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AUTHOR Askins, Billy E.; Alford, Gay


INSTITUTION Adobe Educational Services, Lubbock, Tex.; Clovis Public Schools, N. Mex.

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ABSTRACT Initiated in 1972, the Bilingual Early Childhood Program (BECP) serves as early intervention for 3- and 4-year-old children in Clovis and Portales, New Mexico (40 children at each site). Target group children were predominantly from Spanish-speaking backgrounds and were selected as participants using guideline requirements of language, background, income of parents, and residence. The goal of the BECP is to demonstrate that early childhood bilingual education intervention will facilitate the learning of two languages (English and Spanish) simultaneously in a responsive environment designed to enhance the child's cognitive, affective, and psychomotor development. Specific objectives were developed for the program components: instruction, staff development, materials development, and community-parental involvement. The evaluation design for the instructional component was within a framework of a pretest-posttest design without a control group. Abilities measured were: language development in English and Spanish, school readiness, and subjective evaluation of self-concept. Findings indicated that the students made significant gains in language ability in English and in Spanish, and in general school readiness. The children developed and maintained a positive self-image and developed substantially in various dimensions of personality growth. It was concluded that BECP functioned as planned for the target group. (Author/ST)
FINAL EVALUATION REPORT
1972-73

BILINGUAL EARLY CHILDHOOD PROGRAM

Sponsored by:

Title VII, ESEA Bilingual Education Project
Bureau of Elementary and Secondary Education
U.S. Office of Education

Under contract with:

Clovis Municipal Schools
Clovis, New Mexico
Grant Number OEG-0-72-5239(280),
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Prepared by:

ADOBE EDUCATIONAL SERVICES
Box 4234
Lubbock, Texas 79409
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Mrs. Gay Alford, Director

Clovis Site

Teachers: Miss Lorene F. Garcia; Mrs. Ruth Burns
Secretary-Aides: Mrs. Yolanda Warrington
Home Visitors: Miss Anita Bojorquez
Aides: Mrs. Clara Gomez; Mrs. Clara Gonzales
Media Consultant: Mr. Duane Ryan
Custodians: Mr. Jimmy Moreno

Portales Site

Mrs. Alvonna Arnold; Mrs. Arcelia Gutiérrez
Mrs. Margaret Tarango
Mrs. Aurora Flores
Mrs. Ramona Nunez; Mrs. Alice Onsurez
Mr. Duane Ryan
Mr. Paul Pena

Evaluation Team Members (Adobe Educational Services)

Dr. Billy E. Askins, Coordinator of Evaluation
Dr. Joe D. Cornett, Research Associate
Dr. Len Ainsworth, Consultant
Dr. Leo J. Juarez, Consultant
Dr. Ralph Carter, Test Specialist
Mrs. Theresa H. Escobedo, Test Specialist
Mrs. Frankie Cook, Secretary/Administrative Assistant

Program Auditor

Dr. I. V. Payne
ABSTRACT

EVALUATION OF EFFECTS OF THE CLOVIS - PORTALES BILINGUAL EARLY CHILDHOOD PROGRAM: FINAL REPORT, 1972-73

Askins, Billy E. and Alford, Gay

Initiated in 1972, the Bilingual Early Childhood Program (BECP) serves as early intervention for eighty 3 and 4-year old children in Clovis and Portales, New Mexico (40 children at each site). Target group-children were predominantly from Spanish speaking backgrounds and were selected as participants using guideline requirements of language, background, income of parents, and residence. The goal of the BECP is to demonstrate that early childhood bilingual education intervention will facilitate the learning of two languages (English and Spanish) simultaneously in a responsive environment designed to enhance the child's cognitive, affective, and psychomotor development; thereby reducing the debilitation resulting from the interactions between a large number of possible organic and environmental causes. To accomplish this goal, specific objectives were developed for the program components: instructional; staff development; materials development; and community-parental involvement. The BECP, a group educational project, is a demonstration project and a satellite of the Responsive Environment Program for Spanish American Children (REPSAC). Both programs in developing have drawn heavily from three experimentally developed models in early childhood education: the New Nursery School; the responsive environment concept; and Project LIFE (Language Instruction to Facilitate Education). Also, the Piaget-Early Childhood Curriculum is used. External evaluation of BECP was conducted by an independent team not directly associated with
the program. The evaluation design for the instructional component was within a framework of a "pretest - posttest design" without a control group. Abilities objectively measured were: language development in English and Spanish; school readiness; and subjective evaluation of the self concept. Findings of the evaluation indicated that the students made significant gains in language ability in English, language ability in Spanish; general school readiness; developed and maintained a positive self-image; and developed substantially in various dimensions of personality growth. The conclusion was that the BECP functioned as planned for the target group children and parents.
FOREWORD

The following Final Evaluation Report is provided for the 1972-73 school year for the Bilingual Early Childhood Program which serves certain groups of children in Clovis and Portales, New Mexico. This report is the result of data collection and analysis by the external evaluator. The purpose of the external evaluation function is to establish and maintain a procedure of collecting and providing information for decision-making relative to student and program progress.

The evaluation team recognizes and hereby expresses appreciation to the Director, staff, and participants of the program for their excellent cooperation in the evaluation effort.

The invaluable assistance of the various professionals and para-professionals on the evaluation team is also acknowledged.

Billy E. Askins
Evaluation Coordinator
Adobe Educational Services
May, 1973
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The Bilingual Early Childhood Program (BECP), a demonstration model for bilingual early childhood education, is designed to serve 3 and 4-year-old children at Clovis and Portales (approximately 40 children at each site). The goal of this program is to demonstrate that early childhood bilingual education intervention will facilitate the learning of two languages (English and Spanish) simultaneously in a responsive environment designed to enhance the child's cognitive, affective, and psychomotor skills; thereby reducing the debilitation resulting from the interactions between a large number of possible organic and environmental causes. To accomplish this goal, general and specific program objectives were developed. To achieve these objectives, comprehensive components were developed which were: instructional, staff development, materials development; and community-parental involvement.

This program has a unique advantage and opportunity in that it can be considered as an expansion or satellite of another successful early childhood program which is the Responsive Environment Program for Spanish American Children (REPSAC). The REPSAC program, located in Clovis, is designed to serve as early educational intervention for 3, 4, and 5-year-old "high risk" Spanish American children. "High risk" children are defined as low birth weight (less than 5 1/2 pounds) and considered disadvantaged (low income of family plus other factors which constitute this condition). The REPSAC program, as well as the BECP, has drawn heavily upon three experimentally developed models in early childhood which were the New Nursery School, Northern Colorado University; the responsive environment concept of Omar K. Moore; and Project LIFE (Language Instruction to Facilitate Education). In addition, the Piaget-Early Childhood Curriculum (Lavatelli) is used.

Target Group Children

Participants of the program at the two sites were eighty 3 and 4 year old children, predominantly from Spanish speaking backgrounds. Approximately 10% of the total group was monolingual (English). Participants were selected from among those meeting guideline requirements of language, background, income level of parents, and residence.

Program Activities

The program activities were organized and conducted within the organization of the various program components.

Curricular activities of the instructional component, patterned from the REPSAC program, were generally divided into group activities.
(story telling, reading, painting, cutting, manipulative toys, playground activities, and the lunch period) and individualized or small group activities (Piaget-Early Childhood Curriculum, Project LIFE, Responsive Typing Booth, Peabody Language Development Kits, and various other materials).

Activities of the staff development component consisted mainly of in-service training, activities which were designed or selected to achieve the objectives of the component. Most of the in-service activities were in conjunction with the REPSAC in-service training activities.

The materials development component was primarily the process of adapting materials for the program which were developed for 3 and 4-year old children in the REPSAC program.

