tr>
</thead>
<tbody>
<tr>
<td>T1.31</td>
<td>T1.43</td>
</tr>
<tr>
<td>T1.32</td>
<td>T1.44</td>
</tr>
<tr>
<td>BLANK</td>
<td>T1.45</td>
</tr>
<tr>
<td>T1.33</td>
<td>T1.46</td>
</tr>
<tr>
<td>T1.34</td>
<td>T1.47</td>
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<tr>
<td>T1.35</td>
<td>T1.48</td>
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<tr>
<td>T1.36</td>
<td>T1.49</td>
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<td>T1.37</td>
<td>T1.50</td>
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<tr>
<td>T1.38</td>
<td>T1.51</td>
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<tr>
<td>T1.39</td>
<td>T1.52</td>
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<tr>
<td>T1.40</td>
<td>T1.53</td>
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<tr>
<td>T1.41</td>
<td>T1.54</td>
</tr>
<tr>
<td>T1.42</td>
<td>T1.55</td>
</tr>
</tbody>
</table>
D. Children often learn a great deal from one another and it is important to understand how they get along with one another. At school you've had a good deal of experience with the ways children from different language backgrounds interact with one another. I'd like your impressions.

First think about children whose first language is Spanish and those whose first language is English. (Hand respondent Card T3) Again, tell me the number that best describes how FRIENDLY they are with one another when they interact.

<table>
<thead>
<tr>
<th>Friendly</th>
<th>Relaxed</th>
<th>Cooperative</th>
<th>Competitive</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3=Neither</td>
<td>4</td>
</tr>
<tr>
<td>Tense</td>
<td>Uncooperative</td>
<td>Uncompetitive</td>
<td></td>
</tr>
</tbody>
</table>

How FRIENDLY are they? 
- Spanish/English: T1.56
- Chinese/English: T1.62
- Spanish/Chinese: T1.67

How RELAXED are they? 
- Spanish/English: T1.57
- Chinese/English: T1.63
- Spanish/Chinese: T1.68

How COOPERATIVE are they? 
- Spanish/English: T1.58
- Chinese/English: T1.64
- Spanish/Chinese: T1.69

How COMPETITIVE are they? 
- Spanish/English: T1.59
- Chinese/English: T1.65
- Spanish/Chinese: T1.70

---

B. Now, HOW MUCH do these two groups interact with one another? The circles on the card represent different amounts of interaction.

Tell me the number that best represents the amount of interaction at this school between students who speak ONLY ENGLISH and students whose first language is SPANISH.

- No Interaction: T1.61
- Some Interaction: T1.66
- Full Interaction: T1.71

INTERACTION SP/ENG
- Spanish/English: T1.61
- Chinese/English: T1.66
- Spanish/Chinese: T1.71

Now what about students who speak ONLY ENGLISH and students whose first language is CHINESE? Again, tell me the numbers that are most descriptive of the ways they get along.

And one more time: What about students whose first language is SPANISH and those whose first language is CHINESE? Tell me the numbers that are most descriptive of how they get along.
Interviewer: Hand respondent Card T4

Card T4

1 = extremely (interested, eager, helpful, likely)
2 = quite (interested, eager, helpful, likely)
3 = somewhat (interested, eager, helpful, likely)
4 = hardly at all (interested, eager, helpful, likely)
5 = not at all (interested, eager, helpful, likely)

(T2.1 to T2.8 BLANK)

We're also trying to learn something about the parents of children whose first language is not English, compared to parents of other children in this school. First, think about PARENTS IN GENERAL at (school). Of course some parents are closely involved in their children's schooling; some are hardly interested at all.

