Formerly the Responsive Environment Program for Spanish American Children, REEEP is an educational intervention program for 3-, 4-, and 5-year-old "high risk" (of low birth weight and with various handicaps) Spanish American children. Goals of REEEP, an Elementary and Secondary Education Act Title III program, are to: prevent school failure with an intervention program which includes early identification and remediation of developmental learning deficiencies and to integrate handicapped children into the regular school program; provide in-service training to selected early childhood and kindergarten teachers and aides employed by various New Mexico school districts; and disseminate information concerning the program. Evaluation of the instructional activities was based on a pre-posttest design using standardized tests which measured language development in Spanish and English, school readiness, and self concept and personality development. In-service training and dissemination activities were subjectively evaluated using site-visits, observations, records, and self-reports by the staff. Major findings included: students made significant gains in language development in Spanish and English and in general school readiness; students developed and/or maintained a positive self concept and substantially developed in various dimensions of personality growth; and an outstanding in-service training program was provided.

(Author/NO)
RESPONSIVE ENVIRONMENT EARLY EDUCATION PROGRAM (REEEP):
FIRST-YEAR EVALUATION STUDY

Sponsored by:
ESEA, Title III
State Department of Education
Santa Fe, New Mexico

Under contract with:
Clovis Municipal Schools
800 Pile Street
Clovis, New Mexico 88101

Prepared by:
B. E. Askins and Associates
Box 4234, Texas Tech University
Lubbock, Texas 79409

June, 1976
CLOVIS MUNICIPAL SCHOOLS
CLOVIS, NEW MEXICO

Board of Education

- Dr. Jacob Moberly, President

Mr. Harry Eastman
Mr. Wilbur Johnson
Mr. Billy Neal Williams
Mr. Charles Guthals

Dr. L. W. Byous, Superintendent of Schools
Mr. Davenport Beasley, Assistant Superintendent

Members of the Professional Advisory Board

Dr. Gilbert Delgado, Dean
Graduate School
Gallaudet College
Washington, D. C.

Mrs. Oralie McAfee
Early Education
Metropolitan State College
Denver, Colorado

Mr. Henry Pascual, Director
Bilingual Teacher Training Unit
State Department of Education
Santa Fe, New Mexico

Mr. Harry Wugalter, Chief
Public School Finance and
Secretary for Education
State Capitol Building
Santa Fe, New Mexico

Mr. Kermit Stuve, Executive Director
New Mexico Association for Retarded Citizens
Albuquerque, New Mexico

Faculty/Staff

Mrs. Gay Herman, Director

Teacher: Mrs. Christine Aguirre
Secretary: Mrs. Julia Robertson
Aides: Mrs. Manuela Armijo
Mrs. Jeanne Gomez
Custodian/Bus Driver: Mrs. Patsy Encinias

EVALUATION TEAM MEMBERS

Dr. Billy E. Askins, Coordinator of Evaluation and Research

Dr. Joe D. Cornett, Research Associate and Testor
Dr. Len Ainsworth, Consultant
Dr. Ralph Carter, Testor
Mrs. Frankie Cook, Secretary/Administrative Assistant

3
RESPONSIVE ENVIRONMENT EARLY EDUCATION PROGRAM (REEEEP): FIRST YEAR EVALUATION STUDY, END OF YEAR EVALUATION REPORT, 1975-76
Askins, Billy E. et al

Related Documents: See ED 085 122, ED 096 086, and ED 111 562.

Suggested Descriptors: Preschool Education; Academically Handicapped; Demonstration Program; Intervention; Bilingual Education; Handicapped Students; Low Birth Weight Children; Language Development; School Readiness Tests; Self Concept and Personality Development; Teacher Training; Program Evaluation.

This report describes an external evaluation study of the Responsive Environment Early Education Program (formerly the Responsive Environment Program for Spanish American Children). This program serves as an educational intervention providing direct services to "high risk" (low birth weight-less than 5½ pounds) 3-, 4-, and 5-year-old children, including the integration of handicapped children, living in the area served by the Clovis Municipal Schools, Clovis, New Mexico. In addition, the program serves as a base for training selected early childhood and kindergarten teachers and aides.

The major goals of the program are: (1) To prevent school failure with an intervention program which includes early identification and remediation of developmental learning deficiencies and to intergrade handicapped children into the regular school program; (2) To provide in-service training to selected early childhood and kindergarten teachers and aides employed by various school districts of New Mexico; and (3) To disseminate information concerning the program.
Evaluation of the instructional activities was based on a pre-posttest design (without a control group) using standardized test which measured language development in Spanish and English, school readiness, and self concept and personality development. In-service training and dissemination activities were subjectively evaluated using site-visits, observations, records, and self-reports by the staff. Findings of the follow-up study of former REPSAC students are reported in a separate study.

Major findings included: (1) Students made significant gains in language development in Spanish and English and in general school readiness; (2) Students developed and/or maintained a positive self concept and substantially developed in various dimensions of personality growth; and (3) An outstanding in-service training program was provided.
This evaluation report describes the effect of the Responsive Environment Early Education Program (REEEP) during the school year 1975-76. This report is the result of a continuing external evaluation study being conducted by B. E. Askins and Associates which is an independent consultant and service organization with its direction primarily through various faculty members of the College of Education, Texas Tech University.

The evaluation team recognizes and hereby expresses appreciation to the director, faculty, and staff of REEEP for their excellent cooperation during the evaluation process, especially during the periods of testing the young children.

The invaluable assistance of the various professional and paraprofessional personnel on the evaluation team is also acknowledged and appreciated.

