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DEVELOPING LANGUAGE THROUGH A MUSICAL PROGRAM
AND ITS EFFECT ON THE READING ACHIEVEMENT
OF SPANISH SPEAKING MIGRANT CHILDREN

by

Dora Dominguez

A Dissertation
Submitted to the
Faculty of The Graduate College
in partial fulfillment of the
requirements for the
Degree of Doctor of Education
Department of Educational Leadership

Western Michigan University
Kalamazoo, Michigan
June 1991

DEVELOPING LANGUAGE THROUGH A MUSICAL PROGRAM
AND ITS EFFECT ON THE READING ACHIEVEMENT
OF SPANISH SPEAKING MIGRANT CHILDREN

Dora Dominguez, Ed.D.

Western Michigan University, 1991

The purpose of this study was to investigate the effects of a language development program that uses music as a medium of instruction on the reading achievement of Spanish speaking migrant children. Fifty-one preschool aged subjects from a Title I (Michigan Department of Education, 1987) Summer Migrant Education Program participated in the study.

The subjects were randomly divided into 2 groups. They were provided oral language instruction to help them acquire the language of the basal readers. In other words, the vocabulary and language patterns found in a basal reading program were built into the daily language lessons. In the comparison group, the subjects were instructed using a drill-type method; in the treatment group, the instruction was through musical activities. The musical activities were part of a specially designed program that used music to teach oral language. The musical program was developed by taking all the different words and language patterns found in the preprimers and arranging them into songs and set to music of familiar children's songs. The program ran for 6 weeks and the children participated twice daily.

At the end of the instructional period, the subjects were administered the Houghton Mifflin Reading Test (Brzeinski & Schoephoerster, 1983) which is designed to measure the level of reading mastery. The data were analyzed through the use of a t-test for independent means.

The findings of this study were inconclusive. The results of the t-test did not support a difference between the means of the post-test scores of the group receiving traditional drill-type instruction and the group receiving instruction through the medium of music. Even though a difference in the mean scores of the drill-type group and the musical group could not be substantiated, it is worthy to note that the children did not suffer academically by participating in the programs. In both groups the subjects made satisfactory progress in reading. The mean score of both groups was in the satisfactory range of accomplishment as set by the company.

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on the reading achievement of Spanish-speaking migrant
children**

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Western Michigan University, 1991

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Finally, I dedicate this project to the memory of a migrant farmworker, a philosopher and dreamer, a teacher, my father, Genaro H. Sanchez. "Este es para Usted!"

Dora Dominguez

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CHAPTER I

THE PROBLEM

Establishing the Research Question

Reading is the key for success or failure in school (Wilson, 1985) and increasingly is becoming just as important for personal fulfillment in post secondary life (Chall, 1983b). In other words, it is no longer easy for students to leave high school and get a job. Higher levels of literacy are being expected of the nation's work force in order to fully participate in business, industry, and technology. For the nation's growing Hispanic population this poses a serious problem. Many Hispanic students can be described as functionally illiterate. These students appear to have poorly developed language and literacy skills in Spanish and English. They may not have learned to read in Spanish and many have had little success in learning to read English. In school, these students are at a great disadvantage because after the second grade most of the schoolwork requires reading (Thonis, 1981). Although there is optimism about the potential for improvement of literacy in this country and many significant advances have been made in the last decade on the basic processes involved in reading, teaching, and learning, a question still remains. Why do children who are linguistically different not succeed in school? In

disproportionate numbers, Hispanic students continue to underachieve in school, many leaving before graduation.

The Hispanic American, a major sub-population in the United States, is the fastest growing minority. The population has nearly doubled in the last two decades, but they too are the most likely to drop out of school, be unemployed, and live in poverty. The demographic trend is that this sub-population by the year 2000 will make up 10% of the population in the United States and will represent about 10% of the work force. Today one in 12 Americans is Hispanic. Among the Hispanic population more than one of every seven families lives below the poverty level, more than one of every five adults is illiterate, and one in every four adults has less than a fifth grade education (National Council of La Raza, 1988).

The population figures reported by the National Council of La Raza (1988) indicate that there are 18.8 million Hispanics living in the United States. Of these, 63% are identified as Americans of Mexican descent, 12% are Puerto Rican, 11% are Central and South American, 5% are Cuban, and 7% other Hispanics. Hispanics live in every state but half are concentrated in California and Texas (National Council of La Raza, 1988).

The single most critical problem facing Hispanics is the lack of an adequate education. According to the National Council of La Raza, a national non-profit group that advocates for the rights of Hispanics, only about half of Hispanic adults 25 and over are high school graduates. This compares to three-fourths of the white population and more than three-fifths within the black population.

Only about one in 12 Hispanics is a college graduate, compared to one in nine blacks and one in five whites. Up to 56% of Hispanic adults are functionally illiterate.

The lack of an adequate education also affects employment. The unemployment rate for the Hispanic is typically at 60% above the white rate regardless of economic conditions and has been in the double digits for the last decade. Those employed generally hold lower-skill and lower-wage jobs; Hispanic females hold the lowest earning jobs of any major population group. Hispanics also have the highest rate of worker displacement, that is, job loss through plant closings or other factors. Hispanic women are also more likely than other displaced women to remain unemployed and leave the work force.

This trend must be reversed if Hispanics are to contribute positively to the nation's economy and work force. Education is a solution but programming must be developed to adequately prepare Hispanic youth for the future labor market.

The increasing number of Hispanics poses a special challenge to the nation's school system. Among the Hispanic population currently in our nation's schools, 1.6 million children are classified as Limited English Proficient (LEP). This means that these students are performing below the norm in English reading (Bennett, 1988). The criteria used to determine Limited English Proficiency is the child's academic performance in reading or oral language as measured by national standardized tests (Code of Federal Regulations, 1986). If a child scores below grade level in any reading subtest or oral language proficiency test, the student is termed Limited English

Proficient (LEP). These children come from homes in which a language other than English is spoken and they are limited in the English skills of understanding, speaking, reading and writing.

Hispanic children living in the United States may have receptive language skills in English as a result of their exposure to television, but the language they use to communicate with family members is generally Spanish. In other words, it is not uncommon for Spanish speaking children to understand some English words but not have enough mastery of the language to produce complete sentence structures. The variation in proficiency levels in both languages is often great. They may be fluent in their native language and limited in the other, or they may be limited in both languages. They, nevertheless, enter school. Some have enough social English language to answer a simple question such as "What is your name?" and to verbalize such statements as "I have to go to the bathroom." Others have no English language at all. Some also enter with a limited aural and oral command of Spanish. The school, nevertheless, begins reading instruction in English and traditionally uses the district's adapted basal reader. The Spanish speaking youngster along with his monolingual English speaking peers commences to learn to read in an English reading program that has been designed and sequenced on the assumption that all children have had five years of listening and speaking in the English language (Gonzalez, 1983). Reading, then, becomes a very difficult process for the child who has not had the opportunity to develop the requisite English language proficiency to succeed in the traditional

reading programs (Thonis, 1970). The result is a continuous succession of failures that often leads to students dropping out of school.

The clearest indication of the deficiencies of the school systems is reflected in the educational outcome of the Spanish speaking students. In 1974, the U.S. Commission on Civil Rights printed a report on the education of Mexican American students. The following is an excerpt:

For every ten Mexican American students who enter the first grade, only six graduate from high school. In contrast, nearly 9 out of every 10 Anglo students remain in high school and receive diplomas. The proportion of Chicanos reading below grade level is twice as large as the Anglo. By the time Mexican American students have reached the 12th grade... of the 60% who have not already dropped out... three of every four are reading below the acceptable level for that grade. (U.S. Commission on Civil Rights, 1974, p. 12).

In 1987, Applebee, Langer, and Mullins stated in The Nation's Report Card that the scores in reading proficiency for Hispanic students were quite low and in need of improvement. They stated that even after the improvements evidenced in the 1988 assessment, the reading proficiency level of Hispanic 17-year-olds was only slightly higher than that of white 13-year-olds (Applebee, Langer, & Mullins, 1987).

It is apparent that improvement in the instruction of reading for Hispanic students is needed to effectively and equitably educate the hundreds of children who come to school speaking a language other than English. These studies also imply that whatever the schools were doing and are continuing to do to teach reading is not working for the Hispanic youngster.

In Michigan schools, the challenge posed by the increasing number of Hispanics is compounded by their migrant life styles. This is not to imply that all migrants are Hispanic; however, a large number of the Spanish speaking children in school are current transient migrants or have recently settled out of the migrant stream. Migrant students enroll in as many as three different schools during one school year and in most cases are expected to keep pace in the same curriculum with the resident student. The Migrant population within the Hispanic groups is significant. In 1987, Michigan schools served 15,236 students who were Spanish speaking bilingual migrants (Michigan Department of Education, 1987).

The migrant life style is extremely difficult for the children and their parents. Every spring thousands of migrant families migrate into Michigan to harvest seasonal crops. Though the racial and ethnic makeup of the migrant labor force is comprised of Hispanics, Whites, Afro-Americans, Native Americans, and Indo-Chinese, the largest percent are Hispanics of Mexican descent (Current Population Reports, 1979, p.10). Nationally, 69% of the migrant population is Hispanic while 65% were Mexican American (Cameron, 1981). In Michigan, the percent of Hispanic students enrolled in migrant programs during the 1986-87 school year was 85% (Michigan Department of Education, 1987).

In the migrant family, extreme poverty, a different language and a different culture coupled with high mobility contribute to the many problems they experience. Typically, the income level of a

migrant family is below the poverty level, they live in substandard housing and work under adverse conditions. They suffer from poor health and due to the frequent mobility, they often do not access essential community services (Ockerman-Garza, Garza & Snow, 1982). Additionally, migrant workers are often exposed to dangerous pesticides in the fields. Spielberg (1979) conducted a study on work-related problems experienced by farm workers and found in their blood samples significant levels of PBB and other chemicals used in pesticides.

In school, migrant students are typically 2.5 years behind the general population in reading and about one year below in mathematics (Cameron, 1981, p. 9). In the study conducted by the Research Triangle Institute (Cameron, 1981) it was found that 14% of migrant students aged 8-13 years were two years or more older than their counterparts for the grade level in which they were enrolled.

The dropout rate of migrant students is of particular concern. Of the migrant students who enter high school, which is estimated to be 50%, only one of every ten graduate. The Research Triangle Institute study (Cameron, 1981) found a significant decrease in student population beyond the seventh grade. This suggests that migrant students start to leave school as early as the eighth grade.

As was stated before, the largest percent of migrant children (65%) are of Mexican descent (Cameron, 1981, p.12). In the study conducted by the Research Triangle Institute (Cameron, 1981) that examined the factors that hinder progress in education for migrant students, language competence was measured for proficiency. It was

found that 36% of the Hispanic population was severely limited in English. This rating appears to indicate that only about 33% of Spanish speaking migrant children will experience problems with classroom work. The remaining percent of the population appeared to have adequate oral English competence as measured by teacher's rating and validated by the MAT-SEA-CAL Oral Language Proficiency Tests (Center for Bilingual Education, 1978).

It should not be concluded, however, that all migrant children possess enough language facility to successfully perform in English classrooms. Such judgments of a student's ability to communicate in English are often based on the student's "basic interpersonal communication skills" (Cummins, 1982, p.32). This language is used to communicate socially. It is the language used in the playground, in social situations with friends, classmates, and family. This language is quite different from the "cognitive academic language" that is necessary in order to understand instruction such as a discussion of American literature, mathematical principles, scientific experiments, or other abstract concepts.

