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A READING PROGRAM FOR MEXICAN-AMERICAN CHILDREN. FIRST INTERIM REPORT.

BY- AMSDEN, CONSTANCE

CALIFORNIA STATE COLLEGE AT LOS ANGELES

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A PRELIMINARY DEVELOPMENTAL PROGRAM IN BEGINNING READING WAS ESTABLISHED FOR MEXICAN-AMERICAN CHILDREN IN AN EAST LOS ANGELES SCHOOL. THE PROGRAM WAS DESIGNED TO DEVELOP ORAL LANGUAGE SKILLS AND TO REINFORCE TRADITIONAL CULTURAL VALUES IN THE MEXICAN-AMERICAN COMMUNITY. BASELINE DATA WERE OBTAINED ON BOTH READING ACHIEVEMENT AND ORAL LANGUAGE DEVELOPMENT. IN ADDITION, INDEPENDENT STUDIES WERE UNDERTAKEN OF (1) THE SPANISH LANGUAGE PROFICIENCY OF THE CHILDREN AND (2) SPANISH INFLUENCE ON THE CHILDREN'S ORAL ENGLISH. A CONTINUING EMPHASIS ON PARENT PARTICIPATION, INDIVIDUALIZED INSTRUCTION, SELF-INSTRUCTION, AND CULTURAL AWARENESS WAS RECOMMENDED TO ASSURE THE CHILDREN'S ACADEMIC PROGRESS AND TO DEVELOP THEIR SENSES OF IDENTITY AND SELF-ESTEEM. (JH)

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FIRST INTERIM REPORT
OCTOBER 1966

A Reading
Program for
Mexican-American
Children



founder's legacy

INTERIM REPORT
Project No. 5-0559
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U. S. DEPARTMENT OF HEALTH, EDUCATION AND WELFARE
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A READING PROGRAM FOR MEXICAN-AMERICAN CHILDREN

First Interim Report

October 1966

U. S. DEPARTMENT OF
HEALTH, EDUCATION, AND WELFARE

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A READING PROGRAM FOR MEXICAN-AMERICAN CHILDREN

First Interim Report

**Project No. 5-0559
Contract No. OE-6-85-070**

Constance Amsden

August 31, 1966

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We are grateful to the administrators and teachers in the Los Angeles City School System, without whom the project could not have been carried on. We are particularly indebted to the project teachers whose courage, enthusiasm, sensitivity and expertise have made possible the progress made this first year.

The interpretation of language data by the Mexican-Americans from East Los Angeles who have been working in the project has been essential to its success, since language is so intimately concerned with cultural patterns of living. We feel this staff constitutes one of the best resources we could have found. Their information about characteristic language patterns and other relevant concerns has been very accurate and so very generously given. We are deeply grateful to each of these dedicated, generous, hard-working young people.

We also recognize with the deepest gratitude those parents who reorganized their home responsibilities so that they might come into our classrooms and help teach the children.

The resources of California State College at Los Angeles have been at the project's disposal on most generous terms, making the tasks of the project staff much easier. We deeply appreciate the support the college has given this program from its inception.

We are also indebted to the U.S. Office of Education for making this year's work possible.

The active participation of the Youth Opportunities Foundation and the support of Congressman Edward R. Roybal are gratefully acknowledged.

ABSTRACT

This is an interim report on "A Reading Program for Mexican-American children," conducted at the Malabar Street Elementary School in East Los Angeles during the past year (September 1, 1965 through August 31, 1966), under a contract between the U.S. Office of Education and California State College at Los Angeles.

A project method is being developed to facilitate the progress of Mexican-American children in reading and oral language, with emphasis on parent participation, individualized instruction, self-instruction, and cultural awareness.

As a basis for testing research hypotheses with respect to pupil growth, base-line data have been obtained on (1) reading achievement (through the use of standardized and project-developed tests), (2) oral language development (through the analysis of recorded samples of children's spontaneous language at the kindergarten and preschool levels and children's responses to a project-designed Oral Language Interview in the primary grades).

Bilingual Mexican-American project assistants have undertaken studies of (1) the Spanish-language proficiency of the Malabar children and (2) Spanish influence on children's oral English. Results of these studies will (1) help teachers understand the ways in which the language, concepts and values which children learn in their bilingual community may conflict with those of the school; and (2) provide a basis for developing instructional materials to meet the special needs of Mexican-American children.

A READING PROGRAM FOR MEXICAN-AMERICAN CHILDREN - A RESUME

The work of this Project is not limited to the concerns implied by the project title. In a bilingual community, reading instruction must rest on a sound basis of oral language development. Children must be placed in situations which stimulate communication, and they must feel free to communicate without self-consciousness. Moreover, the Mexican-American community has a deep-rooted culture involving value and traditions which differ from those of many members of the school staff. The Project recognizes this and attempts to utilize and reinforce these values and traditions so that children may continue to develop a sense of identity and self-esteem and to make academic progress.

As we have worked this past year with the children of the Malabar Street School and with Mexican-American community leaders, we have come to feel the importance that the Spanish language has in the lives of these children. It should not be difficult for us to understand why this is so. During the critical preschool years most of these children learn Spanish as the language of the home and the extended family. It is through Spanish that they communicate their needs and receive praise from those dear to them. The child hears Spanish spoken all around him; his name and those of his friends are Spanish; the lyrics to the songs he enjoys are in Spanish; moreover, Spanish is used exclusively by the radio and TV stations which are preferred by family and friends. The following excerpts from Chapter VIII, which has been prepared by three members of the research staff (Mr. Estrada, Mr. Gomez, and Mr. Montes) is one of the clearest expressions we have found of this role of Spanish in the lives of Mexican-American children.

The problem of our children can be articulated on the basis of three major communicative factors: (1) ideation and expression, (2) conflicting sound systems of the two languages and (3) self-image of the Mexican-American child.

... The Mexican-American child ... has become accustomed to hearing ideas expressed in Spanish. In East Los Angeles (and this is true in many areas of California), a child hears Spanish spoken all around him ... We now ask the question whether faulty and incoherent expression in Spanish would impede clear expression in English. Or if we put the question conversely, would clear and precise

thinking and expression in Spanish improve the child's ability to achieve clear and precise thinking in English? A child who is vocal and confident in his use of the Spanish language has only to acquire an English vocabulary in order that he might express himself in English. ... A child who has a vague and unstable basis of expression in Spanish must be provided with the experience and process of ideation in English. For those children who lack a clear and precise command of the English language, there may exist a tendency to revert to Spanish expressions that they themselves use or have heard in order to communicate in English. The child is not aware of the dissimilarities that exist between the two modes of communication.

... the Mexican-American child has to face conflicting sound systems. He may not care to express himself in the classroom because he realizes that his accent and intonation are different from that of his teacher. This in turn may have some bearing on the child's readiness to receive instruction and to communicate concerning the things that he has learned. Quite possibly the difference in intonational patterns between the two languages may be a stumbling block for the child in discerning whether he is being asked a question or being told something. ...If the child were made aware of the differences between the Spanish and English sound systems, he could distinguish the influence of one upon the other. This... could provide a basis for further ... reading progress.

The third facet of the Mexican-American child's problem with respect to his achievement in education is the child's self-image. Does the Mexican-American identify himself with the Spanish language? ... The food he eats is known through Spanish terms. The music that is identified with him is known through its Spanish lyrics. ...To tell the Mexican-American child that he must not speak Spanish in the school which he attends leaves him with the idea that in order to succeed he must renounce his cultural background...

If, in fact, the Mexican-American child were made to appreciate his language background, he would be provided with a more positive outlook on his own culture in relation to the school system. He would not feel that success depended upon the rejection of a facet of his personality. Given a more positive mental attitude, the Mexican-American child could overcome the initial frustration that he encounters in the early years of his school career.

Purposes of the Project. This Project is intended to combine an individualized approach to reading instruction, a high degree of parent participation in the classroom, and an extensive program of oral language communication, from the preschool through the primary grades, in an attempt to serve the following purposes:

1. Reading. To help Mexican-American children become vocationally competent adults by teaching them to read at least up to grade level in the primary grades, thus laying a foundation for future success both in school and on the job.

2. Oral Language Development. To accelerate the functional oral language of Mexican-American children age 3-9 years so that it will both serve as an adequate base for reading instruction and enable the child to communicate at optimum ability.

3. Parent Participation. To guide parents in learning how to help their children develop academic skills so that the work of the school may be continued during many of the hours the child spends at home.

4. Individualized Instruction. To offer these children the type of education defined as: "...discriminated knowledge integrated into the functioning self," so that the time and effort they and their teachers put into their education will result in an informed citizenry.

5. Self-Instruction. To help these children not only learn how to learn, but also assume the responsibility for their own academic growth so that in future years they will be able to teach themselves as academic and vocational horizons expand.

The current Project is an outgrowth of a pilot language-development preschool project, developed in 1964-65 and funded by the Los Angeles City Schools. Preliminary monitoring of the tape recordings of the preschool enrollees indicated that few children would attain by first grade the level of proficiency in the language of instruction which is desirable as a base for instruction in reading. It was clear that if these children were to achieve adequate competency in reading, (1) a very large percentage of the school day in kindergarten and the primary grades would have to be devoted to language development and reading experiences; (2) reading instruction in the primary grades would have to be adapted to the special language needs of these children; and (3) parental involvement in helping the children learn would have to be extensive.

Major Characteristics of the Instructional Program. During the preschool and kindergarten years, every aspect of the program was designed to stimulate children's conversation (especially with significant adults, i.e. teacher and parents). Finger-play games

with accompanying rhymes, poems and songs in English and Spanish, stories read to individual children and to small groups were some of the many approaches used.

We tried to convey to children our psychological support of communication in both English and Spanish. At the same time, we began to help the children to differentiate between the two languages. At the preschool level, there were two aspects of the instructional program in oral language development which were perhaps the most important (1) provision of many opportunities for children to talk with significant adults; (we could not have achieved this goal without extensive parent participation in the preschool); (2) the weekly visit of the preschool teacher to each child's home which resulted in establishing common goals and methods in home and school for stimulating and guiding oral language development.

Although we did not intend to teach pre-primary children to read, we did wish to increase their awareness of the usefulness and satisfaction to be found in printed-word reading. Pre-primary activities directly related to pre-reading instruction included: (1) the use of children's names for labelling, (2) learning to write one's own name when the child was ready, (3) learning to recognize and write numbers, (4) listening to stories read to them.

In the primary grades, all the oral language development activities of the pre-primary years were continued; in addition, directed dramatization was introduced. One-to-one conversations between children and adults continued to be emphasized.

Reading instruction was individualized so that each child could learn to read at his own pace, avoid the self-consciousness associated with making mistakes before his peers, and pursue self-directed activities related to his own reading progress. The Fernald story-writing technique was used so that each child could work within his own oral language structure as he engaged in the thinking-writing-reading cycle. Although instruction in phonetics was used, the effectiveness of such instruction will be improved as we obtain and disseminate to teachers our findings on the ways in which differences in the Spanish and English sound systems lead to confusion and unstable performance among these children. Instructional materials based on recurring confusions should also improve the efficiency of this aspect of the instructional program.

In the individualized teaching of reading, the teacher fulfills multiple roles, primarily those of diagnostician, as she determines where help is needed, and consultant to the child in his choosing the learning materials and learning tasks which he

will undertake next. Considerable emphasis was placed on developing the child's resourcefulness and independence in self-teaching, in helping him "learn to learn," in helping him enjoy the difference in intellectual accomplishment which is analogous to the difference between walking and being carried. Teachers responded most favorably to these changes from traditional roles.

Parent volunteers were indispensable in the operation of the preschool program and in the individualized approach to reading instruction used in the primary grades. The children also received emotional support from the parents' presence in the classroom. As parents explained to their neighbors (in English and/or Spanish) the work they were doing in the classroom and as bilingual preschool teachers made weekly visits to homes, the bridge between home and school was greatly strengthened. Group meetings held for parents were described in Chapter II.

Research Aspects of the Program. This project, which was planned to follow the original preschool groups into the kindergarten and primary grades, has been expanded at teacher request to include several other primary-grade classes. Although a better research design could have been achieved by assigning children at random to experimental and control groups, the needs of a demonstration project and the needs of the community have been considered to be pre-eminent. As teachers have asked to be included, they and their pupils have been welcomed. At the end of the three-year project, we can clearly identify groups of children who have had from one to six semesters in the project; results for these groups can then be compared.

Research on the oral language development of these Mexican-American children was essential in order to provide guidelines for the modification of methods and the development of instructional materials appropriate to children's needs. Base-line data on both oral language development and reading achievement were needed as a basis for comparison with end-results in both these aspects of achievement at the time the Project is terminated in 1968. Base-line and end-of-project data will be used to test the following research hypotheses:

1. Children who have had the enriched, individualized instructional program, described elsewhere as the Project Method, will attain significantly higher reading scores on standardized reading achievement tests than did the base-line groups measured this spring.
2. Children who have had the Project instructional program will also attain significantly higher results on measures of oral language development.

3. Children who have been included in the program for two or three years will attain significantly higher scores in both reading and oral language development than those who have been included in the program for shorter periods of time.

4. Despite the relatively heavy emphasis of the Project program on reading instruction, Project children will not achieve significantly lower scores in arithmetic.

In obtaining data on reading achievement, two standardized achievement test series were used. The state-required Stanford Reading Test was administered (Primary I to A1 pupils and Primary II to A2 pupils). Since these state-required tests were assumed to be too difficult to yield valid scores for many pupils, a Sight Vocabulary Test (based on a sample of words common to the two reading series used in grades 1 and 2) was developed and administered in grades 1-3; moreover, the Primary I battery was administered at the A2 level. Although the state did not require a reading test in third grade this year, we did need base-line data for A3 pupils; hence both the Primary I and Primary II batteries of the Stanford Reading Test were administered at this grade level. Prior to this year, the California Achievement Test had been administered at the Malabar Street School; since comparable data were available for 1964 and 1965, both the reading and arithmetic subtests were administered to B3 and A3 pupils. Base-line data from the arithmetic subtests will be necessary in order to determine whether the large concentration of time on the language arts has facilitated or adversely affected achievement in arithmetic.

In order to obtain base-line data on oral language development, samples of all children's speech were obtained. At the preschool and kindergarten level, language samples were obtained by use of a "floating microphone" which was worn by a different child each day of the school year. In grades 1-3, an Oral Language Interview, especially developed for this project, was conducted by bilingual interviewers. Following a "warm-up" period, in which the interviewer conversed with the child first in Spanish and then in English, the interviewer then conducted a semi-structured interview concerning (1) the child's favorite TV program, (2) his favorite toys from a Toy Shop (with toys selected on the basis of preliminary try-out), and (3) the child's story about one of three Loban pictures which he chose to discuss.

In order to obtain a rating of each child's proficiency in Spanish, ratings were made of each child's performance during the "warm-up" period of the Oral Language Interview. Children were rated as: (1) no Spanish comprehension, (2) Spanish comprehension but no manifest ability to speak the language, (3) ability to speak

Spanish but with difficulty, and (4) ability to speak Spanish with relative ease. These ratings were made by bilingual members of the research staff, Mr. Hector Estrada, Mr. Robert Gomez, and Mr. Richard Montes. A reliability study revealed close agreement among them in evaluating the children's proficiency in Spanish.

A study was also made of a-grammatical utterances of children which might be attributable to the influence of Spanish syntactical constructions on the children's oral English. The pilot study by Mr. Frank Hidalgo has revealed a number of significant recurring errors. Further work will be done in this area as a basis for developing instructional materials which will help teachers help children understand and practice those English-language word patterns which tend to be modified by their prior knowledge of Spanish.

A first-level language analysis was made of typescripts from the Oral Language Interview for A1, A2 and A3 Mexican-American children. Comparisons of grade-level groups were made on six basic measures and the following four derived measures: (1) percent of words in mazes, (2) percent of words in "reportage responsums," (3) percent of words in T-units, and (4) average length of T-unit. Second-level analysis (described in Chapter IV) will be undertaken this year. Because of the difficulties inherent in analyzing preschool and kindergarten tapes, these were set aside until we had accumulated experience in analysis of language samples obtained from older children through the Oral Language Interview.

Tentative Conclusions. Final conclusions concerning the children's progress under the Project instructional program must be deferred until end-of-project data are available in 1968 for primary-grade pupils who have spent differing amounts of time in the program.

Our base-line data on reading achievement justify the conclusion that the average reading achievement of Malabar Street School primary-grade children is markedly below national norm. Although the state-required tests in A1 and A2 are too difficult to yield valid results for the majority of children, the results for the easier battery in A2 and for all three tests in A3 confirm this conclusion.

We have been able to obtain language samples from children which yield reliable data on the child's oral language development in English, as well as the child's proficiency in Spanish and the extent to which he uses Spanish words when he is conversing in English. These samples also yield valuable evidence concerning recurring errors which reflect the influence of Spanish upon the

children's oral English language. An adequate degree of reliability for group comparisons was obtained when the Oral Language Interview was administered to the same children on two different occasions by two different interviewers.

We have succeeded in obtaining typescripts which are sufficiently faithful reports of the child's speech so that analysis of the typescripts can be substituted for listening to tapes in a majority of cases. This achievement was made possible by the use of bilingual transcribers who sought to attain the highest standards of accuracy in their interpretations of the tapes.

Although the first-level analysis of oral language development has been disappointing in that we have not yet measured aspects of oral language development which are correlated with tested reading achievement, we have found three types of evidence of progress in oral language development during the primary grades: (1) a reduction in the percent of words in "reportage responsums" (meaningful incomplete predications); (2) an increase in the percent of words in T-units*; and (3) an increase in the average length of T-unit. There is wide variability within grade level with respect to each measure of oral language development studied.

Recommendations with Respect to the Project Program. Our recommendations in this area have grown out of our day-to-day experiences in the classrooms, our all-day conference with project teachers, and many informal conferences with the principal, community leaders, teachers and research team members.

1. Parent participation in the classrooms should not only be continued but expanded.

2. New instructional materials, especially designed for Mexican-American children, should be developed in cooperation with the teachers of the Malabar Street School.

a. The Project Directors are developing a guide for project teachers, which will incorporate our findings concerning pupils' recurring problems, and explain and illustrate methods that have seemed to be most effective in working with children at the Malabar Street School.

b. Supplementary reading books, especially designed for Spanish-English speaking children, should be developed and duplicated for use.

* The T-unit, as defined by Hunt (6), is a "minimal sentence" or more precisely, a "minimal terminable unit," i.e. the shortest grammatically complete units into which a communication can be divided.

c. Materials should be developed to help teachers in their phonics program, with emphasis on the phonemic conflicts between Spanish and English, which seem to be a source of at least as much difficulty as morphological or syntactical confusions.

d. Self-teaching aids, especially suited to the needs of these children, should be developed so that the self-directive aspects of the program can proceed with maximum efficiency.

3. The cultural heritage of Mexican-American children must be emphasized in all possible ways which increase their pride in their ancestral culture. We plan to introduce songs, dances, poetry, and folk-tales in the Mexican tradition as often as is possible.

4. Since the Spanish language is not only a symbol of the Mexican-American child's cultural heritage but is also a potentially valuable linguistic tool, the teachers' supportive attitude toward the use of Spanish during the child's school day should be continued and encouraged. The materials we develop on the similarities and contrasts between Spanish and English, as well as the supplementary readers mentioned in 2b above, will contribute to the children's appreciation and functional use of both Spanish and English.

CHAPTER I

INTRODUCTION

Background Information

A Reading Program for Mexican-American Children, funded through the Vocational Education Act of 1963, was designed to improve the reading achievement of children at the Malabar Street School of whom approximately 90 per cent are Mexican-American.

The Malabar Street School is located in the Boyle Heights section of East Los Angeles. Nearly three-fourth of the people living in this area have Spanish surnames. This is one of the heaviest concentrations of people of Mexican descent in the nation, or, indeed, in the entire world. Only Mexico City, Guadalajara and Monterey have equal or greater population concentrations.

According to the McCone Commission Report (14), there are approximately 27,000 elementary school pupils enrolled in the Los Angeles public schools in East Los Angeles and Boyle Heights, of whom the 1400 children at the Malabar Street School appear to be a representative sample. Of the Malabar children, 63 per cent speak Spanish in the home either entirely or in part. They, in turn, are representative of the Mexican-American children who are of such grave concern to Congressman Roybal (Congressman from the Malabar Street School District) as revealed in the following excerpts from his recent communication to Commissioner Harold Howe II:

I know you are gratified at the evidence of growing national recognition of the urgent need to find solutions to the educational problems confronting the nearly 2 million children of the Mexican-American community in the Southwest.

For your information, I am enclosing a copy of a survey report on this question, entitled The Invisible Minority, released last week by the National Education Association, and an analysis of the NEA report which appeared in the August 22, 1966, edition of the New York Times.

You will note that the NEA report characterizes the unique bi-cultural and bi-lingual situation of Mexican-American children as "the most acute educational problem in the Southwest," but concedes that "little headway is being made." It concludes that the urgent need is for action...and additional research, especially of a demonstrative nature.

Statistics from the McCone Commission Report (14) reveal the school achievement level of children in the Boyle Heights area, as compared with that of other groups in Los Angeles. Mean percentile ranks for grade 5 are given in Table I-1.

Although approximately 90 per cent of the children attending the Malabar Street School are Americans of Mexican descent, by far the majority of pupils in grades 1-3 -- in fact, 65 per cent -- were born in Los Angeles (Table I-2). An additional 5 per cent were born in California outside Los Angeles. Of the 193 born outside California, 79 were born in Mexico.

In Table I-3 are summarized data concerning language spoken in the home, according to information recorded on the school's cumulative records. In 63 per cent of the homes of these primary grade children Spanish is spoken in the home.

Origin of the Project

This project had its origin in 1964-65 as a pilot preschool program to assist these children to develop readiness for reading instruction and other aspects of the school program. We naively thought, then, that all we had to do was bring the children to preschool for one or two years before first grade and they would then achieve as great success in the reading program as most monolingual children.

Monitoring of the tape-recordings we made that first year suggested to us that the children's oral language was far below the level we intuitively felt necessary to provide an adequate base for beginning reading. Intuitive judgments had to be relied upon since there were no known comparable oral language data on monolingual children of the same age. Thus, although we felt that preschool was a valuable experience for our children, it could not be relied upon to fully prepare our children for the traditional curriculum in the primary grades.

Since the problem remained, clearly more needed to be done if we were to prevent these children from becoming slow, inadequate readers. This meant that we would have to look to modification in instructional procedures within the primary classrooms. The wide range of language competency noted in the tape-recordings indicated a need for individualized instruction in reading and specially developed instructional materials.

With the help of Mr. Felix Castro of the Youth Opportunities Foundation, a design for the present project was developed during the fall and winter of 1964-65. With the cooperation of the Los Angeles City Schools and California State College at Los Angeles, this proposal was submitted to Health, Education and Welfare in the spring of 1965. The following fall, work began. This interim report covers the work from September 1, 1965, to August 31, 1966.

Table I-1

Grade Five Achievement Data from Schools
in Comparison Areas of Los Angeles (14)

Group	Reading		Arithmetic		Mech. of English	Spelling
	Vocab.	Comp.	Reas.	Fund.		
City	48	48	54	64	47	42
Poverty Area-- Avalon	20	21	21	43	18	19
Poverty Area-- Boyle Heights	18	19	17	44	17	16
Poverty Area-- East L. A.	18	24	21	46	18	19
Poverty Area-- Watts	20	24	22	46	21	22
Economically Privileged Area	81	75	84	79	73	66

Table I-2

Birthplace for Pupils in Grades One Through Three

Birthplace	B-1	A-1	B-2	A-2	B-3	A-3	Total
Los Angeles, Calif.	67	90	45	81	45	77	405
Los Angeles County (Outside Los Angeles)	4	4	1	2	1	4	16
Cities within 25 miles of Mexican border, in California	1	2	1	1	0	1	6
Other California communities	3	3	0	3	0	1	10
Other Southwestern Border States	9	8	10	9	7	13	56
States outside the Southwest	4	6	0	4	0	4	18
Mexico	10	18	6	20	13	12	79
Other Spanish- Speaking Countries	1	1	1	1	0	1	5
Other Countries	0	1	0	0	0	0	1
No Data	<u>1</u>	<u>8</u>	<u>5</u>	<u>6</u>	<u>3</u>	<u>1</u>	<u>24</u>
Total	100	141	69	127	69	114	620

Table I-3

Language Spoken in the Home of Pupils in Grades One Through Three

Language	B1	A1	B2	A2	B3	A3	Total
English	33	60	18	32	12	38	193
Spanish	26	43	19	40	23	24	175
English-Spanish	35	32	24	48	29	48	216
Japanese	0	1	0	1	1	0	3
English-Japanese	1	1	1	1	2	1	7
Chinese	0	0	1	0	0	0	1
No Data	<u>5</u>	<u>4</u>	<u>6</u>	<u>5</u>	<u>2</u>	<u>3</u>	<u>25</u>
Total	100	141	69	127	69	114	620

We are moving into an era in which low educational achievement can no longer be tolerated for children who must earn their living in a technological society. A more effective way to help Mexican-American children learn within the framework of the classroom must be found. We at the Malabar Street School have been trying to find that way. The urgency is great.

Objectives of the Project

The following objectives of the Project were stated in the original proposal. They have continued to be the goals toward which we have directed our efforts.

1. Reading. To help Mexican-American children become vocationally competent adults by teaching them to read at least up to grade level in the primary grades, thus laying a foundation for future success both in school and on the job.

2. Oral Language Development. To accelerate the functional oral language development of Mexican-American children age 3-9 years so that it will both serve as an adequate base for reading instruction and enable the child to communicate with optimum effectiveness.

3. Parent Participation. To guide parents in learning how to help their children develop academic skills so that the work of the school may be continued during many of the hours the child spends at home.

4. Individualized Instruction. To offer these children the type of education defined as: "...discriminated knowledge integrated into the functioning self," so that the time and effort they and their teachers put into their education will result in an informed citizenry.

5. Self-Instruction. To help these children not only learn how to learn, but also assume the responsibility for their own academic growth so that in future years they will be able to teach themselves as academic and vocational horizons expand.

Children Included in the Study

A continuous enrollment of approximately forty preschool children, three and four years old, has been maintained throughout the project. The preschool children were selected from those whose parents wished them to attend. The selection was made on the following bases:

1. Age (three or four years old)
2. Sex (balance with respect to the number of boys and girls was sought)

3. Language (balance with respect to number of Spanish- and English-speaking children was sought)

4. Willingness of parents to participate in the project (considered essential to optimum development in language)

5. Parents' willingness for teacher to make home visits once a week.

Since these preschool children were volunteers, they may constitute an unrepresentative sample of children in the area.

Two kindergarten classes totalling fifty children were included in the project. Four children from the 1964-65 preschool who were then enrolled in kindergarten were transferred to these project groups.

According to the original time plan, only the preschool and kindergarten children were to have been included during 1965-66. During the second year of the project, these children were to have moved up into the kindergarten and first grade respectively, and a new group would enter preschool. In the third and final year of the study, 1967-68, the project was to have been extended through the second grade.

However, the interest of teachers, parents, and interested community leaders has been so great that the use of the project methods has been extended to other groups as teachers have requested assistance and materials from the Project Director. For the spring semester, 1965-66, the expected number of preschool and kindergarten children were included, i.e., two groups each. However, although we had expected to have no first- and second-grade classes this year, we included two of the five first-grade classes, and one of the four second-grade classes during the spring semester. In the fall semester of 1966 we will include all of the children involved this past year, who will then be enrolled in preschool through grade three. In addition, we will extend the project into other sections of each grade level, as well as introduce approximately twenty new preschoolers to the program as planned.

In the absence of any control group (which could not be established without denying the admission of teachers and classes to the project), our chief basis for evaluation will have to be a comparison of the reading achievement and oral language development of children completing grades 1, 2, and 3 with those for the base-line group assessed in April and May of 1966. (It is evident that base-line data on reading achievement and oral language development had to include preschool through grade three.)

At the conclusion of the project, there will be groups of first, second, and third grade children who have had one or more years instruction in the project because one or more of their teachers have volunteered to participate in the project.

Research Hypotheses

The following research hypotheses were developed during the early months of the project:

1. Children who have had the enriched, individualized instructional program, described in Chapter II as the Project Method, will attain significantly higher reading scores on standardized reading achievement tests than did the base-line groups measured this spring.