This report was prepared and submitted in accordance with the approved Continuation Evaluation Proposal for 1975-76 dated May 22, 1975 and the Educational Evaluation Agreement dated August 20, 1975.

Billy E. Askins, Ed.D.
Coordinator of Evaluation and Research
June, 1976
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>LIST OF TABLES AND FIGURES</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>i</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SECTION</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
</tr>
<tr>
<td>I.</td>
<td>1</td>
</tr>
<tr>
<td>INTRODUCTION</td>
<td></td>
</tr>
<tr>
<td>Purpose of Program</td>
<td>1</td>
</tr>
<tr>
<td>Development of the Program</td>
<td>1</td>
</tr>
<tr>
<td>II.</td>
<td>3</td>
</tr>
<tr>
<td>DESCRIPTION OF THE PROGRAM</td>
<td></td>
</tr>
<tr>
<td>Target Children and Criteria for Selection</td>
<td>3</td>
</tr>
<tr>
<td>Goals and Objectives</td>
<td>3</td>
</tr>
<tr>
<td>Goals</td>
<td>3</td>
</tr>
<tr>
<td>Objectives</td>
<td>4</td>
</tr>
<tr>
<td>Program Activities</td>
<td>5</td>
</tr>
<tr>
<td>Instructional Activities</td>
<td>5</td>
</tr>
<tr>
<td>In-Service Activities</td>
<td>5</td>
</tr>
<tr>
<td>Dissemination Activities</td>
<td>6</td>
</tr>
<tr>
<td>Outreach Activities</td>
<td>6</td>
</tr>
<tr>
<td>Faculty/Staff/Advisory Board</td>
<td>7</td>
</tr>
<tr>
<td>Location and Physical Facilities</td>
<td>7</td>
</tr>
<tr>
<td>III.</td>
<td>8</td>
</tr>
<tr>
<td>EVALUATION</td>
<td></td>
</tr>
<tr>
<td>Purpose of External Evaluation</td>
<td>8</td>
</tr>
<tr>
<td>Evaluation Design</td>
<td>8</td>
</tr>
<tr>
<td>Procedure and Time-Schedule for Collecting Data</td>
<td>9</td>
</tr>
<tr>
<td>On-Going Evaluation Procedures</td>
<td>9</td>
</tr>
<tr>
<td>Statistical Treatment of Data</td>
<td>9</td>
</tr>
<tr>
<td>Summary Chart of Evaluation Plan</td>
<td>10</td>
</tr>
<tr>
<td>Additional Evaluation Data</td>
<td>10</td>
</tr>
<tr>
<td>IV.</td>
<td>12</td>
</tr>
<tr>
<td>EVALUATION RESULTS</td>
<td></td>
</tr>
<tr>
<td>Number of Participants</td>
<td>12</td>
</tr>
<tr>
<td>Student Achievement</td>
<td>12</td>
</tr>
<tr>
<td>Language Development in English</td>
<td>13</td>
</tr>
<tr>
<td>Language Development in Spanish</td>
<td>13</td>
</tr>
<tr>
<td>School Readiness</td>
<td>13</td>
</tr>
<tr>
<td>Analysis By Age and Year in Program</td>
<td>14</td>
</tr>
<tr>
<td>Self Concept and Emotional Development</td>
<td>15</td>
</tr>
<tr>
<td>In-Service Training</td>
<td>19</td>
</tr>
<tr>
<td>Dissemination Activities</td>
<td>20</td>
</tr>
<tr>
<td>Outreach Activities</td>
<td>21</td>
</tr>
<tr>
<td>Follow-Up Study of Former Students</td>
<td>21</td>
</tr>
<tr>
<td>V. SUMMARY, FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS.</td>
<td>22</td>
</tr>
<tr>
<td>Summary</td>
<td>22</td>
</tr>
<tr>
<td>Findings</td>
<td>22</td>
</tr>
<tr>
<td>Conclusions</td>
<td>23</td>
</tr>
<tr>
<td>Recommendations</td>
<td>23</td>
</tr>
<tr>
<td>BIBLIOGRAPHY</td>
<td>24</td>
</tr>
<tr>
<td>APPENDIX A - Description of Tests</td>
<td>27</td>
</tr>
</tbody>
</table>
# LIST OF TABLES AND FIGURES

## Tables

<table>
<thead>
<tr>
<th>Table</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Pre and Posttest Performance of REEEP Students</td>
<td>13</td>
</tr>
<tr>
<td>2</td>
<td>Age and Test Performance of REEEP Students</td>
<td>14</td>
</tr>
<tr>
<td>3</td>
<td>Year in Program and Test Performance of REEEP Students</td>
<td>15</td>
</tr>
</tbody>
</table>

## Figures

<table>
<thead>
<tr>
<th>Figure</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Personal Development Profile for First Year REEEP Students</td>
<td>16</td>
</tr>
<tr>
<td>2</td>
<td>Personal Development Profile for Second Year REEEP Students</td>
<td>17</td>
</tr>
<tr>
<td>3</td>
<td>Personal Development Profile for Third Year REEEP Students</td>
<td>18</td>
</tr>
</tbody>
</table>
This end-of-year evaluation report describes an external evaluation study of the Responsive Environment Early Education Program (REEEP) during the school year 1975-76. This report is part of a continuation evaluation study being conducted by B. E. Askins and Associates which is an independent consultant and service organization with its direction primarily through various faculty members of the College of Education, Texas Tech University.

Purpose of the Program

The major purpose of REEEP is to serve as an effective early educational intervention for 3-, 4-, and 5-year-old "high risk" children living in the area served by Clovis Municipal Schools, Clovis, New Mexico. Children are considered "high risk" as a result of their low birth weight, 5 1/2 pounds or less, and who will probably have accompanying handicaps as they enter the first grade. This program attempts to demonstrate that such an early intervention can provide such children the experiences necessary to succeed and remain in the educational mainstream.