The lack of English language proficiency of Spanish speaking migrant children entering school is one of the principal reasons for poor academic performance (Garcia & Padilla, 1985). Many of these children are entering school with limited proficiency in oral English skills and are expected to perform in the same curriculum and at the same pace as their counterparts who have had five years of experience in listening and speaking English.

Realizing that the migrant lifestyle created numerous problems

that impacted negatively on the children's education, Title I of the Elementary and Secondary Education Act (ESEA) under Public Law 93-380 (1965) was amended in 1966 to include educational programs for children of migratory farmworkers (Michigan Department of Education, 1981). It was amended again in 1968 to include children of migratory fisherman. Migrant programs as intended in Public Law 93-380 are designed to provide supplementary educational and supportive service to all children who qualify. To qualify, children must accompany their parents or guardians as they follow the crops or fishing industry, thus depriving them of the opportunity of a full school year term. The instructional programs must be designed for children who are currently transient or recently settled out. Transiency includes travel within the state and across state line. The settled out children are those whose parents or guardians have left the migrant stream and have decided to remain in a community. To provide consistency in the identification of eligible children, the following definitions are applied (Code of Federal Regulations, 1986).

Interstate

An interstate child is one who has moved with a parent or guardian within the past year across state boundaries in order that a parent, guardian or member of his immediate family might secure temporary or seasonal employment in agriculture, fishing activities, or in related processing activities, or any activity directly related to the cultivation or harvesting of trees. The parent or

guardian and child are expected to continue in the migrant stream.

Intrastate

An intrastate child is one who has moved with a parent or guardian within the past year across school district boundaries within a state in order that a parent, guardian or member of his immediate family might secure temporary or seasonal employment in agriculture, fishing activities, or in related processing activities or any activity directly related to the cultivation or harvesting of trees. The parent or guardian and child are expected to continue in the migrant stream.

5 Year Eligibility Provision

The five year eligibility provision applies to a child whose migratory parents have "settled in." Should a family meeting either of the above conditions decide not to return to the home state or school district and not to follow the crops or fishing activities, but to "settle in" a given community and pursue another occupation or remain in agriculture, such a child may be considered eligible to participate in projects funded under Public Law 89-750 (Code of Federal Regulations, 1986) for a period of five years with consent of the parents or guardian.

Migrant education in Michigan consists of summer and school year programs. The summer programs are comprehensive in nature, generally operating from five to ten weeks in length. Some programs service infants to high school age students all day while others are

half-day programs that service only students in kindergarten through sixth grade. The school year programs are pull out programs in which students are tutored individually or in small groups in English language development, reading, and math. The goal is to provide migrant students with supplementary instructional support that will assist them in succeeding in their regular classes.

In 1987, Michigan Migrant Education operated 56 summer programs and school year programs. The total number of migrant children enrolled was 15,236 (Michigan Department of Education, 1987). The total Spanish speaking population in Michigan Public Schools totaled 15,974. Of this figure, 10,368 were termed Limited English Proficient (LEP). This translates to 65% of the Spanish speaking students performing at or below the fortieth percentile in a reading subtest or on an English oral language proficiency test.

The evaluation reports prepared by state agencies (Rio, 1985; Silver, 1981-82) and studies conducted by local agencies (Project NOMAD, 1986) are further evidence that many Spanish speaking youngsters are not succeeding in school; their performances on standardized tests consistently show that they are performing below grade level in reading comprehension and vocabulary. The high retention and drop out rate is further evidence of their failure to read and comprehend the English language. Hispanics in Michigan have a dropout rate of 55% (Michigan Department of Education, 1987). These statistics also imply that whatever the schools have been doing and are continuing to do in reading instruction is not working for many Spanish speaking migrant children.

Given that reading ability makes a significant difference for success or failure in school, it follows that programs that strengthen the student's ability in reading need to be explored. The literature that examines reading and the bilingual student (Ching, 1976; Kaminsky, 1979; Perez, 1981; Thonis, 1981) supports the notion that oral language development is necessary for success in reading and recommends that instructional programs provide opportunities for the limited English speaking students to develop their English oral language skills. Thonis (1976) and Gonzales (1983) recommend that programs that utilize a language arts approach are best for bridging the English proficient student into reading. The need for language development is further exemplified by the commitment shown by migrant education. Migrant education which serves largely a Hispanic population (Cameron, 1981) has as a national instructional priority the development of English language. This is demonstrated by the development of a set of national skills in oral language and a teacher resource guide titled, Oral Language All Day: A Resource Guide for Effective Communication (National Migrant Education Program, 1980).

Purpose of Study

Why do Spanish speaking children continually fall behind in academics? The literature that examines reading and the bilingual student takes the position that the degree of language development is a determining factor in reading achievement. The literature also maintains that bilingual children experience school-related

difficulties that depress their academic achievement in the early school years because they do not understand the instruction (Andersson & Boyer, 1978; Gaarder, 1977). Consequently, language minority students, unable to communicate with their teachers, are unable to close the gap between them and their English speaking peers and fall further behind in the later school years. Furthermore, that early frustration establishes a pattern of failure which is compounded by the mismatch between the student's language need and that of the school program and its environment. Without intervention, these students face a life of unemployment and poverty.

This study was formulated to answer the following question. Given that the number of Limited English Proficient migrant students who are not succeeding in school is significant (10,368) and that the single most crucial skill through which students achieve success or encounter failure is reading, will a structured program in oral language that is aimed at developing the auditory and oral skills in English and taught through music make a difference in the reading achievement of Spanish speaking students? By using the Post-test-Only, Control Group Design, this study examined the relationship of language development taught through music to reading achievement. It was hypothesized that a difference in reading achievement would be evident between the children who participated in a structured program in oral language that developed the listening and speaking skills and used music as a medium of instruction compared to the reading achievement of Spanish speaking

children who participated in structured programs that followed the traditional instruction as suggested in the locally adopted basal reading program. The dependent variable was reading achievement.

Research Objectives

This study was formulated on two basic principles: first, that language proficiency contributes positively to success in reading; and second, when preschool children are involved, a program that uses musical activities to teach language development is more effective than a drill-type method of instruction. The study examined the literature to investigate the effect of language proficiency on reading achievement. The principal objective examined a specially designed oral language program taught through music and its effectiveness in helping Spanish speaking children acquire the language necessary to succeed in reading. The subjects for this study were Spanish speaking migrant students. They were divided into two groups. The treatment group received instruction through the medium of music and the comparison group was instructed using a drill-type method.

Significance of Study

The aim of American education is to educate its population so that all students become full contributing members of this society. To fully contribute to this society, everyone must have higher levels of literacy in order to be prepared to participate in business, industry, technology and the professions. Though great

strides have been made in the area of teaching reading to Spanish speaking children, and there has been continuous growth in reading achievement, research is lacking on effective methods for working with Spanish speaking children. It is expected that the results of this study will support the notion that oral language development is a factor that contributes positively to reading proficiency. It is further projected that the study will provide direction and guidance to the development of programs which systematically and consciously develop the listening and speaking skills of the children whose language is primarily Spanish. Last, it is anticipated that this study will give credence to the use of music as a viable method of instruction for teaching language and concepts to Spanish speaking children.

Strengths of the Study

The study was administered by the researcher who has 26 years of experience with migrant children. The study was conducted in a setting in which administration and staff are totally committed to quality programming for migrant children. This commitment is evidenced by the number of times that the program has been recognized for exemplary programming and for making an outstanding contribution in improving the quality of educational opportunities for migrant children in America. The commendations have been from the United States Office of Education, the Michigan Department of Education, and from the Governor's office, State of Michigan. The teachers are certified in early childhood education. Preschool

teachers in the summer migrant program must meet the local requirements which include an experiential and educational background in Early Childhood training. Both teachers have in their educational background six hours of teaching reading in the elementary school and three summers' experience in teaching preschool in the Lawrence (Michigan) Summer Migrant Program.

The experimental oral language program which uses music as a medium of instruction was developed by the researcher with the assistance of experienced teachers in migrant education and in curriculum development. Its pedagogy is sound. It contains elements that experts in bilingual education recommend as important for the bilingual student. These include the following.

1. Because the program is designed for kindergarten age children, it takes advantage of the child's major formative and developmental years to learn the English language and acquire concepts which will enable him/her to succeed in formal public school.

2. The program stresses that language systems are interdependent and interrelated with other major areas of cognition, and in the growth of the social, emotional, and self identity.

3. The program provides sequenced and concrete language which in turn prepares the way for more advanced and abstract linguistic and cognitive concepts.

4. The program emphasizes active involvement by requiring the children to manipulate objects and experience concrete events to help them develop language repertoires.

Limitations of the Study

The findings of this study should be considered within limitations. One factor that might have influenced the outcome of the study was the length of time. Since the summer migrant programs depend on the use of the local school buildings, the operation of the program is limited in its beginning and ending date. As soon as the school year ends, migrant personnel have to bring in all the instructional materials that will be used in the summer program. In some cases even furniture has to be replaced or moved from one room to another. All this has to be done as quickly as possible so that classrooms are ready for the first day of instruction. At the end of the seven week program, all materials and equipment have to be inventoried, packed, and out of the building. In other words, the building must be left in the same shape as it was before the summer migrant program. This limits the length of the summer migrant program to seven weeks of instruction. For this particular project, the length of time for implementation was limited to six weeks. One week was used for training of staff and identification of subjects.

Another factor that warrants consideration was the conditions during the testing period. They were not conducive to total concentration. Because attendance in the summer migrant program is voluntary, it is necessary to provide many different activities throughout the summer that encourage the student's daily attendance. During the week of testing in this particular study, a variety of incentive-type activities were provided and not all classes

participated. The activities included a book give-away, a clown/magician performance, and a skating party. Participation of children in these activities is dependent on individual teachers. In other words, attendance at any event is up to the teacher's discretion. Sometimes attendance at these activities is used as reward for good academic performance or for satisfactory behavior. These factors were not conducive to eliciting from the students their optimum performance and might have had a negative influence on the subjects' performance on the test.

Summary of Definition of Terms

In the following chapters, the population involved is referred to by a variety of terms. For the purpose of this study, the terms Hispanic, language minority student, second language learner, Spanish speaking student, and Mexican American are used interchangeably. Following is a definition of each term.

Hispanic

Hispanic is a term used to describe a person of Spanish origin or Mexican origin. These include people whose ancestry is North American (Mexico), island republics (Cuba, Santo Domingo), U.S. island possession (Puerto Rico), Central America, South America and Spain.

Language Minority Child

A language minority child is a student whose first language or native language is other than English or who comes from a home or environment where a language other than English is spoken.

Limited English Proficient (LEP)

LEP is a term used to describe a student who has been identified through results of standardized tests as having difficulty in speaking, understanding, reading and writing the English language.

Receptive language

Receptive language is a term that refers to language that is heard and can be understood by the receiver.

English as a Second Language (ESL) classroom

An English as a second language classroom is a classroom in which students are learning English as the second language and are being provided with structured programs in language development.

Pull out program

A pull out program is a type of program in which students are pulled from regular classroom settings for brief periods of time each day or each week for the purpose of being tutored. Tutoring sessions are either individual or in small groups. The instruction

is provided by a teacher who has had special training in migrant education, bilingual education, or in English as a Second Language techniques.