The community and parental involvement component attempted to demonstrate that proper supervision, guidance and training, parental influences can make a marked difference on the child's performance in school. Also, in an effort for community involvement, various newsletters were sent to various community organizations making them aware of the program and soliciting their assistance in various activities. The function of this component was also patterned from the REPSAC program.

Evaluation Methods

Evaluation was performed on two components: the instructional component and the community - parental involvement component.

The evaluation design for the instructional component was within a framework of a "Pretest - Posttest Design" without a control group. The specific abilities objectively measured and instruments used were: language development in English as measured by the Peabody Picture Vocabulary Test; language development in Spanish as measured by the Peabody Picture Vocabulary Test (Spanish); general school readiness as measured by the Readiness Test for Disadvantaged Pre-School Children; and personality growth and self-image as measured by the Developmental Profiles.

The evaluation design for the community - parental involvement component was a formative type design based upon the component objectives and was conducted within a subjective framework using observations and interviews.

Findings

1. The students participating in the BECP made significant gains in: language ability in English; language ability in Spanish; general school readiness; developed and maintained a positive self-image; and developed substantially in various dimensions of personality growth.
2. There was very little difference in the overall performance of the students at the two site locations.

3. Overall, the children in the program showed considerable desire and ability to participate in the various program activities. Also, at the end of the year, the attention-span of the children appeared to be somewhat longer than one would expect from children with limited experiences and the characteristics which define most of this group.

4. The staff reflected a high morale and demonstrated improved skills in working with the children.

5. Parents of the students participating in the program maintained a positive attitude toward the program and the various curriculum and cocurriculum activities.

Conclusions

1. The instructional and community - parental involvement components of the program were effective and functioned so as to complement each other. Specifically, these program components appeared to have the organization, curriculum, materials, facilities, and a qualified and motivated staff to provide the desired educational experiences for the target group of children and parents.

2. The program is in an active and positive process of accomplishing the general, or long range, program objectives.

3. The community - parental involvement component is vital to the continued success of the program but should be expanded as described in the recommendations.

4. In brief, the Bilingual Early Childhood Program functioned as planned for the target group children and parents and in accordance with the approved proposal during the 1972-73 program year.

Recommendations

1. That the BECP continue to develop and serve as a demonstration model and as an early childhood intervention program.

2. That the BECP continue the inter-relations with the operation of the Responsive Environment Program for Spanish American Children (REPSAC) concerning the operation of the various program components.

3. That the statement of the general program objectives and the specific program objectives be reviewed and refined. Also, a specific statement of objectives for the instructional component should be developed.
4. That the external program evaluation be continued, but adding to the evaluation design: provision to compare the first and second year students; an additional measure of the children's self-concept with the rating scale of personality development; and a type of quantitative measure to assist in the evaluation of the community - parental involvement component.

5. That the function or role of the community-parental involvement component be expanded and that the number of home visitors be increased and their role expanded.
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FINAL EVALUATION REPORT

BILINGUAL EARLY CHILDHOOD PROGRAM
Clovis Municipal Schools, Clovis, New Mexico
Title VII, ESEA Bilingual Project
Bureau of Elementary and Secondary Education
U.S. Office of Education

SECTION I

INTRODUCTION

The rationale of bilingual education programs as established under Title VII of the Elementary and Secondary Education Act of 1964 (Public Law 89-10) is that educational programs should be developed to meet the special educational needs of children who have limited English-speaking ability, who come from environments where the dominant language is one other than English, and who come from low-income families. Some characteristics of bilingual education programs include: 1) English is recognized and taught as a second language to children whose dominant language is one other than English; 2) The children are taught one or more academic subjects in their dominant language, at least until they have mastered enough English to enable learning in English; 3) The children whose dominant language is English are taught the dominant language of the other children; 4) Provision is made for increasing the instructional use of both languages for both groups in the same classroom; and 5) The children are taught the history and cultural heritage which reflect the value systems of speakers of both languages (5,p. 1-2)*.

Until evidence is obtained to the contrary, it is assumed that such children participating in such programs will develop greater competence in the English language, become more proficient in their dominant language, and profit from increased educational opportunity. Although the Title VII, ESEA program affirms the primary importance of English, it also recognizes that the use of the children's mother tongue in school can have a beneficial effect upon their education. Instructional use of the mother tongue can help to prevent retardation in school performance until adequate command of English is attained. Moreover, the development of literacy in the mother tongue as well as in English should result in more broadly educated citizens.

*The scientific method of documentation or footnoting is used in this report. The information reflected within the parenthesis refers to the document and page number respectively in the numbered Bibliography which is located at the end of this report.
Background and Significance of the Program

The population of Eastern New Mexico has a high percentage of Spanish speaking people, and many of these people have retained the use of the Spanish language to the extent that it is the dominant language of their children when they enter the public schools. This frequently prevents some of the Spanish American children from normal advancement in the formal schooling process, even to the point of often being "mis-labeled" and inheriting a stigma which often dooms them to poor education, poverty, and lack of higher educational and vocational training.

Recognizing this language problem, as well as other accompanying educational problems in this area, a cooperative effort was started among the Clovis Municipal Schools, Portales Municipal Schools, and the U.S. Office of Education under Title VII, ESEA Bilingual Education Project. This effort resulted in the planning and implementation of an early educational intervention program commonly referred to as the Clovis-Portales Bilingual Early Childhood Program. This program began operation in September, 1972 and completed its first year of operation in May, 1973.

This Bilingual Early Childhood Program is designed to serve eighty 3 and 4 year old children at Clovis (40) and Portales (40) who most have suspected educational handicaps as evidenced by satisfying the entering criteria. This program is planned to provide two years of specialized early childhood instruction for the initial 3-year old group and subsequent 3 year old groups, and with one year of specialized assistance for initial 4-year old groups. The state of New Mexico does not provide state supported kindergartens; however, the two cooperating school districts are operating a preschool program for 5-year old children funded from Title I, ESEA. Most of the children leaving this program will be assigned to Title I programs; therefore, it is possible for many of the children in this Bilingual Early Childhood Program to have two or three years of early learning experiences prior to entering the first grade.

The Clovis-Portales Bilingual Early Childhood Program has a unique advantage and opportunity in that it can be viewed as an out-growth or as a satellite of an existing most successful early childhood program. This existing program is an early educational intervention program referred to as the Responsive Environment Program for Spanish American Children (REPSAC). This program is also located in Clovis, New Mexico. This program, which is completing its second year of operation, is funded by the Handicapped Children's Early Education Program, Bureau of Education for the Handicapped, U.S. Office of Education.

The major purpose of REPSAC is to serve as an effective early educational intervention for 3, 4, and 5 year old "high risk" Spanish American children. Such children are considered "high risk" as a result of their low birth weight (less than 5 1/2 pounds) and considered disadvantaged (low income of family plus other factors which constitute this...
condition). With the exception of the criteria used to select students to enter each program, the operation of the two programs are very similar. Thus, the REPSAC program provides a base for this Bilingual Early Childhood Program in terms of curriculum development, design of physical facilities, and selection and training of faculty/staff.

There are very few effective early childhood education programs in the Southwest and few, if any, bilingual early childhood programs; therefore, this program is designed to provide or serve as a demonstration model for bilingual and early childhood education for the state of New Mexico as well as for other southwestern states.

Area Served and Locale of the Program

The area served by this program is the total attendance area served by both of the cooperating school districts: Clovis Municipal Schools, Clovis, New Mexico and Portales Municipal Schools, Portales, New Mexico. Thus, this program operates at two different sites about twenty miles apart. The site location at Clovis is 312 Merriwether Street, and the site location at Portales is 103 Lime Street. The location of each of the two sites is in the section of town where there is a high concentration of the "target group" children.
SECTION II

TARGET GROUP CHILDREN

The "target group" or the children who participated in this program were approximately eighty children, and each of the two sites had about forty students. The desired and planned cultural mix of the target group was to have about 55-60 students with Spanish surnames and about 15-20 Black and Anglo students. Although the program site at Clovis is within a block of the REPSAC program, the target group of this program differs from that of the REPSAC program in that all ethnic groups are represented. Many Spanish speaking children who were eligible for this program were identified by the REPSAC program in its selection procedures. Both at Clovis and Portales, several eligible Anglo and Black students were identified through the Title I preschools.