2. Children who have had the Project instructional program will also attain significantly higher results on measures of oral language development.

3. Children who have been included in the program for two or three years will attain significantly higher scores in both reading and oral language development than those who have been included in the program for shorter periods of time.

4. Despite the relatively heavy emphasis of the Project program on reading instruction, Project children will not achieve significantly lower scores in arithmetic.

CHAPTER II

MAJOR CHARACTERISTICS OF THE INSTRUCTIONAL PROGRAM

The description of the Project Method, or treatment, will be organized around the five major objectives of the project, as listed on page 3.

Objective 1. Reading. Although almost all classroom activities with the exception of arithmetic fundamentals had relevance for reading, the following activities were specifically planned to attain the first objective of improved reading achievement:

1. **Preschool activities directly relevant to reading:**

a. Activities designed to develop "word awareness"; e.g., upon arrival each day, each child took his name card from a pocket chart labeled "Home" and put it into a similar chart labeled "School". These name cards had pictures on them at first, but these were removed as the children learned to identify their names without picture cues.

NOTE: It had been our experience at the Malabar Street School that children entering first grade often lack awareness of printed words as representing meanings.

b. Teachers and parents read to children a great deal, sometimes in small groups and sometimes individually with the child seated on the adult's lap.

An individual child would often bring his favorite story to an adult asking that the story be read to him. On these occasions, other children might cluster around to listen.

c. Working with parents in the use of reading readiness materials. As preschool teachers went on home visits (once a week for each child), they took attractive books which they read to preschoolers and simple reading readiness materials which parents could make available to their children for play materials, discussing the educational implications of these activities with the parents.

d. Providing opportunities for "writing" or scribbling. Since primary classrooms were used for the preschool classes, we had a supply of chalk on hand, and children were allowed to scribble on the blackboard at any time. From these scribbles, a letter or two and occasionally a complete name would emerge. No comments were made on these scribbles unless the child himself introduced them into his conversation.

2. Kindergarten activities directly relevant to reading:

a. Activities designed to develop "word awareness". The activities described above were continued. Children naturally became more interested in writing their names; several of the children learned their last names as well. The next natural step was to learn to write friends' names, and sometimes those of favored visitors to the classroom.

In response to children's requests, word-cards were attached to the children's favorite objects in the classroom (book-case, piano, mirror, etc.). As a child wished, he could remove these name cards, copy them, and finally announce that he could write the word without looking. Our goal in these activities, however, was word awareness rather than competency in reading or writing.

b. Beginning steps in reading. When a kindergarten child insisted that he wanted to "really read", the kindergarten teacher would let him begin on a simple book of his choice, giving him separate word-cards for each word he needed to know. These words were traced (as in the Fernald method) and memorized. In this way, without pressure and always at the request of the child, several children made their first steps toward learning printed-word reading.

3. Primary-grade activities directly relevant to reading:

a. Individualized reading and self-instruction activities. Reading instruction in the primary grades was highly individualized; although it might seem to a classroom visitor to be informal, it was quite formal and structured.

Since all classes were on a divided day, one-half of the children came from 9:00 a.m. to 2:00 p.m.; another half came from 10:00 a.m. to 3:00 p.m. In the hour at the beginning and end of each day during which only half of the children were there, formal reading instruction was given special emphasis. However, reading and oral language made up 80 per cent of the instructional day. While the teacher was working individually with one child, other children were studying alone or in small self-selected groups. A child may work alone, work with a partner, or become part of a small group. Word games used by the children, either commercial or developed by the teachers, stress word recognition, sounds of letters, building words, sentences, etc.

At another table, children are reading books alone until each has his turn reading to the mother volunteers or the teacher who checks on comprehension and word skills. If a child is having trouble with a word, the adult writes it on a slip to be brought back the next day. She also notes on a paper inserted in the book the pages to be read for the next day. A dictionary is often consulted.

There has been much self-initiated competition by children. As one teacher reported, "Almost invariably, a child selected someone at or slightly above his reading level with whom to compete. When he matched or exceeded this child, he sought out a child at the next highest level and competed with him. Only the most alert observer was aware of what the child was doing."

The children show wonderful attitudes toward helping each other. A teacher reported such comments as: "I told him a lot of words at lunch;" "Hector helped me with the words on our way to school." The same teacher reported that when Eddie transferred into the class, unable to read a word, he went through three pre-primers in three weeks, with a different child helping him each day. When Maria arrived from Mexico, Laura took her book out each recess to help Maria learn to read. To quote this teacher, "When one child has been helping another at the reading table, he will sit expectantly and listen while the child he has helped reads to me. When the child successfully completes the reading, the one who helped enjoys the success as much as the one who read."

Individualized teaching has special advantages with Mexican-American children: (1) their range of competency in the "language of instruction" is so great that any groups organized would still involve a wide range in readiness; (2) the individualized method provides the privacy necessary for the child to admit what he knows and what he does not know; (3) these children who are shy, especially at school, have the courage to speak; (4) the individualized method helps the teacher to know each child as an individual; the child feels that the teacher really knows him as a person rather than a member of a group.

b. Development of books written by Mexican-American children.

Children in the upper grades wrote books for "the little kids." These were typed by the teacher and beautifully bound by volunteers. Xerox copies will be made of the best of these books so that more children will have them available next year. Through the preparation of additional books like these, and the provision of more published books, we should have richer resources for supplementary reading next year. These books will also be available for the child to take home.

c. Use of an adaptation of the "Fernald Method" which involves the child's tracing new words and using them in his own stories.

Although primarily a writing technique, the Fernald Method contributes to the child's ability to read. He writes about what he is thinking about, and he reads what he has written, thus completing the thinking-reading-writing cycle. If the child needs a word in his story which he does not know, he asks the teacher to write it on a slip of paper; he then traces the word with his finger until he can reproduce it correctly without referring to the original. He then incorporates the word in his story. Since the child chooses the language he will write, the story he is to read cannot exceed his oral language development in the language of instruction.

Many Mexican-American children have been observed reading (or pronouncing) words correctly without understanding the sequence of words in a story. If the child decides on the concepts he wants to express and chooses his own words, understanding of the printed story is "built in."

Transcripts of children's taped responses in a standardized interview reveal a disjointed quality in much of the Mexican-American child's speech which is not evident to the listener when gesture and intonation accompany conversation. This disjointed quality seems to result, in part, from the omission of connectives or the substitution of incorrect connectives. As children write their stories, they are helped to use English connectives correctly.

There are many differences between the Spanish and English phonetic systems which cause difficulty for children. In using the Fernald tracing technique, the child must pay close attention to the letters in the word in order to reproduce it. For example, although the child may not be aware of how the "catch" he sees in his book differs from "cash", he is forced to recognize such differences as he traces the word and learns it by memory.

Self-initiated drills were often observed. Children drill themselves on individual words; a child was observed writing "book-Book, book-books" over and over, examining the differences. Children would look up words in pre-primers and compare them with words they had written. Opposites (up, down and big, little) were favorites, as well as other familiar combinations which are used in workbooks but were, in these classrooms, initiated by the children themselves and spread from child to child. The following quotation from a teacher's record is relevant: "Larry has been noticing for some time that there are small words in bigger words. But today everybody is telling me this. They underlined and circled small words in every visible bit of writing in the room--chalkboards, charts, names, etc. Steven is making words by changing initial consonants. He started with Batman, then catman, ratman, etc.; the other children are fascinated."

d. New approaches to instruction in phonics.

Since formal instruction in phonics had proved to be the least successful aspect of reading instruction for these children, we have begun an analysis of the extent to which the Spanish phonetic system and syntax interfere with the learning of English. As will be explained in Chapters VII and VIII, Spanish influences on oral English have been analyzed from the transcripts for recurring instances of: (1) extra words, (2) omitted words, (3) variations in word order, (4) word substitutions, and (5) word modifications. On the basis of these findings, we are constructing phonics workbooks and related self-instructional materials for the children, as well as teachers' manuals for their use.

The attached reproduction of pages from a pre-primer shows how a mother has written in the margin, with approximate Spanish phonetics, the English words spoken with a Spanish pronunciation. Such evidence suggests that many children may have confused, unstable oral phonetic patterns that do not provide a firm basis for phonetic analysis of unfamiliar English words.

Objective 2. Oral Language Development. The children's progress in every part of the school curriculum depends upon improving their ability to understand oral communications directed to them and their effectiveness in expressing themselves orally in English. At the same time, it seemed imperative that children be actively encouraged in the speaking of Spanish and that they learn to value their bilingualism.



*the taller
6
fod down*

Tom! Tom!



*daigro is mlarino.
inda bayseco*

Betty

Since very little data are available in the research literature about the language development of bilingual children, we decided to obtain samples of the children's oral language at all levels from preschool through grade 3. As will be explained in the next chapter, the samples for preschool and kindergarten children were obtained through recording their everyday conversation (to themselves and others) through the "floating microphone" technique; the samples for primary-grade children were obtained through an Oral Language Interview especially developed for this study.

Instruction at the preschool and kindergarten levels has emphasized adult-child oral communication on a one-to-one basis, as well as as great a variety of oral language experiences as resourceful teachers could devise. The importance of one-to-one language experiences with adults is emphasized in the following quotation:

. . . the opportunity for one-to-one interaction with a familiar adult is one of the most effective known language learning situations. It is often assumed or at least hoped that in some cases, the disadvantaged child is getting significant amounts of "compensatory" language experience in school. But, though we know little about what goes on in the classroom, it is obvious that even in the ideal situation there is a good deal less verbal interaction between teacher and individual pupil than is often assumed (5).

The participation of the mothers in providing a sufficient number of adult-child language experiences was indispensable.

Many of the oral-language experiences provided, such as reading to children and word-games, have been described under Objective 1 because of their contribution to children's improved readiness for reading. In the primary grades, social studies activities provided new opportunities for extending the children's oral vocabularies and using newly learned English words in class discussions.

Objective 3. Parent Participation. Whereas parent-school contacts may make little difference in the understanding that the middle class Anglo parent has of the school his children attend, such contacts are indispensable for many Mexican-American parents whose education may have been meager, obtained in Mexico, or both. Merely visiting the school at Open House does not provide sufficient opportunity to develop a genuine understanding of the purpose and methods of the classroom.

1. Participation of mothers in classroom activities.

At the preschool level, the teachers actually could not function effectively without the parents. The parent volunteers not only

engaged children in one-to-one conversations, mentioned above; but they worked with the teacher in establishing daily routines, assisting children in their work with art media, minimizing safety hazards, and in many other ways. At the kindergarten level, parents not only worked in all the ways mentioned for preschool, but also gave children individualized help in such learning tasks as writing their names, learning their addresses, learning to count, and the like. At the primary grade levels, parents were involved in more academic activities without, however, abandoning the primary reasons for parent participation which were significant at each level. These were: (a) emotional sustenance for children, (b) helping the child perceive teacher and parents working cooperatively to help him in his education, and (c) increasing parent awareness of the kinds of learning expected of their children at each age level. Although it is almost impossible to assess progress toward these three goals, it has seemed to the staff that children whose parents worked regularly in the classrooms matured more socially and did better academically than the children whose parents attended infrequently or not at all. As in all such comparisons, there are many alternative explanations of this phenomenon.

2. Home visitations.

The preschool teachers (both bilingual) visited each child's home at least once each week. Each visit was tape-recorded so that we could obtain a record of the visit itself as well as a sample of each child's speech at home. We are interested in observing whether or not it differs significantly in quality and amount from his speech at school.

These weekly visits to the home served at least four purposes:

a. They assured the child that the teacher was not a stranger to his way of life, and helped him perceive teachers and parents as working cooperatively to help him in his education.

b. The children were not left to make the difficult transition from home to school by themselves, but had both parents and teachers to help them.

c. The teacher assured parents that reading games, puzzles, and other educational toys were significant to the child's development.

d. The teacher had an opportunity to understand, through personal contact, the kind of life the child leads outside of school.

Among the other home-visit activities were: going over nursery rhymes with children, asking children to tell the "story-line" of a book just read to them, helping the child to interpret a story on the basis of the pictures, asking them to identify colors, helping them learn to count and understand simple number concepts, encouraging them to work with puzzles and other educational toys. Although some of these activities overlapped with school activities, others such as seeing the child's own private "retreat", or his especially loved home activities, were possible only during home visits.

Not the least important part of the teacher's home visits were her interpretations of these activities to the parents in terms of the child's intellectual and emotional growth. Some parents sat in the room throughout the visit, observing the teacher closely; others, although they worked in an adjoining room, showed their close attention by the rapidity with which they answered any question a child failed to answer. Teachers communicated through their own work during the home visit that the school considered the preschool years an important time for learning.

3. Other Malabar parents' activities.

a. Showing slides of preschool activities to other parents.

During the spring semester, one of the preschool parents asked permission to take the 35mm slides of preschool activities home to show her father and mother who were visiting from Mexico. The preschool teacher loaned his slides, projector and screen. During the weekend, the slides were shown four different times, each time to a "full house". Later, other parents requested projector and slides for weekend use; and a new method of conveying the preschool message to the community was found. Although a tape-recording could have easily been prepared to accompany the slides, we did not prepare it since preschool parents could speak more effectively to their neighbors about the program than we could.

This approach has proved to be of so much value that project funds are being requested to extend the work next year beyond the preschool level. This year, the slides were paid for by the preschool teacher; and his own projector and screen were loaned to parents.

b. Mothers' Club.

The Mothers' Club of the Malabar School met monthly. The September Mothers' Club meeting involved all teachers; the following subjects were discussed:

(1) General parent concern about the reading problems of their children.

(2) Interpretation of the program for reading improvement included such features as the divided day, compensatory English instruction, grouping for reading in the fifth and sixth grades, extended day, and Saturday school.

(3) Bases for grading in reading.

(4) The new Malabar reading project, including pre-reading activities in preschool and kindergarten.

c. Men's Club.

During one of the regular Men's Club meetings (fathers, faculty members, and principal), the following topics were discussed:

(1) The new Malabar reading project.

(2) The father's role in the family, with special emphasis on his contributions to children's language development.

(3) The ways in which fathers could assist the school by preparing needed reading-project materials.

The Men's Club also sponsored a Parents' Fun Night, which set an unprecedented attendance record of more than three hundred parents.

d. "A Night of Learning".

On March 21, approximately one hundred parents came to Malabar to see other parents demonstrate with their children the ways in which parent volunteers could help in making the instructional program more effective.

e. Open House.

During the annual Open House at Malabar, held during American Education Week, the project classrooms were well attended. In each of these classrooms, teachers explained the program to parents in English. In addition, each room had a Spanish-speaking parent explaining the program in Spanish, expressing herself in her own words, rather than from a translated "script".

f. Proposed communication to the community via Spanish radio station.

Despite all the activities listed above, many parents have not attended parent meetings nor participated in classrooms. Much remains to be done with teachers and parents to facilitate parent participation in the classroom. Mr. Ed Moreno, station manager for KALI (Spanish radio station in Los Angeles) has presented some innovative ideas for increasing school-community communication next year. KALI has a vast listening audience among Mexican-Americans in the Boyle Heights area.

Objective 4. Individualized Instruction. In order to work at maximum effectiveness toward our fourth goal of helping children to integrate newly acquired knowledge into the functioning self, individualized instruction seemed essential.

1. Individualized instruction at the preschool and kindergarten level.

Insofar as possible, each child had his own individualized program of activities. We gave preschool and kindergarten teachers few guidelines other than stressing that adequate time could be made available for language development since these children did not seem to us to need many of the experiences which are typical of a middle class school. For example, many Mexican-American children have learned to get along with other children and to share toys and attention, through the experiences they have had in a large family. Similarly, they have learned greater self-reliance than possibly the more over-protected middle class child. Some typical preschool and kindergarten activities and materials were retained but used chiefly as a stimulus to conversation.

The teachers responded in many innovative ways to the challenge to work toward project goals in a highly individualized way and with a minimum of structuring of the school day. Mother volunteers helped regularly; through their participation, frustrations were avoided and tensions reduced. Under such conditions, we could rely on Maslow's concept that:

The healthy child reaches out to the environment in wonder and interest . . . to the extent that he feels safe enough to dare. . . . If he can choose those experiences which are (then) validated by the experience of delight, he can return to the experience, repeat it, savor it to the point of satiation. . . . He then shows a tendency to go on to more complex richer experiences . . . such experiences not only mean moving on, but have a feedback effect on the self, in the feeling of certainty, of capability, mastery, self-trust, and self-esteem (15).

It was heartening to note how frequently preschool and kindergarten children completed one learning activity and then insisted that the adults provide them with a more difficult learning task.

2. Individualized instruction in the primary grades.

In these grades, communication with teachers focused on the problems of individualizing instruction in the tool subjects which are so fundamental to the child's success in further instruction.

Since the original project proposal was to include the first grade in 1966-67 and the second grade in 1967-68, project techniques and materials had to be hurriedly assembled when teachers of two first-grade classes and one second-grade class wished to be included in the project. Weekly meetings, personal talks with the Project Director at lunch, in the classrooms and in the parking lot after a long day's work had to substitute for the more formal teachers' manuals and curriculum guides. Teachers improvised new instructional materials to meet their needs. Dr. Cleo Cook, of the college faculty, was particularly helpful in working with the primary grade teachers on these problems.

Individualizing instruction emphasizes human relationships and respects the dignity of the individual. The child feels that the teacher values him as a person; he is rightly confident that the teacher likes him.

The individualized approach to instruction also made parent participation both natural and feasible. It seemed natural to a parent volunteer to sit down with a child and start working with him. The children became so accustomed to individualized help that any adult who walked into the room was likely to be conscripted by some child for individualized instruction. There were some interesting encounters with both unwary VIP's and workmen who came into project classrooms.

3. Multiple roles of classroom teachers under a program of individualized instruction.

Teachers in this type of program fulfill many roles simultaneously:

a. They were responsible for the mechanics of class management . . . materials out, children in their places, order in the room.

b. They were responsible for the instructional patterns the children were to follow, i.e., the setting of the curricular tasks the children had to learn each day.

c. They sought to strengthen the ego-development of their children, attempting to further their psychological growth as well as their educational growth.

d. When the parents came in to help, the teachers were responsible for their teaching patterns; at the mechanical level, the psychological level of person-to-person interaction, and the educational level.

e. The teachers volunteered many of their after-class hours to talk with other faculty members and gave them the highest form of "in-service education" that a grateful faculty could ever receive.

f. Finally, the teachers were at all times, public relations workers operating in this role without extra pay.

In addition to fulfilling all these roles, the preschool teachers also had certain responsibilities to the "plastic pants" set, those infants and toddlers who accompanied their mothers to preschool. If they were old enough, they got a little juice from the jealously guarded preschool supply; if they were still older, they might be given a little paint, paper, or clay. The preschool was, in fact, as much like the large extended family unit characteristic of the Mexican-American culture as we could make it.

In working with the individualized method, considerable modification is required in teachers' traditional roles. Rather than directing the child's activities, the teacher leaves as many choices up to the child as she can. She indicates what needs to be learned, the methods by which he may learn them, and then helps him check to see if he has learned them. In other words, the project teacher assumes the role of consultant to the child as he learns to make his own decisions.

Objective 5. Self-Instruction. We believe that the chief function of the teachers is to free the child to learn. Therefore, the child's ability and willingness to teach himself are of paramount importance.

Self-instruction strengthens the child; he senses that no one can learn for him, that self-instruction is analogous to walking rather than being carried. By the act of self-teaching, the child commits himself to learning; having made that commitment, he cannot withdraw from it without an uncomfortable loss of self-esteem. As the child finds that he can learn by himself through his own efforts, he learns respect for himself, for his powers, and for others.

For preschool children, self-teaching is natural and spontaneous; hence, preschoolers engage in it almost continuously. They practiced for themselves the patterns of putting away lunch sacks and different instructional materials. They taught themselves how to put the Judy puzzles together, how to put the Montessori-based weight boards together in sequential order; how to place tone blocks in order, how to carry a pail of water without spilling it, how to defend one's possession of the "trike" against determined raiding parties, how to use one's own body strength on the jungle gym, and how to share a playhouse. All of these activities, normal to young children, are self-teaching activities, children are learning how to "read" their environment (in the sense of making discriminating reactions to all kinds of sensory stimuli). Without being aware of it, adults are constantly reinforcing these discriminating reactions of children. "Yes, your sack is a big brown sack; yes, Juan's sack is smaller than yours; yes, Anita's sandwich bag is smooth." Or adults teach words by tying them in with objects or with actions, "Up you go, way up high in the swing . . . down you come, way down low in the swing."

The kindergarten child teaches himself by counting beads, using pegboards, and teaching himself the names of letters on his alphabet blocks. He works out size-space relationships as he works with jig-saw puzzles, stick-figures and "Dopey-face" people. He looks through picture books, trying to figure out the story sequence. He gives himself long periods of drill in trying to write his own name; he may even learn to write his friend's name as well as his own.

By the time he comes to first grade, the child who has learned through self-teaching, whether at home or at school, has not only a vast store of useful knowledge but a feeling of competency and self-esteem. Many of our Mexican-American children come to school with such knowledge and self-trust. It is through individualized instruction, however, that his sense of self-reliance and self-esteem can be strengthened and he can be best guided into the various areas of school learning.

In Project Classrooms, primary-grade children teach themselves the names and sounds of letters, the formation of upper-and lower-case letters, and the alphabetical sequence of letters through such devices as specially designed jig-saw puzzles, etc. They can learn the function of vowels in words, the phonetic sequence of letters within words, and the organization of words into sentences by the use of additional self-teaching devices.

Primary-grade children help each other to write the letters of the alphabet with increasing accuracy and neatness; they teach each other new and interesting words from reading books available in project classrooms. Because of the ease of self-checking in arithmetic, children can and do teach themselves addition and subtraction combinations almost without help from the teacher who is thereby freed to check with individual children to see which ones they still need to learn and to help them with reasoning problems.

Second and third graders can undertake more highly organized academic tasks. They have learned to differentiate between those tasks which must be learned immediately and those which can be postponed to another day. They can recognize that some things have been mastered and that others need to be reviewed.

In teaching each other, children find some things that they do not understand thoroughly themselves. Self-teaching develops learning habits which will prove valuable to them in the future. When the child "learns to learn" during the early years of school, he has acquired an invaluable attitude and mastered basic learning strategies which pay big dividends in the future.

CHAPTER III

METHODOLOGY: DATA COLLECTION

Although the chief emphasis in this project is on the instructional program as described in Chapter II, the project does have significant research aspects. If we were to assess the progress of children in the project, we had to obtain base line data concerning the children's present level of achievement in both reading and oral language. If we were to prepare instructional materials of special value for bilingual Mexican-American children, we had to summarize data concerning the specific ways in which their bilingualism interferes with their understanding and functional use of English.

If we were to assess the children's development in oral language, we had to develop measures of maturity in oral language development which were reliable, and which had validity in terms of predictors of later reading achievement. Our interest in the children's language development is three-fold:

- a. as a necessary basis for the next step in symbolization (i.e., reading).
- b. for its immediate value in improving the children's communication with teachers and other English-speaking adults; and
- c. the related ability of the child to think in the language of instruction.

The research hypotheses concerned with the children's achievement in reading can be tested by comparing end-test results with base line data from standardized reading tests. As will be explained later, it was necessary to supplement the standardized achievement tests by an individually administered vocabulary test, developed for use in the project. The hypothesis concerned with children's growth in oral language development is not so easily tested. Much of the effort of the research team during the spring and summer months has gone into an assessment of children's oral language development.

Personnel involved in the research study. In order to insure accuracy in the assessment of oral language development, all interview transcriptions and language analyses were done by Mexican-American staff members who are familiar with the Spanish

spoken by children and adults in the Malabar School area. The project was most fortunate in obtaining the services of bilingual college students with a special interest in language, many of whom were also members of the Malabar community. These staff members participated in the development of the instrument known as the Oral Language Interview, to be described later. They also conducted all interviews with the children, using both English and Spanish during the "warm-up period," with care being taken to use vocabulary and sentence patterns with which the children are most familiar. We further assured the accuracy of the typescripts by having the transcriptions made by bilingual transcribers who were familiar with the language background of these children.

The study of the transcribed recordings proceeded in two phases; the first, dealing with the Spanish language primarily, was the work of Mr. Hector Estrada, Mr. Robert Gomez and Mr. Richard Montes.

The second, the analysis of the children's competency in English, was done by our Mexican-American staff members in consultation with Dr. Jerome Hutto and other members of the research team. The section on the influence of Spanish on the children's oral English was the work of Mr. Frank Hidalgo.

OBTAINING BASE-LINE DATA ON ACHIEVEMENT IN READING

The testing program. In the original development of the project plans with the Los Angeles City Schools, we had agreed to utilize tests from the city-approved testing program. When the State of California initiated their state testing program in the spring of 1966, this program largely determined the tests by which the achievement of project children would be assessed.

The Stanford Achievement Test was selected by the State Board of Education as the official achievement test to be administered to all pupils in the first three grades. The State required that all pupils in grades A1 and A2 be tested during the spring semester of 1966; starting in 1967, the third grade will also be tested.

The State testing program has been expanded in four ways for the present study. First, the State-required sub-tests have been supplemented by additional sub-tests related to reading (e.g., Word Study Skills). Second, the second grade pupils have been tested with the Primary I level of the test in addition to the Primary II level required by the State.

The Primary I level of the tests is more appropriate for use with pupils who are reading below their grade level as are most of the pupils at the Malabar Elementary School. Third, both the Primary I and Primary II batteries were administered to A3 pupils although the State does not require third grade testing until 1967. Fourth, the California Reading and Arithmetic Tests were administered in grades B3 and A3 in order to obtain achievement test data comparable to those available for 1964 and 1965.

The purpose of the spring, 1966, testing program summarized in Table III-1 was to establish a base line against which students who have participated in the project program could be compared. The program was as follows:

1. Stanford Achievement Test, Primary I Battery, was given in grades A1, A2, and A3 in May. This test, now required by state law for grade A1, was also given in grade A2 and A3 to provide more valid base line data on achievement than may be obtained through the use of the more difficult Primary II Battery.

2. Stanford Achievement Test, Primary II Battery, was given in grades A2 and A3 in May. Since this test is now required by state law in grade A2, supplementary administration in grade A3 seemed advisable.

3. California Reading Test, Upper Primary Battery, was given in grades B3 and A3 in May. This test was administered because comparable data are available from previous administrations of the CRT at these grade levels in 1964 and 1965. Form W, used in these earlier years, was administered.

4. California Arithmetic Test, Upper Primary Battery. In order to assess the possible effects of the heavy concentration of time on reading, base line data on achievement in arithmetic was needed. Therefore, the California Arithmetic Test, for which comparable data are available for 1964 and 1965, was administered in B3 and A3.

Since it is anticipated that the children will be retested in 1967 and 1968, a different form of the Stanford Achievement Test was used for each grade level.

Make-up tests were administered by the staff of the reading project in those cases where children had been absent during the regular test administration. Due to the difficulty of scheduling these make-up tests, data were not obtained for all pupils. With few exceptions, however, all pupils completed the reading tests.

Table III-1

Standardized Testing Program for Reading Project, 1965-66
(Tests Administered in May, 1966)

Grade and No. of Cases	State Testing Program	Supplementary Testing for Project*	
		Stanford Achievement Test	California Achievement Test
A1 (N=145)	Stanford Reading, Pri- mary I, Form W, Sub- tests on Word Meaning, Paragraph Meaning	Stanford Reading, Pri- mary I, Form W, Sub- tests on Vocabulary and Word Study Skills	
A2 (N=122)	Stanford Reading, Primary II, Form W, Subtests on Word Meaning and Paragraph Meaning	Stanford Reading, Primary I, Form X, Stanford Reading, Primary II, Form W, Subtest on Word Study Skills	
B3 (N=74)			California Read- ing Test, Upper Primary, Form W
			California Arith- metic Test, Upper Primary, Form W
A3 (N=116)		Stanford Reading, Primary I, Form Y	California Read- ing Test, Upper Primary, Form W
		Stanford Reading, Primary II, Form X	California Arith- metic Test, Upper Primary, Form W

*The Primary I Battery, Stanford Achievement Test, was administered in grade A2 to provide a more adequate measure for pupils of low reading ability than could be obtained by the use of the Primary II Battery. Both the Primary I and Primary II batteries were administered in grade A3 to provide base-line data for the third-grade level. The California Achievement Test was administered in both B3 and A3 to provide a basis for comparison with results from the same test administered in 1964 and 1965.