CHAPTER II

REVIEW OF RELATED LITERATURE

Introduction

This chapter reviews the literature that examines the relationship of oral language development taught through music to the reading achievement of Spanish speaking migrant children. It presents the theoretical implications and empirical research that influenced the development of this study. The major areas considered as they relate to reading achievement are language development and music. For language development, the research focused on the importance of developing the listening and speaking process as prerequisite to developing language necessary to succeed in reading. Music was examined as a viable teaching tool that can help Spanish speaking children acquire, understand and produce orally the vocabulary and structures necessary to succeed in a traditional reading program.

Reading and Language Proficiency

The debate over what is reading and how one learns to read has existed for decades (Smith, 1983). It is true, however, that the word reading has been used to describe what beginners do when they are struggling to learn to read as well as to refer to what more

experienced and fluent readers do for work or play (Eskey, 1985). In the schools reading also takes on different forms. In some places it is a relatively superficial activity which precedes activities in which students answer lower level questions; in others students simply recite what the authors have said. Eskey (1985) states that even the most brilliant of scholars have not been able to tell us exactly what we do when we read and that like most of the higher level cognitive level functions, the reading process is too complex to break down into a series of steps to take into a classroom and teach. He concludes that reading is a process that differs for different learners at various levels of proficiency.

Clearly, reading is a complex process and experts don't agree on how one learns to read. There is, however, agreement that language development does influence positively on reading and that the more developed one's language is, the better reader one becomes. The experts also agree that the early years are crucial in the process of becoming literate (Goodman & Yetta, 1973).

Another point of agreement among experts is that reading is communication. Gonzalez (1983), Troike (1978), and Thonis (1981) describe communication as being a two way process of input and output, input consisting of listening and reading and output including speaking and writing. Gonzalez (1983) further states that as elements of language, listening and speaking follow a natural sequence in their development. From the moment a baby is born, the infant hears sounds conveyed by parents, siblings and others. As the child grows, he or she imitates the sounds heard, and gradually

forms words, then phrases and sentences. It follows then that to develop communication as an input and output process, one must be able to hear the language first before producing it orally.

In agreement with the research, the logical sequence to follow when teaching the limited English proficient child a second language is to develop his/her listening, speaking, reading and writing processes. In other words, programs for language minority children should be developed to afford them many opportunities to hear the language before being expected to verbalize it. Thonis (1981) stresses that reading should not occur until after the child has achieved some fluency in speech, and in writing--the child should not be expected to write words or structures which have not been introduced orally.

If students cannot speak a language and use its vocabulary, form sentences or use functional grammar at the appropriate level of a six-and-one-half year-old child, learning to read that language would be difficult (Gonzalez, 1983; Thonis, 1976, 1981). Troike and Saville (1971) further state that for the language minority students, learning to read in English is frustrating when they lack the oral language readiness for it.

Clark (1978) agrees that language competency is important to reading proficiency and states that the lack of it produces a "short circuit" effect on the reader.

Further substantiating the notion that oral language development is necessary for success in reading is found in Cummin's work (1982) in which he found that individuals possess two forms of

communication. One serves for personal and social situations and its fluency does not necessarily predict success in school. He calls this "basic interpersonal communication skills" (BICS) (p.32). The second term "cognitive academic language proficiency" (CALP) (p.32) refers to the language abilities that go beyond ordinary communication. CALP is very important in learning to read but often BICS is what the Spanish speaking youngster brings to school. He lacks language necessary to understand academic concepts and abstract reasoning. Reading is language-based and the comprehension of a printed page is possible only to the extent of the reader's stored vocabulary. The abilities to abstract from the language as written and to elaborate further on its content are dimensions of language proficiency not readily apparent in natural informal communication.

Reading is communication (Smith, Goodman, & Meredith, 1976); reading is thinking (Cummins, 1982); reading is a process (Thonis, 1981). Johnson and Myklebust (1967) defined reading as a process in which a response to a visual symbol is superimposed on auditory language. This process involves seeing print, hearing speech, and associating whatever it is that has been seen and heard with stored and remembered experiences called referents. In other words, the reader goes from the known to the unknown, from a reality represented by sounds, to a new reality represented by symbols.

In Michigan, reading is defined by the Michigan Reading Association and supported by the Michigan State Board of Education as "a dynamic process that involves the reader's ability to

construct meaning through the interaction between information suggested by the written language and the reader's existing knowledge" (Michigan Department of Education, 1984, p.4).

For the language minority student, success in reading is dependent on the number and quality of experiences stored, the general level of oral language development, and the suitability of the instructional program (Thonis, 1981). Smith (1971) concurred that in order for reading to occur, meaning must be attached to the speech-print connection. Sometimes a reader must use context clues to help gather meaning from material that is unfamiliar. To reduce uncertainties and help the reader gain understanding of what has been read, it is important that the reader have numerous experiences and stored vocabulary (Smith, 1971).

Loban (1963), in his correlational studies on the processes of language development, found that reading, writing, listening and speaking correlated positively. Subjects who had a low general oral language ability performed low in reading; those with a high language ability tended to do well in acquiring literacy skills. Also, children with ability in oral language and vocabulary tended to do better in group intelligence tests. Further, Loban pinpointed the major problems of children experiencing difficulties in the elementary grades. They included:

1. having language that is inflexible, limited and not appropriate to meet their needs, especially in completing school tasks. This language is used most often for basic interpersonal communication and often is not the language of the text.

2. Having language that is not standard or acceptable as measured by standards set by those in power or by the society in that particular setting. For the language minority students, this presents a serious problem, for when language that is different is confused with language that is inadequate, teachers and school programs may inadvertently inhibit learners to the point of becoming inarticulate.

The research available on teaching the bilingual child to read is replete with data to substantiate the importance of language development to the success in reading. To date, volumes of research exist on methods to use for unlocking the mystery of why English-speaking children cannot read. For the language minority child the research is not as voluminous and the list of researchers not as long, but all who have done extensive research in bilingual education agree that the level of oral language proficiency in the language that one is learning to read correlates to the level of achievement in reading comprehension and vocabulary (Ching, 1976; Gonzalez, 1983; Kaminsky, 1979; Loban, 1963; Thonis, 1976, 1981).

Listening

Listening as an input process is termed a receptive language act. It enables the listener (Taylor, 1973), first, to receive the sounds and, second, to discriminate between various sound components, patterns and word order of the language. In the early stages of learning a new language, distinguishing between sounds is difficult yet crucial to the second language learner. Often,

students "will 'hear' the phonemes of their own language, that is, they will automatically classify new sounds as variants of familiar native-language phonemes" (Rivers, 1968, p.45). Thus, the student who cannot distinguish between the sounds of the new language and distinguish them from the sounds of the native language will have great difficulty in imitating the new sounds and in comprehending the speech of others. It is, therefore, crucial that second language learners be taught by aural discrimination exercises to help them hear the sounds which they had not been conscious of before. For, until they can hear the differences readily, they will have difficulty in producing acceptable imitations of these sounds.

The ability to hear sounds and discriminate between similar ones relates to success in learning to read. Children must be able to hear and produce the speech sounds before they can master the symbols used to represent them on the printed page. Undoubtedly, poorly developed listening skills account for much of the difficulty bilingual children experience with phonics in learning to read (Ching, 1976).

Tireman (1945), in studying the vocabulary of Spanish speaking children, found that the difference in phonetic structure of Spanish and English was the cause for many errors in pronunciation and meaning of English words. In second language learning, the learner will draw from his/her language those sounds that are similar to the second language and substitute them in the new language. If a sound does not occur in the native dialect, the child will substitute the one in the native language that approximates the sound. Following

are examples of sounds lacking and the common substitutions:

Sounds lacking in Spanish	Substitutions
sh as in shoe	ch as in chew
a as in man	e as in men or
	a as in father
i as in ill	e as in eel
u as in cup	o as in cop
ou as in out	o as in oh
th as in then	d as in den
z as in zoo	s as in sue
ng as in wing	n as in win
j as in joke	ch as in choke
v as in very	b as in berry

These are a few of the classic sound substitutions. There are also sound variations that when coupled with sound substitutions cause extreme confusion for the second language learners.

Rivers (1968) stresses the following points when designing programs of language development for the second language learners. First, sounds should not be practiced in isolation. Since sounds differ according to their combination with other sounds, they should be taught in combination with other sounds. Second, do not limit instruction to only those sounds that do not appear in the native language of the child. Instruction and practice should also include the sounds that are difficult to produce.

Listening and reading as receptive language activities are similar processes in which meaning is derived from spoken or written messages. This relationship is emphasized by Smith et al. (1976) who describe reading as an active process of constructing meaning from language and listening from sound symbols. This relationship was further substantiated by defining reading as "perception and comprehension of written messages in a manner paralleling that of

the corresponding spoken message" (Carroll, 1964, p. 340). Both are therefore considered meaning-getting processes in which the listener or reader responds to language in order to construct meaning.

Listening, like reading, involves an interaction between the background experiences and the language of the listener or reader and the speaker or author in order to construct the message. When children learn to read they are making a transition from spoken to written language. Reading instruction builds on conversational skills; the better the children are at using spoken language the more successfully they will learn to read written language. To succeed at reading, children need a basic vocabulary, some knowledge of the world around them, and the ability to talk about what they know. These skills enable children to process written material successfully.

As is evident in the research, there is a positive relationship between reading and listening. Duker (1964) and Brown (1965) show a positive correlation between reading comprehension and listening. In studies conducted with fourth and fifth grade students between 1926 and 1961, Duker found correlations ranging from .45 to .70; Brown (1965) reported higher correlations ranging from .75 to .82. In studies with kindergarten and first grade children it was found that students who listen well exhibit more ease and fluency in retelling stories. They are also more likely to be successful readers by the third grade. Similarly, good fifth grade listeners are likely to do well on aptitude and achievement in high school (Humphreys & Davey, 1983).

The review of literature clearly substantiates the importance of developing the listening process as a requisite to learning a second language and to the success in reading. In other words, being able to hear the words facilitates the acquisition of the second language which leads to vocabulary building. It is through stored vocabulary and stored experiences that the reader is helped to comprehend the written word. Researchers who have studied second language teaching stress the importance of designing programs that teach students to hear the sounds that do not appear in their native language. It is through this method of instruction that non English speaking students will acquire the skills to become fluent and proficient in the language and thereby succeed academically.

Music

A major assumption in education is that children vary according to preferred learning styles, rate of learning, and language of instruction. And, when the instruction matches the preferred mode of learning of the learner, acquisition of skills and knowledge can be enhanced (Witkin, Moore, Goodenough, & Cox, 1971). This is particularly true in the area of initial schooling where early successes are so important in establishing a positive adjustment to formal education. This emphasizes the need for teachers to select from a variety of options those methodologies which ensure the best possibilities for success. For the Limited English Proficient child, activities that utilize music can be one of the most powerful tools in helping him or her develop language use (Gray, Klaus,

Miller, & Forrester, 1972). Through music, language can be enjoyable and satisfying and the child can participate with the group without the fear of making a mistake.

Using music with the young child is documented by Vahed (1982) in which music is termed "delightful and challenging" for it "speaks to each child in a special way" (p.132). In musical activities, the child participates without fear and inhibitions. In this setting, he or she can practice producing the sounds of words, language patterns and word order. Music also adds variety and change to the traditional classroom where children engage in repetitive drills and choral repetitions of dialogues (Monreal, 1982, p. 44). Repetition is key to second language learning; but repetition hinders learning when it lacks meaning.

Documentation on the effect of music on the mind can be traced back to biblical times. In the Old Testament it is recorded that King Saul was overtaken by an "evil spirit." A harpist was summoned to play for him. Through his music the "evil spirit" was driven away leaving King Saul's body refreshed and well (American Bible, 1970).