T2.9 But in general, how interested are most parents in what their children learn in school?
T2.10 How eager are they to have their children learn the three R's?
T2.11 How eager are they to have their children learn good social skills?
T2.12 How much do most parents encourage or demand that their children do their assigned homework?
T2.13 When the teacher asks them to come to school for a conference, how likely is it that most parents will come?
T2.14 How likely is it that most parents will telephone the teacher about their child, or come on their own to see the teacher?
X T2.15 BLANK
T2.16 When the teacher or principal asks for parents' help with their children (in discipline, homework, social or emotional problems), how willing are most parents to do what is asked?
T2.17 When they do try to cooperate, how much help are most parents with their children's problems in school?
T2.18 How much do most parents complain about what goes on in school?
T2.19 In general, how much to most parents trust teachers and principals?

NOW SHIFT FOCUS. What about the parents of children whose first language is SPANISH?

T2.20 How much do they trust teachers and principals?
T2.21 How much do these parents complain about what goes on in school?
T2.22 In general, how interested are these parents in what their children learn in school?
T2.23 How eager are these parents for their children to learn to read and write (in English)?
1 = extremely; 2 = quite; 3 = somewhat; 4 = hardly at all; 5 = not at all

(Spanish)

T2.24 How eager are they for their children to learn arithmetic?
T2.25 How eager are they to have their children learn good social skills?
T2.26 How much do they encourage or demand that their children do their assigned homework?
T2.27 When the teacher or principal asks them to come to school for a conference, how likely is it that these parents will come?
T2.28 How likely is it that these parents will telephone the teacher about their child, or come on their own to see the teacher?
T2.29 When the teacher or principal asks for parents' help with their children (in discipline, homework, social or emotional problems), how willing are these parents to do what is asked?
T2.30 When they do try to cooperate, how much help are they with their children's problems in school?

Now shift focus once more. What about parents of children whose first language is Chinese?

T2.32 When the teacher or principal asks for parents' help with their children (in discipline, homework, social or emotional problems), how willing are these parents to do what is asked?
T2.33 When they do try to cooperate, how much help are they with their children's problems at school?
T2.34 How much do they trust teachers and principals?
T2.35 How much do these parents complain about what goes on in school?

In general, how interested are these parents in what their children learn in school?
T2.36 How eager are they for their children to learn to read and write (in English)?
T2.37 How eager are they for their children to learn arithmetic?
T2.38 How eager are they for their children to learn good social skills?
T2.39 How much do they encourage their children to do their assigned homework?
T2.40 When the teacher or principal asks them to come to school for a conference, how likely is it these parents will come?
T2.41 How likely is it that these parents will telephone the teacher about their child, or come to school on their own to see the teacher?
Now, one more question about parents. Think of the most important things a parent can do to help the child succeed in school. Which would you list first? Which next? What other things might be important? What else? (Interviewer: probe for at least five responses.)

<table>
<thead>
<tr>
<th></th>
<th>Initial</th>
<th>Global</th>
<th>Direct</th>
</tr>
</thead>
<tbody>
<tr>
<td>T2.42</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>T2.43</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>T2.44</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>X</td>
<td>T2.45 BLANK</td>
<td></td>
<td></td>
</tr>
<tr>
<td>T2.46</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>T2.47</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Now, if you don't mind, I'd like to ask you a few questions about yourself and the school. And again: if you'd rather not answer a question, just say so, and we'll go on.

<table>
<thead>
<tr>
<th></th>
<th>T2.48</th>
<th>T2.49</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>What is your marital status?</td>
<td>Do you have children of your own?</td>
</tr>
<tr>
<td></td>
<td>1=Never married</td>
<td>1=No children ever</td>
</tr>
<tr>
<td></td>
<td>2=Married once, still married</td>
<td>2=Had child(ren) who died</td>
</tr>
<tr>
<td></td>
<td>3=Divorced, not now married</td>
<td>3=Youngest child(ren) at home is grade school age</td>
</tr>
<tr>
<td></td>
<td>4=Divorced, currently married</td>
<td>4=Youngest child(ren) at home is high school age</td>
</tr>
<tr>
<td></td>
<td>5=Widowed, not now married</td>
<td>5=Youngest child(ren) at home is post-school age</td>
</tr>
<tr>
<td></td>
<td>6=Widowed, currently married</td>
<td>6=Child(ren) all left home</td>
</tr>
</tbody>
</table>
T2.50  (If appropriate) Do you have any grandchildren? How often do you see them?