Development of the Program

In developing the program (formerly the Responsive Environment Program for Spanish American Children - REPSAC) has drawn heavily upon various experimentally developed models in early childhood education including: the New Nursery School, Northern Colorado University; the responsive environment concept of Omar K. Moore; Project LIFE (Language Instruction to Facilitate Education); the Piaget-Early Childhood Curriculum, and various parent involvement programs throughout the nation. In addition, the program has adapted the Early Prevention of School Failure Model,* a nationally validated Title III ESEA developer-demonstrator project. Thus, beginning with the school year 1975-76, this program is an adaptation of the former Responsive Environment Program for Spanish American Children (REPSAC) and the Early Prevention of School Failure Project.

The rationale for the design and development of REPSAC emanated from research which indicated that children with a low birth weight, coupled with other factors, generally experience childhood difficulties in the cognitive

*The Early Prevention of School Failure Project is located at 114 North Second Street, Peotone, Illinois and is sponsored by USOE (ESCA, Title III, Sec. 306) and the Office of the Superintendent of Public Instruction, Springfield, Illinois.
areas of development which can result in subsequent retardation as they progress through their formal education. Spanish American children with such a low birth weight coupled with a language different from that used in the American educational setting, have additional handicaps. Further, Spanish American children with the foregoing handicaps whose home environment often does not include toys, materials, games, and media which can enrich their childhood experiences enter the first grade with a notable disadvantage in comparison to children with such advantages.

Recognizing that approximately 22% of the total school population of Clovis were children with a Spanish surname and that approximately 39% of children enrolled in special education were of Spanish origin, and accepting the premise that a high percentage of "high risk" children come from this particular ethnic group, the idea of an early educational intervention became a reality in the form of REPSAC. REPSAC officially started in September, 1971 with 32 students and operated four years (1971-75) serving low birth weight Spanish American children. During 1971-75, REPSAC was funded by the Bureau of Education for the Handicapped.

Thus, beginning with school year 1975-76, the Responsive Environment Early Education Program (REEEP) was expanded to serve low birth weight children of all ethnic groups.

*For references pertaining to evaluation results of REPSAC during these years, see Bibliography 4, 5, 6, and 7.
The Responsive Environment Early Education Program (REEEP) is designed to serve as an educational intervention providing direct services to approximately forty high risk (low birth weight - less than 5.5 lbs.) 3-, 4-, and 5-year-old children, including the integration of handicapped children, living in the area served by the Clovis Municipal Schools, Clovis, New Mexico. In addition, the program serves as a base for training selected early childhood and kindergarten teachers and aides employed by various school districts of New Mexico.

After completing REEEP (1-3 years depending upon the child's age at entry), the children will enter the first grade. A follow-up study is being conducted on these students as they enter the mainstream of formal education (Grades 1-6).

**Target Children and Criteria for Selection of Participants**

The target group children of the program are 3-, 4-, and 5-year-old low birth weight children who are considered educationally handicapped. Criteria used to select children to participate in the program are: 1) Low birth weight - 5.5 pounds or less; 2) Health history of child; 3) Level of education of parents; 4) Educational attainment of siblings; 5) Home language - Spanish or English; and 6) Income of family.

**Goals and Objectives**

The following goals and objectives give direction to the organization and administration of the program.

**Goals:**

1. To prevent school failure with an intervention program which includes early identification and remediation of developmental learning deficiencies and to integrate handicapped children into the regular school program.

2. To provide in-service training to selected kindergarten teachers and teacher-aides employed by various school districts throughout New Mexico.

3. To disseminate information concerning the program.
Objectives

The major objectives of the program are:

1. Student Achievement (At the end of the school year, the student will be able to):

   1.1 Demonstrate language ability in English which is normally expected at their age level. Evidence of achievement will be determined from significant gain scores of the Peabody Picture Vocabulary Test. (Cognitive)

   1.2 Demonstrate language ability in Spanish which is normally expected at their age level. Evidence of achievement will be determined from significant gain scores of the Test for Auditory Comprehension of Language-Spanish. (Cognitive)

   1.3 Demonstrate school readiness in such areas to include: listening ability; visual acuity; and recognition of similarities, differences, and numerical analogies. Evidence of achievement will be determined from significant gain scores of the Readiness Test for Disadvantaged Children. (Cognitive)

   1.4 Exhibit a positive self-concept and favorable emotional development. Evidence of such behavior will be determined from rating from the Developmental Profiles which involve periodic teacher evaluations in six areas of the affective domain: awareness of self, self-confidence, interpersonal comprehension, sensitivity to others, effectiveness, and tolerance. Evidence of growth/development for each age-level will be determined from individual profile sheets plotted in terms of direction and rate of growth development. (Affective)

2. In-Service Training

2.1 Upon completion of the various in-service training sessions, teachers and aides will be able to employ various aspects of the curriculum in their own educational settings so as to meet the needs of children with developmental lags and learning deficiencies. This will include incorporating the approaches of Piaget and Montessori, using various materials such as the Project LIFE materials, and using the responsive environment typing booth. Evidence of achievement will be determined by observations and written examinations.
3. Dissemination

3.1 Information concerning the program and operation of the program will be disseminated by various means such as:

a. Progress reports to the LEA central office, school board, and local area news media.

b. Site-visitation by interested individuals and groups, both from in and out-of-state.

c. Copies of the end-of-year Evaluation Report will be disseminated throughout the state including the Educational Resources Information Center (ERIC).

d. At the end of the year, various types of training films for use in early childhood education will be developed and will be disseminated throughout the state.