Music and song have also been used effectively to facilitate language learning as well as learning other content areas. In the Middle Ages students learning a second language, usually Latin, started their training in a special school (Kelly, 1976). Here they were drilled by chanting the rhythm and flow of the language before starting the formal study in the second language.

In more modern times, studies have been conducted to document

the effect of music aptitude on learning. It was found that music aptitude correlated positively with the ability to learn a second language. A study, involving students with a high aptitude in music, showed that these students learned Spanish as a second language at a higher rate of learning than students who were low in musical ability (Eterno, 1961). Similarly, Leutenegger and Mueller in 1965 found a relation between language learning ability and musical aptitude.

Garcia (1983), in a study using Lazanov's Suggestopedia method to teach a second language which utilized music in the passive phase of the presentation to Hispanic non-English speaking adults, found that the experimental group acquired more facility with the second language and exhibited more confidence in expressing themselves. Another positive outcome was the building of positive self-esteem. The increase in vocabulary acquired at the end of each lesson was an evident source of pride for each individual student.

Continuously researchers and practitioners have studied and documented the use of music and song to aid in teaching concepts and facilitate language learning. In 1984, a study involving Southeast Asian students gave evidence that through the aid of music and rhythm the students were able to discriminate more quickly between English phonemes (Karimer, 1983). Schmidt (1976), who studied the effects of music on concept learning, found programs in Connecticut and Michigan that used music to improve language and cognitive skills such as mathematics. It was also found that children developed increased motor and affective skills at a greater rate

than children in comparison groups.

Studies on the effect of music on the rate of learning with handicapped children have also produced positive results. In a study involving retarded children conducted by Doepke (1967) it was found that approximately half of the population were able to memorize content through songs more easily than lessons that were presented using drill and discussion.

In the English as a Second Language (ESL) classroom, music can be the vehicle by which students transcend their feelings of inhibition and in adequacy with articulation, pronunciation and grammar of the second language. They can participate without fear, and practice forming speech patterns, word associations, and word order.

Songs encourage language and help students develop concepts (Gray et al., 1972, pp. 47-48). They help in building vocabulary, pronunciation, syntax and idiomatic expressions (Iantorno & Papa, 1979; Jolly, 1975; Richards, 1969). In vocabulary building, the lyrics of the songs provide a number of words that are easily remembered. First the child repeats the words every time he or she sings the song, and second, the content is easily learned because the lyrics of the song present the words in a particularly stimulating context.

Singing offers sustained and meaningful repetition of items to be learned (Richards, 1969, p. 161). In second language learning, a method that is widely used by those espousing to the audio-lingual school of language teaching is the drill and pattern practice

(Hauptman, 1976). Although repetition by itself often produces boredom which interferes with learning, repetition that is meaningful is motivating and holds the interest of the student, thereby contributing positively to the learning and retaining of content being taught (Hunter, 1981). By singing, children develop the ability to pronounce words, whole sentences or phrases fluently and smoothly. They also get practice in producing irregularities of the language and sounds that are foreign to them.

Songs provide another medium for listening. Students can listen to a song for specific parts of speech, for a fill in the blank exercise, or for dictation. Listening to songs can also assist students in developing imagery for creative writing or for oral discussions.

Music and songs in the ESL classroom can be a valuable tool for teaching language and can be the basis for valuable pedagogical activities. They too, however, hinder learning when inappropriately selected and used. For example, inappropriate lyrics can distract students and restrict imagination when the level is too difficult or too simple for the students being taught (Magahay-Johnson, 1984). The speed by which single words, phrases or whole sentences are uttered affects learnability as well as the use of non-standard English pronunciation (Iantorno & Papa, 1979; Monreal, 1982; Richards, 1969; Terroux, 1982; Zola & Sandvoss, 1976). Another distracting factor can be the accompanying instruments. In musical selections where the sounds of the instruments overpower the lyrics, the children may have difficulty in associating meaning to the

words. Often in these selections what is remembered is the beat or the sound. The selection of songs to teach specific concepts is another point to consider. Iantorno and Papa (1979) found that when songs were specifically constructed for teaching particular structures, students found them to be boring and artificial. Young people prefer content that is authentic and relevant to the time (Monreal, 1982).

In summarizing the literature, music can be a helpful tool for teaching language and concepts to the language minority children. Most children enjoy singing and songs often provide a pleasant change from the drill-type routine involved in learning a second language. In this pleasant setting, children learn vocabulary, pronunciation, structures, and language patterns. Songs provide the needed repetition without losing the child's interest, and also provide a new type of listening activity. Their careful selection and appropriate use can reinforce teaching; conversely, their inappropriate selection and use can hinder learning.

CHAPTER III

DESIGN AND METHODOLOGY

Introduction

This study was designed to examine the relationship between an oral language program that uses music as the medium of instruction, and reading achievement of Spanish speaking migrant children. This chapter describes the population and procedures for selecting the subjects, the dependent and independent variables are operationally defined, the procedures for collecting data are described, and the analysis of the data is discussed.

The research that is available on teaching the bilingual child is limited; also lacking are empirical data on methods that work. The research that does exist, however, substantiates the importance of language development as key to becoming literate and that reading is the single most critical skill that contributes to success in school. The research also supports the notion that programs in language development for bilingual children in their early years should focus on the use and practical function of language (Gonzalez, 1983) and should be set in environments that offer many opportunities for success.

Population and Selection of Subjects

Population

The population sample, which numbered 64 children, was drawn from the Education Consolidation and Improvement Act (E.C.I.A.), Chapter I Summer Migrant Educational Program (Michigan Department of Education, 1987) administered by the Van Buren Intermediate School District in Lawrence, Michigan. The ages of the subjects ranged from 5 years 9 months to 6 years 9 months. This precise age group was necessary since the study needed to include only children who had participated in a reading readiness program in kindergarten. The subjects selected for this study included interstate migrant children and intrastate migrant children. The interstate migrant children came from southwest Texas and Florida. The intrastate migrant children were from communities within Van Buren County. All of the subjects in the study had not yet entered first grade and had less than a year of kindergarten experience. The "settled out" migrant students were excluded because the educational experience and economic circumstance of these children are significantly different than that of the transient migrant.

Selection of Subjects

The subjects were identified through the Migrant Student Record Transfer System (MSRTS). MSRTS is a computerized network that tracks the academic and health data of every student who is a

migrant and enrolled in a migrant education program. All children who met the following criteria were identified:

1. age: five years nine months to six years nine months;
2. ethnic background: Mexican American;
3. migrant status: one or two (one stands for interstate; two stands for intrastate);
4. grade level: kindergarten.

From an alphabetical list generated by the computer, all the children meeting the specified criteria were identified and administered the Peabody Picture Vocabulary Test in English (Dunn, 1965) and Spanish (Dunn, 1986) to determine a receptive language age.

The Peabody Picture Vocabulary Test (PPVT) is designed to provide an estimate of a subject's verbal intelligence by measuring his or her listening ability (Dunn, 1965, p. 25). The reliability coefficients for the PPVT or the degree to which a subject scores consistently on the test were obtained by calculating Pearson product-moment correlations. They ranged from 0.73 for five-year-olds to 0.74 for seven-year-olds. In terms of validity, or the extent to which the test measures what it is supposed to measure, data were obtained for both single item and total test items. It contains two main types of validity evidence--rational and statistical. In this study, the test was used to measure hearing vocabulary, so its rational validity was based on the content validity. The test when used to measure hearing vocabulary is termed "the most valuable single test in the scale" (Dunn, 1965,

p. 32).

For the purpose of this study, the test was used to ensure that the potential subjects had a reasonable command of language. Those selected for the project were children who scored at or one and a half years below their chronological age. With migrant children, one and a half years below their chronological age when first tested is not uncommon. This is due to the "newness" of the situation. It takes the children time to adapt to the new environment and new people.

After all possible subjects were identified, the next step was to determine who might not be in the area for at least six weeks. This was extremely important to the project. Since transiency is basic to the existence of the migrant lifestyle, it was necessary to ascertain whether or not the families were to remain in the area for the length of the project. Each family was contacted and interviewed. The data gathered for each child included the number of weeks their parents or guardians thought they might remain in the area and the number of months of kindergarten experience. At this time the parents or guardians were provided with a detailed explanation of the musical and drill-type programs and permission was obtained for each child to participate in the study. The subjects who might not remain for the duration of the program were excluded from participating in the project. This was necessary to safeguard against disproportionate group sizes caused by subjects

leaving the program before the end of the summer.

After the elimination process, 51 children remained to participate in the study. Table 1 provides a description of the population sample by age and kindergarten experience.

Table 1
Description of Population Sample by
Age and Kindergarten Experience

Age		Months of Kindergarten Experience	
Years and Months	Frequency	Months	Frequency
5-9	8	4	2
5-10	2	5	2
5-11	2	6	3
6-0	8	7	11
6-1	1	8	22
6-2	3	9	11
6-3	2		
6-4	9		
6-5	4		
6-6	1		
6-7	5		
6-8	3		
6-9	3		

The participants numbered 51 with 24 girls and 27 boys. The ages ranged from five years nine months to six years nine months. The mean age of the children was six years three months. The number of months of kindergarten experience ranged from four months for two participants to nine months for eleven subjects. In kindergarten experience, the mean was 7.58 months. The range in kindergarten

experience for migrant children is not uncommon. This is attributed to transiency in this population and should not be construed as a lack of interest in education. The transient migrant parents value education but often a priority is placed on satisfying the basic physiological needs of food, shelter, and warm clothing (Maslow, 1978). Often, the family gets to a new community and is not there long enough to find a school to enroll the children. With this population, this is a frequent occurrence.

To form the comparison group and the treatment group, the first step was to group the subjects by migrant camps of residence. The names were listed alphabetically. Each child was then assigned a numeral starting with one and ending with fifty-one. The odd numbers became the comparison group who received instruction using a traditional drill-type method; the even numbers became the treatment group who received instruction using the musical program. Table 2 presents a description of both groups by age and kindergarten experience.

Table 2
Description of Student Population by Age
and Kindergarten Experience by Groups

	AGE		Months of Kindergarten Experience	
	Years & Months	Frequency	Months	Frequency
DRILL-TYPE COMPARISON GROUP	5-9	5	6	2
	5-10	2	7	5
	6-0	6	8	11
	6-2	1	9	8
	6-3	1		
	6-4	3		
	6-5	1		
	6-6	1		
	6-7	3		
	6-9	3		

Age: M 6.19 years

Kindergarten Experience: M 7.96 months

Total Cases: 26

MUSICAL TREATMENT GROUP	5-9	3	4	2
	5-11	2	5	2
	6-0	2	6	1
	6-1	1	7	6
	6-2	2	8	11
	6-3	1	9	3
	6-4	6		
	6-5	3		
	6-7	2		
	6-8	3		

Age: M 6.24 years

Kindergarten Experience: M 7.24 months

Total Cases: 25

The drill-type comparison group consisted of 26 subjects. There were 15 girls and 11 boys ranging in ages 5 years 9 months to 6 years 9 months. Their kindergarten experience ranged from 6 months for 2 children to 9 months for 8 children.

The musical treatment group had a group size of 25 students. The group was comprised of 9 girls and 16 boys. Their ages ranged from 5 years 9 months to 6 years 8 months. The kindergarten experience was between 4 months for 2 students to 9 months for 13 students.