NOTE: The following subtest scores were obtained from the Stanford Achievement Test, Primary I: Word Meaning, Paragraph Meaning, Total Reading (including Word Meaning and Paragraph Meaning), Vocabulary Word Study. The following subtest scores were obtained from the Primary II Battery: Word Meaning, Paragraph Meaning, Total Reading (including Word Meaning and Paragraph Meaning), Word Study Skills. The following subtest scores were obtained from the California Achievement Tests: Reading Vocabulary, Reading Comprehension, Total Reading, Arithmetic Reasoning, Arithmetic Fundamentals, and Total Arithmetic.

Scoring of standardized tests. All tests were scored independently by two staff members who had been given special training for the jobs. Any discrepancies which were found were reconciled. Thus, a very high standard of accuracy in test scoring was achieved.

Since the Stanford Achievement Test scores were to be used not only for base-line data but for establishment of criterion groups (for use in validating oral language measures), the staff decided that raw scores corrected for guessing should be computed.

The standard method of scoring the Stanford Achievement Tests does not correct for random guessing. Since it is known that random guessing can result in scores which are spuriously high, it was decided to score the tests in two ways. First, the tests were scored following standard directions. Then they were scored correcting for random guessing using the formula:
$$\text{Corrected Score} = \text{Number Right} - \frac{\text{Number Wrong}}{\text{Number of Choices} - 1}$$

(e.g., for a series of 4-choice multiple-choice items, the formula is:
$$\text{Corrected Score} = \text{Number Right} - \frac{\text{Number Wrong}}{3}$$
).

The corrected scores are considered to be more valid since they reduce the factor of guessing and are utilized throughout the study when it is desired to identify groups of pupils who differ in their reading ability.

Construction of Sight Vocabulary Test. It was the considered judgment of the research team that the Stanford Achievement Test would not provide a sufficiently low floor to measure the reading achievement of some of the low-achieving pupils. Hence, a word recognition test, based on words in the state-adopted textbooks actually used at the Malabar Street School, was constructed. One member of the research team assumed responsibility for developing a word recognition test of 116 words, common to the two reading series used. The test included: 26 words common to the pre-primers of the two series and 30 words each from the following reading levels: primer, first-grade readers, and second-grade readers. Words which could be placed in more than one category were omitted. Representative numbers of each of the major parts of speech were included.

This individual test requiring approximately five minutes per pupil, was administered to all pupils in grades 1, 2, and 3. The child was asked to read aloud each word as it appeared on each card. He was shown at least the first thirty cards even though he might not have known all the words. After the first thirty words had been presented, the examiner stopped the test administration when the child had missed five words in a row.

The reliability of this test was checked by having the test re-administered to 78 pupils, distributed by grade as shown in Table III-2. Although the reliability coefficient for grade B1 was only .65; all other coefficients were .87 or higher. For all grade levels combined, the reliability coefficient was .98 for two administrations approximately three weeks apart. The average gain of four words between the two administrations is undoubtably attributable in part to actual growth in sight vocabulary.

Table III-2

Reliability Coefficients for Sight Vocabulary Test

Grade Level	N	First Administration		Second Administration		r*
		M	S.D.	M	S.D.	
B-1	12	4.33	5.72	10.33	7.64	.65
A-1	17	13.65	13.51	16.71	16.80	.87
B-2	8	37.38	21.79	40.62	24.80	.99
A-2	15	53.47	35.33	61.87	39.99	.94
B-3	12	51.92	34.00	55.17	33.56	.99
A-3	14	95.43	22.96	96.29	23.77	.99
Total	78	42.87	39.42	47.06	40.19	.98

*Product-moment correlation between two administrations approximately three weeks apart.

Although we know that a check on vocabulary provides very limited evidence of the child's ability to read, word recognition is prerequisite to the development of higher skills. Such a test was the only measure we could devise that we thought would constitute a fair measure of what the children had learned at the lower levels of reading ability. That many of these children are in the "one-word" stage of reading ability may be reflected in the "stories" the majority of these children wrote which consisted of single words all over the page, sometimes connected to an idea, but frequently not. Although this vocabulary test was an essential supplement to standardized testing in the first grade, its use was extended to the other two grades to provide a basis for comparison, and to see whether growth was taking place in those children who showed only slight improvement on standardized reading tests.

OBTAINING BASE-LINE DATA ON ACHIEVEMENT IN ORAL LANGUAGE

Obtaining language samples for preschool and kindergarten children. A portable microphone which was in reality a miniature transmitting unit, was placed in a chest band on one preschool child each day on a rotating basis; another microphone was used daily with kindergarten children on a rotating basis. Thus, everything that the child said and everything that was said to the child by adults or children was sent out from the portable microphone to the pick-up unit, into which was plugged a tape-recorder. Thus, daily tape recordings of the children's functional oral language was obtained.

Samples of oral language obtained in this manner differ in many important ways from those obtained from the structured Oral Language Interview, to be described later, which presented each child with uniform stimulus situations. However, our experience in attempting standardized interviews with preschool children in the 1964-65 preschool program had been so unsatisfactory that we doubt that representative samples of the preschool child's oral language behavior can be obtained in this way.

We obtained many more hours of usable recording from the preschool than we did from the kindergarten tapes because the kindergarten building was in a direct line with the Los Angeles County Sheriff's Station and the short-wave radio from the sheriff's station often interfered with the transmission of data from the weaker transmitting unit used in the project. However, since these interferences occurred at random, it is thought the audible portions of the kindergarten tapes are representative and sufficient to provide base-line data for this study. Hence, the floating microphone will not be used in either the preschool or the kindergarten again until the third year of this study, when end-of-project data will be gathered for comparison with the initial base-line data on oral language development.

We have obtained 320 hours of recording from preschool children; this represents an average of eight hours per child. Approximately 120 hours of these tapes have been transcribed. In addition, we have obtained approximately 130 hours of recording from the kindergarten children included in the project; this represents an average of 2.6 hours per child. Approximately 50 hours of these tapes have been transcribed.

Obtaining language samples in the primary grades. The techniques of obtaining samples of oral language must be appropriate to the age of the child. We had found that the standardized interviews were not eliciting much language from preschool children; hence, we developed the floating microphone technique to meet their specific needs. Now we discovered that while preschool and kindergarten children were almost unaware of the floating microphone, first-grade children were fascinated with it and tended to play with it. Hence, the use of the floating microphone was discontinued in the primary grades and the Oral Language Interview was substituted. Although it is desirable to use the same techniques of assessment throughout the grades included in a research study, the stated disadvantages of the standardized techniques at the lower age levels, and of the floating microphone at the higher age levels made such continuity and comparability impracticable.

It is the considered judgment of the research team that, whereas we are obtaining interesting samples of the functional oral language of preschool and kindergarten children through the use of the floating microphone, we may not be getting samples of the kind of language they would use when making an effort to respond to a questioning adult. On the other hand, data from the Oral Language Interview used with primary children may reveal the higher level of oral language usage typical of communications with adults but may not be as representative of the children's day-by-day language usage.

The research team is very conscious of the fact that language analysis data based on the Oral Interview will reflect only the language of the child used in response to these stimuli under the conditions of the interview, rather than being representative of either his daily language usage or his optimum performance in oral language.

Data obtained from this Oral Language Interview will be most useful when used as a base line against which to compare results from the re-administration of the Oral Language Interview at the end of this study.

In formulating the Oral Language Interview, we first explored many means of eliciting oral language flow from the children before the standardized interview was developed. Dr. Walter Loban, of the University of California at Berkeley, generously sent us the pictures he had used in his study of oral language. On the basis of preliminary try-outs, we selected pictures 3, 5, and 6 as effective stimulus

materials in eliciting language from our children. Picture 3 portrayed two little girls by a barn door; picture 5, a little boy crying; and picture 6, a child clutching a rabbit.

The interviewers also experimented with the use of stuffed animals to stimulate conversation but found that a wider range of toys was needed to appeal to children. Mr. Robert Gomez and Mr. Arthur Selva worked with the research staff in the selection of the toys they found to be most effective in eliciting conversation from children.

A standard set of questions for each phase of the interview was devised. Using these questions, Mr. Gomez and Mr. Selva each interviewed the same 15 children. Comparison of the typescripts from these pairs of interviews enabled the two interviewers to evaluate and improve their interviewing techniques. Considerable disparity in interviewing techniques was discovered; this discrepancy was attributed to the fact that the research team had not provided the interviewers with an adequate number of appropriate questions; hence, each interviewer had been forced to improvise questions of his own in order to elicit an adequate amount of language from the children. As a result of this preliminary study, recommendations made by Mr. Gomez and Mr. Selva were followed in modifying questions and adding additional questions which could be used to stimulate the child to further conversation about the stimulus materials.

The oral language interview, as developed in its final form is given in the appendix. Instructions to interviewers were finalized, and also appear in the appendix.

The interviews ranged in duration from fifteen to twenty minutes. The interview was begun by a "warm-up" period during which the interviewer attempted to establish rapport with the child to determine the extent to which the child spoke and understood both Spanish and English. At the start of the interview, the children were asked questions in Spanish. The same questions were then repeated in English. The remainder of the interview was conducted in English. This was divided into three parts:

1. A series of questions about the child's favorite television program was first introduced.
2. The child's responses to three-dimensional objects was next elicited. The child was introduced to the Toy Shop, a selection of toys which had proved to be effective in stimulating conversation in a preliminary try-out by Mr. Gomez and Mr. Selva with the Malabar Street School children. The Toy Shop included: boat, airplane, small and large racing cars, rennel truck, hauling truck, mechanical knight on horseback, bride doll, paper castle stand-ups, magic slate, and coloring book. The arrangement of the toys was standardized, as shown in Figure 1 in the Appendix.

3. Next, three photographic reproductions from the Loban series were shown to the child. He was asked to choose one picture and tell a story about it.

Mr. Hector Estrada and Mr. Richard Montes joined the research staff as interviewers after having had experience as transcribers, which gave them an understanding of the interviewing techniques employed. In addition, tapes of their initial interviews were studied by the two experienced interviewers; the results indicated that they were following the procedures adequately.

Transcriptions of language recordings. We have taped interviews with 575 children in grades 1 through 3. In addition, we taped second interviews on 28 children selected at random for this group. Of these interviews, approximately 80 per cent have been transcribed.

The recordings of the Oral Language Interview and the "floating microphones" were then transcribed into typescripts by bilingual interviewers according to a carefully devised set of instructions (as given in the appendix). Since we were dealing with the oral language of young bilingual children, these typescripts of necessity reflected the judgment of the transcribers. Since the children's language was influenced by two language streams, the transcribers themselves had to be bilingual.

The meticulous care and patience with which these transcribers worked has resulted in a high degree of accuracy although it is unrealistic to expect complete agreement among transcribers. The children's teachers could often hear more of what the children said than either the transcribers or the research staff. In turn, the child's mother could hear words not discernible to the child's teacher. This was particularly true of the preschool tapes. However, the research team was well satisfied that for the purposes of this study, the transcribers' auditory acuity and their familiarity with the spoken language of young Spanish-English-speaking children was more than adequate for the job. The transcriptions were as phonetic as possible within the bounds of the standard alphabet.

Spot-checking of the transcriptions has been done by members of the research team as the transcriptions are being made. When the research team considered whether language analysis could be made from the transcripts without the analysts' listening to the tapes, the advice of Dr. Hutto, our specialist in language analysis, was sought. After Dr. Hutto listened to several tapes and compared them with the corresponding typescripts, he concluded that we could base the analysis on the typescripts, providing we consulted the tapes when in doubt. Whenever analysts could not reach consensus

as to what the child actually said, from their reading of the typescripts, the tapes were consulted. It is only by listening to the intonational flow of the child's language that an adequate interpretation of his speech can be made in extreme cases.

The transcribers were instructed to transcribe each word or partial word that the child uttered. They were further instructed to transcribe deviations from correct pronunciation as accurately as possible, using the letters of the traditional English alphabet. For example, "going to" was transcribed as "gonna" if that was what the transcriber heard. Transcribers were further instructed to indicate in parentheses any notations that they felt might aid the language analysts, but which would not appear as part of the written transcription of the child's language.

Reliability of oral language measures. In order to check on the stability of children's language performance on two different occasions, as elicited by two different interviewers, the Oral Language Interview was administered by both Mr. Gomez and Mr. Selva to 28 children (grades B1 to A3). In order to eliminate any differential effects of interviewer-order, Mr. Gomez interviewed 14 children, and Mr. Selva interviewed 14 children. Each of them then interviewed the other's group of 14 children, making a total of 28 interviews for each interviewer, or 56 interviews in all. In selecting these children for the reliability study, numbers were drawn from envelopes at random; and the child's name was taken from the class roster by corresponding number.

The 28 pairs of typescripts for this reliability study were analyzed according to the techniques described in the next section of the report. Reliability coefficients for the measures of oral language development, used in Level I of the language analysis study are given in Table III-3. For four of the six basic measures* listed in Table III-3, the reliability coefficients were above .80; i.e., for (1) number of words in mazes, (2) number of T-units, (3) number of words in T-units, and (4) total number of words. When one considers that the children were interviewed on two different occasions by two different interviewers, these reliability coefficients are high. The reliability coefficients for the two other basic measures (number of reportage responsums and number of words in reportage responsums) are lower, as are those for all four of the derived measures. However, all of these measures are sufficiently reliable for use in group comparisons. As we continue to probe to new levels of language analysis, these same typescripts will be used to study the reliability of additional indices.

* Such technical terms as "mazes" and "reportage responsums" are defined in Chapter IV.

Table III-3

Reliability of Ten Measures of Oral Language for Two Interviews*
(N=28 Pupils, Grades B-1 to A-3)

Measure of Oral Language	First Interview		Second Interview		r*
	Mean	S.D.	Mean	S.D.	
Basic Measures					
Number of Words in Mazes	82.93	89.57	101.39	146.99	.84
Number of Reportage Responsums	20.21	11.73	19.57	13.90	.60
Number of Words in Reportage Responsums	61.82	37.35	64.36	60.59	.48
Number of T-Units	49.71	45.04	58.32	67.68	.84
Number of Words in T-Units	336.21	306.61	407.18	160.83	.84
Total Number of Words	480.96	409.50	572.93	701.21	.85
Derived Measures					
Mean Words Per T-Unit	6.50	1.05	6.49	.94	.41
Percent of Words in Mazes	15.04	6.65	14.00	7.82	.60
Percent of Words in Reportage Responsums	19.25	13.17	18.46	12.82	.52
Percent of Words in T-Units	65.75	11.88	67.46	12.28	.59

*The average time between interviews was two weeks. The first and second interview for each pupil was conducted by a different interviewer. Four different members of the staff conducted the interviews. The transcript of each interview was analyzed by one of a staff of seven analysts.

Evaluation form on proficiency in Spanish and language preference.

In the warm-up section of the Oral Language Interview, we obtained evidence concerning the child's oral proficiency in Spanish. Initially, an evaluation of each child's proficiency in Spanish was made from typescripts for the reliability study. These twenty-eight children were taken in approximately equal numbers from the first, second, and third grades. Each typescript was rated independently by three raters on the basis of the child's proficiency in Spanish, the extent to which English was introduced into the child's Spanish, and his preference as to language.

A three-part form was developed, on which ratings concerning different aspects of the child's linguistic ability were recorded.

Part One. Proficiency in Spanish

The first part of the form was devoted to an evaluation of the child's proficiency in Spanish. In this part, six categories were set up which represented different levels of proficiency in Spanish:

1. No Spanish comprehension.
2. Spanish comprehension but no manifest ability to speak the language.
3. Ability to speak Spanish but with difficulty.
4. Ability to speak Spanish with relative ease.
5. Ability to speak the language fluently.
6. The ability to speak the language with exceptional fluency.

The first two categories are self-explanatory. Various reasons might account for the child's reluctance to answer in Spanish under the second category. A child was considered to speak with difficulty (category 3) if his responses were characterized by a mixture of monosyllabic replies, much hesitation, and much stuttering or repetition of words within a single sentence. On the other hand, a child was said to speak with relative ease (category 4) if his responses were quick and to the point, lacking in excessive hesitation, and evidencing only a minimal amount of tenses and mazes. Only a few of the children fell into category 5, provided for those speaking the language fluently. To be categorized as such, the child's speech would have had to exhibit proper intonational patterns, good sentence structure, freedom from grammatical errors, proper diction, and lack of hesitation.

The last of the six categories was intended for a child who spoke with exceptionally good diction, freedom from grammatical errors, and an overall command of the language. The sixth category, however, was not altogether beyond the reach of children of this age.

Part Two. The second part of the form served as a measure of the mixture of the English used by the child when speaking Spanish. This section had as its main function providing an indication of the predominance or influence of the child's English usage upon his communicative ability in the Spanish language. Due to the scarcity of such occurrences, three rudimentary categories were used. The child was said to speak with a mixture of either "none", "little", or "much".

Part Three. The last part of the form was devoted to an estimation of the child's language preference. The estimation was based on a subjective evaluation on the part of the authors of Chapter VIII of the "warm-up" section of the Oral Language Interview as well as the child's informal remarks. It goes beyond the scope, not only of this paper, but also of our entire study to go more deeply into the psychological, sociological, and economic ramifications of this language preference section. Aside from the outstanding proficiency in one language over the other, the basis for an evaluation of the child's language preference was necessarily based on information about the child's background and environment.

With respect to ratings on preference for English or Spanish, the reliability was also high; on 72 per cent of all samples rated, there was perfect agreement by all three raters; there was agreement within one rating point by an additional 24 per cent. When ratings were compared across interview situations, 75 per cent of the samples showed perfect agreement, while an additional 23 per cent varied by only one point. The following categories were used in rating children with respect to language preference:

1. Marked preference for Spanish.
2. Some preference for Spanish.
3. No preference.
4. Some preference for English.
5. Marked preference for English.

High agreement was obtained on Part One which involved independent ratings on proficiency in Spanish by three raters on typescripts based on pairs of interviews. On 70 per cent of all samples rated, perfect agreement by all three raters was achieved; on an additional 28 per cent the range of ratings was only one.

When ratings were compared across interview situations by the same rater, 62 per cent of the ratings agreed perfectly, and in an additional 36 per cent of the cases, the rating differed by only one point.

With respect to ratings on the extent to which the child used English when speaking Spanish, there was complete agreement by all three raters on 81 per cent of the samples, while an additional 17 per cent agreed within one point. When ratings were compared across interview situations by the same raters, 80 per cent of the ratings agreed perfectly, while in an additional 19 per cent, the ratings differed by only one point.

CHAPTER IV

METHODOLOGY: DATA ANALYSIS

The research findings obtained to date are concerned with four different sub-studies: (1) a study of base-line data on reading achievement, (2) a study of base-line data on oral language development, (3) a pilot study of the relationship of indices of oral language development to reading achievement, and (4) pilot studies of Spanish influences on children's oral English, as well as children's proficiency in Spanish.

The findings on the base-line data in reading and oral language are presented in Chapter V; preliminary findings of pilot studies in the other areas are presented in Chapters VI through VIII. In this chapter, the methodology of data analysis (as it affects all four areas of research) will be summarized.

Methods of analysis of base-line data on reading achievement.
The analysis of base-line data on reading achievement has involved the computation of the following percentile points for each test for each grade level: 10th, 25th, 50th, 75th, and 90th.

For the Stanford Achievement Test, the data are not only summarized in terms of grade placement, but also in terms of raw scores corrected for guessing. Study of Stanford Reading Primary I results for grade 1 and Primary II results for grade 2 (Tables V-2 and V-6) confirm our hypothesis that correction of test scores for guessing was essential to obtain more valid scores. Median corrected scores in these two tables are only slightly above zero. Moreover, with the exception of the Primary I battery administered in third grade, correction for guessing resulted in negative scores for pupils in the lower fourth of the class for all other test-grade combinations.

As Table IV-1 indicates, corrected scores were almost perfectly correlated with uncorrected scores for: Primary I Battery, grades A2 and A3; and the Primary II Battery, grade A3. In these situations, the uncorrected scores would have been entirely satisfactory. With the Primary I in grade A1 and the Primary II in grade A2, the correlations were only .84 and .87 respectively, representing common variances of 71 per cent and 76 per cent respectively. Hence for these grade levels, the error variance was considerably reduced by using raw scores corrected for guessing in the establishing of criterion groups.

Table IV-1

Correlations between Total Reading Raw Scores on the Stanford Reading Test and Those Scores Corrected for Guessing

Grade Level	Battery	Form	N	r
A1	Primary I	W	139	.84
A2	Primary I	X	121	.99
A3	Primary I	Y	108	.99
A2	Primary II	W	118	.87
A3	Primary II	X	112	.96

Table IV-2

Correlations between Primary I and Primary II Scores on Stanford Reading Tests

Grade Level	Battery	N	r
A2	Primary I - Primary II Rights Scores	118	.77
	Corrected Scores	118	.83
A3	Primary I - Primary II Rights Scores	108	.80
	Corrected Scores	108	.82

The corrections for guessing were also helpful in interpreting achievement test results for pupils in the lowest fourth at all grade levels. They also made it evident that the state-required Primary I Battery produced only chance scores for pupils in the lowest fourth of grade 1; and the state-required Primary II Battery produced only chance scores for pupils in the lowest fourth of A2. In other words, at these levels at least one-fourth of the pupils would have scored as high by marking a test at random.

As explained in Chapter III, the Project supplemented the state testing program by administering an easier or lower-level battery in both grades A2 and A3. At the A2 level, the Rights scores on the Primary I Battery correlated only .77 with corresponding Rights scores on Primary II (Table IV-2). However, corrected scores on these same batteries were more closely correlated (.83). Hence, we have additional evidence for the necessity for continued administration of the Primary I Battery to A2 pupils in other years of the project. At the A3 level, there is also some indication that the Primary II level is too difficult for many pupils since the P_{10} for corrected scores are negative for all students and the P_{25} for corrected scores for the sub-tests range from 0.4 to 2.5 (Table V-10). Supplementary testing at the A3 level, however, proved not to be as essential as at the A2 level; percentile ranks on the Primary I and Primary II batteries agreed very closely except at the lowest level (P_{10}) where neither test may be providing an adequate measure (Tables V-7 and V-9).

The standardized achievement test results certainly indicate the need for a supplementary measure of reading achievement for those pupils reading at too low a level to be adequately measured by standardized tests. The Sight Vocabulary Test, developed for this project, to compensate for the high floor of most standardized tests, was described in Chapter III.

Methods of analysis used in studying base-line data on oral language. For a number of reasons, the language analysis conducted this year was limited to children in the primary grades. Preliminary review of a sampling of preschool and kindergarten tapes revealed a substantial decrease in oral language output between preschool and kindergarten which may be due to the differing structure of the kindergarten class and/or to a decline in egocentric speech. Since the analysis of oral language samples from very young bilingual children represented a very unfamiliar field, it was decided to postpone the analysis of preschool and kindergarten tapes until 1966-67 when experience with analyzing the tapes from Oral Language Interviews would have helped us in establishing guidelines, selecting promising indices of language maturity, and developing more detailed instructions for language analysts. The literature was searched for

studies of the oral language of bilingual children. No studies were found which were specifically concerned with this subject. We were reassured concerning the thoroughness of our search when we came upon the following statement made by V. John in a newsletter from the IRCD Bulletin, (an information retrieval newsletter concerned with research on disadvantaged learners):

Qualitatively, we know almost nothing about language among disadvantaged populations. While psychologists have often confined themselves to counting, linguists have, with a few recent exceptions, absented themselves from this field of study (5).

In the recent exceptions cited, there were no instances of analyses of oral language of bilingual children.

We next turned to studies of the oral and written language of children in middle-class communities for ideas concerning indices of oral language development which might be helpful. Five studies have been of assistance: Loban's study of both the speaking and writing of elementary school children (13), Strickland's study of oral language and its relationship to reading achievement (22), Hutto's study of children's oral language (7), Hunt's recent study of grammatical structures (6), and an unpublished progress report on the analysis of oral language of children in grades K through 7 by Griffin (3).

As in most studies of language, we were concerned with differentiating between recorded language which could be analyzed into clauses of various types and material which defied such analysis. We were also interested in determining what percentage of the child's conversation was in grammatically complete units, as compared with hesitations, false starts, incomprehensible passages, and incomplete predications. Loban and Strickland describe such extraneous material as "maze material" while Hunt uses the term "garbles" as comparable to what Strickland and Loban call "mazes."

We found that we had in our typescripts a number of expressions which were grammatically incomplete but which did carry meaning and did not necessarily reflect immaturity in language development. Hence, we borrowed the term "reportage responsums" from Hutto's research (7) to apply to: "All message-carrying responses which are less than complete predications, but in which the meaning is clear."

These "reportage responsums" were typically given in response to questions by an adult or child. Typical responsums would be: "Yes", "Batman" "Because I want to". The reader is referred to "Instructions for Language Analysts" in the appendix for other examples of incomplete meaningful predications which were classified under the category of "Reportage Responsums."

The term "maze" was used to include partial expressions, repetitions, and "false starts" associated with lack of speech fluency. Although we did not subdivide our maze material into the four categories used by Strickland, her categories will help to clarify for the reader the types of material classified under the heading of "mazes."

1. "Noises", unintelligible sounds such as "ah", "er", and the like.
2. "Holders", used to hold attention such as "well" and "now .. uh".
3. "Repeats", i.e., repetitions of words such as "you -- you".
4. "Edits", i.e., words used by the speakers which indicate a correction or change of direction in what he was saying (22).

We are indebted to Hunt for the concept of T-unit for use in analyzing the portions of the typescripts identified. Young children tend to use run-on sentences so frequently that length of sentence, or length of the communication unit between pauses, has proved very misleading as an index to children's maturity in written and oral language. The T-unit, developed by Kellogg W. Hunt, has been used in this study to meet this deficiency in the sentence-unit. He defines T-unit as follows: "One main clause expanded at any of many different points by structures that are modifiers or complements or substitutes for words in the main clause" (6).

As Hunt says:

These units might be christened 'minimal terminable units', since they would be minimal as to length, and each would be grammatically capable of being terminable with a capital letter and a period. For short, the 'minimal terminable unit' might be nicknamed a 'T-unit'. . . . As a potential index of maturity, the unit has the advantage of preserving all the subordination achieved by a student, and all of his coordination between words and phrases and subordinate clauses (16).

T-units can vary in length from simple imperatives such as "Jump" or "Eat it" to such complex sentences as the following: "Batman and Robin, who were the good guys, didn't like the Joker when he tricked them."

The identification of maze material, reportage responsums, and T-units was done by members of the research staff in consultation with Dr. Hutto. Although the analysts had the original tapes available for use and consulted them whenever they needed help in interpreting ambiguous or incomprehensible passages, the transcribers had done their work so conscientiously that they found that they could rely almost entirely on the typescripts.

Since considerable in-service education was needed in the analysis of this type of oral language material, and yet we did want to check the reliability of independently formed judgments on the classification of language in these various categories, we worked out an arrangement in which analysts worked in Team A or Team B, helping each other with interpretations within teams as needed. Each team (which included three or four bilingual members of the project staff) was trained independently and worked independently. In Table IV-3 are given the inter-rater reliability coefficients between the independent evaluations by Teams A and B of duplicated typescripts for 26 A2 pupils (who comprised the lowest third of the A2 class with respect to reading achievement on the Stanford Reading Test). The use of a group of low readers for this reliability check insures that the reliability estimates are conservative. Even though these bilingual staff members had not had previous experience in language analysis, all the reliability coefficients are adequate to permit group comparisons. In fact, the reliability coefficients for five of the six basic measures are .88 or higher. Evidently, the in-service education of this group had resulted in reasonably high agreement on all measures except the number of words in reportage responsums. Additional time was given to discussing with the staff the definition and examples of "reportage responsums" before the analysis was continued for other groups of typescripts.