Program Activities

Activities of the program can be classified as: instructional; in-service; dissemination; and outreach.

Instructional Activities

The instructional activities of the program are conducted in two half-day sessions five days a week. Approximately twenty students attend the morning session and twenty students attend the afternoon session. The students are transported to and from school by a small bus provided by the program.

Specific learning activities are planned for the children for each three-hour day. These learning activities can be generally classified 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, and the Peabody Language Development Kit).

Eating the noon meal with attendant language involvement is developed as a learning activity: therefore, all of the students are served a hot lunch. The morning group is served prior to leaving school, and the afternoon group is served immediately upon arrival for the afternoon session.

In-Service Activities

The majority of the in-service activities of the program were considered as a part of the outreach activities (described later). Other types of in-service activities included: attendance at various workshops; enrollment in
selected graduate/undergraduate courses at Eastern New Mexico University; formal and informal sessions with various consultants, including members of the external evaluation team; and regularly scheduled faculty meetings.

Dissemination Activities

Activities which served as means to disseminate information concerning the program included: preparation of various brochures; newspaper releases; progress reports to the funding agency; central administration office and school board; site-visitation by interested groups and individuals; various speaking engagements by director and faculty; preparation of an audio tapes and manuals; and copies of the evaluation report were distributed throughout the state and nation including the Educational Resources Information Center (ERIC - Clearinghouse on Rural Education and Small Schools). Also, a paper concerning the program was presented at a national level professional organization.

Outreach Activities

Beginning with school year 1975-76, the outreach activities component was added to REEEP.* The purpose of adding the outreach activities to the parent center was to give the program the capability of providing replication services to various local education agencies. A unique feature of this replication service is the capability of taking the training to the replication centers by a specially designed and equipped motor coach.

Three school districts, all in isolated areas and having a large number of target children and within a reasonable distance of the parent center requested replication of all or part of the parent program during the 1975-76 school year. These school districts were: Fort Sumner, Artesia, and Carlsbad, all located in eastern New Mexico. In addition, replication by two other school districts had been made completing their second year of operation. This replication was made by the Clovis-Portales Bilingual Early Childhood Program (ESEA, Title VII) with a training site in both Clovis and Portales, New Mexico (8, 9, and 10).

The outreach activities component is designed to have three major functions: advisory and training, diffusion, and evaluation.

*The outreach activities of REEEP is funded by the Handicapped Children's Early Education Program, Bureau of Education for the Handicapped, U.S. Office of Education, Grant No. G00-75-00079.
The evaluation of the outreach activities also includes a follow-up study of former REPSAC students as they enter the mainstream of education (grades 1-5). The school year 1975-76 is the completion of the third year of this follow-up study.

Faculty/Staff/Advisory Board

The faculty/staff of REEEP consists of: the director; one certified teacher; two teacher-aides; and one custodian/bus driver.

In addition to the regular faculty/staff, there is the Professional Advisory Board. The purpose of the Professional 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, bilingual and bicultural education, educational technology and the responsive environment concept.

Names of personnel associated with the REEEP are listed on the back of the cover page of this report.

Location and Physical Facilities

The project is located about six blocks southwest of the central business area of Clovis, and the physical facilities blend into the surrounding buildings and are not discernable from the rest of the community except by a sign on one of the houses. The physical facilities of the program consists of two houses with an adjoining yard. One house, which is a renovated former single family dwelling, is used as the main teaching facility, and the other building serves as office and workroom which is a renovated former beauty shop.
SECTION III
 EVALUATION

The external evaluation of REEEP was conducted by B. E. Askins and Associates which is an independent consultant and service organization with its direction primarily through various faculty members of the College of Education, Texas Tech University.

Purpose of External Evaluation

The purpose of this external evaluation study was to collect and provide information necessary for decision-making relative to student and program progress. Such information was furnished to the program director, the LEA, and to the funding agency.

Major elements of this external evaluation consisted of:

1. Providing a variety of professional personnel appropriate to the evaluation of the program including: personnel to administer tests, site-visits, analysis, and report writing.

2. Obtaining and administering the selected standardized tests in accordance with the evaluation design.

3. Providing the program director with baseline data which could be used in the program planning and operation. These data were mainly the results from the pretesting phase.

4. Preparing two interim and the end-of-year report.

5. Disseminating evaluation reports and other information pertaining to the evaluation of the program.

Evaluation Design

The design for the external evaluation for 1975-76 was based primarily upon the program objectives as pertains to student achievement (1-1 through 1-4). The objectives were objectively measured with standardized tests using a pre-posttest design. A summary description of the objectives and instruments used are as follows:

<table>
<thead>
<tr>
<th>Objective</th>
<th>Instrument</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1 Language development in English</td>
<td>Peabody Picture Vocabulary Test (PPVT)</td>
</tr>
<tr>
<td>1.2 Language development in Spanish</td>
<td>Test for Auditory Comprehension of Language (TACL)</td>
</tr>
</tbody>
</table>
1.3 School Readiness

Readiness Test for Disadvantaged Children (RTDC)

1.4 Self concept and personality development

Developmental Profiles (DP)

Form A and Form B of the PPVT and RTDC were used as the pretest and posttest respectively. The same form of the TACL was used as the pre and posttest. The use of the Developmental Profiles is described later.

A brief non-technical description of the test instruments is included in Appendix A.