Setting for the Study

The setting for this study was the Summer Migrant Program located in Lawrence, Michigan and administered by the Van Buren Intermediate School District. This program, the largest summer migrant program in Michigan, serves over 1400 children ages two and a half to twenty-one if they have not graduated from high school. Lawrence is located in southwestern Michigan in Van Buren County. The area is rural and is commonly referred to as the fruit belt of Michigan. The migrant labor force in Van Buren County consists of families from southwest Texas (65%), Florida (25%), and other states (10%). About 95% are Mexican American. Depending on the weather, the families start to arrive in mid-March and depart in November. They begin the season by harvesting asparagus and end their stay by picking apples.

The program is nationally recognized for excellence in education for disadvantaged youth. The curriculum materials and

programs developed by this program staff are disseminated nation-wide. The program consists of a preschool program for children ages 2 1/2 to 5 years old, a youth program for children ages 6 to 17 and an evening program for the young adults who cannot attend school during the day. A counseling program for all students complements the program. Also included is a family unit program that provides instruction, resources, and recreation for the parents. The program places an emphasis on staff training before and during the program and has in place a strong parental involvement component.

The instructional program is in session seven weeks. The curriculum emphasizes English language development, reading, and mathematics. It also includes a pre-vocational career program for students who are 10 years and older. The evening program is designed to help students complete the required time needed to earn high school credits. Often the migrant families are forced to leave their home state before the students have a chance to complete a semester in school. This causes the students to get an incomplete grade in that class. Rather than forcing the students to repeat the entire class, migrant education programs in the receiving states worked out a cooperative agreement with the sending states. The agreement involved setting up programs that would complement the curriculums of the sending states. The evening classes, then, are set up to afford the student an opportunity to make up the needed time. The classes offered are those identified by the students. During the recruitment process, a survey is conducted of all the

young adults needing to complete a particular course. Depending of the need of the students, the classes are established. The classes generally taught in the evening school are history, government, and English.

The day school begins at 8 o'clock in the morning and ends at 4 o'clock in the afternoon. All children are fed breakfast, lunch, and an afternoon snack. They are provided medical and dental screenings, and when necessary, provided with clothing (shoes and sweaters). The evening classes start at 7 p.m. at night and run until 9:30 p.m. All students are provided dinner.

The teaching staff is experienced in migrant education and more than half are bilingual. The teacher-student ratio is 1 to 25 and each teacher has two or three teaching assistants. In the early elementary classrooms each teacher has three teaching assistants; in the later elementary grades each teacher has two teaching assistants. The objective is to provide individualized instruction, thereby increasing the child's chances for educational achievement.

Known for excellence in programming, the program has been the recipient of two national awards: first by the U. S. Office of Education, and second by the National Title I Program under Secretary Bennett's initiative to identify programs which showed exceptional success with Title I students. The program also received a Commendation of Excellence from the Michigan State Board of Education in 1985 and was recognized as outstanding in education for Hispanic youth from the Governor's office.

Though this particular project was selected because of the

accessibility to the researcher, it is worthy to note that other migrant programs in Michigan or in any other part of the nation do not differ significantly in population. The rules and regulations that govern migrant education are consistent throughout the United States.

Independent Variable

To determine the relationship of a language program taught through music to reading achievement, the experimental group participated in an oral language program, "Cantamos" (Dominguez, 1981). This is a program designed to teach vocabulary and basic sentence structures through the use of music. It includes the entire set of sentence patterns found in the preprimer program of the basal readers. The development of the program consisted of taking all the different sentence patterns in each preprimer of a basal reading series and arranging them to music of familiar children's songs. For example the sentence patterns "I want", "here is", "the best surprise", "in here", found in Bears (Durr, W.K., LePere, J.M., Pikulski, J.J. & Alsin, M.L., 1983) of the Houghton Mifflin basal reading series were organized into a song and given the tune of "La Raspa", a well known Mexican folk dance.

The song is as follows:

I want to get a surprise,
to get a big surprise
I want to get a surprise,
to get a big surprise
And it is the best surprise -
the surprise is in here.

And it is the best surprise -
the surprise is in here.

I want to get a surprise,
to get a big surprise.
I want to get a surprise,
to get a big surprise.

The surprise is for Mother and Father -
Here is a big surprise!
The surprise is for Mother and Father -
Here is a big surprise! (Dominguez, 1981, p.8)

Guided by the teacher, the children interacted for a 20 minute period with a set of songs, pictures and puppets that represented the textbook characters. As the children were guided through a sequential development of simple to complex sentences, they also experienced the actions and feelings of the characters.

Each preprimer had its set of songs or chants that represented all the different structures. They were organized in a song book format accompanied with a corresponding set of recordings on audio tapes. Each song or chant could be presented and developed through choral recitations, individual or group singing, dramatizations of actions and feelings, discussion of ideas, illustrations or storytelling. Through the medium of music and in a pleasant and functional environment, the children developed and internalized the language necessary for success in the reading program.

The techniques for implementing this phase of the program included specific activities. They followed a series of sequential steps: motivation, direction, presentation, elaboration, reinforcement and evaluation (Gonzalez, 1983). The teacher selected a specific technique from the set of recommended activities for each

of the six sequential steps in order to develop a complete lesson plan. A listing of recommended activities for each technique and a sample lesson plan follows.

Recommended Activities

Motivation

Guide the students so that they listen to the entire song relating it to one of the following activities:

Surprise (guess what is in this box).

Humor (have you ever seen such a funny...)?

Mystery (do you like scary stories about...)?

Wonderment (I wonder what would happen if...)?

Identity (have you ever...)?

Activity (let's all take part in this...).

Concern (do you know how important it is to...)?

Feedback (let's find out how much you know about...).

Immediacy (you need to know this now, so that we can later...).

Direction

Guide the students so that they listen critically to each part of the song and help them to focus on specific sentence patterns or phrases so that at the end of the lesson they are ready to perform one of the following activities:

Sing the song or recite the song. They can answer a set of questions about the song or change the song using their own

sentences.

Presentation

Guide the students so that they are able to do one of the following activities: Recite each part of the song. Combine parts of the song into larger segments. Sing the entire song assisted by the teacher.

Elaboration

Guide the students to chant or sing the entire song as part of an extended experience. For example, the children may dramatize the actions and feelings depicted in the song; or they may draw pictures to illustrate the details of the song; or they may locate pictures in magazines or coloring books that depict specific sentences in the song. The children may also participate in a game related to the content of the song, or dance and sing the song as a presentation before a group.

Reinforcement

Guide the students so they listen to the song and then sing along with the music.

Evaluation

Guide the students so that they change the song using their own sentences; or discuss the song without the music focusing on sentences and phrases learned; or help the children in answering a

set of questions about the song.

Sample Lesson Plan

A sample lesson plan for the structure "You will see" sung to the tune of "Jingle Bells" from the Bears preprimer (Durr et al., 1983, p.11) might look like the following.

Title: "You will see"

Materials needed: puppets of frog and fish

Divide the children into 2 groups. Each group sings a verse.

Group I	You will see You will see I will get you, frog!
---------	---

Group II	You will see You will see I will get you, fish!
----------	---

Group I	Jump, Frog, jump! Jump, Frog, jump! I will get you, frog!
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Group II	Go, Fish, go! Go, Fish, go! I will get you, fish! (Dominguez, 1981, p.12)
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Motivation: Introduce the structure "You will see" by talking through the puppets saying, "you will see, you will see, I will get you (child's name).". Continue to do this until the children catch on.

Direction: Instruct the children to listen carefully to the audio tape because questions will be asked. Who are the characters? What are the characters doing?

Presentation: Sing the song with the audio tape. Divide the children into 2 groups. Each group will sing a verse.

Elaboration: Dramatize the actions of the song.

Reinforcement: Listen to the song and sing along with it.

Evaluation: Ask children to tell the class what they liked best about the song.

When presenting a lesson the teacher was encouraged to adhere to the following guidelines and recommendations.

1. Model the words, phrases, sentences and stanzas of each song carefully and precisely.

2. Make sure that children can pronounce each word, phrase, and sentence clearly and fluently.

3. Provide meaning to the words, phrases, sentences, and stanzas by relating them to the children's experiential background.

4. Use visual aids when appropriate.

5. Use mimicry and pantomime to provide clarity to the words, phrases and sentences.

6. Provide group and individual practice for each song or chant.

7. Keep the singing periods brief. Do not over expose the children to any one song; avoid fatigue.

8. Encourage the expression of each child's personality, thereby allowing each child to develop a positive self-concept.

9. Emphasize the immediacy of language by reinforcing the words, phrases, and sentences of each of the songs in situational and contextual environments.

The children receiving drill-type instruction were guided through a variety of oral language drills. Using a combination of

repetition (choral and individual), substitution (simple and progressive) and patterning techniques, the teachers taught the vocabulary and language forms of the preprimers. The program emphasized the following points:

1. Concentrate on a single grammatical pattern per drill.
2. Avoid using vocabulary which is unfamiliar to the students.
3. Keep the utterances short so the students can easily repeat them.
4. Limit the number of new words introduced to 5-7 per lesson.
5. Use one simple, previously-taught grammatical pattern per drill.
6. When possible, use cue cards, props, etc. to visually reinforce the meaning of each new word.

Usually the instructional setting was on the floor with the children sitting in a semi-circle in front of the teacher. Occasionally, the instruction was on a table. Using picture cards, pictures from a magazine, or dittoes, the teacher delivered her instruction twice daily. Each session was twenty minutes in length.

In a lesson used to teach the following words and structures--can, can see, see, I can see you, frog, you can see--the teacher showed the children a picture of a frog on a lily pad. A capsule presentation of the lesson follows.

Teacher: Children, can you tell me about this picture?

Children: (choral response) yes

Teacher: What is this? (pointing to the frog)

Children: (choral response) frog

Teacher: Can you see the frog?

Children: Yes

Teacher: Where is the frog?

Children: (choral response) on a flower

Teacher: Yes, the flower is called a lily pad.

Teacher: Janie, what is this?

Janie: a lily pad.

The drill continued for fifteen minutes with the teacher showing pictures, asking questions, and modeling the structures. The children responded by giving choral responses. After each choral response, a child was called on to give an individual response. This provided the teacher with a quick check on the child's grasp of the vocabulary and language forms. The lesson ended with a quick review of the words and structures (frog, can, see, I can see, and you can see) that included the teacher showing pictures that depicted the words and asking children to repeat the words and phrases. The teacher then asked the children to draw a picture of a frog on the lily pad. A similar type of instruction continued daily.

The difference between the traditional drill-type method and the musical model was the pedagogy used in teaching language development to young second language learners. In the traditional drill-type program, children were drilled on the new vocabulary using picture cards or dittoes, responding on cue in unison or individually. The vocabulary was taught in isolated units and only occasionally did the teacher use the words in the structures as they

appeared in the preprimer. There was no conscious effort to teach the words in the structures, phrases and sentences as they appeared in the preprimers. Also, because this drill technique did not provide for active involvement of all children, the chances that children might lose interest and not stay on task all the time were highly probable.

In the experimental program, the medium of music was used to teach vocabulary and structures. For the young child who was English language deficient, the musical activities afforded him or her an opportunity to participate with the group. It offered, as well, the safety of a group response where the child could hide his or her inadequacies in the language until such time when he or she could express himself or herself freely. The vocabulary was used repeatedly in phrases and structures as they appeared in the preprimer. In doing this, by the time the child got to the reader he or she would have heard the vocabulary and structures and produced them orally many times.

Dependent Variable

The dependent variable in this study was reading achievement which was measured by the Test of Basic Reading Skills (Brzeinski & Schoepfoerster, 1983) developed by the Houghton Mifflin company.