Table IV-3
Inter-Rater Reliability for Ten Measures of Oral Language

Product - Moment Correlation Between A and B Teams (N=26 A2 Low Readers)	
<u>Basic measures</u>	
Number of Words in Mazes	.98
Number of Reportage Responsums	.88
Number of Words in Reportage Responsums	.73
Number of T-Units	.98
Number of Words in T-Units	.99
Total Number of Words	.99
<u>Derived measures</u>	
Mean Words Per T-Unit	.93
Per Cent of Words in Mazes	.82
Per Cent of Words in Reportage Responsums	.85
Per Cent of Words in T-Units	.77

Since almost all of the transcribing of tapes had to be done during the summer months when bilingual college students had more time available, the language analysis could only be begun. To date, the following aspects have been completed:

1. Base line data have been summarized (10th, 25th, 50th, 75th, and 90th percentiles) for grades A1, A2, and A3 for the following basic and derived measures:

Basic measures (obtained directly from the typescripts)

1. Number of words in mazes
2. Number of words in reportage responses
3. Number of words in T-units
4. Total number of words
5. Number of reportage responses
6. Number of T-units

Derived measures (computations derived from basic measures)

7. Mean words per T-unit ($3 \div 6$)
8. Per cent of words in mazes ($1 \div 4$)
9. Per cent of words in reportage responses ($2 \div 4$)
10. Per cent of words in T-units ($3 \div 4$)

Since typescripts have been prepared to date only for those pupils in the upper and lower thirds in reading achievement, the base line data on oral language measures are based on two-thirds of the pupils in grades A1, A2, and A3.

2. A study has been made of the relationships between these measures of oral language development and children's reading achievement as measured by the Total Reading Score (corrected for guessing) on the Primary I level of the Stanford Reading Test. Comparisons on each of these language measures have been made for pupils scoring in the highest and lowest thirds of their grade level for both the A2 and A3 classes. Such an analysis will probably not be made for the first-grade since corrected reading scores are so low.

Next year, the staff will undertake Phase 2 of this language analysis, compiling base line data in terms of the following basic and derived measures of language development. The following basic and derived measures will be studied:

Basic measures

11. Number of words in each child's three longest T-units
12. Number of "short" T-units (less than 7 words)
13. Number of T-units beginning with coordinate conjunctions
14. Number of tokens (number of running words)
15. Number of types (number of different words)

16. Number of modified nominals
17. Number of subordinate clauses of each major type: a. noun, b. adjective, c. adverbial
18. Number of subordinate clauses: a. preceding main clause, b. following main clause
19. Number of different sentence patterns used (i.e., main clause only, subordinate clause preceding main clause, subordinate clause following main clause, more complex T-units)

Derived measures

20. Mean number of words in three longest T-units ($11 \div N$)
21. Per cent of short T-units ($12 \div 6$)
22. Per cent of T-units beginning with coordinate conjunctions ($13 \div 6$)
23. Type-token ratio ($15 \div 14$)
24. Mean number of modified nominals per T-unit ($16 \div 6$)
25. Total number of clauses ($6 + 17a + 17b + 17c$)
26. Mean length of clauses ($3 \div 25$)
27. Mean number of clauses per T-unit ($25 \div 6$)
28. Per cent of clauses of each major type ($17a \div 25$) ($17b \div 25$) ($17c \div 25$)
29. Per cent of subordinate clauses preceding main clause ($18a \div 17$), following main clause ($18b \div 17$)
30. Mean no. of different sentence patterns used ($19 \div N$)

During the second year, we intend to have the language-analysis data punched on one or more punch cards per pupil so that we can study the intercorrelations among our various measures. We would also like to compute derived measures (for both Phases 1 and 2) for each portion of the Oral Language Interview. The TV section of the interview seems to be eliciting a greater quantity of language than either of the two other sections. However, since the children can respond in this section of the interview merely by repeating ideas and stereotyped expressions heard on TV, their speech in this section may not provide as valid indications of their maturity in oral language development as their responses in the Toy Shop or the Loban pictures.

In a third phase of the language-analysis, which will probably have to be postponed until the third year of the study, we hope to develop objective measures of the complexity and flexibility of children's language usage, as well as the extent to which the child introduces new ideas into his conversations. We may undertake study of tense and voice of verbs, use of verb auxiliaries, subject-verb disagreements, and various types of Spanish influences of English which we began to explore in one of our pilot studies, reported in Chapter VIII.

Methods of analysis used in studying the relationship of measures of oral language development to criterion data on reading achievement. Although the children's progress in oral English (the language of instruction) has intrinsic value, we are also concerned with oral language development as it relates to the child's achievement in reading. In the pilot study reported in Chapter VI, we compared each of the basic and derived measures of oral language for the criterion groups (namely the lowest third and highest third of the pupils with respect to corrected Total Reading scores on the Stanford Reading Test, Primary I. Since the corrected scores were considered to be more valid, they have been utilized throughout the study whenever criterion groups were identified. Comparisons between criterion groups were made for both the A2 and A3 grades. Differences between high and low groups were interpreted in terms of t-ratios and level of statistical significance.

Methods used in pilot study of Spanish influences on oral English. One of the best illustrations of Spanish influence on oral English is the widespread confusion concerning the words "in" and "on" among young Mexican-American children. The Spanish word "en" translates as both "in" and "on". Thus, when the teacher says, "Put your books in your desks", many children have to look around the classroom to see what other children are doing before they know whether the teacher is asking them to put the books in or on their desks.

The Malabar teachers have almost instinctively compensated for these confusions by using an efficient sign-language. "Sit on the rug!" they tell their kindergarten children, using a long, horizontal sweeping motion of the hand, which the children happily obey. Although this system gets the day's work done, and must be continued to reduce frustration of both teacher and children, widespread use of supplementary sign communication may lead children to depend less on oral language for clues. The child's experience with the undependability of oral language cues may tend to make him place less reliance on the feed-back system that stands his Anglo peer in such good stead as an instantaneous check on the accuracy of his reading. This is yet another indication of the very real language difficulties faced by the Mexican-American child.

The pilot study on Spanish influences on English, reported in Chapter VII was limited to a study of the typescripts of A2 pupils. Recurring instances of "errors" and "confusions" from the typescripts were typed on 2x4 cards. These were then classified into several categories, such as "word added", and "word omitted". Two bilingual staff members worked independently on the classifying process and also in interpreting the ways in which the child's familiarity with Spanish influences his oral English. Differences between their independently made classifications and interpretations were discussed and reconciled.

We had to ignore the intonational influences of Spanish into English completely, even though they are so strong at the Malabar Street School, that Anglo project staff members often find themselves speaking English with a Spanish accent after a day's work in the classroom with the children! This is certainly germane to the reading problem, as the Spanish intonational system often does not fit into the English sentence pattern. If the children are to rely on the sensory feed-back of their oral language as a check of the correctness of their reading, as we all do, cognizance of the differing intonational patterns must be taken, if we are to adjust our curriculum to the needs of these children.

Methods used in the pilot study of children's proficiency in Spanish. The Evaluation Form used in this study was presented in the preceding chapter. Three bilingual analysts independently rated pairs of interview transcripts (using the section of the warm-up period in which questions were asked in Spanish). High reliability was achieved.

In Chapter VIII, the different levels of proficiency in Spanish are illustrated. Next year, ratings will be completed on all primary grade pupils; and the relationship of proficiency in Spanish to measures of oral language development in English will be studied.

Continued work with the children's understanding of Spanish and the degree of preference they show for Spanish, indicate additional attempts must be made to assess the relative facility with which they speak in Spanish and/or English. We hope to work out a measure for this based on the work of Saer (19).

It has been suggested that the Mexican-American children are reluctant to admit, directly or indirectly, to a knowledge of Spanish which they do, in fact, possess. We hope that next year, we can send an interviewer into their homes whom they do not realize is connected with the school to see whether there will, in fact, be any appreciable differences in the amount of Spanish they are willing to use under these circumstances.

Note to the Reader regarding Interpretation of
Grade Placements on the Stanford Achievement Tests

In interpreting the test data summarized in Chapter V, the reader is cautioned to consider certain facts about the norm sample for the Stanford Achievement Test (taken from a report received from the test publisher in late October, 1966 after this manuscript had been completed). These facts justify, in the opinion of the Project Staff, the conclusion that the Stanford grade placements underestimate the achievement level of pupils (to a degree yet to be determined).

1. One economic index (MFI - median family income) and one educational index (MYS - median years of schooling completed by persons over 25 years of age) were used in selecting the sample of communities for norming the Stanford Achievement Test. For the norming sample, the median MFI and the median MYS were .2 standard deviation above the average or at approximately the 58th percentile level.*

2. The median IQ's of pupils in the norm sample were as follows:

Grade	Median IQ (Otis Quick-Scoring Mental Ability Test)
1	108
2	105
3	104
4	109
5	109
6	109
7	108
8	108
9	106

The publisher's interpretation of these data is as follows:

...The data in this table give the erroneous impression that the norm sample is a somewhat superior group. However, based on data presented in Tables 1-4 it is evident that

* Stanford Achievement Test: A Supplementary Report on the Norm Group. New York. Test Department, Harcourt, Brace and World, Inc. 1966, p. 10.

the Stanford norm sample closely approximates the national population and, therefore, is the proper frame of reference to be used. Accordingly, it is presumed that the Otis tests, which were normed some years ago yield inflated IQ values.*

Until results are available from the concurrent administration of the Stanford Achievement Test and the Otis-Lennon Mental Ability Test (a completely revised and renormed edition of the Otis), the representativeness of the Stanford norming sample with respect to IQ will be in doubt.

3. Another characteristic of the norming sample which was of great concern to the Project Staff was the exclusion of cities with populations of 300,000 or more.

It should be noted that cities with populations of 300,000 or more were excluded from the norm group, partly in light of considerations outlined in the preceding paragraph and partly for practical reasons. The very large city systems often have their testing programs planned years in advance and find it difficult to modify schedules to cooperate in standardization programs. To have attempted to make the necessary arrangements for inclusion of very large systems in the norm population would have postponed the standardization program by at least a year, with dubious improvement in the accuracy of the norms.**

The other considerations leading to the exclusion of large cities were as follows:

...Size of system is, to be sure, positively and significantly related to features such as salaries of teachers and supervisory and administrative personnel; there tends to be greater provision of special services in large systems than in small systems, etc.; and there is a presumption that such features will conduce to better achievement. On the other hand, very large school systems are increasingly confronted with problems associated with high proportions of culturally deprived

* Ibid., pp. 12-13.

** Ibid., p. 11.

and lower socio-economic groups, leading to an expectation of possibly depressed achievement.*

The authors of the Supplement minimize the bias introduced by excluding cities of 300,000 or more.

As to possible bias arising from this exclusion, it is relevant to observe that pupils in school systems in cities of 300,000 or more population constitute about 5 per cent of the national pupil population.**

Data for 1961-62 from the Office of Education indicate that 17 per cent, rather than 5 per cent, of the children enrolled in public and private schools are enrolled in cities with a population over 300,000.

* Ibid., p. 11.

** Total 1962 enrollment in public and private schools cities over 300,000 was computed from data in: "Non-public schools in the 50 largest cities," School Life, July, 1964, p. 14. Corresponding data were obtained from: Digest of Educational Statistics 1965. Bulletin, 1965, No. 4, United States Office of Education, pp. 10, 16.

CHAPTER V

BASE-LINE DATA ON ACHIEVEMENT IN READING, ARITHMETIC AND ORAL LANGUAGE

As explained in Chapter III, base-line data on achievement in reading were obtained by administration of the state-required Stanford Reading Test, supplemented by an easier level of the Stanford in grades A2 and A3, and supplemented by the California Reading Test in B3 and A3, to provide a comparison with data collected for those grades in 1964 and 1965. In addition, a Sight Vocabulary Test, developed for this Project and described in Chapter III, was administered on the assumption that the standardized tests would provide too high a floor for many pupils. Since it is important that the heavy emphasis on reading instruction have no detrimental effects on achievement in arithmetic, base-line data were obtained by administering the California Arithmetic Test at the same grade levels at which it was administered in 1964 and 1965 (i.e., grades B3 and A3).

Base-line data on oral language development were obtained by use of the floating microphone for kindergarten and preschool children and the Oral Language Interview in the primary grades. The techniques for data collection and data analysis have been summarized in Chapters III and IV respectively. In this chapter, only findings from the first-level analysis of typescripts from the Oral Language Interview will be presented. Second-level analysis for primary-grade pupils, as well as all summarization of language data for preschool and kindergarten pupils, has had to be postponed until the second year of the project.

BASE-LINE DATA ON ACHIEVEMENT IN READING

Reading achievement at the first-grade level. It is apparent from Table V-2 that children in the lower half of the first-grade with respect to reading ability made near-zero or negative scores when their test scores on each subtest were corrected for guessing. The test was so difficult for them that probably only the best readers obtained valid scores. Perhaps all that can be inferred from Table V-1 on grade placements is that even the 90th percentile point for the various subtests is from one to three months below the national norm of 1.8. On the Sight Vocabulary Test (based on words from preprimers, primers and readers used at Malabar Street School), the median score at the end of B1 was three test words recognized, while 10 per cent of the B1 children recognized twenty or more such words. That children were making measurable progress, however, is evidenced by the fact that the median for A1 children was 16 words recognized; and the highest 10 per cent recognized 53 words or more. Even at the end of A1, however, one-fourth of the children recognized three words or fewer, from a sample of words chosen from their own reading series (Table V-15).

Table V-1

Stanford Achievement Test Grade Scores for AI Pupils
(Primary I, Form W, administered May 1, 1966)

Sub-Test	N	Percentile					Q	P ₉₀ -P ₁₀
		90	75	50	25	10		
Word Reading	142	1.5	1.3	1.2	1.1	1.0	.1	.5
Paragraph Meaning	140	1.6	1.5	1.4	1.4	1.1	.05	.5
Total Reading	139	1.5	1.4	1.3	1.2	1.1	.1	.4
Vocabulary	127	1.7	1.4	1.3	1.2	1.1	.1	.6
Word Study Skills	118	1.5	1.3	1.3	1.2	1.1	.05	.4

Table V-2

Stanford Achievement Test Corrected* Scores for AI Pupils
(Primary I, Form W, administered May, 1966)

Sub-Test	N	Percentile					Q	P ₉₀ -P ₁₀
		90	75	50	25	10		
Word Reading	142	7.6	2.6	1.6	-1.0	-2.4	1.8	10.0
Paragraph Meaning	140	6.1	3.5	0.6	-1.1	-3.0	2.3	9.1
Total Reading	139	13.3	5.9	1.3	-1.3	-3.1	3.6	16.4
Vocabulary	127	9.6	5.1	0.7	-0.7	-5.2	2.9	14.8
Word Study Skills	118	15.0	8.5	4.8	0.0	-2.9	4.3	18.0

*Raw scores corrected for random guessing.

The reader is reminded that the Sight Vocabulary Test norms are valid only for the children at the Malabar Street School. The A1 median of 16 does not mean that the typical A1 child knew only 16 words, but that he knew 16 words in this test. This must not be interpreted as "good" or "bad", and is certainly no indication of the ability of either teachers or children since there are no national norms available. We cite it here only so that it may serve as a base line from which to measure subsequent performance.

Reading achievement at the second-grade level. At the second-grade level, it is apparent from Table V-6 that at least half of the A2 pupils were making only chance or negative scores on the more difficult Battery, the Primary II. However, median corrected scores ranged from 9 to 17 on all but one of the subtests of the easier Primary I Battery (Table V-4). As Table V-3 shows, the 90th percentile was three months below national norm in paragraph meaning and vocabulary.

It is inevitable, of course, that bilingual pupils would make a slower start in learning to read. The Sight Vocabulary Test (Table V-15) reflects their steady progress in learning to read those primers and readers used in their own school. The median for B2 pupils is 38 words, an improvement of 21 words over the median for A1. The reader is again reminded that this does not mean that the typical B2 pupil knows only 38 words in all, but 38 words from this test. Although only Malabar Street School norms are available, we can report that the pupil who scores at the 25th percentile for B2 reads more words correctly than the A1 child at the 50th percentile.

The median score for A2 children on the Sight Vocabulary Test was 68 words, with 25 per cent of the children correctly reading 101 or more of the 116 words, and children who were in the top 10 per cent making only one or two errors.

Reading achievement at the third-grade level. At this grade level, we have data from three standardized tests. Both the Primary I and Primary II levels of the Stanford Reading Test were administered, as well as the California Reading Test, for which earlier comparative data were available (Tables V-7 through V-12).

On both batteries of the Stanford Reading Test, the median grade placement for Reading Total for A3 pupils was 2.0, while median for the California Reading Test was 2.5. Approximately 10 per cent of the A3 pupils reached or exceeded the national norm on the California Reading Test.

All of the pupils whose results are summarized in this chapter were taking standardized tests for the first time. Previously standardized testing had been begun at the third-grade level. Unfamiliarity with standardized tests, plus the fact that each class was administered

Table v-3

Stanford Achievement Test Grade Scores for A2 Pupils
(Primary I, Form X, administered May 1, 1966)

Sub-Test	N	Percentile					Q	P ₉₀ -P ₁₀
		90	75	50	25	10		
Word Reading	125	2.4	1.7	1.5	1.3	1.1	.20	1.3
Paragraph Meaning	122	2.5	1.8	1.6	1.5	1.3	.15	1.2
Total Reading	121	2.4	1.8	1.6	1.4	1.3	.20	1.1
Vocabulary	113	2.5	1.9	1.5	1.3	1.2	.30	1.3
Word Study Skills	114	2.0	1.8	1.5	1.3	1.1	.25	.9

Table v-4

Stanford Achievement Test Corrected* Scores for A2 Pupils
(Primary I, Form X, administered May 1, 1966)

Sub-Test	N	Percentile					Q	P ₉₀ -P ₁₀
		90	75	50	25	10		
Word Reading	125	28.0	16.4	10.1	4.0	0.4	6.2	27.6
Paragraph Meaning	122	29.9	17.7	9.0	2.9	-0.4	7.4	30.3
Total Reading	121	56.4	33.4	16.8	8.9	1.5	12.3	54.9
Vocabulary	113	18.8	10.2	3.6	-0.5	-5.1	5.4	23.9
Word Study Skills	114	29.9	23.8	14.5	6.1	-0.7	8.9	30.6

*Raw scores corrected for random guessing.

Table V-5

Stanford Achievement Test Grade Scores for A2 Pupils
(Primary II, Form W, administered May 1, 1966)

Sub-Test	N	Percentile					Q	P ₉₀ -P ₁₀
		90	75	50	25	10		
Word Reading	118	2.6	1.9	1.7	1.5	1.2	.20	1.4
Paragraph Meaning	123	2.4	1.9	1.7	1.5	1.3	.20	1.1
Total Reading	118	2.6	1.9	1.7	1.6	1.4	.15	1.2
Word Study Skills	105	2.3	2.0	1.6	1.4	1.3	.30	1.0

Table V-6

Stanford Achievement Test Corrected* Scores for A2 Pupils
(Primary II, Form W), Administered May 1, 1966

Sub-Test	N	Percentile					Q	P ₉₀ -P ₁₀
		90	75	50	25	10		
Word Meaning	118	9.3	4.3	1.1	-0.9	-2.5	2.6	11.8
Paragraph Meaning	123	15.2	6.9	2.4	-0.8	-4.1	3.9	19.3
Total Reading	118	24.1	9.6	3.1	-1.6	-4.2	5.6	28.3
Word Study Skills	105	16.0	10.4	3.9	-1.6	-6.0	6.0	22.0

* Raw scores corrected for random guessing.

Table V-7

Stanford Achievement Test Grade Scores for A3 Pupils
(Primary I, Form Y, administered May 1, 1966)

Sub-Test	N	Percentile					Q	P ₉₀ -P ₁₀
		90	75	50	25	10		
Word Reading	110	3.4	2.7	2.0	1.5	1.4	.60	2.0
Paragraph Meaning	110	2.9	2.7	1.9	1.6	1.4	.55	1.5
Total Reading	103	3.1	2.7	2.0	1.6	1.4	.55	1.7
Vocabulary	109	3.6	2.9	2.2	1.6	1.4	.65	2.2
Word Study Skills	96	3.2	2.6	1.9	1.5	1.4	.55	1.8

Table V-8

Stanford Achievement Test Corrected* Scores for A3 Pupils
(Primary I, Form Y, administered May 1, 1966)

Sub-Test	N	Percentile					Q	P ₉₀ -P ₁₀
		90	75	50	25	10		
Word Reading	110	34.5	30.2	19.0	8.3	3.9	11.0	30.6
Paragraph Meaning	110	33.1	29.9	18.3	8.0	0.7	11.0	32.4
Total Reading	108	66.1	59.0	38.5	17.5	6.9	20.8	59.2
Vocabulary	109	29.1	25.7	16.9	8.2	2.4	8.8	26.7
Word Study Skills	96	44.0	39.0	28.7	17.4	10.8	10.8	33.2

*Raw scores corrected for random guessing.

Table V-9

Stanford Achievement Test Grade Scores for A3 Pupils
(Primary II, Form X, administered May 1, 1966)

Sub-Test	N	Percentile					Q	P ₉₀ -P ₁₀
		90	75	50	25	10		
Word Meaning	112	3.3	2.7	2.1	1.8	1.7	.45	1.6
Paragraph Meaning	114	3.1	2.7	2.0	1.7	1.6	.50	1.5
Total Reading	112	3.0	2.7	2.0	1.8	1.7	.45	1.3
Word Study Skills	110	2.9	2.4	2.1	1.6	1.4	.40	1.5

Table V-10

Stanford Achievement Test Corrected* Scores for A3 Pupils
(Primary II, Form X, administered May 1, 1966)

Sub-Test	N	Percentile					Q	P ₉₀ -P ₁₀
		90	75	50	25	10		
Word Meaning	112	16.9	11.0	4.2	1.3	-1.4	4.9	18.3
Paragraph Meaning	114	29.3	20.0	5.2	0.4	-2.4	9.8	31.7
Total Reading	112	41.4	31.0	9.5	2.5	-2.4	14.3	43.8
Word Study Skills	110	23.0	14.9	9.5	2.0	-3.5	6.5	26.5

*Raw scores corrected for random guessing.

one battery which was sufficiently above their present level of achievement to be discouraging, may have made many of the test scores invalid.

The steady increase in scores on the individually administered Sight Vocabulary Test, based on words in their own reading series certainly indicates that measurable progress was being made which does not seem to be adequately reflected in the standardized tests. As is shown in Table V-16, the average A3 pupil read correctly 30 more words than the average A2 pupil, who in turn read 51 more words correctly than did the average A1 pupil. The seemingly smaller increase from A2 to A3 is attributable to the fact that the Sight Vocabulary Test included a larger percentage of primer and first-reader words than it did of second-reader words. It is obvious that the Sight Vocabulary Test was too easy for the most able readers in both the B3 and A3 grades. Since the test had been designed to provide a measure of progress for less competent readers, we are not surprised that it has too low a ceiling for the most able.

Examination of the three-year comparative results for 1964, 1965 and 1966 reveals considerable evidence of improvement over this time period. The B3 medians show substantial improvement in the medians for reading vocabulary and reading total. For the A3 class, there has been improvement in median grade scores on reading comprehension and reading total; whereas those for reading vocabulary have remained the same (Tables V-11 and V-12).

Arithmetic achievement at the third-grade level. It is very encouraging to note that in arithmetic fundamentals, in which the pupils' achievement is not influenced by their bilingualism, the A3 median is at national norm this year, (3.8 as compared with 3.3 in 1965 and 3.2 in 1964.) At the B3 level, arithmetic achievement although two months below national norm in 1966 is three months higher than in previous years. Here is evidence of what teachers and pupils can accomplish when their progress is not slowed by below-average facility in the "language of instruction." In fact, 10 per cent of the A3 children are working a year or more above grade level in arithmetic fundamentals, and one-fourth of them are working seven months or more above national norm in this subject.

As one would expect, scores in arithmetic reasoning, which are affected by reading ability, are not as high. Even here, however, the 1966 medians are five to six months higher than those for 1964.

PRELIMINARY BASE-LINE DATA ON ORAL LANGUAGE DEVELOPMENT

The analysis of base-line data on oral language development is far from complete. As explained earlier, we have undertaken to date only the first phase of oral language analysis, on the Mexican-American

Table V-11

California Reading Test Grade Scores for B3 Pupils
(Upper Primary, Form W, administered in late April
or early May, 1964, 1965, 1966)

Sub-Test and Year	N	Percentile					Q	P ₉₀ -P ₁₀
		90	75	50	25	10		
<u>Reading Vocabulary</u>								
1964	67	3.2	2.4	1.7	1.4	1.1	.5	2.1
1965	78	3.6	3.0	2.0	1.4	1.1	.8	2.5
1966	64	3.5	3.1	2.4	1.9	1.4	.6	2.1
<u>Reading Comprehension</u>								
1964	67	3.2	2.4	2.0	1.6	1.5	.4	1.7
1965	78	3.3	2.8	2.1	1.6	1.4	.6	1.9
1966	64	3.5	3.0	2.3	1.8	1.6	.6	1.9
<u>Reading Total</u>								
1964	67	3.1	2.3	1.8	1.5	1.3	.4	1.8
1965	78	3.3	2.8	2.0	1.5	1.3	.65	2.0
1966	64	3.5	3.0	2.3	1.8	1.5	.6	2.0

Table V-12

California Reading Test Grade Scores for A3 Pupils
(Upper Primary, Form W, administered in late April
or early May, 1964, 1965, 1966)

Sub-Test and Year	N	Percentile					Q	P ₉₀ -P ₁₀
		90	75	50	25	10		
<u>Reading Vocabulary</u>								
1964	103	3.9	3.3	2.4	1.8	1.4	.75	2.5
1965	102	3.9	3.3	2.4	1.8	1.5	.75	2.4
1966	114	3.8	3.5	2.4	1.9	1.0	.80	2.8
<u>Reading Comprehension</u>								
1964	102	3.6	3.4	2.3	1.9	1.6	.75	2.0
1965	102	3.6	2.9	2.3	1.9	1.6	.50	2.0
1966	114	3.7	3.3	2.6	2.0	1.3	.65	2.4
<u>Reading Total</u>								
1964	102	3.8	3.3	2.2	1.8	1.5	.75	2.3
1965	102	3.7	3.2	2.3	1.8	1.6	.70	2.1
1966	114	3.8	3.3	2.5	1.9	1.0	.70	2.8

Table V-13

California Arithmetic Test Grade Scores for B3 Pupils
(Upper Primary, Form W, administered in late April
or early May, 1964, 1965, 1966)

Sub-Test and Year	N	Percentile					Q	P ₉₀ -P ₁₀
		90	75	50	25	10		
Arithmetic Reasoning								
1964	66	3.0	2.4	2.0	1.5	1.2	.45	1.8
1965	78	3.3	2.7	2.2	1.6	1.0	.55	2.3
1966	63	4.0	3.7	2.6	2.3	2.0	.70	2.0
Arithmetic Fundamentals								
1964	66	3.3	3.1	2.8	2.2	1.7	.45	1.6
1965	78	3.4	3.2	2.8	2.3	1.6	.45	1.8
1966	65	3.9	3.4	3.1	2.5	2.2	.45	1.7
Total Arithmetic								
1964	66	3.2	3.0	2.8	2.1	1.7	.45	1.5
1965	78	3.4	3.1	2.8	2.4	1.7	.35	1.7
1966	62	3.8	3.4	3.0	2.6	2.3	.40	1.5

Table V-14

California Arithmetic Test Grade Scores for A3 Pupils
(Upper Primary, Form W, administered in late April
or early May, 1964, 1965, 1966)

Sub-Test and Year	N	Percentile					Q	P ₉₀ -P ₁₀
		90	75	50	25	10		
Arithmetic Reasoning								
1964	102	4.0	3.5	2.4	1.8,	1.3	.85	2.7
1965	99	3.8	3.3	2.6	2.0	1.6	.65	2.2
1966	114	4.0	3.6	2.9	2.3	1.5	.65	2.5
Arithmetic Fundamentals								
1964	102	4.2	3.8	3.2	2.7	2.3	.55	1.9
1965	99	4.0	3.6	3.3	2.9	2.4	.35	1.6
1966	114	4.8	4.5	3.8	3.1	2.4	.70	2.4
Total Arithmetic								
1964	102	4.1	3.6	3.1	2.8	2.4	.40	1.7
1965	99	3.8	3.6	3.1	2.8	2.5	.40	1.3
1966	114	4.2	4.0	3.6	3.0	2.4	.50	1.9

Table V-15

Tentative Percentile Norms for Sight Vocabulary Test*

Grade Level	N	Percentile					Q	P ₉₀ -P ₁₀
		90	75	50	25	10		
B1	95	20.0	12.8	3.2	0	0	6.4	20.0
A1	115	53.0	39.6	16.2	3.4	0	18.1	53.0
B2	62	81.3	56.2	37.5	19.2	3.7	18.5	77.6
A2	118	113.7	101.2	67.5	45.8	23.9	27.7	89.8
B3	67	115.2	109.8	72.0	43.2	23.2	33.3	46.0
A3	108	115.9	113.8	97.5	66.0	47.4	23.9	68.5

* Maximum Score = 116.

children in the A1, A2 and A3 grades whose scores on the Stanford Reading Tests, Primary I placed them in the upper and lower thirds of their grade. These grades were selected because test results were also available for these pupils. Work will be continued next year on other measures of language development, (summarized as Phase 2 and described in Chapter IV). Moreover, initial work will be begun with preschool, kindergarten, B1, B2, and B3 children.