Criteria for Selection of Students

Interested parents were invited to apply to enroll their 3 and 4 year old children in the program. The desired and planned cultural mix of the children was to have about 70% children with a Spanish surname and the remainder from Black and Anglo ethnic groups. Considering interest, age, and this desired mix, the following criteria were applied in selecting the students for participation in the program: 1) Spanish surname children with a limited speaking ability in English; 2) Children from a lower socio-economic level ($3600 total family income) with Spanish as the dominant language; and 3) Children from any socio-economic level who were interested and whose dominant home language was English. This information was obtained by an interview with one or both parents and from the "Application Form."

The children finally selected to enter the program were 3 and 4 year old and predominantly from a Spanish speaking background. About 10% of the group was monolingual English speaking. These children were selected so as to provide the desired cultural mix in each classroom setting.

General Data of Students Initially Entering the Program

There were 39 students initially selected to enter the program at the Clovis site and 41 students at the Portales site. In an effort to obtain an overall profile of the first class entering the program, some general background information concerning the students was collected. This included such background factors as: education of the parents; dominant language used in the home; family status and size; and monthly income. This information is presented in summary form in Table 1. The source of this information was the "Student Information Sheet" obtained from the Project Director.
TABLE I

SUMMARY BACKGROUND DATA OF STUDENTS INITIALLY ENTERING THE PROGRAM

<table>
<thead>
<tr>
<th>Background Factor</th>
<th>Clovis (Mother)</th>
<th>Clovis (Father)</th>
<th>Portales (Mother)</th>
<th>Portales (Father)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Education of Parents</td>
<td>Grade School</td>
<td>8%</td>
<td>13%</td>
<td>10%</td>
</tr>
<tr>
<td></td>
<td>Jr. High</td>
<td>10%</td>
<td>15%</td>
<td>12%</td>
</tr>
<tr>
<td></td>
<td>Some high school</td>
<td>36%</td>
<td>32%</td>
<td>45%</td>
</tr>
<tr>
<td></td>
<td>H.S. Graduates</td>
<td>41%</td>
<td>28%</td>
<td>20%</td>
</tr>
<tr>
<td></td>
<td>Some College</td>
<td>5%</td>
<td>10%</td>
<td>8%</td>
</tr>
<tr>
<td></td>
<td>College Graduates</td>
<td>0%</td>
<td>2%</td>
<td>5%</td>
</tr>
<tr>
<td>Dominant Language Used in Home</td>
<td>English</td>
<td>54%</td>
<td>57%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Spanish</td>
<td>0%</td>
<td>15%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Both</td>
<td>46%</td>
<td>48%</td>
<td></td>
</tr>
<tr>
<td>Family Status (Parents at Home)</td>
<td>Two</td>
<td>69%</td>
<td>93%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>One</td>
<td>31%</td>
<td>7%</td>
<td></td>
</tr>
<tr>
<td>Family Size (No. of Children)</td>
<td>0-2</td>
<td>29%</td>
<td>44%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3-5</td>
<td>50%</td>
<td>41%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>6-8</td>
<td>8%</td>
<td>13%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>9-11</td>
<td>2%</td>
<td>2%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>12 over</td>
<td>11%</td>
<td>0%</td>
<td></td>
</tr>
<tr>
<td>Income (Monthly)</td>
<td>0-100</td>
<td>2%</td>
<td>3%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>101-200</td>
<td>30%</td>
<td>21%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>201-300</td>
<td>2%</td>
<td>21%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>301-400</td>
<td>22%</td>
<td>32%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>401-500</td>
<td>24%</td>
<td>10%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>501-600</td>
<td>12%</td>
<td>3%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>over 600</td>
<td>8%</td>
<td>10%</td>
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SECTION III
DESCRIPTION OF THE PROGRAM

This Bilingual Early Childhood Program is designed to serve eighty 3 and 4-year old certain type of children at two locations; one at Clovis and the other at Portales, New Mexico. This program is planned to provide two years of specialized early childhood instruction for the 3-year olds and one year of specialized assistance for the 4-year old children. As previously stated, this program is considered as an extension or satellite of the Responsive Environment Program for Spanish American Children (REPSAC) which is an especially designed and extremely successful early childhood educational intervention program for low birthweight children of ages 3, 4, and 5. Most of the children completing this program will be assigned to a Title I preschool before entering the first grade. The remainder of this section of the report describes the program in terms of: Program Objectives, and the Components of the Program.

Program Objectives

The objectives for this program, a demonstration model for bilingual early childhood education, are divided into general and specific program objectives.

General Program Objectives

The general program objectives as stated in the initial proposal are as follows:

1. Development of a "Scope and Sequence" of bilingual instruction from early childhood (age 3-8) through the first two years of elementary school.

2. Development of confidence, abilities, and skills in the second language so that each child performs adequately and comfortably in the second language in verbal and cognitive areas.

3. Development of bilingual-bicultural approaches to teaching and to teaching methods and materials. Enhancement of the school staff to the point of operationality with bilingual-bicultural approaches.

4. Development of materials and methods based on the research of Jean Piaget suitable to both program goals and early childhood educational theory and practice.

5. Development of the logical thinking processes.

6. Development of community communication and awareness regarding
values and expectations in multi-ethnic communities and societies.


Specific Program Objectives

The specific program objectives, as stated on page 43 of the Program Proposal, are as follows:

1. To develop a positive self concept.
2. To increase sensory and perceptual acuity.
3. To develop cognitive skills.
4. To improve language skills in both English and Spanish.
5. To establish a close relationship between the home and school.
6. To avoid the retardation label which results when a child is obliged to realize through a language he does not communicate.
7. To enable a child to operate comfortably in two cultures and to realize the values inherent in each.
8. To develop a satisfactory basis for learning in all areas of development.
9. To demonstrate that early intervention using a bilingual approach will provide the necessary impetus for the child to enter and remain in the mainstream of education.

Components of the Program

For organizational and operational purposes, this program is divided into six major components which are: Physical Facilities; Personnel; Instructional; Community-Parental Involvement; Staff Development; and Materials Development. A description of the program components is as follows:

Physical Facilities

The program is located at two sites. The physical facility at each site consists of a renovated former residential dwelling located in the center of the target population. Renovation of each of the houses provided the following facilities:

1. One large room or classroom for various types of large group as well as small group activities. Activity in this room can be observed through a one-way mirror.
2. One small room (approximately 7 x 9 ft.) for use as a typing booth and is equipped with a one-way mirror.

3. One small room (approximately 7 x 9 ft.) to house the Project LIFE materials and is equipped with a one-way mirror.

4. An area containing kitchen facilities to store, prepare, and serve snacks. This also serves as the area for art activities.

5. Adequate restroom facilities for children and adults.

6. Outside playground area.

Personnel

The personnel of the program consists of: one Director; four teachers; six aides; two home-visitors; two part-time secretaries; one media consultant; two custodians; and the Professional Advisory Board (The names of these personnel are listed on the cover page of this report). Some duties of these personnel include:

Director

This person is responsible for the administration and coordination of the entire program at the two sites. Specifically, the Director is responsible for the overall supervision of the program, supply appropriate materials, making contact with the parents, community and civic organizations; planning and conducting inservice training programs; dissemination of information; scheduling of consultants; and has responsibility for preparation of the required reports.