Procedure and Time-Schedule for Collecting Data

Data to evaluate objectives 1.1 - 1.3 were collected with the use of standardized tests within the framework of a quasi-experimental design commonly referred to as a "Time Design" or "Pretest-Posttest Design Only" (16). This design involved a single experimental group without a control group. The subject group (the program participants) was measured on a dependent variable (the pretest), and was then given the experimental treatment (instructonal activities). Following the treatment, the subject group was measured again on the same variable (posttest), and a statistical comparison was made between the means of the two measurements.

Data to evaluate objective 1.4 was collected with the use of the Developmental Profiles. This instrument was completed for each student three times during the year by the classroom teacher and aides.

The dates for administering the pretests were September 2-5, 1975, and the posttests were administered May 10-14, 1976. The Developmental Profiles were completed during September, February, and May.

On-Going Evaluation Procedures

In addition to the above stated measures (pre and posttests), there were various on-going subjective-evaluation procedures. This consisted mainly of site-visits by the evaluator so as to observe and become familiar with the daily operation of the program. Assistance with the subjective evaluation of the other objectives was accomplished during these site-visits.

Statistical Treatment of Data

As concerns the collected data from the standardized tests, a mean gain score was computed for each test (posttest score minus pretest score) by age and year in program. Also, comparative data were reported concerning the second-year and third-year students. 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 for each child for each marking period and was "plotted" on a standardized scale to indicate direction and rate of growth/change.

**Summary Chart of the Evaluation Plan**

A summary of the various evaluation activities is presented on the next page in the "Evaluation Plan Summary Chart".

**Additional Evaluation Data**

A separate external evaluation study of the outreach activities, including the follow-up study of former REPSAC students, was conducted. Information concerning this report can be obtained either from the project director or the external evaluator.
# EVALUATION PLAN SUMMARY CHART

(REEAP - 1975-76)

<table>
<thead>
<tr>
<th>GOAL</th>
<th>EVALUATION ACTIVITY (BY OBJECTIVES)</th>
<th>SAMPLE OR TARGET GROUP</th>
<th>INSTRUMENT*</th>
<th>DATA COLLECTION RESPONSIBILITY</th>
<th>DATE</th>
<th>ANALYTICAL PROCEDURE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Student Achievement</td>
<td>1.1 Measure language development in English on pre and posttest basis.</td>
<td>100% of subject group</td>
<td>PPVT- (A)</td>
<td>Evaluator</td>
<td>09/02/75</td>
<td>t-test for significance of difference of mean gain scores</td>
</tr>
<tr>
<td>1.</td>
<td>1.2 Measure language development in Spanish on pre and posttest basis.</td>
<td>100% of subject group</td>
<td>TACL-(A)</td>
<td>Evaluator</td>
<td>09/02/75</td>
<td>t-test for significance of difference of mean gain scores</td>
</tr>
<tr>
<td>1.</td>
<td>1.3 Measure degree of school readiness on pre and posttest basis.</td>
<td>100% of subject group</td>
<td>RTDC (A)</td>
<td>Evaluator</td>
<td>09/02/75</td>
<td>t-test for significance of difference of mean gain scores</td>
</tr>
<tr>
<td>1.</td>
<td>1.4 Evaluate self-concept and emotional development during 3 month intervals.</td>
<td>100% of subject group</td>
<td>DP</td>
<td>Teacher/Evaluator</td>
<td>10/15/75</td>
<td>Statistical summary</td>
</tr>
<tr>
<td>2. In-service Training</td>
<td>2.1 Assess effects of in-service training sessions.</td>
<td>100% of teachers and aides</td>
<td>WES</td>
<td>Site visits</td>
<td>Written exams</td>
<td>Director/Evaluator</td>
</tr>
<tr>
<td>3. Dissemination</td>
<td>3.1 Assess the quality &amp; quantity of dissemination of information concerning the program.</td>
<td>N/A</td>
<td>Observations, Number of news releases, Number of prof. articles, Quality of training films.</td>
<td>Director/Evaluator</td>
<td>End of year</td>
<td>Narrative summary</td>
</tr>
</tbody>
</table>

*LEGEND*

- PPVT = Peabody Picture Vocabulary Test (Dunn)
- TACL = Test for Auditory Comprehension of Language (Carrow)
- RTDC = Readiness Test for Disadvantaged Children (Walker)
- DP = Developmental Profiles (Bessell and Palomares)
- WES = Workshop Evaluation System (McCallon)

(See Appendix A for description of instruments).
SECTION IV
EVALUATION RESULTS

The design for the external evaluation for 1975-76 primarily focused upon the program objectives as pertains to student achievement (1.1-1.4). A list of the specific objectives can be found in Section II, and a detailed description of the evaluation design can be found in Section III.

Number of Participants

At the beginning of the school year, there were 42 students enrolled in REEEP (24 boys and 18 girls); 6 third-year students; 14 second-year students; and 22 initially started the program this year.

The pretesting phase included 42 students and the posttesting phase included 41 students. The number of students who were both pre and posttested was 30. The reason for N=30 was because of student withdrawals and new entries into the program.