In Table V-16 the data are summarized for three of the derived measures of language development, i.e. the percentage of words in the language samples for each grade level which were classified as (1) mazes, (2) reportage responsums and (3) T-units. As one would expect, the median percentages for each grade level add to approximately 100 per cent.

Percent of words in mazes. Surprisingly, the median per cent of words in mazes does not decline with grade level. Since use of maze material reflects lack of verbal fluency, we had expected such a decrease. At the A1, A2 and A3 levels the medians were approximately the same, ranging from 14.5 to 16.5. We do not have any norms for representative children of these ages. The median percentages may not be unusually high for primary-grade children engaged in conversation with an unfamiliar adult. Loban's percentages of maze material were as follows: grade 1, 10.0 per cent; grade 2, 8.9 per cent; and grade 3, 6.2 per cent; or an average of 8 per cent for the primary grades. In comparison with Loban's groups, our children have almost twice as large a percentage of maze material.

There was considerable variation within each grade-level group with respect to per cent of words in mazes. At each grade level, 10 per cent of the pupils had more than one-fourth of their words in maze material; while the best 10 per cent of A2 and A3 pupils (on this measure) had 6.5 per cent or less of maze material; and the best 10 per cent of first graders had 1 per cent or less of maze material.

Measures of variability (both Q and the difference between P₉₀ and P₁₀) did decrease with grade level. The difference in Q was attributable to a consistent decrease in P₇₅ with grade level, reflecting a smaller percentage of pupils with excessively large amounts of maze material. It is interesting to note that the relatively large variability at the A1 level was due to the fact that both P₁₀ and P₂₅ were "better" than for either of the two higher grades. Although it is impossible to explain why the upper one-fourth of the first-graders (on this measure) did relatively better than their older peers, we intend to check this upper-quarter group next year to see whether their oral language performance is consistently good on other measures and to see how many of them have had preschool experience.

Table V-16

Summary Data with Respect to Percentage of Words in T-units,
Reportage Responsums and Mazes for Grades A1, A2, A3

Grade	N	Percentiles					Q	P ₉₀ -P ₁₀
		90	75	50	25	10		
<u>Percent of words in Mazes</u>								
A1	60	27.5	20.5	14.5	7.5	1.0	6.5	26.5
A2	54	27.0	22.0	16.5	10.5	6.0	5.8	21.0
A3	60	25.5	18.5	15.0	10.0	6.5	4.3	19.0
<u>Percent of words in Reportage Responsums</u>								
A1	60	38.0	37.5	23.0	12.0	7.5	12.8	30.5
A2	54	38.0	24.0	16.0	10.0	6.0	7.0	32.0
A3	60	35.0	21.5	14.5	9.5	6.5	6.0	28.5
<u>Percent of words in T-units</u>								
A1	60	74.0	69.0	62.0	45.0	30.5	12.0	43.5
A2	54	77.0	73.0	67.0	58.0	49.0	7.5	28.0
A3	60	82.0	76.0	69.5	61.5	50.0	7.3	32.0

The median test was applied to the distributions for grades A1, A2 and A3. The results, as summarized in Table V-18, show that the three grade-level groups did not differ statistically in central tendencies. The two-tailed test was used in all tests of significance.

Percent of words in reportage responsums. The results for the percent of words in reportage responsums did show the expected improvement with grade level (Table V-16). The median percent for A1 pupils was 23 per cent, while that for A2 pupils was only 16 per cent; the median test for these two groups approached statistical significance, ($p < .10$). The A3 median was also slightly lower than that for A2; but the difference was not statistically significant; even this slight improvement, however, contributed to the difference between the A1 and A3 grades being significant at a highly satisfactory level ($p < .01$).

The marked decrease in Q between the A1 and A2 levels is attributable chiefly to a markedly better P_{75} for the A2 group. Whereas the "poorest" one-fourth of A1 pupils on this measure had 37.5 per cent or more of their words in reportage responsums, the "poorest" one-fourth of A2 pupils had 24 per cent or more of their words in this category.

Percent of words in T-units. A consistent increase with grade level in percent of words in T-units is noted, with the median percent increasing from 62 per cent in A1 to 69.5 per cent in A3. The tests for significance reveal similar results to those for reportage responsums, i.e., a statistically significant difference between grades A1 and A3, with a larger increase occurring between A1 and A2 than between A2 and A3.

A marked decrease in variability is noted between the A1 and A2 grades, as measured by both Q and the difference between P_{90} and P_{10} . In the A1 grade, the "poorest" one-fourth of the pupils have 45 per cent or less of their words in T-units; while at the A2 level the comparable figure (P_{75}) is 58 per cent. These data confirm those presented earlier on the decrease between A1 and A2 in percent of words in reportage responsums (i.e. meaningful but incomplete predications.)

Mean words per T-unit. Here again a consistent increase with grade-level is found. The average length increases approximately one word from the A1 to the A3 grade level, with most of the increase taking place between A2 and A3 (Table V-17).

Although data presented on the three other language measures (Table V-16) seemed to indicate that little growth was taking place between A2 and A3, we find here that significant improvement during

Table V-17

Mean Words Per T-unit (mean number of words per T-unit)
for Grades A1, A2, A3

Grade	N	Percentiles					Q	P ₉₀ -P ₁₀
		90	75	50	25	10		
A1	57*	8.2	6.7	5.8	5.0	4.4	.85	3.8
A2	54	7.9	7.1	6.1	5.4	4.3	.85	3.6
A3	60	7.9	7.1	6.7	6.2	5.5	.45	2.4

*Three of the typescripts for A1 pupils included no words classified under T-units.

Table V-18

Median Test for Grade Level Differences
on Derived Scores from Language Analysis

Measure and groups compared	χ^2	p
<u>Percent of words in mazes</u>		
A1 and A2	.56	NS
A2 and A3	1.27	NS
A1 and A3	.02	NS
<u>Percent of words in reportage responsums</u>		
A1 and A2	2.82	$p < .10$
A2 and A3	.86	NS
A1 and A3	8.53	$p < .01$
<u>Percent of words in T-units</u>		
A1 and A2	2.50	$p < .15$
A2 and A3	.56	NS
A1 and A3	6.12	$p < .02$
<u>Mean words per T-unit</u>		
A1 and A2	.74	NS
A2 and A3	3.54	$p < .10$
A1 and A3	9.30	$p < .01$

third grade is evident. Although the shift to a smaller percent of words in reportage responses and a correspondingly larger percent in T-units seemed to take place during the second grade, children are progressing during the third grade on another significant aspect of oral language development, i.e. they are increasing in average length of their T-units. Although complexity of T-units will not be studied until next year, Hunt's research (6) would lead us to expect that this increase in average T-unit length will be accompanied by increases in complexity of structure.

Variability among pupils is lower in A3 than in the two other grades. Again, there is evidence of considerable improvement by pupils in the poorest one-fourth of the distribution with respect to this measure. Improvement at the P₇₅ level was greater between A1 and A2 than between A2 and A3. Until we obtain measures of complexity of T-units, to be studied next year, it is impossible to interpret the relatively smaller improvement in length of T-unit among pupils in the upper quarter.

CHAPTER VI

PILOT STUDY OF RELATIONSHIP OF MEASURES OF ORAL LANGUAGE DEVELOPMENT TO READING ACHIEVEMENT

Children's development in oral language is intrinsically valuable to them as it facilitates their understanding of information presented orally and improves their communication with teachers and peers. We are also interested in oral language development as it facilitates the process of learning to read.

Today's linguists are agreed that language develops on the basis of the oral, that spoken forms eventually determine written. In the individual, speech is learned first, translates itself into reading and later into writing (12).

Since we are especially interested in those aspects of language development which seem to facilitate the reading process, we are studying each of several oral language measures in relationship to reading achievement.

Corrected scores on the Stanford Reading Test show that a large percentage of A1 pupils are making no better scores than they would by guessing. Hence, the A1 grade has been excluded from this study of the relationship of oral language development to reading achievement. For the A2 and A3 grades, those Mexican-American pupils scoring in the highest third of their grade on the criterion of reading achievement have been compared with those pupils scoring in the lowest third of their grade on six basic measures and four derived measures of oral language. The results are summarized in Tables VI-1 and VI-2. The criterion measure of reading achievement was corrected raw score on Total Reading, Stanford Reading Test, Primary I.

Total number of words in language samples. The low-reader groups in both A2 and A3 had higher means than did the high-reader groups with respect to total number of words spoken in response to questions of the Oral Language Interview. In the A2, the low readers averaged 50 more words in their language samples than did the high readers; i.e. low readers spoke, on the average, 13 per cent more words than did high readers. At the A3 level, the difference was even greater; low readers averaged 239 words or 72 per cent more than did high readers. The higher means in the low reader groups were attributable to the volubility of a few children. When medians were computed, the differences between the reading groups were negligible at

Table VI-1

Ten Measures of Oral Language Compared for
High Readers¹ and Low Readers² in Grade A-2

	Mean of A and B Teams					
	A-2 High Readers N=28		A-2 Low Readers N=26		Difference (High-Low)	t
	Mean	S.D.	Mean	S.D.		
Basic Measures						
Number of Words in Mazes	66.02	70.2	82.11	77.9	-16.09	-.78
Number of Reportage Responsums	19.41	7.3	16.98	10.6	2.43	.97
Number of Words in Reportage Responsums	58.68	27.3	50.16	37.8	8.52	.94
Number of T-Units	38.60	28.6	44.73	38.8	-6.13	-.65
Number of Words in T-Units	254.30	223.4	297.56	280.7	-43.26	-.62
Total Number of Words	379.09	298.8	429.82	377.4	-50.73	.54
Derived Measures						
Mean Words Per T-Unit	6.20	1.2	6.12	1.2	.08	.24
Percent of Words in Mazes	15.21	7.8	17.12	7.4	-1.91	-.90
Percent of Words in Reportage Responsums	20.89	12.8	18.00	11.7	2.89	.85
Percent of Words in T-Units	63.86	10.81	65.12	11.54	-1.26	-.41

¹ Mexican-American A-2 pupils whose scores on Total Reading, Stanford Reading Test, Primary I, placed them in the highest third of this grade.

² Mexican-American A-2 pupils whose scores on Total Reading, Stanford Reading Test, Primary I, placed them in the lowest third of this grade.

Table VI-2

Ten Measures of Oral Language Compared for
High Readers¹ and Low Readers² in Grade A-3

	A-3 High Readers N=31		A-3 Low Readers N=29		Difference (High-Low)	t
	Mean	S.D.	Mean	S.D.		
Basic Measures						
Number of Words in Mazes	48.48	32.57	104.48	130.40	- 56.00	-2.28*
Number of Reportage Responsums	16.35	7.36	21.38	10.83	- 5.03	-2.08*
Number of Words in Reportage Responsums	49.90	22.13	62.24	39.43	- 12.34	-1.48
Number of T-Units	33.90	16.38	56.62	60.02	- 22.72	-1.99
Number of Words in T-Units	231.52	114.82	402.10	461.74	-170.58	-1.96
Total Number of Words	329.90	149.12	568.83	612.50	-238.93	-2.07*
Derived Measures						
Mean Words Per T-Unit	6.75	1.02	6.64	.94	.11	.43
Percent of Words in Mazes	13.53	6.69	16.41	7.53	- 2.88	-1.54
Percent of Words in Reportage Responsums	19.13	14.37	17.77	13.78	1.36	.37
Percent of Words in T-Units	67.35	14.24	65.83	13.66	1.52	.41

¹ Mexican-American A-3 pupils whose scores on Total Reading, Stanford Reading Test, Primary I, placed them in the highest third of this grade.

² Mexican-American A-3 pupils whose scores on Total Reading, Stanford Reading Test, Primary I, placed them in the lowest third of this grade.

* $p < .05$

the A2 level, the medians for high- and low-reader groups were 300 and 325 words respectively. At the A3 level, the median of 343 words for the high-reader group was slightly higher than that for the low-reader group (312 words).

One of the results of this large difference in mean sample size is that all the other basic measures are affected by it. Since A3 low readers, for example, averaged 72 per cent more words than A3 high readers, they also averaged a larger number of words in the three categories: mazes, reportage responsums, and T-units. Hence, the remainder of this analysis will be based on the four derived measures of oral language.

Percent of words in mazes, reportage responsums, and T-units. In both the A2 and A3 grades, the low readers had a slightly larger percentage of words in mazes than did the high readers. These differences are in the expected direction but are not statistically significant.

With respect to percent of words in reportage responsums, the high readers had slightly higher percentages than did low readers at both the A2 and A3 levels. No significance, however, should be attached to these differences; both t-ratios were below 1.00.

With respect to percent of words in T-units, the differences at each grade level were small and lacked statistical significance. The same statement can be made with respect to mean length or T-unit for both grade levels.

In summary, the language measures developed to date do not differentiate between high and low readers, in terms of the criterion of reading achievement used.

Next year, we plan to recompute these measures for the different sections of the Oral Language Interview. One hypothesis is that the TV section may have elicited a considerable amount of stereotyped language, i.e. repetitions of phrases used in the TV shows

We know, for example, that lower-class children watch TV (as much or more than their middle-class peers) and can frequently reproduce units of standard speech which they have heard on TV. But that such reproduction is non-functional would seem apparent from the fact that such standard speech is not subsequently adopted as a variant appropriate in naturalistic situations unrelated to TV (5).

It is possible that the language elicited in one or both of the other sections may yield measures which have greater validity, in the sense of differentiating between the reading-criterion groups. We plan also, as explained in Chapter IV, to study a number of additional measures of oral language development.

Rating on children's proficiency in Spanish. As explained in Chapter III, the "warm-up" sections of all typescripts were rated with respect to proficiency in Spanish. The high and low readers at each grade level were compared with respect to their rated proficiency in Spanish. The ratings were dichotomized, with ratings 1 and 2 being grouped together as non-Spanish speaking and ratings 3 and above as Spanish-speaking.

At all three grade levels the Chi-square test revealed no significant relationship between membership in the high or low reading groups and membership in the Spanish-speaking or non-Spanish speaking group. One possible explanation of this lack of relationship is that all children in the Mexican-American community, whether they speak Spanish or not, do learn pronunciation, word order, and intonational patterns which reflect Spanish influences in English.

CHAPTER VII

PILOT STUDY OF SPANISH INFLUENCES ON CHILDREN'S ORAL ENGLISH

Frank Hidaigo

As we read the typescripts, we became aware of an "a-grammatical" quality in the children's speech that seemed to exceed the limits of childish deviations from common grammatical constructions. This quality persisted even into the typescripts of some of the third grade children. It was evident that the children themselves had a feeling for sentence closure even though the sentences often lacked one or more units necessary for complete predication. In addition, we would often find awkward word arrangements and sometimes even confusion of meaning, although the semantic meaning of the child's total communication was clear. We have begun a study of such occurrences. We must distinguish between those a-grammatical constructions which are typical of little children and those which result directly from faulty inference from learned Spanish speech patterns to English speech patterns. The task is a difficult and sensitive one. This chapter is an account of our first moves in this direction, upon which will be based further research and analysis during the coming winter.

Omitted Word: Omission of a word or group of words that is not vital to the communication unit and is at least in part influenced by the omission of the equivalent Spanish word or words.

It was found that the interviewed children's conversations contained many instances of omitted words. We had to distinguish how many of these omissions were at least partly caused by the Spanish linguistic structure. Three such classifications were found: the omission of adverbs; the omission of pronouns; and the omission of auxiliary verbs. Missing adverbs were usually supplementary ones, as in: "picking the rabbit." Notice the omission of the adverb, "up", which, as in most such omissions, denotes "where". Another similar example is "put something" in which the adverb "there" is omitted. The frequency of such omissions caused us to speculate that they must be at least partly influenced by the Spanish structure. The Spanish equivalent of "picking up" is "levantando". Notice that the adverb "up" is contained in the Spanish verb. Adverbs may be used in Spanish, but they sound superfluous and are used in cases where emphasis is required. In English, however, the adverbs accompany the verbs to make the meaning clear. Another common omission among Mexican-American bilingual children, and perhaps among unilingual children, involves the pronoun that precedes a verb; for example, "then put" instead of "then he put" or "is about" instead of "it is about" or "has a windshield" instead of "it has a windshield". The use of the pronoun in

Spanish is superfluous and when used, is used for emphasis. The Spanish translations of the above speak for themselves: "luego puso" (then put); "es de" (is about); "tiene un parabrisas" (has a windshield).

A third common discrepancy in this category is the omission of such auxiliary verbs as "to go" or "to be" as in: "the car gonna" or "how you call that?" The Spanish translation "el automovil va a" and "como le llamas?" indicates the influence which Spanish has on the child's oral English usage, again such usage is not necessarily exclusive to Mexican-American bilingual children. It may or may not occur with unilingual children. We merely wish to indicate that the Mexican-American is more likely to encounter such discrepancies and that Spanish is clearly an influence in these discrepancies.

Word Order: Re-arrangement of a word or group of words in speech due at least in part to the position given it in Spanish.

The repositioning of words by the Mexican-American child may be divided into three parts: (1) the arrangement of response; (2) the positioning of an adverb; (3) the positioning of an adjective.

The verbal arrangement of these children's responses when answering the interviewer's questions sometimes appeared faulty; for example, "I know what's his name." Adhering to the structure, the correct form is "I know what his name is." The faulty form of the response may be simply a childish discrepancy common to many children. However, in addition to this possibility, the child is influenced by the form used when he answers a question in Spanish. The question-response form in Spanish is consistent; i.e., "Como se llama?" (What is his name?) "Yo se como se llama" (I know what his name is). Notice that the Spanish form remains consistent in both the question and the response; while the English form changed by the rearrangement of the word "is".

The positioning of an adverb in Spanish is subject to flexibility since it is used for emphasis. Emphasis in Spanish is achieved by the position of words to a greater extent than in English, when emphasis is also achieved by vocal inflection. The confusion of these language patterns results in the repositioning of words for emphasis in English! For example, "walk with him home," or "there's on there two little girls." In phrases such as "came real fast up," instead of "came up real fast", there is a delay of the adverb because such adverbs are omitted in Spanish since they are already contained in the verb.

The third category, the positioning of the adjective, is very directly, though probably not solely, affected by the Spanish structure. "A little cute doll" is used instead of "A cute little doll" because the Spanish form allows for greater interchangeable positioning of the adjectives since usage does not determine the arrangement. "A little

cute doll" sounds awkward in English. In Spanish, "una muñeca pequeña y bonita" sounds equally as acceptable as "una muñeca bonita y pequeña."

Unilingual children may make the same errors, but we must recall again that the Mexican-American bilingual child has more reason to err.

Extra Word: Insertion of a superfluous or redundant word or group of words influenced at least in part by Spanish.

This need not be used exclusively by a Mexican-American bilingual child, but it seems that while it is used by many children, it is more prevalent among these Mexican-American children due to influence from the Spanish language, to which many children refer when confused about the structure of a sentence. Examples taken from the interviewed children include: "gonna go play;" "she looks more prettier;" "this one's more gooder;" "because it is more littler." The superfluous "go" in the first example has appeared frequently in the interviews. To a Mexican-American the word "ir" (to go) is sometimes used to form the future tense in spoken Spanish. The English counterpart also becomes part of the future tense, not solely because of the structure transfer, but also because it is misused in English. In the phrase "gonna go play", the first "go" denotes the future tense, while the second one indicates the act of going. The Spanish translation, "voy a jugar" or "jugare", like the English form, "I am going to play" or "I shall play". Why "go" is inserted in this position is, however, not clear. In the second and third examples, the extra "more" before the comparative adjective seems a common error among many children of this age. However, as in the previous example, this form is influenced by the Spanish structure in addition to being a common error in English. All comparative adjectives in Spanish are formed with "mas" (more) or "menos" (less); while in English only a handful of adjectives need the "more" or the "less". Thus, when the child uses the Spanish structure in English, the comparative adjective will usually be accompanied by an extra "more" or "less". Why it is used in English needs no explanation here and to what extent it is used in English in comparison to Spanish is beyond our realm of research. We can only hypothesize that such discrepancies are more often found among Mexican-American bilingual children than among unilingual children simply because there are arithmetically more reasons or motives behind the former than there are behind the latter for so doing.

Word Modification: Modification of a word identified by a missing, different, or additional suffix or prefix or a form influenced by Spanish or taken directly from Spanish.

A Mexican-American child who speaks Spanish is tempted to change the sound of an English word by employing a part from a Spanish word and attaching it to the English word, using it in place of the appropriate English word. For example, the plural ending for Spanish words ending

in consonants is "es". However, the plural ending for most English words ending in consonants is "s". Thus, when the rules are mixed, the result can be "cartoones". Many children confuse the present tense endings of regular verbs because the third person singular is the only tense that ends in "s". This confusion is aggravated for the Mexican-American bilingual child, especially if he refers to Spanish for the construction of this ending. (It seems to occur often in their oral language.) The problem between the Spanish and English construction involves only the singular of the second and third persons. This latter problem is exemplified in the following paradigm:

You go Tu vas

He goes El va

Notice that the ending "s" is used in the two opposite persons.

While the unilingual child's problem can be solved more easily by simple explanation by a teacher, the Mexican-American bilingual child, who has to contend with both problems, needs further clarification.

Word Substitution: Substitution of an English word by a Spanish word or by its direct English equivalent.

Mexican-American bilingual children use the Spanish negation form and sometimes apply it to the English. A result is: "I no have". The Spanish equivalent is "yo no tengo". Notice that "no" was used in both languages to negate the verb.

The confusion of prepositions and the use of prepositions presents a special problem to Mexican-American children, since Spanish prepositions are often ambiguous when translated. For example, the Spanish preposition "en" can mean "in", "for", "on", "upon", and often, though not legitimately, "at". Thus, when Spanish requires the use of "en" the bilingual child is left to figure out what English equivalent to use (goes on her car.)

Spanish wording of ideas often interferes with English! A child speaking Spanish to his mother would ask, "Podemos hacer la comida?" "Can we make the food?" is the word-for-word translation; but it is not the way the question should be asked in English. "Cook the food" is not necessarily unknown to the child, but it is not the closest association that he makes when thinking in Spanish.

Mexican-American children who are more or less proficient in the use of Spanish will, according to the environmental circumstances, use a Spanish word itself to replace the English unknown or remote counterpart. This serves as an often easy alternative or escape for the child who would otherwise ask for help or take time to figure out the correct English word.

Words that are singular in Spanish may be plural in English and vice-versa. For example, the word "people", when meaning a group or gathering, is singular in Spanish and plural in English. "These people" is equivalent to "esta gente". But "esta", when isolated, is translated "this"--thus, "this people."

CHAPTER VIII

PILOT STUDY OF CHILDREN'S PROFICIENCY IN SPANISH

Hector Estrada, Robert Gomez, and Richard Montes

"If Juanito doesn't read, should we blame the child, his teacher, or his environment? There are many reasons why the Mexican-American child in California seems to be a slow learner, but unfortunately the reasons are not readily admissible or adequately understood by the classroom teacher" (4).

Juanito, the Mexican-American child, dwells in a bicultural environment. The material values, concepts of social institutions, beliefs, aesthetics and languages that are sought to be integrated within his own personality are the reflection of two distinct cultures. First, there exists the culture of the English-speaking Anglo-American. On the other hand, there exists the culture and tradition of the Spanish-speaking world which has its roots not only in the Southwest but also in all of South America. This child brings with him to the school these nascent concepts of a society where two cultures are mingling with each other to give rise to a cosmopolitan way of life and an individual who is able to relate and communicate to more than just one type of American citizen. When the doors of the school are open to Juanito, he finds there a unilingual, unicultural structure which reflects little of the aesthetics, material values, language, and concepts of social institutions which form part of his personality.

Part of the reading process is to reach and instruct the child. It is germane to any reading program to be concerned with the communicative ability of the child. It is essential to know how the child will cope with the English sound system, what problems he will have with the English sentence structure and sentence pattern. And it is very important to know how to best enable the child to adjust to the school environment so that he might function to his optimum.

Before entering into a discussion of the characteristics of Juanito's communicative ability, we would like to point out two problems which make it difficult to speak about the bilingual child's problem in oral and written language development. The first problem is the deplorable dearth of research on the subject. With respect to this problem we can only say that sufficient research done now can forestall great educational problems and waste in the future.

The other problem of which we speak is not directly related to reading development itself, but is an area which must be guarded against so that one will not approach any related study with a preconceived notion of Juanito's ability. This problem is that of the prevailing misconceptions surrounding Juanito. These misconceptions are due in large measure to individuals who arrive at certain conclusions about Juanito using a one-sided frame of reference. For example, in discussing the Mexican-American child, it has been said that the "lower class" child shares little, if any, of the middle class teacher's horror of filthy talk, impure accounts, and messy grammar. They go on to say that this child talks bluntly in the argot he has learned in his portion of the wrong side of the tracks, and is interested only in communication, not in form. They warn teachers that foreign-speaking students use their language, or patois, as a tool to irritate teachers, once they learn that it can be an effective goad. Others imagine that the Mexican-American child is given two languages in which to excel and yet he does not advance in either. We cannot say that every Mexican-American child can and does speak Spanish even though it may lie at the root of his reading problems. And, the mere fact that the child is exposed to English in the school is no guarantee that he can excel in the language. The child's problem may center around the manner in which he is instructed. Furthermore, we often hear the sentiment that the Mexican-American child prefers to speak Spanish. The implication, we believe, is that no matter how hard one tries to teach these children English, they will never learn. If our inference is correct, then, the above sentiment does an injustice, not only to the child, but also to the idea that men are able to develop linguistically and intellectually in more than one sphere of endeavor. All these misconceptions lend support to the narrow concept that individuals who "talk different" are inferior. Moreover, these outlooks reflect in some measure the confusion surrounding the verbal phenomenon which comprises the little world of Juanito.

According to one of the few recent studies on the subject, the apparently slow-learning Mexican-American child can profit from being taught those verbal skills which his environment has not inculcated into this complex system of communication. Work with what had been termed retarded Mexican-American children showed that these children displayed surprising intellectual growth over a short period of time after being properly instructed with respect to certain problem solving processes (9, 17). One of the implications of the study is that the Mexican-American children involved in it had been termed retarded, but actually were not. There is an indication here that if the necessary verbal skills are provided early in the Mexican-American child's life he will transfer such training in a positive manner to other learning experiences.

It appears that the children with the special problems in reading and oral communication are those who do not speak either language exclusively nor are bilingual. These children have a somewhat confused manner of communicating. Their language borrowing is not pronounced; yet the influence of Spanish on English is evident.

Those children who said that they could not speak Spanish but understood it to some extent left in our minds some doubt as to where they had obtained this comprehension. We wondered to what extent, if at all, Spanish was spoken in the homes of these youngsters. School records indicate that of the six hundred children interviewed, two hundred did not hear Spanish spoken at home. Of the remaining four hundred, one hundred spoke Spanish exclusively in the home. Three of the four hundred had Spanish spoken to them in the home but not exclusively.

There are various situations where Spanish is more likely to be spoken than English. Spanish, for some Mexican-Americans, is the language of the home, the intimate encounters and exchanges of daily life. For others, Spanish is the medium in which they converse with grandparents, special friends, or other acquaintances at occasional gatherings. The amount of Spanish spoken by the children varies from neighborhood to neighborhood, even in the East Los Angeles area where the Mexican-American population is most heavily concentrated. At the Malabar Street School, for example, the number of children who speak only Spanish is small. Yet, a large percentage of the Mexican-American children understand the language to some extent even though they do not speak it. Other children will speak it to their parents or other adults, but will refrain from letting any traces of it appear to the monolingual individual. Weinreich (24) touches upon this problem when he speaks of interlocutory constraint of the bilingual trying to suppress any interference and borrowing in his speech. This phenomenon is the result of conditioning which he has experienced as a child. A child is able to sense the hostility and aversion that others have toward his other language. As a result of this awareness, there is a conflict in the child when speaking to unilingual adults or children in certain situations. The child is torn between expressing himself, and suppressing part of himself at the same time.