Teachers

There are four (two for each unit) full-time certified bilingual teachers with a background in early childhood education. One teacher at each site is of Spanish American descent and the other is Anglo so as to provide authentic language culture models. Each pair of the teachers and the accompanying aides work in a team teaching approach. One-half day of instruction is conducted in Spanish and the other half in English.

Aides

There are six full-time (three at each site) bilingual classroom aides. These individuals are required to meet the requirements for classroom aides as established by the New Mexico State Department of Education. The aides perform various duties under the direct supervision of the certified teachers.
Home Visitors

There are two full-time (one at each site) home visitors. The major responsibility of the home visitor is to attempt to get the parents involved in the educational process of their children. Parents, especially mothers, are encouraged to adapt the activities they use with one child for use with other children in the family. The home visitor is required to schedule regular home visits, and most of these visits are coordinated with certain aspects of the classroom instruction. The function of the home visitor is more fully described in the Community-Parental Involvement Component of this report.

Secretaries

There are two part-time (one at each site) secretaries. The major responsibility of these positions is general administrative duties plus occasionally working as classroom aides.

Media Consultant

There is one media consultant (provided by the REPSAC program). This person spends approximately one day per week in the program preparing various types of instructional media.

Custodians

There are two full-time (one at each site) custodians who have the responsibility of general custodial duties.

Advisory Board

The purpose of the Advisory Board is to provide the Director with guidance and direction of the activities of the program and the development of the various program components. The board consists of individuals who can provide expertise in the fields of special education, early childhood education, educational technology, and the Responsive Environment Concept. Names of the Advisory Board are listed on the cover page of this report.

Instructional Component

The Instructional Component is obviously the most important and unique feature of this bilingual childhood program. As previously stated this program, especially the Instructional Component, is patterned from the Responsive Environment Program for Spanish American Children (REPSAC). The instructional processes within this component are selected and conducted using the concept of "responsive environment". Thus, this section of the report describing the Instructional Component is divided into the following sub-sections: Organization; Concept of Responsive Environment; Group Activities; Small Group Activities; and Schedule of Learning Activities for A Typical Day.
Organization

Each site has an enrollment of approximately 40 students, and the students are divided into two groups of 20 each. One group attends the morning session from 8:30 a.m. until noon, and the other group attends the afternoon session from noon until 3:15 p.m. The parents or guardians of the students are responsible for transporting the child to/from the site.

All of the children are provided the noon meal which is a hot lunch transported in a mobile server from a public school cafeteria. This meal is planned as a learning activity as the morning group is served prior to leaving school, and the afternoon group is served immediately upon arrival for the afternoon session.

A part of each daily session is devoted to structured or directed learning activities and the remainder of the time is devoted to free choice activities. Concepts presented during the structured learning periods are planned to be reinforced during free choice and play activities. The structured learning activities can be generally classified into group activities and individualized or small group activities. Both types of activities are planned and conducted using the "Concept of Responsive Environment."

Concept of Responsive Environment

The concept of responsive environment was initially developed by Omar K. Moore as a result of numerous studies of early learning in prenursery, nursery, kindergarten, and first grades, where children are in the process of acquiring complex symbolic skills (4,p. 184). The responsive environment concept can be generally described as a learning setting or environment which facilitates the learning of complex symbolic skills. Such an environment is partly a mechanical system; in part it is a social system; and in part it is a cultural system (4,p. 218). All parts work interrelatedly. Specifically, a responsive environment is one which satisfies the following conditions (4,p. 184).

1. It permits the learner to explore freely.
2. It informs the learner immediately about the consequences of his actions.
3. It is self-pacing, i.e., events happen within the environment at a rate determined by the learner.
4. It permits the learner to make full use of his capacity for discovering relations of various kinds.
5. Its structure is such that the learner is likely to make a series of interconnected discoveries about the physical, cultural, or social world.

This concept of responsive environment was later modified or adapted so as to be used in an early childhood bilingual setting. This was accomplished by the New Nursery School in Greeley, Colorado (3). This approach as developed by the New Nursery School is the one commonly used in this program in selecting and conducting the various types of learning activities.

**Group Activities**

The group activities are planned and conducted using the responsive environment concept in a bilingual (Spanish and English) setting. Approximately half of the daily activities are conducted in Spanish and the other half in English. When one language is used, the other is employed for reinforcement purposes and to maintain motivation for students of limited bilingual ability. This approach is used in the group activities such as: story-telling; reading; painting; cutting; working in the block area; manipulative toys; playground activities; snacks; and the lunch period activities.

**Individualized or Small Group Activities and Materials**

These activities are also planned and conducted using the responsive environment concept when appropriate. The individualized or small group activities are conducted primarily using the following curriculum materials: Piaget-Early Childhood Curriculum Materials; Project LIFE (Language Improvement to Facilitate Education); Responsive Environment Typing Booth; the Peabody Language Kits; and Other Materials. A brief description of these materials is presented in the following paragraphs.

**Piaget-Early Childhood Curriculum.** These materials were developed by Professor Celia Lavatelli and consist of a Piaget designed curriculum drawing upon 22 sets of materials with more than 100 activities in the following areas: classification; number; measurement; space and seriation. The materials stress the use of the child's language and thought processes; therefore, expansion of language and concepts are based on child-initiated talk and activities. These materials are used by all children approximately twice a week.

**Project LIFE (Language Improvement to Facilitate Education).** These materials were developed by the National Education Association, the U.S. Office of Education and the General Electric Company. These materials consisting of over 300 filmstrips are designed to provide a programmed language system to teach handicapped as well as non-handicapped children. The instructional concept employed by these materials is a systematic approach to assist the child to acquire a functional language system. This is accomplished primarily by the child interacting with specifically
designed programmed instructional materials using the machine, the Student Response Program Master. The programmed materials, used in conjunction with the machine, deal with the areas of perception-cognition, thinking skills, and basic vocabulary and language skills. The programs in each area are carefully sequenced so that the child can make satisfactory progress through the various sub-systems in each area, working in an independent manner but in close conjunction with the teacher or aide and other curriculum materials. The children identified, or needing these materials, use them about three times per week.

Responsive Environment Typing Booth. This typing or learning booth was developed by Dr. Omar K. Moore in Hampton, Connecticut and was later tested in the New Nursery School in Greeley, Colorado. The purpose of this typing booth is to develop problem solving ability and language skills. The booth is used in accordance with the equipment, methods, and materials as developed by the Far West Laboratory for Educational Research and Development. The booth is manned by a teaching aide and equipped with a Smith-Corona 250 Electric Typewriter--large print with a colored keyboard. Activities on the typewriter can be classified into four phases: 1) free exploration; 2) search and match; 3) discrimination, and 4) words and stories. Each student is given an opportunity to use the typing booth for about ten minutes each instructional day.

Peabody Language Development Kits. The Peabody Language Kits is published by the American Guidance Service, Incorporated, and Level #P is used in this program. This material is designed for children whose mental age is in the range 3 to 5 years. Level #P is designed to be effective with kindergarten children who come from economically disadvantaged areas of urban and rural communities. This level of the kit is designed primarily to stimulate the receptive, associative, and expressive components of oral language development. The kit stresses an overall oral language development program, rather than specific training in selected psycholinguistic processes. Level #P of the PLDK is contained in two metal carrying cases which include such materials as the: Teachers Manual (contains 180 "Daily Lessons" which are flexible and can be adapted to local needs); manipulative materials; stimulus cards; visual closure templates; story posters; music cards; sound recordings; and puppets. Each student is given an opportunity to work with the Peabody Language Development Kits approximately 20-30 minutes each day.

Other Materials. Additional instructional materials used include: Captioned Films; Light Table; Autosort Language Arts Program (ALAP); Sadler Social Science Series - "Who Am I?"; and various types of playground equipment.