Student Achievement

The objectives (1.1-1.3) were objectively measured with standardized tests using a pre and posttest design. A summary description of the objectives and instruments used are as follows:

<table>
<thead>
<tr>
<th>Objective</th>
<th>Instrument</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1 Language development in English</td>
<td>Peabody Picture Vocabulary Test (PPVT)</td>
</tr>
<tr>
<td>1.2 Language development in Spanish</td>
<td>Test for Auditory Comprehension of Language (TAOC)</td>
</tr>
<tr>
<td>1.3 School Readiness</td>
<td>Readiness Test for Disadvantaged Children (RTDC)</td>
</tr>
<tr>
<td>1.4 Self concept and personality development</td>
<td>Developmental Profiles (DP)</td>
</tr>
</tbody>
</table>

The students were measured at the beginning of the school year on three factors (1.1-1.3). At the end of the year, the students were again measured in the same areas. Progress in each area was determined by the amount of gain accomplished between the pretest and posttest. In addition, gain scores were used to compare performance between first, second, and third-year students. Also, gain scores were used to compare performance of the 3-, 4-, and 5-year-olds participating in the program. All of these differences were
The last objective (1.4) pertained to the assessment of self concept and personality development. The Developmental Profiles were completed by the teacher and teacher-aides three times during the year, September, February, and May. Change/growth for each student was determined by averaging the two ratings for each period and plotting the results on a profile sheet. Group change was determined taking an average of the individual ratings for each of the seven areas measured.

**Language Development in English**

Objective 1.1 pertained to language development in English. A significant mean gain score (MG=43.40, p < .001) was found in this area; therefore, it was concluded that this objective was achieved. Statistical data concerning language development in English are presented in Table 1.

**Language Development in Spanish**

Objective 1.2 pertained to language development in Spanish. A significant mean gain score (MG=25, p < .001) was found in this area; therefore, it was concluded that this objective was achieved. Statistical data concerning language development in Spanish are presented in Table 1.

**School Readiness**

Objective 1.3 pertained to school readiness. A significant mean gain score (MG=10.57, p < .001) was found in this area; therefore, it was concluded that this objective was achieved. Statistical data concerning school readiness are presented in Table 1.

<table>
<thead>
<tr>
<th>TABLE 1</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PRE AND POSTTEST PERFORMANCE OF REEEP STUDENTS</strong></td>
</tr>
<tr>
<td>TEST/OBJECTIVE</td>
</tr>
<tr>
<td>PPVT - English (1.1)</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>TACL - Spanish (1.2)</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>RTDC - Readiness (1.3)</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>*(p&lt;.001)</td>
</tr>
</tbody>
</table>
Analysis By Age and Year in Program

By Age. An additional analysis was conducted concerning the overall performance of the students by age in the three aforementioned areas. It was hypothesized that students participating in REEEP at age 3, 4, and 5 would show a significant gain in the areas measured. The data indicated that this hypothesis can be supported for all ages and for all areas measured except language development in Spanish for age five. This lack of significant gain in Spanish for five-year-olds is consistent with earlier findings and may reflect a greater reliance on the English language to function in school. These data are presented in Table 2.

<p>| TABLE 2 |
| AGE AND TEST PERFORMANCE OF REEEP STUDENTS |</p>
<table>
<thead>
<tr>
<th>TEST/OBJECTIVE</th>
<th>AGE</th>
<th>N</th>
<th>MEAN GAIN</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>PPVT- English</td>
<td>3</td>
<td>7</td>
<td>45.25</td>
<td>5.93*</td>
</tr>
<tr>
<td>(1.1)</td>
<td>4</td>
<td>14</td>
<td>51.81</td>
<td>6.84*</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>9</td>
<td>33.15</td>
<td>4.26*</td>
</tr>
<tr>
<td>TACL- Spanish</td>
<td>3</td>
<td>7</td>
<td>27.25</td>
<td>3.42**</td>
</tr>
<tr>
<td>(1.2)</td>
<td>4</td>
<td>14</td>
<td>33.12</td>
<td>4.16**</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>9</td>
<td>14.21</td>
<td>1.63 N.S.</td>
</tr>
<tr>
<td>RTDC- Reading</td>
<td>3</td>
<td>7</td>
<td>12.33</td>
<td>3.04**</td>
</tr>
<tr>
<td>(1.3)</td>
<td>4</td>
<td>14</td>
<td>9.16</td>
<td>2.81**</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>9</td>
<td>8.48</td>
<td>2.63***</td>
</tr>
</tbody>
</table>

*(p<.001)  **(p<.01)  ****(p<.05)

By Year in Program. An additional analysis was conducted concerning the overall performance of the students according to year-in-program in the three areas measured.

First, second, and third-year students made significant gains in language development in English, language development in Spanish, and school readiness. These data are presented in Table 3.
TABLE 3
YEAR IN PROGRAM AND TEST PERFORMANCE OF REEEP STUDENTS

<table>
<thead>
<tr>
<th>TEST/OBJECTIVE</th>
<th>YP</th>
<th>N</th>
<th>MEAN</th>
<th>GAIN</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>PPVT - English</td>
<td>1</td>
<td>13</td>
<td>51.40</td>
<td>9.12*</td>
<td></td>
</tr>
<tr>
<td>(1.1)</td>
<td>2</td>
<td>12</td>
<td>43.16</td>
<td>6.40*</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>5</td>
<td>39.41</td>
<td>6.11*</td>
<td></td>
</tr>
<tr>
<td>TACL - Spanish</td>
<td>1</td>
<td>13</td>
<td>37.13</td>
<td>5.26*</td>
<td></td>
</tr>
<tr>
<td>(1.2)</td>
<td>2</td>
<td>12</td>
<td>30.12</td>
<td>4.83*</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>5</td>
<td>25.41</td>
<td>4.01*</td>
<td></td>
</tr>
<tr>
<td>RTDC - Readiness</td>
<td>1</td>
<td>13</td>
<td>23.45</td>
<td>3.32**</td>
<td></td>
</tr>
<tr>
<td>(1.3)</td>
<td>2</td>
<td>12</td>
<td>17.17</td>
<td>2.99***</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>5</td>
<td>10.11</td>
<td>2.86***</td>
<td></td>
</tr>
</tbody>
</table>