For our purposes we wished to know if the child could speak any Spanish at all. In some cases, this was easy to determine by their total lack of comprehension. At times, however, a child would give some indication that he could speak the language, but would be very reticent when pressed with further questions. Even though the interviewer was a Mexican-American and bilingual, he may have been identified in the child's mind with the English-speaking school.

The relationship between the Spanish and English dominance in the Mexican-American child's language development in the East Los Angeles area would be a monumental task for research and would be of great benefit to the citizens of Los Angeles. This project is but the beginning of that monumental task. The function of this section of the paper is to scratch the surface of the verbal phenomenon of the Mexican-American child. In a state where twenty-four per cent of the people with Spanish surnames do not complete more than four years of school and the median grade completed by people with the Spanish surnames is 8.6, anything short of a large scale, scientific evaluation of teaching methods and bilingual language development would be but a scratching of the surface (20).

A knowledge of the speaking habits of the children at Malabar is a necessary adjunct to reading evaluation and training. The remainder of this chapter is devoted to the discussion of those speaking habits as found in an analysis of typescripts obtained from the "warm-up" period of the Oral Language Interview as described in Chapter III. In this chapter, also, there is a description of the evaluation form used in categorizing the typescripts on the basis of the children's proficiency in Spanish. Illustrations of each of these categories is given. These excerpts reveal the living language of a portion of the six hundred children interviewed at the Malabar Street School.

1. CINDY DOES NOT UNDERSTAND SPANISH

EXAMPLES: (Excerpt from page 10 of transcript, tape number 71)

I. Do you speak Spanish?

C. No

I. What if I were to ask you a couple of questions in Spanish, do you think you could answer them?

C. No, because, um.....

I. O.K., but we'll give it a try anyway. Que te gusta hacer mas en la escuela?

C. Fine.

I. Fine? Uh-huh (yes, fine). Que te gusta jugar en la escuela?

C. No response from the child.

- I. Que te gusta jugar en la escuela?
- C. What wa dat agin?
- I. Que te gusta jugar en la escuela?
- C. I don't get you.
- I. All right, . . . if you can't answer this one, we'll go on. Que te gustaria hacer cuando estes grande?

EXAMPLES: (Excerpts from page 6 of transcript, tape number 61)

- I. Cindy, can you speak Spanish?
- C. No response
- I. A little bit? Poquito? Let's try it, O.K.? De todas las cosas que tu haces en la escuela, que te gusta hacer mas?
- C. I don know how to talk that way.
- I. No? Let's try another one, O.K.? De todos los juegos que juegas tu en la escuela....(here interrupted by child)
- C. I don even know how to talk that way, I don't know how to talk that way. Just this way.

At first blñsh these children appear to be examples of children who are simply unable to communicate in two languages...Spanish and English. Further questioning, research and testing may reveal this to actually be the case. But we would like to take this opportunity to discuss the phenomenon which Weinreich calls the interlocutory constraint. Interlocutory constraint occurs when a child curtails his use of another language because he is conditioned to refrain from using it. At this point, there can be no declarative pronouncement as to the extent of the existence of the phenomenon at Malabar Street School. The Mexican-American child comes from a milieu where bilingualism is the accepted and common mode of expression. True, there are Mexican-American children who cannot speak Spanish; and some that cannot even understand it. However, there are those who do speak it. Moreover, a great majority can understand it when it is spoken to them in the familiar situations of the neighborhood. When the individuals of the latter type come to the schools, they are placed in an environment which, if not hostile to their mode of expression and reception, is insensitive to this aspect of the child's language development. To quote Weinreich in this matter:

in speaking to unilingual, the bilingual often tends to limit interference and to eliminate even habitualized borrowings from his speech. He is subject to what has been called interlocutory constraint, which requires that he somehow make himself understood in his unilinguals interlocutors tongue. In those specific situations where a mere trace of another language is regarded as a social stigma, the speaker is, of course, constrained to much more than mere intelligibility (24).

The immediate problem, if it can be termed as such, is that these children cannot understand Spanish...according to what they have told the interviewer. Does this help them to become better readers in English? And, if it does, will this greater ability in English help them adjust to their community and become good citizens of the community? Does the fact that the school does not reflect the cultural values of the community produce within the child a feeling of aversion to either one or the other?

These and similar questions must be answered before the effect of bilingualism on learning capacity of children can be determined. It may be that in the ultimate analysis bilingualism is an asset to learning. Surprisingly enough, there has not been a great deal of research on the matter. There are various other factors that can account for a bilingual's poor showing in scholastic achievement. Only a few of these factors are enumerated here: (1) low economic status, (2) not being truly bilingual, that is, not proficient in either language, (3) distrust of the peer group within the school system, (4) lack of encouragement, (5) lack of achievement example.

II. JOSE SPEAKS WITH DIFFICULTY

I. Jose, que te gusta hacer mas en la escuela?

C. Ahh...no sabo.

I. De todas las cosas que haces en la escuela, que te gusta hacer mas?

C. Pinta (meaning pintar).

I. Y eso como se hace?

C. A pinta con...con...brosha.

- I. Con broshas e, y luego?
- C. Uu...y ahora... yo haso...mas cochas y...yo, yo hago mi las name...ah ah hora me gusta cer sine...ahora, ahora, tam...tam...tambien esta u...a...u...juga de aks.
- I. Dime porque te gusta?
- C. Po...poque, poque pa ya mi casa jogo tambien.
- I. En tu casa juegas tambien, eh?
- C. Y tengo blocks tambien.
- I. Y como se juega?
- C. Ahh...ah...ponge asina hora, hora y...

If we view the problem of a Mexican-American child who has difficulty with Spanish as merely a lack of proficiency in a foreign language, we overlook the possibility that for a Mexican-American the ability to speak Spanish is closely linked with the ability to express oneself confidently in either language. This child's Spanish usage was less than adequate. The fact that he was able to communicate in Spanish to some extent is an indication that in some areas of his life this medium of expression is expected of him. Despite these expectations, Jose is slowly becoming some type of metamorphic specie of amphibian who is sitting on the shore of this sea of bilingualism becoming more and more reluctant to venture forth.

The confidence of this child in language development is in jeopardy because he lacks the facility to communicate in this area. We do not mean to insinuate that this particular child is linguistically handicapped in the eyes of our school systems. In fact, he may excel in our school systems which are geared to the English-speaking child. But in terms of his environment, he lacks certain tools that would enable him to achieve greater expression. The question then is, would this greater expression in his own environment redound to this learning capacity as an individual and as a student in Malabar Street School.

As a matter of fact, Jose did experience difficulty with both English and Spanish. In Spanish, the verb forms that he used were neither fish nor fowl. By this, we mean that they were not the accepted form of Spanish conjunction, but were not attributable to English verb forms. For instance, the Spanish for "I know" is "se". This child made use of "sabo" to express this concept. There is no such word in Spanish. However, the form is the proper form for the first person singular in the conjugation of many Spanish verbs. The child was making a logical guess at what he thought the form should be. Jose has

to some extent habitualized Spanish forms with even his minimal contact with Spanish. He has a certain foundation in Spanish that is slowly deteriorating. One facet of his communicating system has developed to a certain extent. Jose will either remain at this poor level of development or lose all ability to speak Spanish. What bearing does this have on English usage or reading? This is a matter that needs to be clarified by research. As a matter of hypothesis, we offer these suggestions. In teaching a child to communicate in English should not the linguistic habits of the child be taken into consideration in order that the proper verbal skills can be stressed? Giving the child confidence and a more solid foundation in Spanish could stimulate his language development and provide him with a more favorable outlook to the system which in his mind is identified with the English language.

In the past the solution to the bilingual's problem has been to ignore one language. Rather than have Spanish treated as the problem of the bilingual, there is a possibility that Spanish can be used as an aid at arriving at a greater ability in expression upon which English can be superimposed. The English speech system of the children at the Malabar Street School evidences interference from the Spanish sound system. In the past, these problems have been ignored and a stress has been placed upon achieving correct English pronunciation. Perhaps it would be more beneficial to identify the problem for the child by teaching him the sounds and spelling of the Spanish, and noting the distinction between the two languages.

III. JACK SPEAKS SPANISH WITH RELATIVE EASE

- I. Dime, de todas los juegos que juegas en la escuela cual te gusta mejor?
- C. Sockbaw (sockball) an kickbaw (kickball).
- I. Dime, como se juega sockball?
- C. Este, tiene a...avientan el "pitcher" una pelota, y la agarra uno, y luego le pega la pelota, y luego se tiene que ir a primera y luego segunda, y luego tercera, y "home".
- I. Dime como se juega kickball?
- C. Este, pichan (local usage) la pelota y le pegan con el pie, y cor....tienen que ir a pri....., seg....primera luego segunda, y tercera, y luego "home".
- I. Y?
- C. Y lue....y luego ot...el...el...el. Otro tiene que agarrar la pelota, y aventarsela al pitcher, para aue aviente adentro.

- I. Y cuando estes grandote, que te gustaria hacer?
- C. Aviador.
- I. Y si tu fueras aviador, que harias?
- C. Este...volar los aviones.
- I. Y.
- C. Y este....ir a muchas partes. Y luego este....da...tenia que este....aterrizar para que la gente se bajara.
- I. Y luego?
- C. Y luego este, cuando ya me iba a bajar, te ia que hablarle al araport pa que me diga si puedo bajar o no, y luego bajo y ya.

There were not many children that could speak Spanish with relative ease. Reticence in this matter could be attributable to the artificial nature of the interview, or the child's inhibition to speak Spanish in this school environment. Those who did speak Spanish with ease give an indication that in some areas of East Los Angeles Spanish is still the language of the home. The environment adjacent to this school makes certain demands of the children in the area of bilingualism. The "Mom and Pop" stores, the "panaderia", the disappearing "tortillerias" expect the child purchasing some item to be able to converse, or at least understand, Spanish. The child is made to understand that to communicate with a certain segment of the community he must learn to speak Spanish. If the child is not taught to speak Spanish, he will look upon those who depend upon it exclusively with a certain lack of empathy. He will not be able to communicate with the older people in the community and those who for some reason are exclusively Spanish speaking. These individuals are of great concern to other Spanish speaking individuals in that this type of non-Spanish speaking person will not be aware of the problems and customs, loves and sorrows of the community.

In speaking of the children that can speak Spanish with relative ease, we must discuss them in terms of two categories. The first category is that of the child that speaks Spanish with relative ease because it is the only language that he has spoken. Many of the children born in California are raised with only a knowledge of Spanish. On the other hand, about twenty per cent of California's Spanish surname population was born in Mexico, according to the Mexican-American Study Project as of 1960. (Progress Report, No. 5, April 5, 1966). The April Progress Report further states that among these immigrant people from Mexico is a relatively small percentage of school children

age--less than 4 per cent. "These 24,000 students of foreign birth represent a probable language problem in the schools" (16). These children do have some success in the school systems. Seventeen Mexican-American college students working on this project, were asked which language they learned first. Eleven replied that they spoke Spanish exclusively during the early years of their lives, but with time they managed to achieve a dominance in English. These college students attended California State College at Los Angeles, East Los Angeles College, and Loyola University.

The other category of youngster that speaks Spanish with relative ease is one that is bilingual and was born in the United States. This type of individual is not as common as one would be led to believe. Usually, this child comes from a home where a grandmother speaks to the children in Spanish, or where one of the parents persists in speaking to the children in Spanish. Occasionally, such a child will come from a home where only Spanish is spoken and the child has managed to acquire a facility in the English language through television and the talk of the other children in the neighborhood.

There is no evidence that the ability to speak Spanish is a hindrance to the acquisition and mastery of English. In fact, there are many Mexican-Americans that have risen to positions of prominence in the Los Angeles School System and in the political arena only after acquiring this second language: English.

When speaking of individuals such as these, it is safe to assume that they will never entirely lose this ability to speak Spanish. This is especially true if these individuals remain in the East Los Angeles area. The influx of Spanish for the trained ear is very great in East Los Angeles. There are instances where one can hear the slang terms of the Los Angeles Spanish being spoken, and then there are areas where one can hear very good and proper Spanish. Twenty feet from the Southeast fence at Malabar Street School at 9 o'clock in the morning one can hear very good Spanish spoken as two of the women of the neighborhood indulge in an exercise of locution that can be heard even in the school building itself. Thus, it is that these children whose ears have already been trained to pick up the Spanish sound system, have an excellent opportunity to retain it even in light of the discouragement in the area.

IV. GUADALUPE IS BILINGUAL

I. Que te gusta hacer mas en la escuela?

C. Jugar.

- I. Este..jugar con la pelota?
- I. Jugar con la pelota, como se juega?
- C. Unos estan afuera y unos estan adentro y agarran la pelota en la mano y le haces asi (gestures) y tienen que correr a una..a una cuarto donde esta un chiquillo, al chiquillo donde esta la pe..donde esta alli, donde tienen que correr y la pelota llege mas primero que yo estoy out, yo y ya sigue la siguiente persona.
- I. Que te gustaria hacer cuando estes grande?
- C. Esas que le dan comida a los que los que los del avion.
- I. Una "Stewardess."
- C. Um-huh.
- I. Porque?
- C. Porque nunca a viajado en un avion.
- I. What do you like to do best in school, Guadalupe?
- C. Play.
- I. And of all the games you play in school which is your favorite?
- C. Sockball.
- I. How do you play that?
- C. You put da ball in your hand and you sock it an..an..a boy cash da ball an den..den goes da next person.
- I. I see, Guadalupe, what would like to be when you grow up?
- C. Umm...da lady whos gibe good inna...in dee...airport.
- I. The Stewardesses?
- C. Yea.
(The following is taken from the body of the interview.)
- I. Can you make up a story about what is going on in the picture?

- C. He was playing ball an den a big boy he di-ent let ah da big boy play an an he an he anda big boy waned to play an he hit da liddle boy an he wen he went an run antell him mother.
- I. Can you tell me more?
- C. Den his mother cam an toll 'im "Why did you hit him?" An den da boy splain all dat what- what happen an an den da lady da da boy's un mother toll him toll da ah big boy to tell him sorry he did.
- I. What else?
- C. Becuzz it da daly said becus dat he was goona call da police. It didn't happen again, what happen to da liddle boy.

Although this child's speech is characterized by several other speaking habits prevalent among Mexican-American children, her speech can be said to be typical of the bilingual child in Malabar Street School. She demonstrated that "switching ability" which is indicative of the fact that the child has been exposed to a great deal of mixture of the two languages. There is no way of knowing whether she has a proneness for "switching" which will interfere with one or the other language. She appears to be able to switch from one language to the other with no interference. This situation is ideal as far as being able to communicate in both languages is concerned. The child gave similar answers to questions which were asked in Spanish and were subsequently posed in English. She could deal with concepts in both languages and was not hindered by a lack of vocabulary as was the case with many of these children.

This child did have trouble with the word "stewardess", and the problem was present in both English and Spanish. Even though she could not find the correct expression for her idea she managed to give an accurate description of the activities of a stewardess.

It is beyond the scope of this work to go into the realm of ideation of the bilingual child. Such a subject is not only highly theoretical but engulfed in a sea of conflicting theories.

The more immediate and germane problem for Guadalupe is the acquisition of a sufficient vocabulary that will enable her to communicate more effectively. Whether all children encounter like problems or whether the problems of the Mexican-American child are distinct is a matter that can only be answered by research and experimentation. The problem may be one of lack of sufficient stimulus; in which case, the school would have to make up for the lack of stimulus in this child's

life. The environmental factor in language development is one that cannot be overlooked if one is to have a proper outlook on the mode of expression used by these children. There is a relationship between experience and expression in a sophisticated manner that cannot be minimized if the child is to achieve confidence in this area. Whether this child's environment has provided the various experiences which are needed to form the basis of a complex system of communication is a question which concerns us only in so far as it relates to the child's reading ability to read in English and is related to her ability to receive instructions and convert those instructions into meaningful guidelines in the reading process. To estimate the number of words of which the Mexican-American child is unaware as shown by the higher scores of other groups on reading tests would serve little if any purpose. What may be of value is a list of the words that the Mexican-American child needs to know in order to achieve a vocabulary which is comparable to the monolingual child of like age and grade level. The pronunciation difficulties of the Mexican-American child must be understood and eradicated in order that the child can increase his vocabulary.

V. ANASTACIO UNDERSTANDS SPANISH, BUT RESPONDS IN ENGLISH

- I. Anastacio, can you speak Spanish?
- C. Ah liddle bit.
- I. De todas las cosas que haces en la escuela, cual te gusta mas?
- C. ...hanriding.
- I. Dime, como se juega Basketball?
- C. Well..you bounce..the ball...den you throw it up at ah ah (interviewer interrupts).
- I. Can you tell me in Spanish?
- C. Noo--oo.

There were several children who could comprehend Spanish but said that they could not speak it. To questions posed in Spanish, these children would answer in English. To the mind of the monolingual individual this may present the question: "How can a person understand but not speak a language?" The question may not express wonderment but rather disappointment that this child does not fit into a neat little category.

Language, like so many other activities, depends upon habit. Consequently, this failure to respond in Spanish may be due to the lack of development of speech habits in Spanish. If this were the only reason

for this manifest inability to speak Spanish, then instruction in Spanish would provide him with the confidence he needs.

The explanation may be very different. These children may not speak Spanish because of the social stigma that has been imposed upon the language. In some instances this stigma may be due to the parent's attitude toward the language. The parents of some of these children are convinced that "success" in the monolingual society will be attained to the extent that all trace of bilingualism is eradicated from the child's communication. The attitude of such people was commented upon by Tireman in the 1950's. "The people who speak the less favored language are eager to learn the favored one; those who already use it are disinclined to make the necessary effort required to learn the less favored language." (23). One wonders what such an attitude does to the child's self-image. The question is whether in discouraging Spanish you are not stifling some aspect of the child's personality. Spanish cannot be handled as simply a foreign language.

In addition to being discouraged by their parents, these children may have felt that Spanish was a forbidden medium of expression within the monolingual structure, the school. We will never know whether children like Anastacio could speak Spanish. But it does seem understandable that even if they could they would be somewhat embarrassed to speak it. If these children are fortunate enough to continue with their education and eventually reach high school and college, it is there that they will realize that this ability to speak and understand Spanish must be cultivated. The elementary schools are in an excellent position to make the child proud of his ability to communicate in two languages. Even if the child were only able to comprehend the language, this in itself is an ability worth cultivating. Why should our school systems wait until the child reaches college (if he is that lucky) to tell him that he has this ability which he should have cultivated all along?

VI. CONCHITA AND JAIME RESTATE SPANISH QUESTIONS IN ENGLISH.

One example from each of the children follows:

I. Conchita, que te gusta hacer en la escuela?

C. What do I like to do in school? (from here she proceeds to answer in English). ...

I. Jaime, que te gusta jugar en la escuela?

C. What do I like to play at school? (no further answer in Spanish or English).

As illustrated above both children knew what the question meant but were unable, or did not want to respond in Spanish. This again clearly shows that they have been or are exposed to some Spanish at

home, in the neighborhood, or possibly here on the school playground. Here the similarity ends as Conchita after restating the question proceeds to answer and amplify the question posed.

I. Que te gustaria ser cuando estes grande?

C. What do I want to do when, when I grow big? I like to go to high school an'l like to learn da tings, anna I want to grow up an' be a teacher.

Conchita continues this same pattern further on into the interview when the English section is presented.

I. (Picture question) Which one of these do you like the best?

C. Which picture do I like da best? Let's see....

Both Conchita and Jaime restated the question in English that was posed to them in Spanish for apparently the same reasons, to gain reassurance and approval from the interviewer through his acknowledge of the question and its correctness as enunciated by them. This device might have also been employed to familiarize, or to clarify its meaning before attempting to answer the question.

In the Spanish section, as noted, Jaime restates the question as a terminal unit. The interviewer noted that the child seemed to consider the act of restating the question to be an answer in itself. It is possible that child thought that was what the interviewer expected, or that he did not have the self-assurance when he heard Spanish being related to him. When the interview was begun in English, Jaime was much more confident and lucid and did not have to resort to restating the question before replying.

VII. ROGELIO MISPRONOUNCES ENGLISH WORDS

I. What else could you tell me about the little car?

C. Um...iss number seven.

I. What does it say there?

C. Sampion.

C. An... deres where you put da gas righ dere, an..

I. What else?

C. Goes fass..um...otts a um, a plastic window. Umamm...an it crashes.

- I. Which one?
- C. Da miole one.
- I. What are the children doing there?
- C. Ching...well one a da girls are watching the boy, da boys are crying.

A child who does not possess adequate verbal and grammatical skills is the child that does not progress as rapidly as his contemporaries. There is a possibility that rather than maintain a minimal basis of comprehension on the material presented, the child would regress as his classmates advance in their skills. If this is true of a child that only has to contend with one language, how much more true should it be of the bilingually oriented child?

All children tend to exhibit some problems in pronunciation of words. And, we would not have discussed the matter here save for two reasons. First of all, there is a stereotype image of the Mexican-American child as an individual who is unable to pronounce the English language properly. It is unfortunate if this stereotype prevents those who are in a position to analyze and rectify the situation from doing so. Secondly, we are discussing the mispronunciation prevalent among the children of Malabar because the same pronunciation problems keep recurring. A list of the pronunciation problems is provided in the Appendix of this report. This list was provided by Professor Carlos Rivera, consultant to El Paso City Schools (18). The pronunciation problems pointed out in that list are essentially the same problems that are prevalent among the children at Malabar Street School.

"V" is a very commonly mispronounced sound. One often hears a bilabial sound as in "boat" in place of a labio-dental sound that should occur in words such as "vote". The soft "sh" sound is often heard in place of the hard "ch" sound. "Shursh" is pronounced in place of "church". On the other hand, the hard "ch" sound is sometimes substituted for the soft "sh" sound as in "choose" instead of "shoes". The "i" and "e" sounds present further problems for the Mexican-American child. In Spanish, these sounds are consistent and unalloyed. The same is not true of these sounds in the English language. The "th" sound gave the children a great amount of trouble. According to Lado, the "th" sound does not exist in Spanish save for the Castillian usage which is not common in Mexico or the Southwest. Despite the difficulty in the acquisition of this sound skill, it would seem that special awareness would help to alleviate this commonplace problem. These may seem like minor difficulties but one may wonder what these initial errors do to future development and expression.

VIII. IRENE MIXES SPANISH WITH ENGLISH OR VICE VERSA

EXAMPLE:

- I. Irene, que te gusta hacer mas en la escuela?
- C. A estudiar.
- I. Que te gusta estudiar?
- C. Como spelling.
- I. Y que otras cosas te gusta hacer?
- C. Do 'rithmetic.
- I. Te gusta el "Arithmetic?" Irene, que te gusta jugar en la escuela?
- C. Tederball an handball....y lo game leader dijo que sometimes ther's no pushys an sometimes there is.
- I. Y de todos los juegos que juegas en la escuela, cual te gusta mas?
- C. Tedderball y handball.
- I. Dime como se juega tetherball?
- C. Be we...before uhm...cuando...juegan, um...a otra persona bounce sa ball, la pelota entonces la otra persona lleva the way they, they gettem...entonces uh..uh..cu n'o juegan si lo ganan lo puede lanzar si?

There are those children who have a proneness to switch from one language to the other. This brings to mind several possibilities. First of all, this indicates that the child was taught both languages simultaneously and indiscriminately (24). The people who taught this child to speak did not distinguish for the child the difference in the intonational patterns of the two separate systems. The outgrowth of such instruction is the confused system of communication that forces the individual to express himself by mixing the two languages. Ideally, a bilingual individual should be able to control the "switching" from one language to another, and this many true bilinguals are able to do(24).

The bilingual must be able to be dominant in one language. The difference between the true bilingual and the individual we are discussing here is that in the latter dominant language interferes with the use of the servient language. This is an area about which it is not safe to conjecture. This area demands much research; and, unfortunately, it is a common problem.

In the past the solution to this problem has been to strive to make English the dominant language. The method employed to accomplish this has been to instruct the child in English to the exclusion of Spanish so that the Spanish will be eradicated from the child's communication system. The object of this approach is to eliminate the interference from the Spanish in the child's speech. One of the failings of this approach is that it has not solved the problems of the Mexican-American in education as is evidenced by this grade level attained and his reading percentile scores.

One of the bases of language development that should be provided for the child who manifests this particular patois is to make him aware of the different systems that form the foundation of his speech communication. Perhaps, by this clarification, the child will achieve confidence in expressing himself in one or the other language. This confidence in turn may also help the child to become dominant in one or the other language.

The problem, then, is how to make the children aware of the two systems of communication that are causing the problem in his communication. One possible method would be to instruct the child in Spanish and English, separately and discriminately. This would show the child that there are two distinct systems forming the grammatical and spelling differences that are at the core of the problem. Psychologically the self-image of the child would be preserved. Linguistically, this polarity will always exist to some extent. By presenting this child with the duality and noting that there is a distinction between the two, one could possibly enable the children to develop distinct habits in the different languages which will serve for future clarification and expression.

IX. LALO REPEATS WORDS

EXAMPLES: (Excerpt from transcript of tape number 59, page 4.)

I. How do you play kickball?

C. Afer when, when, ah, people pitch da ball, you kick it. An' after after when dey catch, that means you're out. After when you, after when den dey don't catch it, dat means your, you have to rur to da bases an', den an' den of you come back to home...base an' dat an' dat means you're um, um safe.

(Excerpt from transcript of tape number 59, page 5.)

- I. What else can you tell me about the show?
- C. I saw b-baseball. Whenna, whenna guy hit da ball, when he slammed it, i-it wen', it sen', it passed by, to da guy, an' it went, an' it passed da gate, an' den, den after when, when, when it went far, den it, den I got it an' den I trow-it--to da other guy, an' he was, an' he was safe.

The repetition of words has been described by Walter Loban as a "language maze,"

". . . mazes are a series of words or initial parts of words which do not add up, either to meaningful communication or to structural units of communication. . . . They are unattached fragments or a series of unattached fragments which do not constitute a communication unit and are not necessary to the communication unit (13).

The following is an excerpt from the transcription of tape 59, page 6, mazes are in brackets:

- C. (and after when,) den he won, an' den he rest, an' den everyone didn't won, so dere losed. (An' an' den,) den everyone has to rest again. (An' den,) den he won. (An',) an' so in da back, dere he lost. (An' den,) an' den, (cum,) an' den, after dey lost (dere,) dere bad. And dey give.... da man, some money becus he won.

This confusion occurs not only in interview situations but also in the daily talk of the children, in the classroom when they share experiences, and on the playground of the school. Also on several occasions the interviewers had the opportunity to observe the children in action throughout the neighborhood.

"The energy level of the health of the subject may also be decisive factors in the child's success or failure in converting an idea into a genuine unit of communication" (13). Questions that arose in the interviewer's mind might also be answered only through further research. We might ask ourselves whether this may not be a normal pattern for someone of this age and grade level. We wonder whether the fundamental conflict of bilingualism can be understood by terming this a normal pattern in speech development. May not the resultant speech patters, as evidenced by this little boy, be an attempt to accommodate himself to both worlds.

Many Children Respond Differently to the Same Question Asked in Spanish than in English.

One of the most interesting phenomena encountered in the interviews of these children was that some children gave different responses to the same question which was asked in Spanish and then was asked in English. The reason for this is open to conjecture. The first reason that would seem to explain this occurrence would be that children are fickle and can rapidly change their minds about their likes and dislikes. This is a simple and feasible explanation. Yet, this explanation can be doubted.

The child's readiness to change his answer may indicate a difficulty in the child's ability to conceptualize in Spanish. If this child was ever dominant in Spanish, this dominance is now on the wane. There is a possibility that this child is in a precarious transitional stage where ideas are shadows without verbal forms. In the child's language English is manifesting itself as the dominant tongue. This is not to suggest that Spanish will totally lose its influence over the child's emerging language development. What is suggested is that perhaps there is now a stronger identification with English, because of many outside influences, such as school, that are coloring and shaping the child's language pattern.