1=No grandchildren
2=Have grandchild(ren) who lives with respondent
3=See grandchild(ren) almost daily
4=See grandchild(ren) 2-3 times a week
5=See grandchild(ren) 2-3 times a month
6=See grandchild(ren) a few times a year
7=See grandchild(ren) rarely or never

T2.51  What languages do you speak, other than English?

1= None
2=Spanish
3=Chinese
4=Other Asian
5=Other European
6=Other

T2.52 & How many years have you been teaching? (Code in exact number)

T2.53

T2.54 & How many years have you taught at this school?

T2.55

T2.56  (Hand respondent card T5) What number represents the age group you are in?

Card T5

1=20-29
2=30-39
3=40-49
4=50-59
5=60 or over

(Hand respondent Card T6) Many people see the relationships between co-workers as an important part of the job. How would you characterize the relationships -- in general -- here at (school)? Again, tell me the number that is most descriptive. First, how FORMAL or INFORMAL are relationships between teachers?
Card T6

What are relationships like BETWEEN TEACHERS at this school?

<table>
<thead>
<tr>
<th>How FORMAL are they?</th>
<th>Formal</th>
<th>Neither</th>
<th>Informal</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>How EQUAL are they?</th>
<th>Equal</th>
<th>Neither</th>
<th>Unequal</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>How RELAXED are they?</th>
<th>Relaxed</th>
<th>Neither</th>
<th>Tense</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>How REWARDING are they?</th>
<th>Rewarding</th>
<th>Neither</th>
<th>Frustrating</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>How POSITIVE are they?</th>
<th>Positive</th>
<th>Neither</th>
<th>Negative</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>How FRIENDLY are they?</th>
<th>Friendly</th>
<th>Neither</th>
<th>Unfriendly</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

(T3.1 to T3.8 BLANK)

Now, what about the relationships BETWEEN TEACHERS AND THE ADMINISTRATION in this school? Again, tell me the most descriptive numbers.

<table>
<thead>
<tr>
<th>BETWEEN TEACHER</th>
<th>TEACHERS-ADMINISTRATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>FORMAL</td>
<td>T3.9</td>
</tr>
<tr>
<td>EQUAL</td>
<td>T3.10</td>
</tr>
<tr>
<td>RELAXED</td>
<td>T3.11</td>
</tr>
<tr>
<td>REWARDING</td>
<td>T3.12</td>
</tr>
<tr>
<td>POSITIVE</td>
<td>T3.13</td>
</tr>
<tr>
<td>FRIENDLY</td>
<td>T3.14</td>
</tr>
</tbody>
</table>

X T3.15 BLANK

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0 PRINCIPALS ONLY (for teachers and staff, go on to next question)

Each principal has a special style of administration and each school has its special array of concerns. What are the most important concerns in the day-to-day administration of this school? (Probe globally, then directly.

<table>
<thead>
<tr>
<th>T3.22</th>
<th>Discipline</th>
<th>Initial Answers</th>
<th>Global Probes</th>
<th>Direct Probes</th>
</tr>
</thead>
<tbody>
<tr>
<td>T3.23</td>
<td>Relations with community</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>T3.24</td>
<td>Relations with parents</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>T3.25</td>
<td>Relations with teachers</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>T3.26</td>
<td>Relations with the district bureaucracy</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>T3.27</td>
<td>Other</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>T3.28</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>T3.29</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Your school has students from a number of different cultural backgrounds and who speak languages other than English. How similar are the expectations of parents from various language-cultural groups to those of the administration and the teaching staff in regards to teaching, discipline, curricula, etc.

X T3.30 BLANK
Probe to identify similarity and difference of each of the major language groups in the school.