The Test of Basic Reading Skills is criterion referenced in that each subtest ascertains student mastery of understandings and skills taught or retaught while that particular preprimer or magazine section was being read. A criterion score has been established as the minimum demonstration of mastery of a specific skill at that level. Normative data are not needed for proper interpretation of the Test of

Basic Reading Skills because the tests provide information about individual students and individual skills; they do not compare student's reading performance against that of some large standardized population (Brzeinski & Schoephoerster, 1983, p. 3).

After six weeks of instruction, the children in both the drill-type program and the experimental musical program were administered the Level B test to determine their level of achievement. The test was administered according to the administration guidelines set forth in the administration manual. In each classroom (the experimental musical group and the comparison drill-type group) the test was administered by the teacher with the help of three teaching assistants. The test was administered in four sessions. The sessions and subtests administered during each session are listed below:

1st session: subtests A, B, C, D
2nd session: subtests E, F, G, H
3rd session: subtests I, J, K, L
4th session: subtests M, N, O

The test is divided into subtests which test a particular skill. Each subtest includes a set of 5 items, except word recognition which contains 15. To attain mastery the student must get 80% correct. The total number of possible correct responses numbered 85. A listing of the subtests and a description of each follows.

1. Word recognition: The subjects were tested on the ability to read the specified word. From a list of 3 words, the subjects chose the word dictated by the teacher. The maximum number of correct responses totaled 15.

2. Digraph th: From a list of 3 pictures, the subjects identified the picture beginning with th.

3. Following directions: The subjects were shown a landscape. They were to mark the appropriate part of the picture by circling, underlining, placing an x or connecting 2 objects with a line.

4. End sounds: From a list of 3 pictures, the subjects identified the 1 ending in l, t, n, p, y, m, d.

5. Letter sounds, context clues and cluster fr: A sentence containing an italicized word was provided followed by three pictures of objects. The subjects selected the picture that corresponded to the italicized word.

6. Digraph sh: From a list of 3 pictures, the subjects identified the one beginning with or ending with sh or st.

7. Referents: Two sentences were read to the subjects. From a list of 3 pictures, the subjects selected the 1 that corresponded to the pronoun referred to in the sentence.

8. Drawing conclusions: A pair of sentences was provided; the second one contained a blank space. From a list of pictures, the subjects were to pick the picture that corresponded to the blank space.

9. Predicting outcomes: Two pictures depicting a series of events were presented. From 3 sentences provided, the subjects chose the one that predicted the outcome.

10. Noting important details: A sentence was provided which contained a blank space. The subjects decided on the appropriate word by using the picture for clues.

11. Categorizing: From a list of like pictures, the subjects picked the 1 that did not belong.

After the test was administered to both groups, the booklets were scored and the number of correct responses for each skill recorded on the student's records. The data were entered and analyzed by using the SPSS-X (Norusis, 1986) program on the VAX-VMS of Western Michigan University.

Research Question and Hypotheses of the Study

Research Question: Will a program of oral language development that uses music as a medium of instruction make a difference in the reading achievement of Spanish speaking migrant children?

Research hypothesis: There is a relationship between a language development program that uses music as a medium of instruction on the reading achievement of Spanish speaking migrant children.

Null hypothesis: The mean score for the group of Spanish speaking migrant children participating in the oral language program taught through music is the same as the mean score of the group of Spanish speaking migrant children participating in the oral language program taught through traditional drill-type instruction.

Alternate hypothesis: The mean score in reading achievement for the group of Spanish speaking migrant children participating in a structured oral language program taught through music will be different than the mean score in reading achievement for the group of Spanish speaking migrant children participating in an oral

language program taught through traditional drill-type instruction.

To test the null hypothesis against the alternate hypothesis, a .05 level of significance was set. The .05 level was selected above the .01 level because the researcher felt that it (.05) provided enough leeway to reject the null hypothesis. The .01 was too strict; the .10 was too conservative.

Analysis of Data

For the purposes of examining the relationship of oral language development taught through music on the reading achievement of Spanish speaking youngsters, an experimental design was implemented. The Post-test-Only, Control Group Design was used. Its form is as follows:

R	x	O ₁
R		O ₂

The process involved in this design as described by Borg and Gall (1983) includes: (a) randomly assign subjects to the experimental and comparison groups, (b) administer the treatment to the experimental and not the comparison group, and (c) administer the post-test to both groups.

The decision to use the Post-test Control Group design over the Pre-test-Post-test Control Group Design was in consideration of the population participating in the experiment. The study involved kindergarten-age migrant children. Characteristically preschool migrant children do not pretest well. Often, they exhibit behaviors of intimidation such as crying, "clamping up" and not responding at

all, or being so anxious to please that they respond only for the sake of responding. In other words if the test involves pointing to a specific picture after a stimulus question is asked, the child will point to anything on the page. This cultural characteristic is often displayed by Mexican American children who feel that by not responding will hurt the other person's feelings.

Randomization of the population sample was done to the extent possible to eliminate initial differences in the control and comparison group. Characteristically, the population sample included similarities in socioeconomic background, ethnicity, educational experience, and language ability in both English and Spanish. In dividing the sample into two groups, a simple randomization was used.

Statistical Analysis

To analyze the data from this design, a t-test was used to compare the mean post-test scores of the drill-type comparison group and the musical treatment groups (Borg & Gall, 1983, p. 671). The Post-test Only, Control Group Design is the only setting for which the t-test is optimal (Campbell & Stanley 1966, p. 26).

Other analysis conducted for additional data included a Pearson Product Moment Correlation to determine the relationship of language proficiency and reading achievement as well as attendance and months of kindergarten background on reading achievement.

CHAPTER IV

ANALYSIS OF DATA

Introduction

The purpose of this study was to determine the effect of a structured oral language program taught through music on the reading achievement of Spanish speaking migrant children. This section presents an analysis of the data.

The study included 51 Spanish speaking migrant subjects ages 5 years 9 months to 6 years 9 months. Twenty four were females and 27 were males. Their kindergarten experience ranged from 4 months to 9 months. The subjects were randomly divided into 2 groups, the comparison group and the treatment group. In the comparison group the subjects studied the vocabulary and language patterns of the basal readers through drill-type instruction; in the treatment group the subjects participated in an experimental music program, "Cantamos" (Dominguez, 1981). Here they were taught the vocabulary and language patterns of the basal reader through a specially designed program where these language items were put into verse and music. The instructional program ran for 6 weeks. Twenty six subjects made up the comparison group; the treatment group consisted of 25 children. The differences in the characteristic make-up of the group were minimal (see Table 3). In age, the difference between

the group was less than 1 month and in kindergarten background they differed by approximately 1 month. In attendance the groups averaged about 25 to 29 days present from a possible 30 day period.

Table 3
Age, Kindergarten Experience, and Attendance:
Comparison of Means by Groups

	GROUPS	
	Drill-type Comparison	Musical Treatment
Age in Years and Months		
<u>M</u>	6.19	6.24
<u>SD</u>	.98	.48
Kindergarten Experience in Months		
<u>M</u>	7.96	7.24
<u>SD</u>	.92	1.53
Attendance in Days		
<u>M</u>	27.54	26.64
<u>SD</u>	2.21	2.75

The study was designed to document the efficacy of the program, "Cantamos," that teaches the vocabulary and language patterns of the basal reader through the medium of music to Spanish speaking migrant children. The evidence to substantiate the benefit of this musical program was measured through the administration of a test (Brzeinski & Schoepfoerster, 1983) at the end of the six week period. The test, developed by the Houghton Mifflin Company (Boston, MA), is designed to measure the child's progress in mastering the concepts

presented in the daily lessons. The skills tested included word recognition, following directions, initial and ending letter sounds, categorizing, and literal and inferential comprehension. Descriptive test data for each skill can be found in Table 4, page 64. The data represent the mean score of correct responses for each skill, the standard deviation, and the observed t -test values.

The hypotheses which governed the analysis of the data included the following:

Research hypothesis: There is a relationship between the language acquired through a program that uses music as a medium of instruction and the reading achievement of Spanish speaking migrant children.

Null hypothesis: The mean score for the group of Spanish speaking migrant children participating in the oral language program that uses music as a medium of instruction is the same as the mean score of the group of Spanish speaking migrant children participating in the oral language program taught through traditional drill-type instruction.

Alternate hypothesis: The mean score in reading achievement for the group of Spanish speaking migrant children participating in a structured oral language program that uses music as a medium of instruction will be different than the mean score in reading achievement for the group of Spanish speaking migrant children participating in an oral language program taught through traditional drill-type instruction.

The t -test for independent means was used to test the null

hypothesis against the alternate hypothesis at the .05 level of significance. Since the alternate hypothesis was non-directional, a two-tailed test was used. The t -test was used since this study involved only two groups. Campbell and Stanley (1966) term the t -test as optimal when comparing two means.

The data were entered and analyzed through the SPSS-X (Norusis, 1986) program on the VAX-VMS system of Western Michigan University.

Data Analysis

Descriptive Analysis of the Research Hypothesis

The data collected on reading achievement were to answer the research question: Is there a relationship between the language acquired through the musical program "Cantamos" which develops the vocabulary and language patterns of the basal reading program and the reading achievement of Spanish speaking children? Reading achievement was measured by computing the mean scores for each of the following skills: word recognition; digraphs th, sh; following directions; end sounds l, t, n, p, g, m, d; letter sounds and context; referents he, she, it; clusters fr, st; drawing conclusions, predicting outcomes; details; and categorizing. Table 4 presents the mean scores, standard deviations, and the t -test values for each of the subtests.

Table 4
Mean Scores and *t*-test Values for Subtests
in Reading by Groups

Skills	Drill-Type Instruction Comparison Group	Musical Program Treatment Group	<i>t</i> -test Value
Word Recognition			
<u>M</u>	13.12	14.35	-2.16*
<u>SD</u>	2.45	1.19	
Digraph th			
<u>M</u>	4.21	4.48	-.88
<u>SD</u>	1.06	1.04	
Following Directions			
<u>M</u>	4.33	4.65	-1.37
<u>SD</u>	.92	.65	
End Sounds l,t			
<u>M</u>	4.13	4.39	-.99
<u>SD</u>	1.04	.78	
End Sounds n, p			
<u>M</u>	3.96	4.30	-1.05
<u>SD</u>	1.23	1.02	
Letter Sounds & Context			
<u>M</u>	4.17	4.35	-.54
<u>SD</u>	1.24	1.07	
Digraph sh			
<u>M</u>	3.92	4.48	-1.80
<u>SD</u>	1.32	.73	
Referents: he, she, it			
<u>M</u>	4.13	4.57	-1.52
<u>SD</u>	1.23	.66	
Cluster fr			
<u>M</u>	3.67	4.04	-.99
<u>SD</u>	1.43	1.15	
Drawing Conclusions			
<u>M</u>	3.71	3.87	-.37
<u>SD</u>	1.51	1.45	
Predicting Outcomes			
<u>M</u>	3.0	3.30	-.50
<u>SD</u>	2.02	2.14	
Cluster st			
<u>M</u>	3.54	4.13	-1.36
<u>SD</u>	1.61	1.32	

Table 4--Continued

Skills	Drill-Type Instruction Comparison Group	Musical Program Treatment Group	t-test Value
Details			
<u>M</u>	3.25	3.44	-.33
<u>SD</u>	1.96	1.85	
Categorizing			
<u>M</u>	4.04	4.43	-1.20
<u>SD</u>	1.39	.73	
End Sounds g, m, d			
<u>M</u>	3.87	3.82	+.10
<u>SD</u>	1.62	1.61	

t-test for Independent Means
df (49), cv (.05)=2.012

* $p < .05$, two-tailed.