Typical Schedule of Learning Activities

To illustrate how these various activities and materials are used a Typical Schedule of Learning Activities is listed as Appendix A.
Community - Parental Involvement Component

The program includes the development of a comprehensive Community - Parental Involvement Component. In an effort for community involvement, various newsletters were sent to various community organizations making them aware of the program and soliciting their assistance in various activities. Effort, through the work of the home visitors, is made by the program to assist parents with understanding and practice of underlying principles of child care. One of the responsibilities of the home visitor is to demonstrate that given proper supervision, guidance and training, parental influences can make a marked difference on the child's performance in school.

Staff Development Component

This component consists mainly of in-service training functions for the staff. The in-service training focused on the objectives of this component as established by the Project Director. The major objectives are: 1) To assist the staff develop their general knowledge of the difficulties encountered in early childhood education in the area of language, bilingualism, and child growth and development; 2) To assist the staff to recognize various problems which are unnatural in young children so as to make the necessary referral for assistance; and 3) To assist the staff to become efficient in the use of the various instructional materials as used in the instructional component. Most of the in-service training activities was conducted in conjunction with the in-service activities of the REPSAC program.

Materials Development Component

This component is mainly the process of adapting the materials for this program which were developed in the REPSAC program for 3 and 4 year-old children. Most of these materials are based upon the research of Jean Piaget as reflected in the Early Childhood Curriculum authored by Celia Lavatelli and by use of various curriculum materials using the responsive environment concept.
SECTION IV
PROGRAM EVALUATION

Purpose of the Evaluation Function

The evaluation function is another element of this program. The primary purpose of the evaluation function is to establish and maintain a procedure of collecting and providing information for decision-making relative to student and program process. The evaluation function plays a major part in the accountability aspects of the program. The evaluation function is recognized to be a way to improve rather than simply to prove.

The External Evaluator

The external evaluation function was conducted by Adobe Educational Services, Lubbock, Texas. This is an independent consultant and service organization with its direction primarily through various faculty members of the College of Education, Texas Tech University. Names of the evaluation team members are listed on the cover page of this report.

A detailed description of the evaluation function including the evaluation design is described in the approved "Evaluation Proposal" (amended) dated September 1, 1972. A summary of the approved evaluation design is described in the following paragraphs.

The evaluation design is divided into areas by program components. The evaluation of some components must be governed by strict research design while it is more appropriate to evaluate other components by description or-explanatory means.

The evaluation function for this program year was conducted by:

1. Providing a variety of professional personnel appropriate to the evaluation function which includes: evaluation coordinator; research specialist; bilingual testing personnel; consultants; and secretarial assistance.

2. Developing and following the evaluation design for components selected to be evaluated this year which were the Instructional and Community - Parental Involvement Components.

3. Analyzing collected data and subject data, when appropriate, to statistical treatment.
4. Providing the Project Director with baseline data obtained from the pre-testing procedures which was used in program planning and operation.

5. Preparing various reports which include the Preliminary Report and this Final Evaluation Report.

The description of the evaluation design of the components as referred to in paragraph 2 is presented in the following paragraphs.

**Evaluation Design for Selected Program Components**

The program consists of six major components; however, the external evaluation function for this first year's operation pertains only to two components: the Instructional Component and the Community - Parental Involvement Component. The evaluation design for these two components is described in the following paragraphs.

**Instructional Component**

The evaluation design for the Instructional Component is within a framework of a quasi-experimental design commonly referred to as a "Time Design" or "Pretest - Posttest Design Only" (2). This design involves a single experimental group (the 80 students) without a control group. The experimental group was measured on the dependent variable (pre-test), and then the group was given the experimental treatment (structured and unstructured activities in the Instructional Component). Following this treatment, the group was measured again on the same variable (posttest). Comparison, using statistical procedures, was made concerning the difference between the means of the two measurements.

The description of the evaluation design of this component is divided into six areas which are: 1) Number of Students; 2) Program Objectives; 3) Specific Abilities Measured and Tests Used; 4) Procedure/Time-Schedule for Collecting Data; 5) Statistical Treatment of Data; and 6) Reporting of Baseline Data.

**Number of Students**

The single experimental group consisted of 80 three and four-year old children. Initially, there were forty-one students at Portales and thirty-nine at Clovis.

**Specific Program Objectives**

The basis for the evaluation design for this component was the specific program objectives. The specific program objectives were developed by the Project Director (see page 43 of the Program Proposal).
and are as follows:

1. To develop a positive self image.
2. To increase sensory and perceptual acuity.
3. To develop cognitive skills.
4. To improve language skills in both English and Spanish.
5. To establish a close relationship between the home and school.
6. To avoid the retardation label that results when a child is obliged to realize through a language he does not communicate.
7. To enable the child to operate comfortably in two cultures and to realize the values inherent in each.
8. To develop a satisfactory basis for learning in all areas of development.
9. To demonstrate that early intervention using a bilingual approach will provide the necessary impetus for the child to enter and remain in the main stream of education.

Specific Abilities Measured and Tests Used

Based upon the above specific program objectives, various general abilities or areas were selected to be objectively measured. These were: language development in Spanish and English as measured by the Peabody Picture Vocabulary Test (Spanish and English versions); general school readiness as measured by the Walker Readiness Test for Disadvantaged Pre-School Children; and personal development as measured by the Developmental Profiles (Bessell and Palomares).

A brief non-technical description of each of these tests is listed in Appendix B.

Procedure/Time-Schedule for Collecting Data

The procedure to collect data to evaluate this component was within a framework of a quasi-experimental design referred to as "Pretest - Posttest Design Only" which has been previously described. The pre-testing was conducted during September 5-22, 1972. Posttesting was conducted May 8-11, 1973.
The same Peabody Test (Spanish and English) was used as the pre and posttests; however, Form A of the School Readiness Test was used as the pre-test and Form B was used as the posttest.

The Developmental Profile was completed for each student by both the Spanish and English teacher approximately every six weeks. These dates were as follows: October 13, November 22, 1972; January 12; February 23; April 6; and May 18, 1973.

Statistical Treatment of Data

A mean gain score was computed for each test (mean posttest score minus mean pretest score) for the 3 year-old group and for the 4 year-old group (this does not apply to the Developmental Profiles). The t-test was used to test for significance of difference between the mean gain scores. The findings and interpretation are reported in Section V.

As concerns the Bessell and Palomares Developmental Profiles, the mean was computed from the teachers' ratings for each marking period and was "plotted" on a scale over a 36 week period to determine direction and rate of change.

Baseline Data

After the pretesting was completed, the test results for each student was submitted to the Project Director on a specially designed form. This form is listed as Appendix C. Also, this form was used to reveal the posttest data and gain scores.

Community - Parental Involvement Component

This component was subjectively evaluated. Information was collected with visitations and observations. These means was designed to gain information concerning the degree of community involvement/acceptance and assistance given the child at home. Also, the degree of satisfaction the parents expressed concerning their child's involvement in the program was sought.

The evaluation of this component was performed on a consultancy basis by Dr. Leo Juarez. The findings are reported in narrative form in Section VI. Analysis of this data was subjective but does provide a directional overview of community and parental reaction to the program.