<table>
<thead>
<tr>
<th>T3.31</th>
<th>Chinese</th>
</tr>
</thead>
<tbody>
<tr>
<td>T3.32</td>
<td>Spanish</td>
</tr>
<tr>
<td>T3.33</td>
<td>English</td>
</tr>
<tr>
<td>T3.34</td>
<td>Other (specify)</td>
</tr>
<tr>
<td>T3.35</td>
<td></td>
</tr>
<tr>
<td>T3.36</td>
<td></td>
</tr>
<tr>
<td>T3.37</td>
<td></td>
</tr>
</tbody>
</table>

How do you deal with these different expectations (in your administration of this school)?

TEACHERS, STAFF AND PRINCIPALS:

Now, would you mind filling this sheet out? (Hand Maslach Stress Scale.)

Just one last question. You have worked some time now at a school with students who speak languages other than English and with students from many different backgrounds. You know the real problems facing schools in this position. If you could make recommendations to Congress about what to do, what would you recommend?
Interviewer: Probe, with any remaining time.

Post-interview data (to be completed immediately after interview).

NOTE time finished, and record on front sheet of schedule.

T3.38 Respondent's sex
1 = female
2 = male

T3.39 Respondent's general vitality
1 = Extremely vital
2 = Quite vital
3 = Somewhat vital
4 = Rather listless, tired and frail
5 = Quite listless, tired and frail
6 = Extremely listless, tired and frail

T3.40 Respondent's attitude in early phases of interview
1 = Extremely positive, enthusiastic and cooperative
2 = Fairly so
3 = Neither positive nor negative
4 = Fairly negative
5 = Extremely negative

T3.41 Respondent's attitude midway in interview
(Code as in item T3.40.)

T3.42 Respondent's attitude in last phases of interview
(Code as in item T3.40.)

X (T3.43 to T3.45 BLANK)

T3.46 What is your ethnic background?
1 = Anglo
2 = Black
3 = Chicano, Mexican
4 = Other Latino
5 = Cantonese
6 = Other Chinese
7 = Other Asian
8 = Other

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<th>Page</th>
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<td>68a-68b</td>
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<tr>
<td>Table 5.2</td>
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<td>71a</td>
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<td>Table 6.2</td>
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<td>Table 6.3</td>
<td>Chinese- and Spanish-Speaking Children's Normative Beliefs About English Acquisition by Referent Other, Fall 1982</td>
<td>89a</td>
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</tbody>
</table>
Table 6.4  Regression Coefficients of Comprehension Scores (Spring, 1982) on Language Attitude Measures

Table 7.1  Regression Coefficients of Language Learning Efforts, on Comprehension Scores (Fall, 1981), General Learning Strategies and Language Attitudes; Children From Spanish-Dominant Homes

Table 7.2  Regression Coefficients of Language Learning Efforts, on Comprehension Scores (Fall, 1981), General Learning Strategies and Language Attitudes; Children From Chinese-Dominant Homes

Table 7.3  Regression Coefficients of Language Learning Efforts, on Comprehension Scores (Fall, 1981), General Learning Strategies, Language Attitudes, and Peer Language Use; Children From Spanish-Dominant Homes

Table 7.4  Learning Strategies by Classroom; Analyses of Variance (Children From Spanish-Dominant Homes

Table 7.5  Individual Modal Learning Strategies, by Classroom, Children From Spanish-Dominant Homes
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<th>Description</th>
<th>Page</th>
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</thead>
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<td>19a</td>
</tr>
<tr>
<td>Figure 5.1</td>
<td>Classroom Learning Behavior: A Taxonomy of Lesson Confidence and Lesson Value</td>
<td>55a</td>
</tr>
<tr>
<td>Figure 5.2</td>
<td>Inter-Factor Correlation Coefficients; Learning Strategy Factors, All Cases</td>
<td>69a</td>
</tr>
<tr>
<td>Figure 6.1</td>
<td>Cognitive Structure of Bicultural Children's Attitudes Toward Culture</td>
<td>76a</td>
</tr>
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</table>