The child's lack of ability to express himself in Spanish may have a bearing on the transitional expression that the child must experience in becoming dominant and functional in English. The point which is of interest here is to what extent does confusion in Spanish expression carry over and form the basis for further confusion in English expression; a true understanding of the interplay of the two mediums of expression may enhance the expression of the bilingual in both languages.

The child that has somehow managed to compensate for this interference, displays marked tendencies to recognize the same concepts in either language. It is further apparent that the child is not confused by a use of either one of the languages. This child has managed to bridge the gap, the child is able to relegate, in a more structured and coherent manner, concepts as they apply to Spanish and English. Expression is adapted to fit the needs of either tongue, with a reduction of interference from one to the other. The relegation of concepts, as they apply to Spanish and English is at this stage, perhaps, more structured and coherent thus minimizing confusion and interference, gradually becoming more adaptive (receptive) to the particular needs of both languages. Thus, the lessening of interference and interaction of languages produces a growth of confidence in the child's ability to handle both languages, each within its sphere of use.

Summary. Generally speaking, the problem of the Mexican-American child in education can be said to be primarily one of low academic grade level achievement and poor reading ability. To couch the problem in such terms is to do nothing more than restate the obvious conclusion drawn from data now available. Before we can approach the problem of the Mexican-American child at the Malabar Street School, we must be able to articulate and analyze his problem in education. The problem of our children can be articulated on the basis of three major communicative factors: (1) Ideation and expression, (2) Conflicting sound systems of the two languages, and (3) Self-image of the Mexican-American child.

In the area of ideation and expression the Mexican-American child may encounter interference in the formation and communication of ideas. The Mexican-American child on the whole has become accustomed to hearing ideas expressed in Spanish. In East Los Angeles (and this is true in many areas of California), a child hears Spanish spoken all around him even though he may not speak the language himself. The child has been conditioned to lean toward expression in a foreign tongue. But is it really a foreign tongue? Perhaps if we view Spanish as merely a foreign language which is the subject of study only in high school and college, we fail to realize that these children rely on Spanish as a means of self-expression and a necessary adjunct to communication. We now ask the question whether faulty and incoherent expression in Spanish would impede clear expression in English. Or if we put the question conversely, would clear and precise thinking and expression in Spanish rebound to the child's ability to achieve clear and precise thinking in English. A child who is vocal and confident in his use of the Spanish language has only to acquire an English vocabulary in order that he might express himself in English and prepare himself to receive instructions in English. A child who has a vague and unstable basis of expression in Spanish must be provided with the experience and process of ideation in English. For those children who lack a clear and precise command of the English language, there may exist a tendency to revert to Spanish expressions that they themselves use or have heard in order to communicate in English. The child is not aware of the dissimilarities that exist between the two modes of communication. Furthermore, if the child is relying on errors in Spanish, no one will ever know the precise dissimilarities that exist between English and the child's own form of Spanish.

Aside from the problem of possible ambivalent propensities in the area of expression, the Mexican-American child has to face conflicting sound systems in his endeavor to arrive at greater expression in the area of speech and reading. First with respect to speech the child may not care to express himself in the classroom because he realizes that his speech is different from that of the teacher. His accent and intonation will perhaps be different from that of his teacher. This in turn may have some bearing on the child's readiness to receive instruction and to communicate concerning the things that he has learned.

Quite possibly, the difference in intonational patterns between the two languages may be a stumbling block for the child in discerning whether he is being asked a question or being told something.

When the child is taught to read English he is taught that certain letters or group of letters represent a certain sound. And in English, the same letter may not represent the same sound but is determined by the letters surrounding it. For example, "i" in the word "pick" is a totally distinct sound from "i" in the word "pipe". In Spanish, the letter "i" in the word picar represents the same sound as "i" in piporro. The consistent and simple sound system of Spanish can cause great confusion when the child experiences interference from Spanish in learning to read English. If the child were made aware of the differences between the Spanish and English sound systems he could distinguish in his own speech the influence of one upon the other. This could clear up his phonetic system and provide a basis for further unimpeded reading progress.

The third facet of the Mexican-American child's problem with respect to his achievement in education is the child's self-image. Does the Mexican-American identify himself with the Spanish language? This idea must not readily be thrown aside. The Mexican-American child must realize that to some extent his very existence is imbued with a culture that finds its expression not in parades or motion pictures or plays, but in the real life encounter of a language. The food he eats is known through Spanish terms. The music that is identified with him is known for its Spanish lyrics. His very name is a carry over of some Spanish term. To tell the Mexican-American child that he must not speak Spanish in the school which he attends leaves him with the idea that in order to succeed he must renounce his cultural background, the food he eats, the music he hears, and his very name. If in fact, the Mexican-American child were made to appreciate his language background, he would be provided with a more positive outlook on his own culture in relation to the school system. He would not feel that success depended upon the rejection of a facet of his personality. Given a more positive mental attitude, the Mexican-American child could overcome the initial frustration that he encounters in the early years of his school career. In essence a child must learn things for himself and not from a teacher. There must be instilled in the child this desire to learn, to search for the truth, to be intellectually curious. Once the child has the desire to do these things, he can overcome the occasional failures that form a part of the learning process. However, if the child never tastes success, never is made to realize that his mind functions like that of his fellow human beings, such a child will not achieve the realization of his potential. He and society will share the loss.

CHAPTER IX

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

At this point in our three-year study, we have only preliminary findings with respect to base-line data in reading and oral language; our conclusions must be tentative; and our recommendations must be chiefly recommendations for further study.

Preliminary Findings. The preliminary findings on children's reading ability, as measured by standardized tests, indicate a generally low level of accomplishment throughout the primary grades.

1. The vast majority of children completing the A1 grade are not yet reading at a level which can be validly measured by the state-required test for this level. Children in the lower half of A1 (with respect to reading achievement) made near-zero or negative scores when test scores were corrected for guessing. One-fourth of A1 children recognize three words or fewer from a sample of words common to the two reading series used in their classes.
2. A large percentage of the children completing A2 are not yet reading at a level which can be validly measured by the state-required reading test. More valid results are obtained by using the easier Primary I battery. Even on this battery, however, the 90th percentile was three months below the national median in paragraph meaning and vocabulary.
3. The Sight Vocabulary Test, developed for this Project, shows steady progress by grade level from B1 through A3. That is, children are making steady and measurable progress in terms of learning to read the words in the reading series used in class. However, no inference can be made from this type of test concerning the children's comprehension of material read.
4. By the end of A3, the median grade placement in Reading Total is 1.8 years below national norm on the Stanford Reading Test* and 1.3 years below national norm on the California Reading Test. Approximately 10 per cent of A3 pupils exceeded the national norm on the California Reading Test.
5. In arithmetic fundamentals, where the children are not handicapped by their below-average facility in the language of instruction, children's achievement is highly satisfactory. The A3 median is at national norm (3.8 in 1964). As one

* See p.50a for discussion of representativeness of norm sample for Stanford Achievement Test.

would expect, achievement in arithmetic reasoning, which is affected by reading ability, is not as high. Even here, however, there has been a definite improvement over the three-year period, and one-fourth of A3 pupils are working above national norm.

The base-line data for oral language are far from complete. Pre-primary tapes have not been studied, and only the first-level analysis has been completed for the A sections of the primary grades.

Preliminary findings from the first-level analysis for Mexican-American pupils in grades A1, A2 and A3 indicate that:

1. The percentage of words in maze materials was approximately twice as great among these Mexican-American pupils as among the primary-grade pupils studied by Loban (who were representative of pupils in the Oakland, California schools (13)). These data are not strictly comparable, of course, as the instruments differed. However, since each was an "open-ended" sampling of oral language, results may be legitimately compared on such large deviations as this.
2. The percentage of words in maze material did not decrease as expected, with grade level; however, the percent of words in reportage responsums (meaningful incomplete predications) did decrease significantly between A1 and A2.
3. There was a consistent increase with grade level in the percent of words in T-units, with a larger increase from A1 to A2 than from A2 to A3.
4. There was a consistent increase with grade level in the average length of the T-unit, with the T-units in A3 language samples averaging approximately one word longer than those in the A1 language samples. For this measure of language development, the increase between A2 and A3 was greater than between A1 and A2.
5. None of the oral language measures studied to date differentiated between low readers and high readers. The criterion groups used were those scoring in the lowest third and highest third with respect to corrected raw score on Reading Total. Stanford Primary I comparisons have been made for the A2 and A3 grades.

Tentative Conclusions. Final conclusions concerning the children's progress under the Project instructional program must be deferred until end-of-project data are available in 1968 for primary-grade pupils who have spent differing amounts of time in the program.

Obtaining and analyzing oral language samples is too expensive a process to justify assessment midway through the project. Nor can we justify supplementing the state achievement testing program for midway testing to the extent that we did this year for the purpose of obtaining baseline data.

Our base-line data on reading achievement justify the conclusion that the average reading achievement of Malabar Street School primary-grade children is markedly below national norm. Although the state-required tests in A1 and A2 are too difficult to yield valid results for the majority of children, the results for the easier battery in A2 and for all three tests in A3 confirm this conclusion.

A number of findings justify the conclusion that children and teachers are striving to achieve and are making progress in many respects. Comparisons of medians from the California Achievement Tests administered in 1964, 1965 and 1966 show improvement in almost all subtests. The average achievement of A3 pupils in arithmetic fundamentals, in which language is less of a factor, was up to national norm in 1966 and exceeded the 1964 average by six months. Mean scores on our own Sight Vocabulary Test increased consistently with grade level.

We have found three types of evidence of progress in oral language development during the primary grades: (1) a reduction in the percent of words in "reportage responsums" (meaningful incomplete predications); (2) an increase in the percent of words in T-units; and (3) an increase in the average length of T-unit. There is wide variability within grade level with respect to each measure of oral language development studied. Although these three derived scores on oral language development show improvement with grade level, none of them differentiate between low and high readers at either the A2 or A3 level. This puzzling finding remains to be explained. As we obtain additional measures of language development in the Level Two analysis, and study their intercorrelations, we may be able to reach conclusions concerning aspects of oral language development which are especially relevant to reading achievement.

Conclusions re Research Techniques and Instruments Employed.
We have been able to obtain language samples from children which yield reliable data on the child's oral language development in English, as well as the child's proficiency in Spanish and the extent to which he uses Spanish words when he is conversing in English. These samples also yield valuable evidence concerning recurring errors which reflect the influence of Spanish upon the children's oral English language. An adequate degree of reliability for group comparisons was obtained when the Oral Language Interview was administered to the same children on two different occasions by two different interviewers.

The bilingual interviewers were able to elicit considerable conversation from children in the Oral Language Interview. Through preliminary tryouts open-ended questions were developed about the children's favorite TV programs which elicited a measurable flow of conversation. Toys which would elicit conversation were selected for the Toy Shop section of the Oral Language Interview; and three of the six Loban pictures which elicited the most conversation were chosen.

We have succeeded in obtaining typescripts which are sufficiently faithful reports of the child's speech so that analysis of the typescripts can be substituted for listening to tapes in a majority of cases. This achievement was made possible by the use of bilingual transcribers who sought to attain the highest standards of accuracy in their interpretations of the tapes.

Recommendations with Respect to the Project Program. Our recommendations in this area have grown out of our day-to-day experiences in the classrooms, our all-day conference with project teachers, and many informal conferences with the principal community leaders, teachers and research team members.

1. Parent participation in the classrooms should not only be continued but expanded. At our all-day conference, many teachers expressed their appreciation of assistance given and offered suggestions concerning ways in which more mothers could participate, e.g. having volunteer college students supervise the play of younger siblings while mothers assisted in the classrooms. We agree with Bettelheim (1) about the crucial importance of working with parents, especially in a geographic area from which children come who need so much academic help. As Bettelheim says,

If we were really serious about doing something for the intellectual development of underprivileged children, we would have to make our influence felt in their homes by encouraging parents to change their intellectual expectations and aspirations for their children ... and to make learning supplies, periodicals and books available. (1).

2. New instructional materials, especially designed for Mexican-American children, should be developed in cooperation with the teachers of the Malabar Street School.

- a. The Project Directors are developing a guide for project teachers, which will incorporate our findings concerning pupils' recurring problems, and explain and illustrate methods that have seemed to be most effective in working with children at the Malabar Street School.

b. Supplementary reading books especially designed for Spanish-English speaking children should be developed and duplicated for use.

c. Materials should be developed to help teachers in their phonics program, with emphasis on the phonemic conflicts between Spanish and English, which seem to be a source of at least as much difficulty as morphological or syntactical confusions.

d. Self-teaching aids, especially suited to the needs of these children, should be developed so that the self-directive aspects of the program can proceed with maximum efficiency.

3. The cultural heritage of Mexican-American children must be emphasized in all possible ways which increase their pride in their ancestral culture. We plan to introduce songs, dances, poetry, and folk-tales in the Mexican tradition as often as is feasible.

4. Since the Spanish language is not only a symbol of the Mexican-American child's cultural heritage but is also a potentially valuable linguistic tool, the teacher's supportive attitude toward the use of Spanish during the child's school day should be continued and encouraged. The materials we develop on the similarities and contrasts between Spanish and English, as well as the supplementary readers mentioned in 2b above, will contribute to the children's appreciation and functional use of both Spanish and English. There is an increasing realization among educators of the value of bilingualism, as shown in the following quotation from a recent NEA survey:

...bilingualism can be a tool...with which to educate and motivate the Mexican-American child. It can be the means by which he achieves an affirmative self-concept - by which he comes to know who and what he is, takes pride in his heritage and culture, and develops a sense of his own worth. It can be an invaluable asset to him as an adult, economically, intellectually and socially (8).

Recommendations for Further Research. In addition to the work that obviously remains to be done on the first-level analysis (for preprimary children and the B sections of the primary grades), we intend to proceed immediately with a pilot study in which each of the measures described under second-level analysis in Chapter V will be tried out with a small representative group before any are applied to all pupils.

We would like also to explore measures of the child's flexibility in using the language of instruction. A child might achieve complexity in sentence structure through the mere repetition of

expressions used by adults in his environment or heard on television. It is only as he achieves generative control over language that he has the type of proficiency which is helpful in learning to read. We intend to make separate analyses of the three sections of the Oral Language Interview. It is possible that the TV section may involve more repetitious expressions and less flexibility.

We are very much interested in obtaining evidence concerning the extent to which Spanish/English speaking children translate from one language to another. To the extent that translation occurs, it would seem to have a delaying effect on the child's interpretation of the printed page, his teacher's instructions, and his peers' attempts to help him in school work. We hope to construct a free-association type of test based on the work of Saer (19) with Welsh-English-speaking children. Saer developed a free-association test with which children's reaction-times to stimulus words presented in both English and Welsh were tested. We can obtain data from our language samples concerning appropriate words to include in a similar list of free-association stimulus words. It is assumed that the difference between the child's mean reaction time to English words and to Spanish words would reflect the extent to which he translates stimulus words before responding. Our hypothesis is that the child's differential in reaction-time will be related to his ability to read.

We would like to develop test situations which would reflect the Mexican-American child's ability in verbal mediation. The tests developed by Rapier and Marchus (17) are illustrative. These are based on earlier work by Jensen (9) and by Kendler & Kendler (11). In these tests, the child's responses to reversal shift and non-reversal shift stimulus situations are studied. Rapier and Marchus (17) found that nine-year old Mexican-American children performed well below age level norms in these tests. They suggested that failure of the environment to inculcate "a sufficiently complex system of verbal skills to enable him [the Mexican-American child] to engage in the complex symbolic thinking required to master most school subjects" was probably one of the factors responsible for delay in the development of verbal mediation processes among Mexican-American children. According to Jensen (9), until a school-age child has developed spontaneous verbal mediation, he will exhibit pseudo-mental-retardation, or retardation in the functional sense of the word.

Although our ratings on children's proficiency in Spanish were reliable, their validity has been questioned by some of our consultants within the Mexican-American community. They have suggested that children have learned to conceal their knowledge of Spanish in the presence of school-affiliated personnel. Hence,

we would like to conduct the Oral Language Interview with a sampling of children in their homes with interviewers which they would not connect with the school or college. On the basis of comparative findings from home and school interviews we can judge whether our Oral Language Interviews conducted at school provide valid evidence concerning the children's competency in Spanish.

We would like to analyze a sample of the stories written by first, second and third-grade children to study the relationship between language measures obtained from samples of the children's oral and written communication. We would also like to compare the semantic content of the children's stories with that of their basal readers.

We would also like to explore the use of techniques which would assess children's self-perceptions and their perceptions of teachers, school, and various learning activities. Those perceptions obviously affect the effort the child makes in learning to read and in working toward other school objectives. We will explore the techniques developed by Deutsch (2) and other researchers who have worked with disadvantaged school populations. We will probably develop a semi-structured interview, which would include such open-ended questions as: "What are you going to be when you grow up?" "Why does the teacher like you so much?" "Why do you want to learn to read?"

We plan to make a detailed observational analysis of classroom activities, teacher-pupil interactions, and pupil-pupil interactions, as well as parent-pupil interactions. We have developed an observational chart in tentative form, which will be expanded or revised after experience with its actual use. We will record the number and duration of the teacher's contacts with each child, the number and type of parent-child contacts, the questions asked by children, the number of times children initiate contacts with adults, and the like. A time-sampling procedure will be used in making observations; and the reliability of ratings by different observers will be checked. In addition, each teacher will be asked to keep a log of time spent on different activities for five consecutive days each month.

This systematic observation will be supplemented by informal observation by research team members to obtain data which will help us to assess children's interest in, and difficulties with, different types of self-teaching materials. We would also like to study the phenomenon of apparently marked reduction in discipline problems in Project classrooms. Such observation can help us to establish a more realistic basis for advising teachers concerning the extent to which children can work independently in different types of activities, and the factors which affect the amount and type of adult controls needed. Obviously, no systematic study of this phenomenon can be undertaken because the personality, experience and self-esteem of the adults involved are crucial facts in classroom discipline.

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APPENDIX A.

ORAL LANGUAGE INTERVIEW

DIRECTIONS TO INTERVIEWERS

1. Do not go beyond the standard questions provided.
2. In order to maintain a conversation with the child and elicit the maximum amount of language flow, you may reflect the child's responses, however, do not introduce new words in such reflections.
3. You may ask each of the basic questions three times. Alternate wordings are provided. If the child does not respond, you are to give up that line of inquiry.
4. Supportive utterances, such as "and then..." or "Uh-huh!" may be used to facilitate the child's flow of language. Such utterances are not to be counted as additional questions.

ORAL LANGUAGE INTERVIEW

- I. WARM-UP PERIOD.....SPANISH
- A. Let's talk in Spanish.....
 - 1. Do you speak Spanish?
 - B. Que te gusta hacer mas en la escuela?
 - 1. Como se hace?
 - 2. Dime, por que te gusta?
 - C. Que te gusta jugar en la escuela?
 - 1. Por que?
 - 2. Como se juega?
 - D. Que te gustaria ser cuando estes grande (como tu mama or papa)?

- II. WARM-UP PERIOD.....ENGLISH
- A. Let's talk in English now.....
 - B. What do you like to do best in school?
 - 1. How do you do it?
 - 2. Tell me about it.
 - C. What do you like to play in school?
 - 1. How do you play it?
 - D. What would you like to be when you grow up?

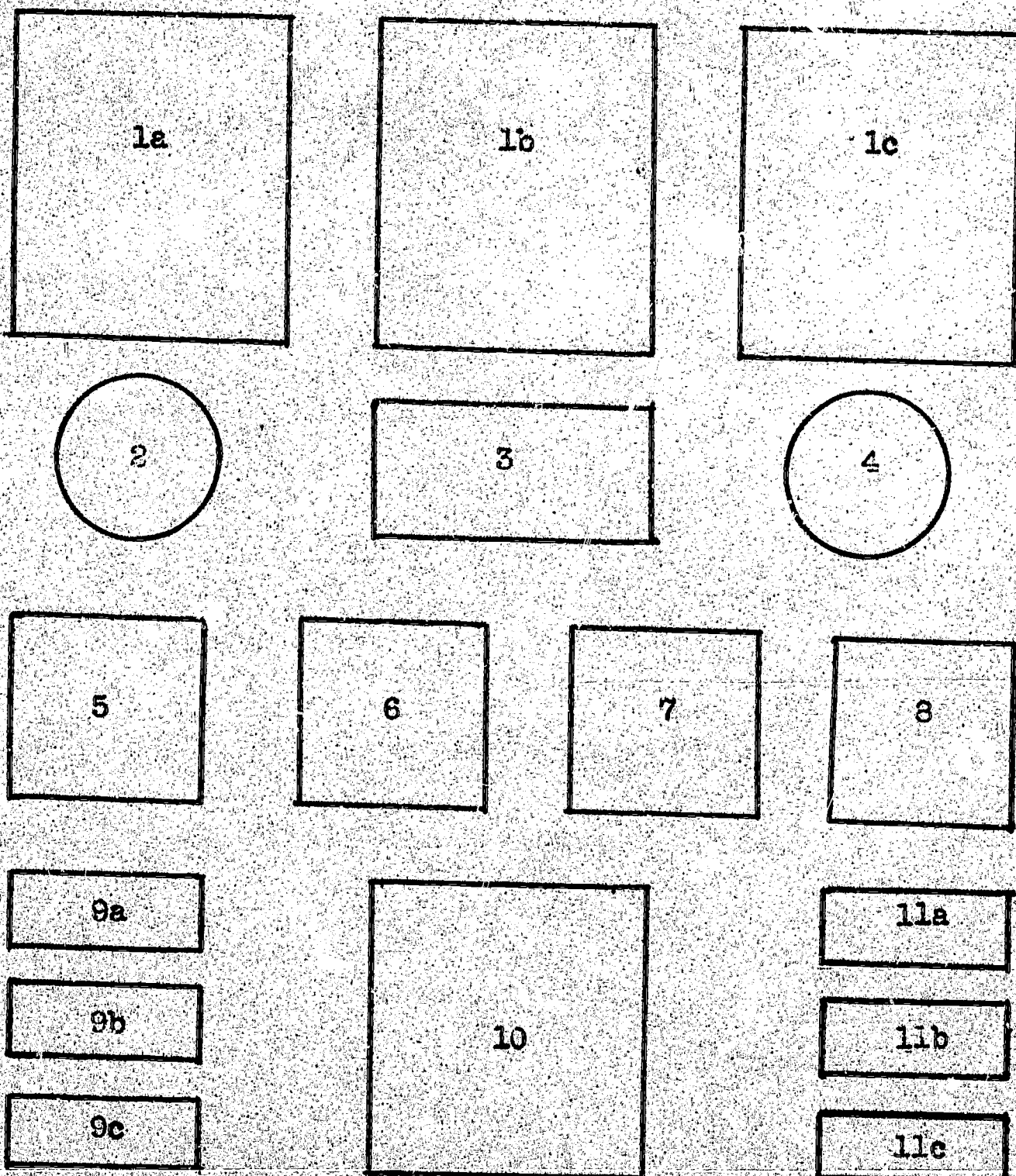
- I. Which television program do you like the best? (show)
- A. Tell me about it....(them)
Alternates:
 - 1. What show do you like the best?
 - 2. What's the name of the show (program) you like the best?
 - 3. What's your favorite program?
 - B. What's it about?
 - C. Can you tell me anything else about the program?
Alternates:
 - 1. What else can you tell me about the show? (program)
 - 2. Can you tell me more about the show?
 - 3. What else?

- II. Toys are displayed
- A. Of all these toys, which one do you like the best?
 - 1. How come? (Alternate: Tell me why)
 - B. What else can you tell me about it?
Alternates:
 - 1. Anything more you can tell me?
 - 2. Anything else?

- III. Loban Pictures: three pictures, child chooses one and tells the interviewer about it.
- A. Which one of these do you like the best?
Alternate: Do you like one of these the best?
 - B. What are the children doing in the picture (sing, or plural)
 - 1. Are the children doing anything?
 - 2. What's going on in the picture?
 - 3. What do you see in the picture?
 - C. Can you tell me a story about what's going on in the picture?
Alternate: Can you make up or pretend a story about the picture?

Figure 1

ORAL STANDARDIZED INTERVIEW TOY DISPLAY



KEY	
1a, b, c PHOTOGRAPHS	6. KNIGHT ON HORSE
2. DOLL	7. RACING CAR
3. CASTLE	8. TRUCK
4. DOLL	9a, b, c SHIPS
5. TRUCK	10. SLATE BOARD
11 a, b, c AIRPLANES	

APPENDIX B.

DIRECTIONS FOR TRANSCRIBERS AND LANGUAGE ANALYSTS

TRANSCRIPTIONS

MECHANICS:

The transcriptions are to be done phonetically. This means that you must type exactly what you hear. For example:

Um, um, da, da, ra-bbit won't let her get da liddle girl tries to get dem an den da rabbit son los que viven down and the liddle girl picks him up...NOT...the rabbit will not let the little girl pick him up (this is what is meant, but not what is said)!

If you will notice, both English and Spanish are being applied by the child in order to communicate. Also, notice the diction of the sentence. It is not the way we would write it for an English class, but it is the way the child speaks and this is the backbone of the project.

TO MAKE TRANSCRIPTIONS EASIER. First listen to the trend of thought and then try to make out what the child is saying. Many times you have to go word by word in order to phonetically type what the child is saying. If a difficulty should arise in understanding the words, ask others to help you clarify it.

SPEED. We are not having a marathon here! Although speed is important - haste often makes waste! The important thing is to do our work as well as possible and as correctly as possible. Don't feel disappointed if it takes you several days to finish a reel.

PAPER HEADING:

They will be as follows (please don't deviate without letting the group know about it). We welcome suggestions.....they are essential to our work....don't keep them to yourself.

Suggestions to Transcribers

1. Leave $1\frac{1}{2}$ " margins on left-hand side 1" margins on right-hand side, but if you're over the margin, do not stop to correct it.
2. Questions of the interviewer should be indicated by an "I", and the responses of the child should be indicated by a "C".
3. Transcribers should double-space; at the top of the middle of the title page (which occurs with the beginning of each child's interview), put the following:

GRADE _____
CHILD _____
AGE _____
TEACHER _____
DATE RECORDED _____
INTERVIEWER _____
TRANSCRIBER _____
METER READING _____
REEL _____

PAPER HEADING: (continued)

AND ALSO, PUT THE PAGE NUMBER in the upper right-hand corner of each page. All pages, other than the title page, will have the child's name and the meter reading in the upper left-hand side of the paper. Should a new transcriber (one other than the one listed on the title page) begin transcription, his or her name should be placed on the top of each page so that he may receive credit for any partial work he accomplished.

In the interviews, there will be an unstandardized section called the "warm up". The termination of this section will be indicated by the following question: What television program do you like the best? (or some variation of this question). Indicate the termination of this period, with a line to mark the beginning of the standardized section. Example:

END OF WARM UP

MISTAKES are to be crossed out with one straight line.

DIRECTIONS FOR LANGUAGE ANALYSIS - Level One

1. Each person has basic responsibility for the accuracy of each transcript he analyzes. He will write "Analyzed by _____" and sign his name at the end of each transcript completed.
2. Each team must work independently in its job of analyzing transcripts. Members of Team A may discuss specific questions with each other but discussion must not take place between teams. This rule has been established so that independent judgments can be made by analysts working on each team, and the reliability of such independently derived judgments can be studied. Yet such arrangement does allow for in-service-education discussions and clarifications within each team.
3. Analyze the actual words that have been recorded from the child's speech. Don't supply words or try to interpret what the child meant to say.
4. The language analysis should begin after the "warm-up" period, i.e. following the interviewer's question: "Which television program do you like the best?"
5. The remainder of the typescript should be divided into three sections (i.e. TV, Toy Shop, and Picture-Story). Sub-totals on all measures will be completed for each section.
6. Maze material is indicated by a line drawn through each word or partial word in the sections of the typescript to be analyzed.

Reportage responsums are indicated by a check mark at the beginning and end of the responsum.

Each T-unit is indicated by parentheses.

Every word in the sections of the typescript to be analyzed should be classified into one of these three categories.

When no response was given to an interviewer's question, the symbol "NR" is written in the margin.

7. The following distinctions should be made in counting number of words:
A contraction such as "don't" should be counted as two words.
Run-together words, such as "gonna" should be counted as the words they substitute for, i.e. "going to".
Record all titles in terms of the number of words in the title; i.e. "Bugs Bunny" is two words.
Count a hyphenated word, such as seventy-seven as one word; however, "one hundred and three" would be four words.
"Uh-huh" is "yes" and counts as one word (however "hu-uh" is two words of maze material and "ua" counts as one word of maze material.
When counting the number of units in maze material, count each partial word as a word, e.g. "Wh-wh-when" is three words.