The Program Auditor

The program auditor for 1972-73 was Dr. I. V. Payne, Department of Education, Eastern New Mexico University. The audit function and specific audit design is described in the document "Educational Audit Design" dated September 3, 1972. The audit reports were submitted as separate reports.
SECTION V

EVALUATION DATA OF THE INSTRUCTIONAL COMPONENT

Summary of Evaluation Design

The basis for this formative type evaluation design for the Instructional Component was the specific program objectives (See Section III). From these objectives, specific abilities or areas were identified to be subjectively measured. The specific abilities measured and test instruments (See Appendix B for a description of instruments) used were as follows:

<table>
<thead>
<tr>
<th>Abilities</th>
<th>Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Language Development - English</td>
<td>Peabody Picture Vocabulary (Eng.)</td>
</tr>
<tr>
<td>Language Development - Spanish</td>
<td>Peabody Picture Vocabulary (Span.)</td>
</tr>
<tr>
<td>School Readiness</td>
<td>Walker Readiness</td>
</tr>
<tr>
<td>Personal Development</td>
<td>Developmental Profiles</td>
</tr>
</tbody>
</table>

The evaluation design was within a framework of a quasi-experimental design commonly referred to as a "Time Design" or "Pretest - Posttest Design Only" (2). This design involves a single experimental group (the students) without a control group. The experimental group was measured on the dependent variable (pretest) at the beginning of the school year, and then the group was given the experimental treatment (The curricular activities of this component as described in Section III). At the end of the school year, the children were measured again on the same variable (posttest). Comparison, using statistical procedures, was made concerning the difference between the means of the two measurements.

The same PPVT (English and Spanish) was used as the pre and posttests; however, Form A of the Walker Readiness Test for Disadvantaged Pre-School Children was used as the pretest and Form B was used as the posttest. The Developmental Profiles were completed for each student by both the Spanish and English teacher approximately every six weeks.

A mean score was computed for each test (mean posttest score minus mean pretest score) for the 3 and 4 year-old groups (this does not apply to the Developmental Profiles). The t-test was used to test for significance of difference between the mean gain scores. As concerns the Developmental Profiles, the mean was computed from the teacher's ratings for each marking period and was "plotted" on a scale over a 35 week period to determine direction and rate of change.
Number of Students Tested

**Clovis Site**

Thirty-nine of 41 students were pretested (95%). Thirty students were available in the program to serve in the pre and posttesting (79%). Thirty-six of 38 students were posttested (95%). The pre and posttest raw scores with percentile scores were posted to the form "Individual Student Test Data" (See Appendix C).

**Portales Site**

Forty-two of 43 students were posttested (98%). Twenty-one students were available in the program to serve in both the pre and posttesting (50%). Thirty-three of 35 students were posttested (94%). The pre and posttest raw scores with percentile scores were posted to the form "Individual Student Test Data" (See Appendix C).

**Findings**

The analysis of data for the Instructional Component of the Bilingual Early Childhood Program (BECP) are presented in terms of overall performance on the three measures employed, performance by site, and performance by age. In addition, graphs are provided depicting the personality development of subjects participating in the program.

**Overall Performance**

Table 2 presents the data relating to the overall performance of the students on the three measures used in the evaluation. It can be noted from the table that subjects participating in the program made significant gains in language ability in English, language ability in Spanish, and school readiness. The differences between the pre and posttest scores were analyzed by the t-test and the values obtained for each measure were found to be significant beyond the .001 level of significance. That is, if repeated measures were obtained from like subjects, the probability that the results would be the same is 999 out of 1000.

**TABLE 2**

<table>
<thead>
<tr>
<th>TEST</th>
<th>N</th>
<th>MEANS</th>
<th>MEAN GAIN</th>
<th>s</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>PEABODY (English)</td>
<td>51</td>
<td>PRE 26.20</td>
<td>20.47</td>
<td>20.07</td>
<td>6.52</td>
<td>.001</td>
</tr>
<tr>
<td></td>
<td></td>
<td>POST 46.67</td>
<td>9.93</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PEABODY (Spanish)</td>
<td>51</td>
<td>PRE 9.39</td>
<td>17.36</td>
<td>9.15</td>
<td>6.20</td>
<td>.001</td>
</tr>
<tr>
<td></td>
<td></td>
<td>POST 26.45</td>
<td>9.36</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>WALKER</td>
<td>51</td>
<td>PRE 17.06</td>
<td>16.14</td>
<td>11.81</td>
<td>7.54</td>
<td>.001</td>
</tr>
<tr>
<td></td>
<td></td>
<td>POST 33.20</td>
<td>9.65</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
It should be noted that the difference in the size of the final group noted in Table 2 from the total enrolled in the program is due to the number of drops and adds that occurred during the year. The final analysis was conducted on these subjects that remained in the program throughout the year.

**Site Performance**

Since the program was conducted at two sites, data are presented in terms of subject performance in each location. Tables 3 and 4 present these data.

**TABLE 3**

<table>
<thead>
<tr>
<th>TEST</th>
<th>N</th>
<th>MEANS</th>
<th>MEAN GAIN</th>
<th>s</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>PEABODY (English)</td>
<td>30</td>
<td>PRE 24.90</td>
<td>21.53</td>
<td>13.63</td>
<td>8.41</td>
<td>.001</td>
</tr>
<tr>
<td></td>
<td></td>
<td>POST 46.43</td>
<td>8.63</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PEABODY (Spanish)</td>
<td>30</td>
<td>PRE 9.47</td>
<td>15.70</td>
<td>7.85</td>
<td>4.66</td>
<td>.001</td>
</tr>
<tr>
<td></td>
<td></td>
<td>POST 25.17</td>
<td>11.61</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>WALKER</td>
<td>30</td>
<td>PRE 16.77</td>
<td>15.66</td>
<td>15.85</td>
<td>5.74</td>
<td>.001</td>
</tr>
<tr>
<td></td>
<td></td>
<td>POST 32.43</td>
<td>8.63</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**TABLE 4**

<table>
<thead>
<tr>
<th>TEST</th>
<th>N</th>
<th>MEANS</th>
<th>MEAN GAIN</th>
<th>s</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>PEABODY (English)</td>
<td>21</td>
<td>PRE 28.05</td>
<td>18.95</td>
<td>24.09</td>
<td>13.63</td>
<td>2.80</td>
</tr>
<tr>
<td></td>
<td></td>
<td>POST 47.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PEABODY (Spanish)</td>
<td>21</td>
<td>PRE 9.29</td>
<td>19.00</td>
<td>12.85</td>
<td>21.16</td>
<td>3.93</td>
</tr>
<tr>
<td></td>
<td></td>
<td>POST 28.29</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>WALKER</td>
<td>21</td>
<td>PRE 17.48</td>
<td>16.81</td>
<td>12.16</td>
<td>11.81</td>
<td>4.82</td>
</tr>
<tr>
<td></td>
<td></td>
<td>POST 34.29</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The lower n value found in these tables is also reflective of the fact that only subjects that remained in the program throughout were included in the final analysis.
Age and Performance

Tables 5 and 6 present performance data by age. As expected, the four-year olds performed at a higher rate than the three-year olds. This was true at both sites.

TABLE 5

| TEST          | AGE | MEAN \n|---------------|-----|-------|
| PEABODY (English) | 3   | 22.71 |
|               | 4   | 24.40 |
| PEABODY (Spanish) | 3   | 11.36 |
|               | 4   | 18.64 |
| WALKER        | 3   | 17.29 |
|               | 4   | 28.16 |

TABLE 6

| TEST          | AGE | MEAN \n|---------------|-----|-------|
| PEABODY (English) | 3   | 20.16 |
|               | 4   | 26.12 |
| PEABODY (Spanish) | 3   | 10.85 |
|               | 4   | 16.40 |
| WALKER        | 3   | 12.36 |
|               | 4   | 31.12 |

Self-Image and Personality Growth

A subjective evaluation concerning self-image and personality growth was made on the children. Rating scales (Developmental Profiles) describing six affective areas were prepared approximately every six-weeks by each of the two teachers. There is no objective scale of accomplishment or standard in terms of age-achievement scores, but the profiles can provide a source of insight and understanding of emotional development.