*(p<.001)
**(p<.01)
*** (p<.05)

Self Concept and Emotional Development

Objective 1.4 pertained to developing a positive self concept and favorable emotional development. This measurement was obtained from three subjective evaluations made by the teacher-aide using the Developmental Profiles. Results of these average ratings for first, second, and third year students are presented in Figures 1, 2, and 3. As reflected in these figures, positive and continuous growth was made by the students; therefore, it was concluded that objective 1.4 was achieved.
Developmental Profile

**Awareness**

1. Self-Awareness
2. Sensitivity to Others

**Mastery**

1. Self-Confidence
2. Effectiveness

**Social Interaction**

1. Interpersonal Understanding
2. Tolerance

*Figure 1 - Personal Development Profile for First Year Freshman Students*
Developmental Profile

AWARENESS

MASTERY

SOCIAL INTERACTION

FIGURE 2 - PERSONAL DEVELOPMENT PROFILE FOR SECOND YEAR REEEP STUDENTS
FIGURE 3 - PERSONAL DEVELOPMENT PROFILE FOR THIRD YEAR REEEP STUDENTS
In-Service Training

Objective 2.1 pertained to the in-service training of the teacher and aide. Assessment of the in-service training activities involved site-visits, written exam, and discussions with the project director and faculty.

The majority of the in-service activities were conducted by the outreach activities component (outreach activities are described in a separate report). Other types of in-service activities included: attendance at various workshops; enrollment of designated graduate/undergraduate courses at Eastern New Mexico University; formal and informal sessions with various consultants, including members of the external evaluation team; and regularly scheduled faculty meetings.

An outstanding feature of the in-service training for the 1975-76 school year was the attendance of two workshops before the school year started.

The first workshop, Workshop on Implementation Procedures on Early Prevention of School Failure, was conducted at Eastern New Mexico State University, May 28-30, 1975. This workshop was conducted by a dissemination team from the Early Prevention of School Failure Program, a nationally validated ESEA Title III project, located in Peotone, Illinois. This workshop focusing on kindergarten age children, was designed to provide school personnel knowledge and skills necessary to implement screening programs in their respective schools. In addition, the workshop attempted to assist the participants in the planning of educational experiences for kindergarten children with certain developmental lags. Specifically, the workshop participants were expected to:
1) Acquire the skills necessary to implement a screening model for kindergarten age children; and 2) Develop strategies designed to meet the unique educational needs of each child.

The second workshop, Early Childhood Bilingual/Bicultural Education: Why and How, was conducted at Eastern New Mexico State University, August 18-20, 1975. This workshop was conducted by three faculty members of the Metropolitan State College, Denver, Colorado. This workshop, focusing on kindergarten age children, was designed to provide teacher and teacher-aides knowledge and skills necessary to implement/improve programs in early childhood bilingual/bicultural education.

Another strong feature of the in-service training program was the teacher and aide working very closely with the outreach training team which included: early childhood specialist; educational diagnostician and language specialist; and a speech therapist.

Another outstanding feature of the in-service training program was the attendance of the teacher and aide of designated courses at Eastern New Mexico University. One such course was Working with Spanish Speaking Children.
Considering the quantity and quality of the in-service training activities, it was conducted that the objective pertaining to in-service was achieved.

**Dissemination**

Objective 3.1 pertained to quantity and quality of dissemination of information concerning the program. Information concerning the project was disseminated as described in the following paragraphs.

Progress reports were made available to the central administration office, school board, local area news media including nearby Cannon Air Force Base, the State Department of Education, the U.S. Office of Education, and the U.S. Senators from New Mexico.

Much publicity was received when the project was notified of an invitation from the National Diffusion Network for the program to serve as a national demonstration site for the Early Prevention of School Failure Project of Peotone, Illinois.

Over 6,000 copies of the brochure, "Parents: Do You Know the Early Warning Signs of Children with Special Needs," were distributed in grades K-6 of the Clovis Municipal Schools.

The development of six one-minute video cassette spots for use on television. These were developed in cooperation with KENW-TV, ENMU, and this material was presented to the Governor's Commission for Public Broadcasting in March, 1976.

Presentations of the project were made at: the annual meeting of the New Mexico Speech and Hearing Association at Eastern New Mexico University, April, 1976; various classes in Child Development at ENMU; and to the ENMU Chapter of the Council for Exceptional Children.

The project was co-sponsored of the Early Childhood Education Conference in Albuquerque, April 29-May 1, 1976. This conference was attended by over 200 administrators, teachers, and teacher-aides from throughout New Mexico. Presentors included nationally known speakers. Also, various training sessions were conducted during the conference by personnel of the Clovis project. In addition, there were representatives in attendance from eight nationally validated Title III early education programs. As part of the conference, the participants drafted a resolution pertaining to state government support of development of early childhood education which was later presented to the Governor at the People's Forum on Education in Albuquerque on May 21-22, 1976.

The project used student teachers from nearby Eastern New Mexico University and thereby disseminated information through the university.
Site-visitations by many professional individuals and groups as well as parents.

A paper was presented by the evaluator concerning the project at the annual meeting of the American Educational Research Association, San Francisco, California, April, 1976.

Copies of the end-of-year evaluation reports were disseminated throughout the states of New Mexico and Texas. Also, these reports were accepted into the network of the Educational Resources Information Center (ERIC) in the Clearinghouse of Rural Education and Small Schools, Las Cruces, New Mexico.

In addition to the above, much information concerning the project was disseminated by the outreach activities component which was added to the program this year. Description and evaluation of the outreach activities were reported for 1975-76 in a separate report.