The mean score for each subtest reflects the subject's accomplishment per skill. In word recognition which contained 15 items, 12 subjects in the drill-type group got all items correct while 17 students in the musical group achieved 100%. Achieving at the 80% level, which is the satisfactory benchmark set by the Houghton Mifflin Company, were 8 subjects from the drill-type group and 6 from the musical group.

In the digraph category which included the sh and th sounds, an average of 12 subjects in the drill-type group got all items correct as compared to 16 subjects in the musical group. Those achieving at the 80% satisfactory level averaged 8 subjects from the drill-type group and 7 from the musical group. In endings, the sounds included l, t, n, p, g, m, and d. Each subtest included 5 items.

The number of subjects who achieved 100% averaged 13 in the drill group and 14 in the musical group. Subjects scoring at the 80% level averaged 8 from the drill-type group and 6 from the musical group.

In the cluster group which tested the fr and st sound, an average of 10 students from the drill-type group scored 100% and 14 did from the musical group. Six students from the drill-type group scored at the 80% satisfactory level and 3 did from the musical group. In the letter sound and context category, 15 subjects from the drill-type group scored 100% and 16 did from the musical group. Scoring at the satisfactory level of 80% were 4 students from the drill-type group and 6 from the musical group.

In the pronoun referent category, 13 subjects from the drill-type group scored 100% compared to 16 from the musical group. Scoring at the 80% level were 7 subjects from the drill-type group and 6 from the musical group. The final skills tested included following directions, details, categorizing, predicting outcomes, and drawing conclusions. An average of 12 subjects from the drill-type group scored at the 100% level and 14 did from the musical group. Those scoring at the 80% satisfactory level included an average of 5 subjects from both the drill-type group and the musical group.

In examining achievement of the total student population in each group, the following was found. The subjects who scored at the 100% level included 48% from the drill-type group and 58% from the treatment group. Scoring at the satisfactory level of 80% were 23%

from the drill-type group and 19% from the musical group.

To test the null hypothesis against the non-directional alternate hypothesis, a .05 level of significance was set and a t-test for independent means was performed for each skill. Since the alternate hypothesis was non-directional, a two-tailed test was used. The results of the t-test for independent means provided evidence to support the rejection of the null hypothesis at a .05 level of significance of the subtest on word recognition in reading achievement (Table 4, p. 64). Therefore, in word recognition there was a difference in the means suggesting that a relationship existed between the method of instruction and achievement in word recognition by Spanish speaking migrant children.

For the remainder of the subtests that made up reading achievement, there was not enough support to reject the null hypothesis at the .05 level of significance. Thus, the method of instruction did not affect reading achievement of Spanish speaking migrant children in the following subtests: digraphs, ending sounds, following directions, letter sounds and context, referents, clusters, drawing conclusions, predicting outcomes, details and categorizing.

Inherent in the study was the notion that oral language proficiency correlated positively to reading achievement. To test the relationship of language proficiency to reading achievement, the English receptive language scores from the Peabody Picture Vocabulary Test (Dunn, 1965) were compared to the scores of the Houghton Mifflin Reading Test (Brzeinski & Schoephoerster, 1983).

Using a Pearson Product-Moment Correlation, the result yielded a high correlation with a correlation coefficient of $r=.72$ (Hinkle, Wiersma, & Jurs, 1979).

The Pearson Product-Moment Correlation was also conducted on attendance and on the number of months of kindergarten experience. Attendance yielded a high correlation with a correlation coefficient of $r=.84$; the correlation coefficient for kindergarten experience was $r=.67$, a moderate relationship.

CHAPTER V

SUMMARY AND CONCLUSIONS

Introduction

In this concluding chapter, a summary of the investigation is presented, limitations of the applicability of the findings are noted, and the recommendations are made for future study. Last, the conclusions are discussed.

Summary

The changing demographics for the Hispanic population affect all Americans and indeed pose major challenges for American education. Hispanics are the fastest growing major subpopulation in the United States, but they, too, are more likely to drop out of school, be unemployed, and live a life of poverty.

Hispanic children have certain special needs that are influenced by language, culture, and environment. These characteristics, which are regarded as advantages in one culture, prove to be liabilities when the child first comes into contact with a new environment and a new language. If school systems are going to ensure that these children are guided successfully through the educational process, their needs must be reflected in the school's instructional beliefs and practices. This will require that programs address the linguistic needs in environments that are supportive and conducive to learning. The needs are many, but the

most important is that which addresses language development. First, many Spanish speaking students lack sufficient linguistic awareness to be able to use the language structures they acquire. Second, their existing or prior knowledge is often inadequate when applied to words or concepts, thereby decreasing comprehension. Last, many are unable to understand the speech of others due to the differences between language systems.

The limited research that exists on teaching methods in language development and reading clearly indicates that fluency in the language correlates positively to reading achievement. It is also, evident in the research that reading is a critical skill that influences success in school. In fact, after the second grade, the average normal student must know how to read in order to acquire and understand concepts in other content areas (Thonis, 1976). When students lack this basic skill, progress in school is severely hampered. For many language minority students this problem is compounded every year they are in school. In other words, often the academic gap widens for every year they are in school.

Though the review of the literature substantiated the need for the programs that develop language, there was a lack of empirical research related to methods that work for teaching the Spanish speaking child. This study was, therefore, undertaken to investigate the effects of a specially designed program, a structured oral language program taught through music on the reading achievement of Spanish speaking migrant children.

The experimental program, "Cantamos," (Dominguez, 1981) is a

collection of songs and chants that take the needs of the Spanish speaking child into mind. It provides many opportunities for children to hear the words and sentence patterns of the basal reader and to produce them orally before being expected to read them. The method of delivery utilizes music which can be a valuable tool in the English as a Second Language classroom. It presents language learning in a comfortable atmosphere and uses songs set to tunes that are familiar to the child. Additionally, the mode of instruction for these lessons emphasizes the active involvement of all children. This is especially important to the young Spanish speaking child who at this age may not be motivated to learn English. Often this child has a complete sound and grammar system in his or her native language which he or she uses at home with his or her family and with peers. But in a setting that is nonthreatening, the child may participate willingly and without fear or inhibition and be motivated to learn English.

For this study, 51 Spanish speaking migrant students ages 5 years 9 months to 6 years 9 months were selected from the Education Consolidation and Improvement Act (E.C.I.A) Title I Lawrence Summer Migrant Program administered by the Van Buren Intermediate School District. All the children had had at least 4 months of kindergarten experience and possessed a fair understanding of English and Spanish oral language as measured by the Test de Vocabulario en Imagenes Peabody (Dunn, 1986).

The design of this study consisted of 2 groups of children receiving instruction in language development via different methods.

One group was instructed via a traditional drill-type method; the other was instructed using a program that utilized music as the medium of instruction. Daily for 6 weeks during two 20-minute sessions, the children in the musical program interacted with songs that contained the vocabulary and language forms in the basal readers. This afforded the children many opportunities to hear and use the vocabulary and language forms of the basic readers before actually reading them. In the drill-type comparison group, the children were instructed via drill-type techniques. Here the children responded on cue to questions posed by the teacher or repeated words or phrases modeled by the teacher. The vocabulary and language forms were those found in the basal reader.

Limitations

The findings of this study should be considered within limitations. One factor that might have influenced the outcome of the study was the length of time. Since the summer migrant programs depend on the use of the local school buildings, the operation of the program is limited in its beginning and ending dates. As soon as the school year ends, migrant personnel have to bring in all the instructional materials that will be used in the summer program. In some cases even furniture has to be replaced or moved from one room to another. All this has to be done as quickly as possible so that classrooms are ready for the first day of instruction. At the end of the 7 week program, all materials and equipment have to be inventoried, packed, and out of the building. In other words, the

building must be left in the same shape as it was before the summer migrant program. This limits the length of the summer migrant program to 7 weeks of instruction. For this particular project the length of time for implementation was limited to 6 weeks. One week was used for training of staff and identification of subjects.

Another factor that warrants consideration was the conditions during the testing period. They were not conducive to total concentration. Because attendance in the summer migrant program is voluntary, it is necessary to provide many different activities throughout the summer that encourage the student's daily attendance. During the week of testing in this particular study, a variety of incentive-type activities were provided and not all classes participated. The activities included a book give-away, a clown/magician performance, and a skating party. Participation of children in these activities is dependent on individual teachers. In other words, attendance at any event is up to the teacher's discretion. Sometimes attendance at these activities is used as reward for good academic performance or for satisfactory behavior. These factors were not conducive to eliciting from the students their optimum performance and might have had a negative influence on the subjects' performance on the test.

Recommendations for Future Research

Further research needs to be conducted to identify effective methods for teaching language to the young Spanish speaking child. Even though the results of the t -test for independent means did not

support the structured oral language program taught through music as being more effective as a method of instruction than the traditional drill-type instructional program, the results of the raw data suggest further study (see Table 4, p. 64). An examination of the raw data indicates an overall satisfactory performance by both groups.

In replicating this study, it is strongly advised that the setting be during a school year program. The school year would allow the instructional staff more time to participate in training that would provide them with additional resources on how to effectively implement the drill-type technique and the musical program. It would also provide teachers with more time and flexibility to help children acquire all the skills that make up reading achievement. The Silver report (1981-1982) documents that time on task correlates positively to reading achievement, i.e., additional time for instruction is needed. Additional time would also provide the children more opportunity to adjust to new environments and new personnel. In migrant education, it is not uncommon for the young children to take up to three weeks to adjust to new situations.

This same study was conducted by the researcher 3 years ago during the summer of 1987. It was implemented in a summer migrant education program. The study was identical to the present one in scope, length of instructional time (6 weeks), population, and delivery. The results of the 1987 project were inconclusive. It appeared that the data did not provide support for the

non-directional alternate hypothesis which stated that a difference in mean scores in reading achievement of the comparison and treatment groups would be evident. Since there was a significant lapse of time in completing the narrative description of the results and conclusions, the second study was implemented in the summer of 1990. The results of the second study were similar to the first.

It is the opinion of the researcher that the length of time was the major factor that influenced the results of both studies. When one considers the actual time spent on instruction, which excludes the 6th week of the project, the total instructional time for the 6 week program was about 16 hours. Sixteen hours was hardly enough time to adequately assess the effectiveness of an experimental program. The 6th week of the study was excluded as instructional time because it was set aside for testing.

Other considerations that need to be taken into account include implementing the study in a setting where the population is large enough so that a random sample can be obtained. The lack of a random sample severely limits generalization of the results of this study to similar populations. Another concern is the need to control other variables. Some examples of variables that could be controlled to strengthen the study include: family background, (single parent versus two parent home versus extended family), parental support for education versus no support for education, pre-kindergarten experience, degree of proficiency in receptive oral language, and number of siblings in family. Finally, the testing should be modified to include a post-test that measures language

development. In the present study, the subjects were tested at the onset of the program to ascertain a fair level of receptive oral language proficiency but were not post-tested in language development. There is uncertainty as to the degree of language proficiency of the subjects at the end of the study. Further research needs to be done for the results to be conclusive.

A final recommendation that merits consideration is one that addresses different learning styles as a result of right brain or left brain dominance (Vitale, 1982). Even though none of the children outwardly opposed participating in either of the groups and everyone seemed to enjoy themselves in both groups, the programs of instruction should be sensitive to how children learn. It is therefore suggested that a program that utilizes both methods of instruction be implemented. A program such as this would address the differences in how children learn and might produce a difference in results.