Figure I on the following page depicts summary data relative to the assessment of self-image and various dimensions of personality growth of children participating in the program.
FIGURE I

GRAPHIC SUMMARY OF PERSONAL DEVELOPMENT OF THE BECP STUDENTS

AWARENESS
(1) AWARENESS OF SELF
5.8 6.2 7.2 8.1 8.6

MASTERY
(1) SELF CONFIDENCE
3.8 4.2 4.8 6.5 7.3

SOCIAL INTERACTION
(1) COMPREHENSION
4.1 4.9 5.6 5.9 6.9

AWARENESS
(2) SENSITIVITY TO OTHERS
3.2 4.5 6.3 7.4 8.3

MASTERY
(2) EFFECTIVENESS
4.3 4.8 5.6 6.6 7.3

SOCIAL INTERACTION
(2) TOLERANCE
4.4 5.1 5.8 6.3 7.4
Conclusions

From the data obtained from the evaluation of the Instructional Component, the following conclusions appear warranted.

1. Subjects participating in the program made significant gains in language ability in English.

2. Subjects participating in the program made significant gains in language ability in Spanish.

3. Subjects participating in the program made significant gains in school readiness.

4. There were no appreciable differences in performance when data were analyzed by site.

5. The older subjects made greater gains on all measures than younger subjects.

6. Subjects participating in the program developed and maintained a positive self-image and developed substantially in various dimensions of personality growth.
SECTION VI

EVALUATION OF THE COMMUNITY - PARENTAL INVOLVEMENT COMPONENT

Objectives

The major objectives of this component is extension, i.e., the inclusion and involvement of parents, the home and community environments in the education of the child. Ancillary objectives are as follows:

1. To motivate parents' interest in the preschool education of their children.

2. To provide extension training for parents in child development and in techniques of preschool education which may be applied to the home.

3. To facilitate an enrichment of the home environment through: 1) home tutoring of children in school related activities; and 2) providing parents with information and linkages to available community services (i.e., welfare, counseling, medical care, baby-sitting, night-school, etc.).

4. To provide for parent participation in school activities.

Observations

Several site visits, including observations of children and parents in school, observations of home visits, and interviews with the home visitor, program staff, and parents form the basis for the following statements.

Many of the types of program activities observed are noted below. Moral of staff, parents, and children appeared very high. Voluntary cooperation and interest on the part of parents were noted both in home and school observations. Also, noted were efforts at coordination and communication between the home visitor, the school teaching staff, and several community agencies. Analysis of this program component suggests that it is vital to the success of this program and should be expanded as discussed in the following statements.

Findings

To accomplish the stated objectives, the following activities were included in the program.

To stimulate parent involvement, parents were recruited as volunteer workers and teacher aides. Parents were also involved in various
school projects such as the construction of crafts and school costumes, textbook covers, etc., and other materials for use in school programs. A home loan library was established with the cooperation of the parents. Parents also donated material and labor for the construction of playground equipment and facilities of various kinds.

Extension training was provided parents and children in the program through weekly visits by the home visitor who tutors parents and children in the home in various learning skills. Non-target group children in the home were involved through participation with the target child and through the diffusion of skills taught to both mother and target child.

Linkages between the home, school and community were provided through activities mentioned above and through parent/teacher conferences both at home and at school. Parent and program staff rapport was such that the staff were often asked to serve as interpreters for parents in the local public schools, in the doctor's office, at welfare agencies, etc. Community support for the program were stimulated through the involvement of various civic agencies and their donations to the program of various items such as clothing, toys, and food stamps. Both local public school officials and state officials, such as the Director of Bilingual and Bicultural education programs for New Mexico, visited the program at various times.

Parent participation was stimulated through special parent programs which provided an opportunity for parents and children to visit the school. Such programs, while not attracting the entire parent population, provided a basis for identification with the project and strengthen the sense of parent/school community.

Recommendations

The educational level of the home-visitors is such that a program of continuing in-service education should be provided for them. Such training is required not only because of the skill levels which the home-visitors bring into their positions, but also because of the turnover in these positions. Continued in-service training would insure the technical competence necessary for the continued success of the program.

Presently the home-visitor's role is defined in such a manner as to require her to fulfill two major change agent functions: 1) The provision of tutoring or extension of the school program to the mother and target child, including by implication a change in the home environment through diffusion of the program to other siblings present in the home; and 2) The provision of communication linkages between the home and the program.
As the program expands, it will be especially important to monitor linkages between parents, children, and the public schools which will receive the children from that program. Every effort should be made to insure that gains made in the initial stages of the program are continued in the public school experiences of parents and children. Such growth in the program will require an extension of the home-visitor's role to include formally such change agent functions as: analysis, innovation, home/community linkage, and functions which are presently filled on an informal and unregulated basis. Adequate fulfillment of both the presently defined and the growth defined requirements of the home-visitor's role will require an expansion of the home visitation staff in that the present load on the home-visitor is such as to make difficult the fulfillment of basic role requirements such as weekly home visits to 80 children (40 children in each of the two sites) lesson planning, individual conferences with parents and teachers, report writing, etc. A maximum student/home-visitor load should include no more than 15-20 children. Such a load would allow time not only for the completion of role requirements presently defined but also time for the completion of important role functions such as the compilation and provision of a community services directory for parents informing them of available community services and agencies which might improve or ameliorate conditions in the home detrimental to the welfare of the child and, also, community visitations and referrals of various kinds which relate directly to the Community-Parental Involvement Component in that they strengthen the rapport established through home visits and link homes to the schools and community.

Finally, within the Community-Parental Involvement Component, some quantitative means needs to be devised so as to measure the effect of home intervention and the school/community linkages provided parents and children in the program. To the extent that changes in the home environment are considered important to the success of the program, quantitative data on the weight of this variable for program success would be invaluable to present and future research.
SECTION VII
SUMMARY, FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS

Summary

The major purpose of the Bilingual Early Childhood Program (BECP) is to provide bilingual specialized instruction to certain 3 and 4-year old children in an effort to help them become better prepared to enter the first grade. This program is located at two sites, one at Clovis and the other at Portales. Children leaving this Bilingual Early Childhood Program, and who are eligible, will enter a Title I preschool program. The organization and curriculum of this program is patterned from the Responsive Environment Program for Spanish American Children (REPSAC).

This program is divided into various components which are: Physical Facilities; Personnel; Instructional; Community - Parental Involvement; Staff Development; and Materials Development.

The external evaluation function of the program is to establish and maintain a procedure of collecting and providing information for decision-making relative to student and program progress. The evaluation design for this year focused on two components: Instructional and Community - Parental Involvement.

The evaluation design for the Instructional Component was a formative type design within a framework of a "Pretest - Posttest Design" without a control group. The specific abilities objectively measured were: language development in English as measured by the Peabody Picture Vocabulary Test (English version); language development in Spanish as measured by the Peabody Picture Vocabulary Test (Spanish version); general school readiness as measured by the Readiness Test for Disadvantaged Pre-School Children; and personality growth as measured by the Developmental Profiles. The pretesting was completed within the first two weeks of the school year, and the posttesting was completed during the last two weeks of the school year.

The evaluation design for the Community - Parental Involvement Component was a formative type design based upon the component objectives and was conducted within a subjective framework using observation and interviews.

Findings

The major findings resulting from this study were:

1. The students participating in the BECP made significant gains in:
language ability in English; language ability in Spanish; general school readiness; developed and maintained a positive self-image; and developed substantially in various dimensions of personality growth.

2. There was very little difference in the overall performance of the students at the two site locations.

3. Overall, the children in the program showed considerable desire and ability to participate in the various program activities. Also, at the end of the year, the attention-span of the children appeared to be somewhat longer than one would expect from children with limited experiences and the characteristics which define most of this group.

4. The staff reflected a high morale and demonstrated improved skills in working with the children.

5. Parents of the students participating in the program maintained a positive attitude toward the program and the various curriculum and co-curriculum activities.