8. In the left-hand margin of each typescript page to be analyzed, three columns should be headed as follows:

M R T

In the column headed "M", record for each interview section (or convenient segment thereof), the number of words in Mazes.

In the column headed "R", record the number of "Reportage Responsums" and the total number of words in such responsums for each interview section (or convenient segment thereof).

In the column headed "T", record the number of words in each T-unit for each interview section (or convenient segment thereof). At the end of each section, the number of T-units should be counted and the number of words in T-units should be totalled.

9. Examples of T-units:

"Jump" and "Eat it" are T-units, with the subject being understood.

If two clauses are connected by "so," determine whether the clause is subordinate or coordinate. If "so" is used in the sense of "so that", the clause is subordinate. If "so" means "therefore", the clauses are coordinate; and "so" marks the beginning of a new T-unit.

10. Examples of "reportage responsums":

Responses to questions, e.g. "Yes" "Batman".
Such incomplete predications as "Is a good dog."
Sentences with compound predicates involving more than two "ands" should be classified as a T-unit and a Reportage Responsum, e.g. (I saw a coal car and a baggage car and a freight car) and a mail car. The last four words are classified as Reportage Responsums.

11. Examples of maze materials:

Partial expressions and repetitions of partial expressions, typically associated with a lack of speech fluency (false starts, stammering, and stuttering).

Wh-when dey when dey wh-when dey shoot ah when they shoot him he dies. (Maze extends from first wh through ah).

APPENDIX C

STUDY OF PROFICIENCY IN SPANISH AND INFLUENCE OF
THE SPANISH LANGUAGE ON ORAL ENGLISH

**EVALUATION FORM ON PROFICIENCY IN SPANISH
AND LANGUAGE PREFERENCE**

NAME:	TAPE:
	GRADE:

I. SPANISH

1.	2.	3.	4.	5.	6.
----	----	----	----	----	----

II. ENGLISH MIXED IN

1.	2.	3.
----	----	----

1. NONE 2. LITTLE 3. LOT

KEY:

- | | | |
|---------------------|------------------------------|-------------------------|
| 1. No Comprehension | 3. Speaks With Difficulty | 5. Fluent |
| 2. Comprehension | 4. Speaks With Relative Ease | 6. Exceptionally Fluent |

III. PREFERENCES

Marked Preference For Spanish	Some Preference For Spanish	No Preference	Some Preference For English	Marked Preference For English

SPANISH AND ENGLISH SOUNDS - Carlos Rivera *

The teacher has the double duty of presenting both the Spanish and the English sounds in order to help the Mexican-American pupil become truly bilingual and a better reader in English. The following phonetic analysis and comparison of some of the problematic sounds of consonants in Spanish and English will aid the teacher of Mexican-American pupils in making a phonetic analysis of these sounds as vocabulary words appear in the reading material; thus making the Mexican-American pupil aware of the difference in sounds in certain consonants in both languages.

b, v - In Spanish both the b and v sound the same. In producing their sound, only the lips are used. Mexican-American pupils should be made aware of those words in Spanish that begin with a b or a v in the reading program or during dictations at the board. The teacher should compare the placement of the b and v in English: the b is placed at the lips in both languages; in English, the upper teeth "bite" the lower lip to produce the v. Often, however, the Mexican-American pupil will reproduce an f sound, since this is the only sound in Spanish produced by biting the lower lip. Whenever this occurs, the teacher should isolate both sounds of v and f for the pupil to distinguish.

c (ce,
ci); s,
z -

The s and z in Spanish with any vowel have the same sound as words that begin with ce and ci. Often the Mexican-American pupil will substitute one for the other in his writing. As these combinations appear in the reading program, the spelling of these words should be analyzed for the pupil to make him aware of the combinations.
(See s, z, below).

ch, sh - There should be no difficulty with the ch sound in Spanish, since the sound exists in the language. Pupils should be reminded that in both English and Spanish the sound is the same. However, the confusion arises in English words with sh; Mexican-American pupils tend to substitute one for the other in reading English. Both sounds, the ch and sh, should not be taught together, since the ch is a known sound to the Mexican-American pupil. As the ch appears in the reading program or in a dictation at the board, the sh English sound should be compared in order that pupils hear the difference. Instruct your pupils to tighten their jaws together, bringing their teeth close together. The only sound that can be produced is the sh sound.

* This excerpt is taken from: Carlos Rivera, Para Mis Niños. Austin, Texas: W. S. Benson Co., 1964. A series of Elementary Spanish textbooks for grades 3 through 6, especially designed to teach Spanish or English as a second language.

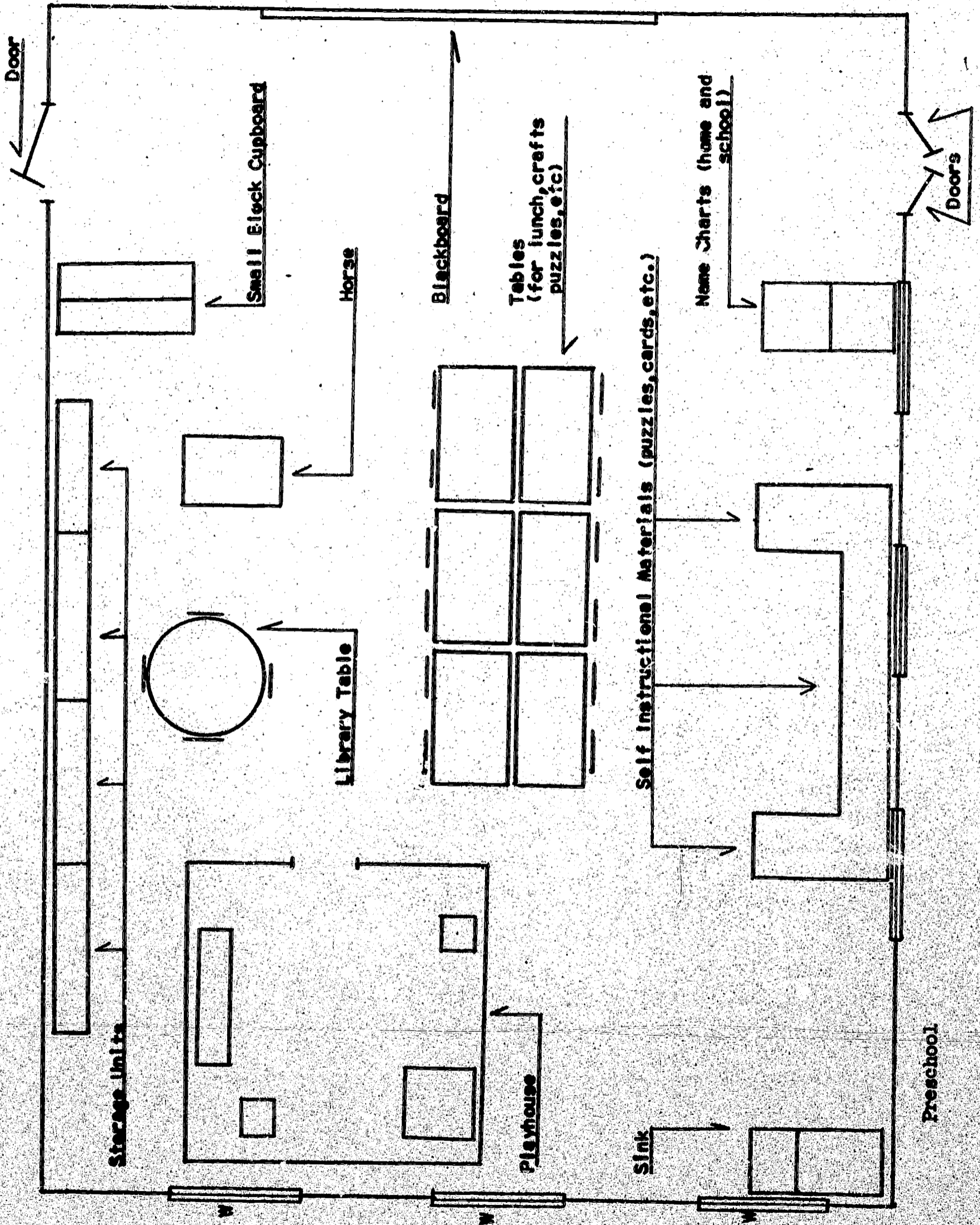
- d, t, - In Spanish, both of these sounds are produced by pressing the tongue against the back of the upper teeth, and releasing the tongue suddenly, creating an explosion of air. English d and t are softer; the tongue rolls back to the soft palate area instead of pressing forward. Because in Spanish the d and t are placed together in back of the upper teeth, the Mexican-American pupil tends to confuse them, pronouncing a t for a d in his English. As these sounds appear in their Spanish readings, the teacher should analyze and compare the sounds in both languages and give examples in English in order that the Mexican-American pupil may distinguish the sounds. Another common mistake made by Mexican-American children is the substitution of the Spanish d for th in English, as in that, this, etc. In Spanish there is an inter-vocalic d (produced by placing the tongue between the teeth) found in words containing d between vowels or at the end of a word. This d now sounds like the th in English. By writing such words as ciudad and usted on the board, the teacher reminds his pupils of the correct pronunciation of th in English.
- h - The letter h is silent in Spanish, but a common mistake made by Mexican-American pupils is to omit it in writing. As words with initial h appear, these should be written on the board and pointed out as beginning with an h.
- j - Since the sound of j in Spanish is like the American h, Mexican-American pupils often confuse these in dictations by substituting the silent h for an initial j in a sentence. They are still "thinking" in English. The teacher should point out these words as they appear.
- k - The k as a letter exists in the Spanish alphabet, since it represents a "sound." Very few words, however, exist in the language with initial k. Because Mexican-American pupils have read more English than Spanish, they will substitute a k for que and qui in their Spanish dictations.
- ll, y - In Spanish both the ll and y sound the same. The confusion arises, then, as to which one to use in a word. As vocabularies are presented from the reading selections, such words that may begin or contain these letters, should be analyzed for the Mexican-American pupil to make him aware of the spelling of the word. Another problem arises in relation to the y sound in English as produced by the Mexican-American pupil: he will substitute a j sound, as in the word "jello" for "yellow." The "j" sound (as in the word "judge") does not exist in Spanish (except in higher phonetics); hence, phoneticians are baffled as to the reason this substitution is made between the y and the j in English. However, a listing of drill words written on the board may help the pupil hear the difference and enable him to distinguish between these two sounds.
- q - This letter is used in Spanish to form the "k" sound in words containing que or qui. Mexican-American pupils who have not read enough in Spanish will substitute the k from their English reading program for these sounds. Point out these words as they appear in the reading program and vocabularies.

s, z - In Spanish the s and the z sound the same. This is not so in English. As Spanish words appear in the vocabulary, the teacher of Spanish should analyze them and point out those that are written with an s and those that are written with z. At the same time, he should remind his Mexican-American pupils that in English the z and, in many words, the s have a "buzzing" sound. Lists of words in English for practice orally will help these pupils "hear" the difference. Also, the Mexican-American pupil tends to begin a word with an s by placing a vowel sound in English: stop becomes "estop." Drills on "hissing" initial s in words will be helpful.

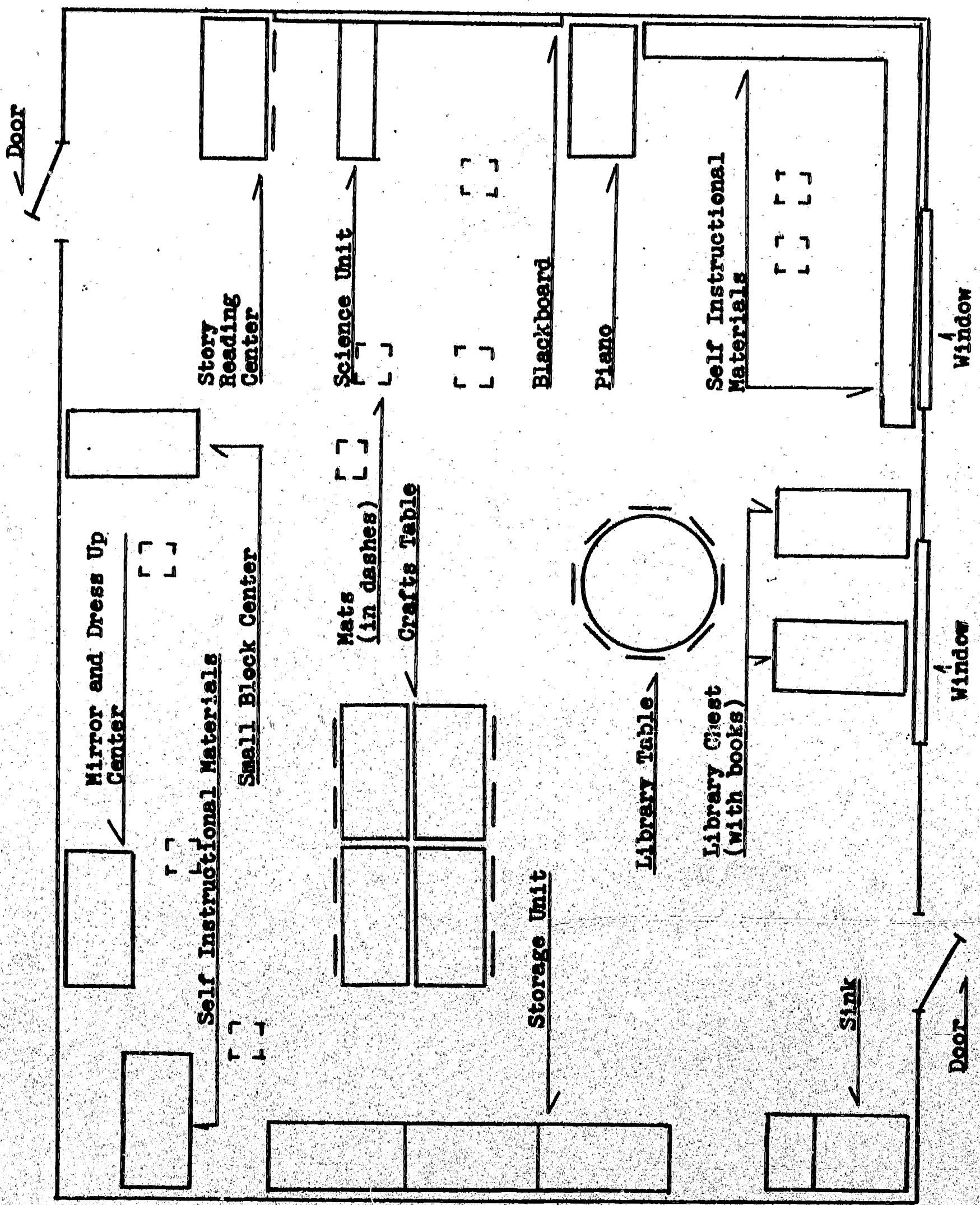
th - In Castilian Spanish as spoken in Spain, this sound exists for the z, ce, and ci. However, this sound is an affectation in Mexico and in many countries in South America. Therefore, the sound in reality does not exist in so-called "Pan-American Spanish." In reading in English, Mexican-American pupils will substitute the t sound (just as they substitute the d sound for th, in that, than, etc.) for the th in such words as thanks, think, etc. The teacher of these Mexican-American pupils should point this difference to them in discussing the t sound versus the d sound, as described above.

APPENDIX D

ROOM PLANS FOR PROJECT CLASSROOMS



D-1

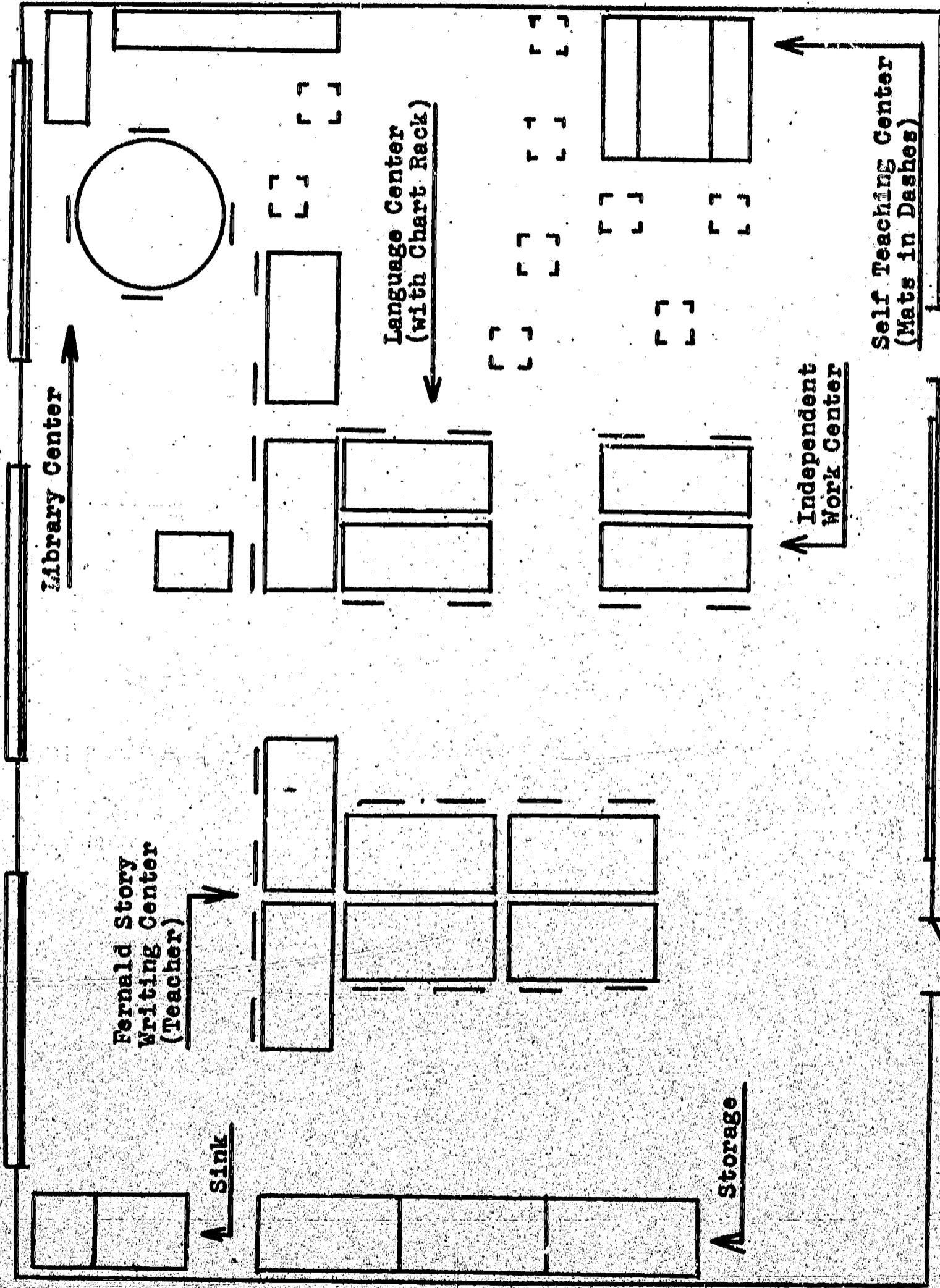


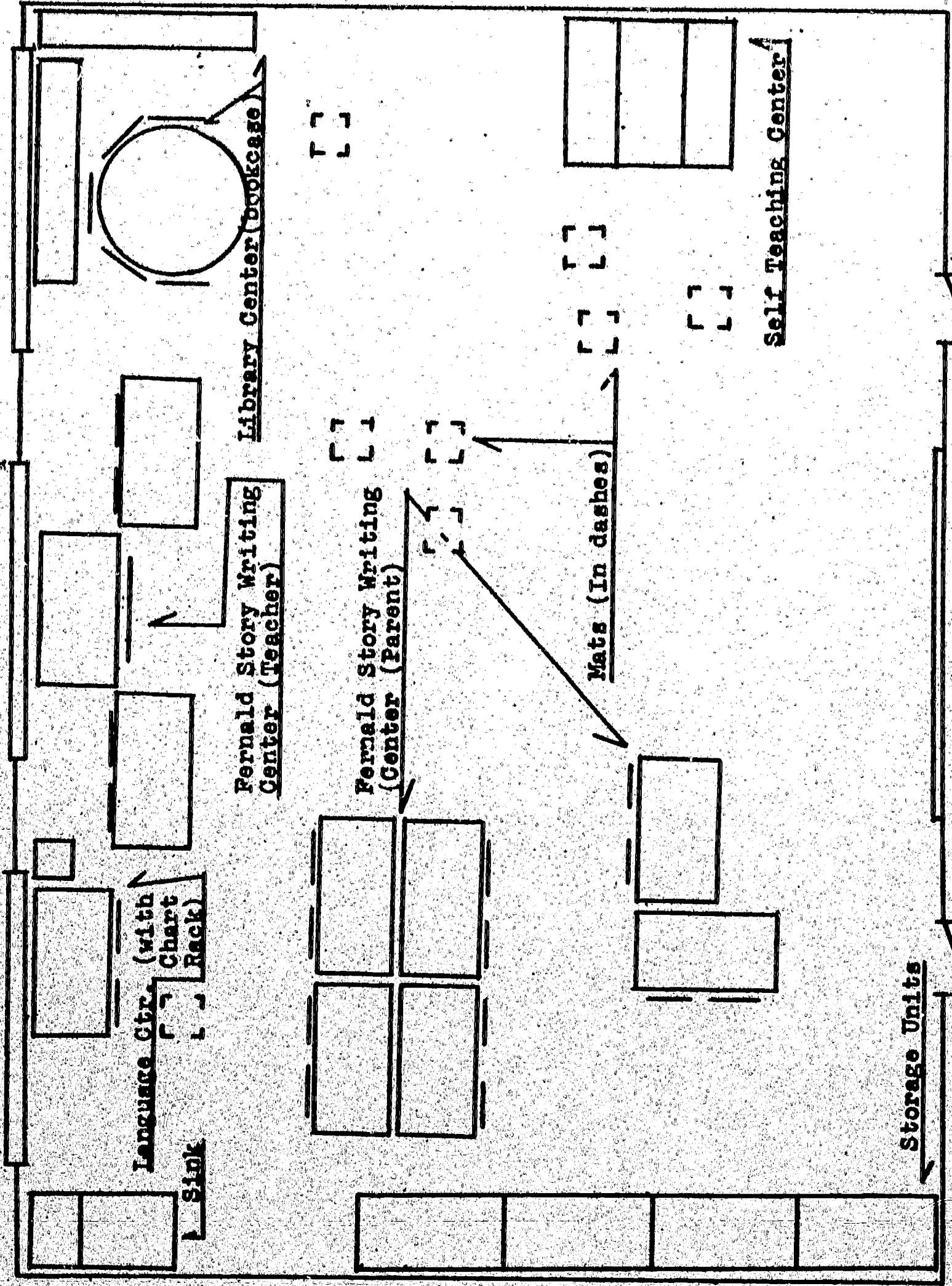
Kindergarten

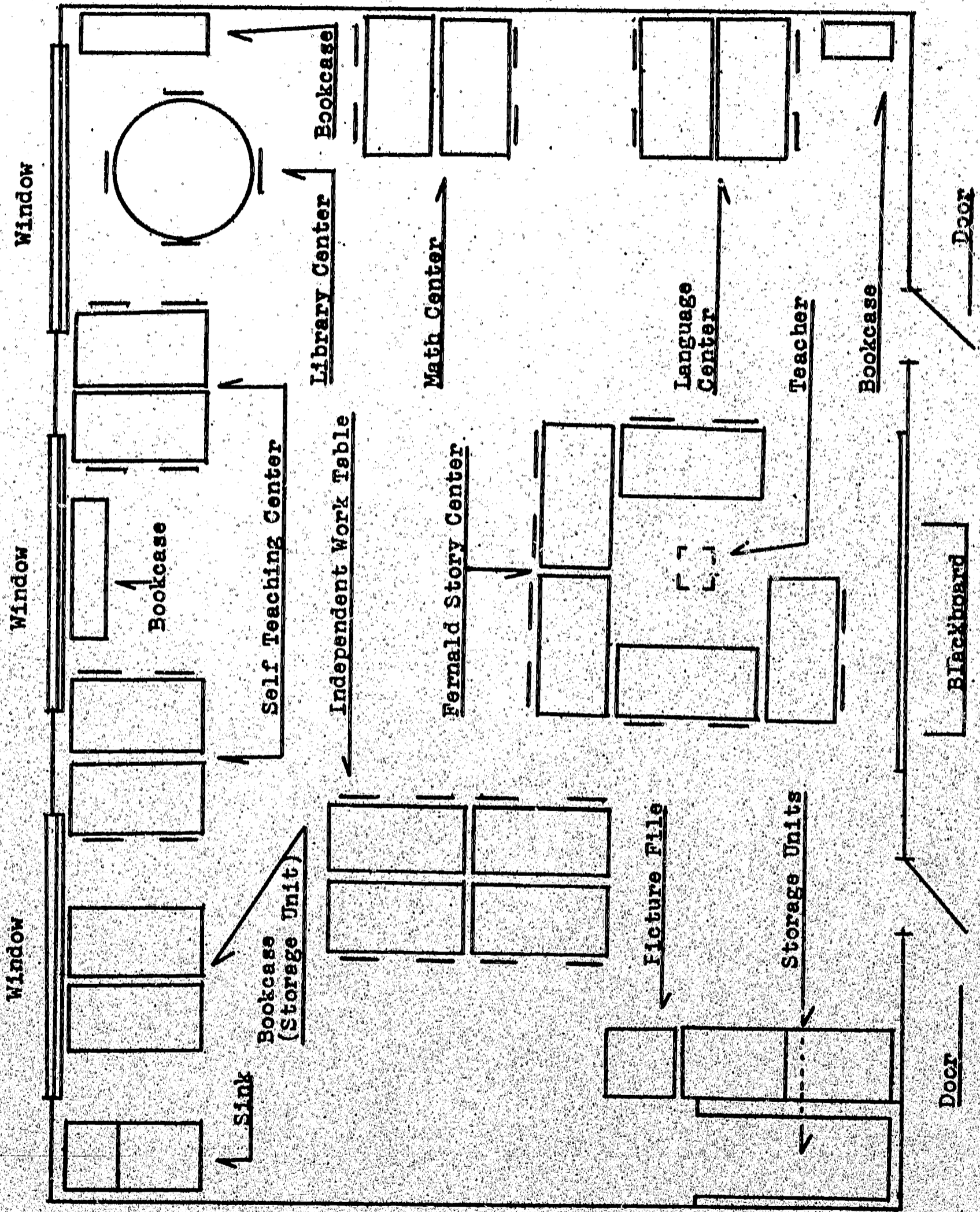
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APPENDIX E

LETTER FROM CONGRESSMAN ROYBAL

CONGRESS OF THE UNITED STATES

House of Representatives

Washington, D.C. 20515

August 26, 1966

Honorable Harold Howe II
Commissioner of Education
Department of Health, Education,
and Welfare
Washington, D.C.

Dear Commissioner Howe:

Thank you for your letter of August 4, 1966, advising on the status of your Project No. 5-0559, "A Reading Program for Mexican-American Children."

I would like to take this opportunity to assure you of my continuing deep personal interest in your early favorable consideration of the request for refunding of this extremely worthwhile project.

In this connection, I know you are gratified at the evidence of growing national recognition of the urgent need to find solutions to the educational problems confronting the nearly 2 million children of the Mexican-American community in the Southwest.

For your information, I am enclosing a copy of a survey report on this question, entitled, "The Invisible Minority," released last week by the National Education Association, and an analysis of the NEA report which appeared in the August 22, 1966 edition of the New York Times.

You will note that the NEA report characterizes the unique bi-cultural and bi-lingual situation of Mexican-American children as "the most acute educational problem in the Southwest," but concedes that "little headway is being made." It concludes that "the urgent need is for action...and additional research, especially of a demonstrative nature."

Your approval of the second year refunding request for "A Reading Program for Mexican-American Children" can be a major contribution toward finding the ultimate solution to this unique and perplexing educational problem.

Sincerely yours,

EDWARD R. ROYBAL
Member of Congress

ERR/abs
Encls.

E-1