Conclusions

The findings of the study proved to be inclusive. There was not enough support to make a determination on which method of instruction was more effective for teaching language that impacted on the reading achievement of Spanish speaking migrant students. There was, however, support to indicate that the subjects' participation in these programs did not prove to be damaging. In both programs, the children made significant progress in reading as is documented by the raw data (see Table 4, p. 64). The raw data,

which reflects the number of correct responses per skill, indicate that the subjects in the control group had 86% correct responses while the treatment group had 80% of correct responses; thus, both groups had a satisfactory score in reading performance. The benchmark set by the company for satisfactory accomplishment of skills is 80%.

The results of the correlations that were computed to determine a relationship between language proficiency and reading achievement support the premise that proficiency in language increases the probability of success in school. The children who had a higher receptive language score also had a higher score on the reading test. The positive relationship between receptive language and reading achievement also verifies the need to consciously plan programs of language development for second language learners. In other words, language development programs need to be planned by people who know how to meet the linguistic and cultural needs of the Hispanic student. Further, language development for the second language learner must not be left to chance. Children who are learning a second language should not be expected to acquire language by watching television or by interacting with peers at play or in school or by listening to the teacher give instructions. Language minority children must have educational programs where instruction is consciously planned, is challenging, and is linguistically and culturally relevant in order that their chances for success in school be increased.

Appendix A

**Michigan Migrant Education Program
Family Certificate of Eligibility**

The Michigan Family Certificate of Eligibility Form is the official document for the identification of eligible migratory children in Michigan. This form is to be completed by a trained field representative of the local Migrant Education program, Michigan Department of Education.

Definitions:

I. Relationship to Migratory Children

- A. Parent**
- B. Guardian (current parent)**
 1. A person who has been appointed to be the legal guardian of a child through formal proceedings in accordance with State law.
 2. A person who an SEA determines would be appointed to be the legal guardian of a child under the law of the child's domiciliary State if formal guardianship proceedings were undertaken.
 3. A person standing in the place of a parent to a child.

II. Agricultural Activities

- A.** Any activity directly related to the production or processing of crops, dairy products, poultry, or livestock for the initial commercial sale or as a principal means of personal subsistence.
- B.** Any activity directly related to the cultivation or harvesting of trees or
- C.** Any activity directly related to fish farms.

III. Type of Migrant Worker

- A. Migratory Agricultural Worker**
"A person who has moved within the past 12 months from one school district to another—or, in a State that is comprised of a single school district, from one school administrative area to another—to enable him or her to obtain temporary or seasonal employment in an agricultural activity."
- B. Migratory Fisher**
"A person who has moved within the past 12 months from one school district to another—or, in a State that is comprised of a single school district, from one school administrative area to another—to enable him or her to obtain temporary or seasonal employment in a fishing activity."

IV. Migratory Status

<i>Agriculture</i>	<i>Fishing</i>	A. Currently Migratory (MS-1, MS-2) (MS-4, MS-5) means a child:
		<ol style="list-style-type: none"> 1. Whose parent or guardian is a migratory agricultural worker or a migratory fisher. 2. Who has moved within the past 12 months from one school district to another—or, in a State that is comprised of a single school district, has moved from one school administrative area to another—to enable the child, the child's guardian, or a member of the child's immediate family to obtain temporary or seasonal employment in an agricultural or fishing activity. This definition includes a child who has been eligible to be served under the requirements in the preceding sentence, and who without the parent or guardian, has continued to migrate annually to enable him or her to secure temporary or seasonal employment in an agricultural or fishing activity.
1	4	—Interstate (child crossed State boundaries)
2	5	—Intrastate (child crossed school district boundaries)
<i>Agriculture</i>	<i>Fishing</i>	B. Formerly Migratory (MS-3) MS-6)
3	6	<ol style="list-style-type: none"> 1. Was eligible to be counted and served as a currently migratory child within the past five years, but is not now a currently migratory child. 2. Lives in an area served by a migrant education project. 3. Has the concurrence of his or her parent or guardian to continue to be considered a migratory child. <ol style="list-style-type: none"> a. There is a total of six years of program eligibility—a one year status as a "currently migratory child" and up to five additional years as a "formerly migratory child." b. For the purpose of this definition, "area served by a migrant education project" means any portion of the geographic areas: <ol style="list-style-type: none"> 1. That is within the legally prescribed boundaries of an LEA or a combination of LEAs; and 2. Within whose boundaries there are currently or formerly migratory children who are receiving migrant education services or who will receive these services within the current grant period of the approved State Migrant education program.

Civil Rights (34CFR204): You have the right to file a complaint if you feel you have been discriminated against because of race, color, national origin, religion, sex, age, marital status or because of physical, mental, or emotional disability.

Family Educational Rights and Privacy Act: You have certain rights under the Family Educational Rights and Privacy Act. You may review your child's record and object to contents which you feel do not reflect the facts. See your local school for more details.

Appendix B
Parent Questionnaire: English

NAME:

ADDRESS/CAMP:

I give permission for my child _____ to participate in the experimental program of oral language at Project NOMAD in Lawrence, Michigan. I understand that the program is experimental and that the object is to see if there is a relationship between reading achievement of the children participating in this program and the reading achievement of the children involved in the traditional oral language program. The following was explained to me and I understand fully:

1. The program is experimental and it was explained in detail.
2. The instruction is for six weeks.
3. My child participates in this project for 40 minutes daily.
4. The children will be tested at the end of 6 weeks using the Houghton Mifflin reading test level B.
5. The test results will be used by Mrs. Dominguez in her research project as part of her doctoral program.
6. The test booklets and the research data will be kept in locked files at the Van Buren Intermediate School District, 701 South Paw Paw Street, Lawrence, Michigan.
7. The participation of my child is voluntary and as such I can withdraw him/her from the program at any time for whatever reason. This I can do by contacting the recruiters or by calling 674-8091 and talking to Mrs. Dominguez or one of the secretaries.
8. The program is of sound pedagogical instruction and will not pose any risk (physical, mental, or emotional) to my child.

My signature below and date affirm my consent for the participation of my child in the Experimental Program of Oral Language Instruction in the Project NOMAD Program in Lawrence, Michigan.

Parent or Guardian Signature

Date

Appendix C
Parent Questionnaire: Spanish

ATTACHMENT 2

NOMBRE _____

DIRRECCION/CAMPO _____

Doy mi permiso para que mi hijo(a) _____ participe en el Programa Exprimental de Lenguage Oral en el programa NOMAD en Lawrence, Michigan. Entiendo que el programa es exprimental y el intento es para ver si despues de participar, los alumnos hacen mejor en una prueba de leer. Lo siguiente fue explicado y lo entiendo bien:

1. El programa de Lenguaje Oral es exprimental y fue explicado en detalle por la Sra. Dominguez.
2. La instruccion durara seis semanas.
3. La participacion de mi hijo(a) es diaria por 40 minutos.
4. Los ninos se les dara un examen de leer al fin de 6 semanas usando la prueba del Houghton Mifflin nivel B.
5. Los datos seran usados por la Sra. Dominguez como parte de su proyecto de doctorado.
6. Los exámenes y los resultados de los exámenes seran archivados bajo candado en la oficina del Van Buren Intermediate School District, 701 South Paw Paw Street en Lawrence, Michigan.
7. El participar de me hijo(a) es voluntario y al cualquier tiempo y por cualquier razon lo puedo sacar del programa. Esto lo puedo hacer comunicando con uno de los reclutores o puedo llamar al 674-8091 y hablar con la Sra. Dominguez o con una de las secretarias.
8. El programa exprimental es un programa de instruccion sana y al participar, mi hijo(a) no corre ningun riesgo fisico, mental, o emocional.

Mi firma y fecha es testimonio de mi permiso para que mi hijo(a) participe en el Programa Exprimental de Lenguaje Oral en el Programa NOMAD de Lawrence, Michigan, bajo la dirreccion de la Sra. Dominguez.

 Firma del Padre o Guardian

 Fecha

Appendix D
Programa Experimental de Lenguaje Oral

APPENDIX D

Programa Experimental de Lenguaje Oral

NOMBRE _____

CAMPO _____

DIRRECCION _____

TIEMPO QUE PERMANECERAN EN EL AREA _____

MESES O DIAS QUE SU NINO ATENDIO EL KINDER _____

Appendix E
Human Subjects Review

**WESTERN MICHIGAN UNIVERSITY
HUMAN SUBJECTS INSTITUTIONAL REVIEW BOARD (HSIRB)
HUMAN SUBJECTS APPROVAL FORM**

RESEARCH MAY NOT BEGIN UNTIL THE PROTOCOL HAS BEEN REVIEWED AND APPROVED BY THE HUMAN SUBJECTS INSTITUTIONAL REVIEW BOARD, WHICH MEETS ON A REGULAR MONTHLY BASIS. PROTOCOLS MUST BE RECEIVED BY RESEARCH AND SPONSORED PROGRAMS AT LEAST SEVEN DAYS PRIOR TO A REGULARLY SCHEDULED MEETING IN ORDER TO BE ACTED ON AT THAT MEETING. THE FORM MUST BE TYPEWRITTEN, EXCEPT FOR SIGNATURES.

PRINCIPAL INVESTIGATOR* Dora S. Dominguez
 DEPARTMENT Ed Leadership
 Office address: 701 South Paw Paw St., Lawrence Office Phone: (616)674-8091
 Home Address: P.O. Box 475, Mattawan, MI 49071
 Home Phone: (616)668-2655 (Zip Code)

PROJECT TITLE: The effects of a Structured Oral Language Program taught through music on the reading achievement of Spanish speaking migrant children

PROPOSED PROJECT DATES From June 19 To July 28
 SOURCE OR POTENTIAL SOURCE OF FUNDING none
 APPLICATION IS New Renewal

Protocols for projects extending beyond one year from date of HSIRB approval must be submitted annually for renewal.

If this proposal is approved by the Institutional Review Board, the Principal Investigator agrees to notify the HSIRB in advance of any changes in procedures which might be necessitated. If, during the course of the research, unanticipated subject risks are discovered, this will be reported to the IRB immediately.

P.I. Signature

Date

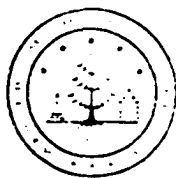
*If the Principal Investigator is a student, complete the following:

Undergraduate Level Research _____ Graduate Level Research
 Faculty Advisor Dr. Charles Warfield Telephone (616)387-3890
 Department: Ed Leadership

Advisor Signature

Date

Rev. 6/89 All previous forms are obsolete and should not be used.



WESTERN MICHIGAN UNIVERSITY

Date: July 19, 1990

To: Dora S. Dominguez

From: Mary Anne Bunda, Chair

Mary Anne Bunda

Re: HSIRB Project Number: 90-06-08

This letter will serve as confirmation that your revised research protocol, "The Effects of a Structured Oral Program taught through Music on the Reading Achievement of Spanish Speaking Migrant Children," has been approved under the exempt category of review by the HSIRB. The conditions and duration of this approval are specified in the Policies of Western Michigan University. You may now begin to implement the research as described in the approval application.

You must seek reapproval for any changes in this design. You must also seek reapproval if the project extends beyond the termination date.

The Board wishes you success in the pursuit of your research goals.

xc: Charles Warfield, Educational Leadership

Approval Termination: July 19, 1991

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