Conclusions

The major conclusions based upon the findings of this study were:

1. The Instructional and Community - Parental Involvement Components of the program were effective and functioned so as to complement each other. Specifically, these program components appeared to have the organization, curriculum, materials, facilities, and a qualified and motivated staff to provide the desired educational experiences for the target group of children and parents.

2. The program is in an active and positive process of accomplishing the general, or long range, program objectives.

3. The Community - Parental Involvement Component is vital to the continued success of the program but should be expanded as described in the recommendations.

4. In brief, the Bilingual Early Childhood Program functioned as planned for the target group children and parents and in accordance with the approved proposal during the 1972-73 program year.

Recommendations

Based upon the findings and conclusions of this study, the following suggestions or recommendations are made:

1. That the BECP continue to develop and serve as a demonstration model and as an early childhood intervention program.
2. That the BECP continue the inter-relations with the operation of the Responsive Environment Program for Spanish American Children (REPSAC) concerning the operation of the various program components.

3. That the statement of the general program objectives and the specific program objectives be reviewed and refined. Also, a specific statement of objectives for the Instructional Component should be developed.

4. That the external program evaluation be continued, but adding to the evaluation design: provision to compare the first and second year students; an additional measure of the children's self-concept with a rating scale of personality development; and a type of quantitative measure to assist in the evaluation of the Community - Parental Involvement Component.

5. That the function or role of the Community - Parental Involvement Component be expanded and that the number of home visitors be increased and their role expanded.
BIBLIOGRAPHY


APPENDIX A

TYPICAL SCHEDULE OF LEARNING ACTIVITIES

Group Activities

Language Development (Approximately 15 min.)

English: "Children, Children, look in the mirror. Tell me, tell me who you see." Use hand mirror in front of each child and have children name the child using first and last name.

"Put your finger on your nose." A song to stress body parts. Tell the story of the "Lonesome Hand" to also stress body parts.

Spanish: Talk about body parts, counting and colors.

Free Choice Activities

Art: Play dough and cookie cutters. Talk about the shapes formed by the cookie cutters. Good activity for small muscle development.

Center table: Flannel board faces with flannel features. Have hand mirror close by for children to see the arrangement of their own features as they put the features on the flannel board. Have children name each part as they put it on the head.

Light table: Trace and name triangle, circle, square and rectangle.

Block area: Blocks out with farm animals.

Language Master: Use cards for identifying body parts.

Small table: Colored beads for stringing, patterning and color identification.

Transition: To draw the children to one or two areas instead of scattered at many activities.

Center table: Lego


Individual Language Activities

(Pone child with one teacher or aide)

Piaget Early Childhood Curriculum (Approximately 10 min. with each child or small group of children. Present lesson in Spanish or English).

Lesson: Conservation of Liquid Quantity.
Materials: Funnel, 2 oz., 4 oz., 8 oz., containers

Instruction: Set up an area where children can pour water from one container to another. Have child estimate how many times he would have to fill a 2 oz. container to fill a 4 oz. container, an 8 oz. container. Then have the child perform the activity to see for himself.

Vocabulary: Funnel, cylinder; also words to describe dimensions of containers i.e., tall, short, skinny, fat, wide, narrow, taller than, shorter than, etc.

Project LIFE

Responsive Environment Typing Booth

Second Group Activity (Approximately 10 min.)

English: "Clap your hands in time to the music" (Autoharp accompaniment) Numerous verses such as "Stomp your feet." Pat your Head, Swing your Arms, Jump up and down.

"My Hands Upon My Head I Place"


"Blanca Vasquez, you may walk outside. Steve Baca, you may walk outside." Sing the children's names as they go outside for a play period.

Spanish: "Venga A Ver Mi Rancho", "Mi Papayo"

Rhythm band with puppets

Outside Activities

Swings

Monkey Bars

Sand Pile

Water Play

Water play (set up 3 stations near the fence). Put out syringes, basters, cans, funnels, eye droppers. Have children squirt the water through the fence. Josie, keep this under close supervision. Only one child at each station.
Put board between the two sets of steps. Have children jump on the board as you hold his hands and count the number of jumps. Count in English in the morning group. Count in Spanish in the afternoon group.

Snacks

Use the blender to make eggnog. "What shape is the egg?" Expect the older children to use the word oval. Ask the younger child if the egg is an oval or a square. Then expect the child to say oval. Let the children crack the eggs, add the milk and push the button to turn on the blender.

Cut toast into big triangle or little triangle. Ask children, "Would you like a big triangle or a little triangle of toast?"
APPENDIX B

DESCRIPTION OF TEST INSTRUMENTS

A brief non-technical description of each of the test instruments used during 1972-73 is listed in the following paragraphs. Personnel interested in more detail concerning the tests are invited to consult technical data provided by the publishers of the tests or refer to the Mental Measurements Yearbook, Buros, editor.

Peabody Picture Vocabulary Test (English and Spanish)

The Peabody Picture Vocabulary Test (English) is designed to provide an estimate of a subject's "verbal intelligence" through measuring his hearing vocabulary. The test also has wide utility as a clinical tool. Besides being effective with average subjects, it has special value with certain other groups. Since subjects are not required to read and the responses can be non-oral, the test is especially fair to non-readers and remedial reading cases. With the drawings free of fine detail and figure-ground problems, the test is apparently appropriate for at least some perceptually impaired persons. According to the Test Manual, the scale is appropriate for subjects between 2 1/2-18 years who are able to hear words, see the drawings, and has the facility to indicate "yes" and "no" in a manner which communicates.

This test has had extensive use in the Southwest in recent years in both English and Spanish. There is no standard version for the Spanish test, but the one used has been used widely. The test consists of sets of four line drawings to a plate and a vocabulary list. The subject points to the appropriate picture upon the examiner's pronunciation of the name or action word.

Readiness Test for Disadvantaged Pre-School Children

A nonverbal instrument designed to assess a child's readiness to enter public school programs. Two forms are available. Form A identifies areas of weakness and facilitates the establishment of individual remedial programs. Form B, administered some time after Form A, assesses the efficiency of the program used and the child's progress. Both forms have 50 multiple choice items and are arranged into four parts: Likeness, Differences, Numerical Analogies, and Missing Parts. Instructions are in Spanish, English, and French. The test is individually administered and training is not necessary. Norms are provided. There are no separate Spanish norms, but the two forms of the test were administered in Head Start and Day Care Centers to a total of 11,933 children, some of whom were Spanish-speaking.
Developmental Profiles

The Developmental Profile (Bessel and Palomares) is a subjective evaluation of children's behavior and assessing dimensions of personality growth under a variety of circumstances. These rating scales are prepared periodically by two teachers. The teachers make ratings on a printed form according to six affective areas; awareness of self; self-confidence; interpersonal comprehension; sensitivity to others; effectiveness; and tolerance. Because of the inherently subjective nature of these profiles, there is no objective scale of accomplishment or standard in terms of age-achievement scores. The profiles can provide a source of insight and understanding of emotional and personality development.
## APPENDIX C

**ADOBE EDUCATIONAL SERVICES**

**BILINGUAL EARLY CHILDHOOD PROGRAM**

**Clovis - Portales**

**Individual Student Test Data for 1972-73**

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<th>DOB</th>
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<th>Year In Prog.</th>
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### I. LANGUAGE ABILITY

**Peabody Picture Vocabulary Test (Dunn) - English**

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<th>Eval. Date</th>
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<th>Raw Score</th>
<th>Percentile</th>
<th>Remarks</th>
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**Peabody Picture Vocabulary Test (Dunn) - Spanish**

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### II. GENERAL SCHOOL READINESS

**Readiness Test For Disadvantaged Preschool Children (Walker)**

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### Gain

- **Peabody Picture Vocabulary Test (Dunn) - English**
- **Peabody Picture Vocabulary Test (Dunn) - Spanish**
- **Readiness Test For Disadvantaged Preschool Children (Walker)**