Based on observations and interviews with various school personnel, it was concluded that the quality and quantity of disseminated materials were more than adequate. Therefore, it was concluded that the objective pertaining to the dissemination of information was achieved.

**Outreach Activities**

Evaluation of the outreach activities (See Section II) was not a part of this evaluation study, however, an external evaluation study of the outreach activities was conducted. The results of this evaluation were reported in a separate report.* Information concerning the report can be obtained from the project director.

**Follow-Up Study of Former REPSAC Students**

A basic concern of those who have been associated with this project (REEEP formerly REPSAC) during the past several years is the status of former students now enrolled in public and private schools. This concern has generated a continuation of a follow-up study of former REPSAC students. The study was conducted in 1974 and 1975 and was again conducted at the end of the 1975-76 school year. Results of the follow-up study during 1975-76 were included in the evaluation study of the outreach activities.* Information concerning this report can be obtained from the project director.

*This evaluation study was funded by the Handicapped Children's Early Education Program, Bureau of Education for the Handicapped, U.S. Office of Education (Grant No. G00-75-00079).
SECTION V
SUMMARY, FINDINGS, AND CONCLUSIONS

Summary

The Responsive Environment Early Education Program (REEEP) was designed to serve as an educational intervention providing direct services to approximately forty high-risk (low birth weight - less than 5½ pounds) 3-, 4-, and 5-year-old children, including the integration of handicapped children, living in the area served by the Clovis Municipal Schools, Clovis, New Mexico. In addition, the program served as a base for training selected early childhood and kindergarten teachers and aides employed by various school districts of New Mexico.

After completion REEEP (1-3 years depending upon the child's age at entry), the children enter the first grade. A follow-up study is being conducted on these students as they enter the mainstream of formal education (Grades 1-6). This follow-up was conducted as a separate study and report.

The evaluation design for 1975-76 was based primarily upon the program objectives as pertains to student achievement. Also, the objectives pertaining to in-service training and dissemination were assessed.

Findings

The major findings of this 1975-76 evaluation study were:

1. REEEP students made significant gains in: language ability in English; language development in Spanish; and school readiness.

2. When the test data were analyzed by age of the students, the 3-, 4-, and 5-year-old groups made significant gains in each of the three areas measured except the gain was not significant in language development in Spanish for the 5-year-old group.

3. When the test data were analyzed by year in program (first, second, or third), each group made significant gains in the three areas measured.

4. The REEEP students showed a positive and continuous growth as concerns self concept and personality development.

5. The REEEP students were found to be extremely friendly and cooperative, willing to try various tasks without fear of failure, and an unusually long attention span for this age and type of children.
Conclusions

Based upon the findings of this study, the major conclusions were:

1. All of the program objectives, pertaining to student achievement, in-service training, and dissemination were achieved.

2. The program is in an active and positive process of accomplishing the long range program goals.

3. The program has the organization, curriculum, materials, facilities, and a qualified and dedicated faculty/staff to provide the needed educational experiences for the target children; therefore, it was concluded that REEEP is serving as an effective educational intervention for the specified target children.

Recommendation

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

1. That REEEP continue to develop and serve as an early childhood and bilingual education intervention program and as a demonstration and replication model.

2. That the evaluation design for the program during 1976-77 be expanded.

3. That the follow-up study of the former REPSAC/REEEP students be made a part of the external program evaluation of REEEP.
BIBLIOGRAPHY


APPENDIX A
DESCRIPTION OF INSTRUMENTS

A brief non-technical description of each of the test instruments 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.

Language Development

English

The Peabody Picture Vocabulary Test (Dunn) 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 2½ - 18 years who are able to hear words, see the drawings, and have the facility to indicate "yes" and "no" in a manner which communicates.

This standardized test is published by American Guidance Services, Inc., Circle Pines, Minnesota.

Spanish

The Test for Auditory Comprehension of Language (Carrow) measures the child's understanding of the Spanish language structure. The test is composed of 101 plates of pictorial referents. The child responds to each of the examiner's oral stimuli by pointing to one of three line drawings. Responses are recorded on a separate scoring/analysis form. The test is designed for individual administration by speech and testing specialists. Test results can also be used to diagnose the language competence of bilingual and mentally retarded children as well as those with hearing, articulation, or language disorders.

This standardized test is published by Learning Concepts, Inc., Austin, Texas.

School Readiness

The Readiness Test for Disadvantaged Pre-School Children (Walker) was adapted from the final report of a project conducted by Dr. Wanda
Walker, Northwest Missouri State College, and supported by the Office of Education. The test consists of multiple-choice items based on pictures and symbols which do not require reading ability and are designed to test a child's listening ability, visual ability, and his recognition of similarities, differences, numerical analogies, and missing parts.

This standardized test is available from ERIC Reproduction Service (ED 047 168), Bethesda, Maryland.

**Self Concept and Personality Development**

The Developmental Profiles (Bessell and Palomares) is a subjective evaluation of children's behavior under a variety of circumstances. These rating scales are prepared periodically jointly 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.

This instrument is published by the Human Development Training Institute, El Cajon, California.

**Workshop Evaluation**

The Workshop Evaluation System (McCallon) provides a scientific approach to gathering and using participant feedback in the evaluation of conferences, workshops, conventions, and in-service training programs.

Participant responses are gathered on seven dimensions - organization, objective, work of the presenter, ideas and activities, scope, benefit, and overall effectiveness. The Workshop Evaluation System is unique in that it provides normative data collected from over 40,000 workshop participants. Participant feedback scores are compared against the norms to ensure reliable analysis and interpretation of workshop effectiveness.

This instrument is published by Learning Concepts, Inc., Austin, Texas.