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ABSTRACT

This bilingual education program involved (1) bilingual classes in grades 1 through 4 in 2 Texas school districts (Harlandale and San Marcos) and (2) Southwest Texas State University, which served as the agency for training senior student teachers for bilingual education. Predominantly Spanish-speaking students from low socioeconomic backgrounds were taught in Spanish while English competence was being developed, thus making these students literate in 2 languages. Pride in the Mexican American heritage was also instilled. Curriculum guides for grades 1-4 and materials for Spanish language arts and social studies were created; methods to improve teacher and aide performance were used; community involvement was increased; project coordination was improved; and comprehensive evaluation of pupil and teacher performance was accomplished. It is recommended that there be special college preparation for teachers of bilingual education. (Author/JH)

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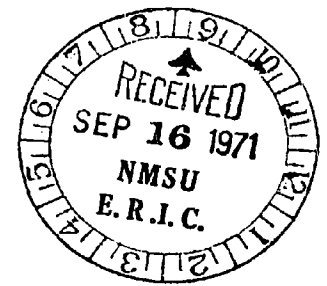
EVALUATION REPORT

OF THE

BILINGUAL EDUCATION PROGRAM

Harlandale Independent School District
San Marcos Independent School District
Southwest Texas State University.

1970-1971



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The U. S. Office of Education,
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SUMMARY

This bilingual education program involves bilingual classes in grades 1-4 in two school districts, San Marcos Independent School District and Harlandale Independent School District. Southwest Texas State University is also involved through the training of senior student teachers for bilingual education. The pupils served by the program come from predominantly Spanish-speaking homes and are from low socio-economic backgrounds.

The primary objective of the program is to prevent educational retardation of these children by teaching in Spanish while competence in English is being developed until command of the English language is sufficient to carry the educational burden. Other objectives include making the children literate in two languages and instilling in them a pride in the Mexican-American culture and heritage.

This year's plans called for developing and/or revision of curriculum guides for grades 1-4, revision of cuadernos used in Spanish language arts, revision of existing social studies units and creation of new ones to fill needs. This was accomplished by curriculum writers after these needs had been pointed out by teachers through checklists, questionnaires, and written or oral suggestions.

The evaluation design included use of the Metropolitan Achievement Tests, the Spanish Serie Interamericana Reading Tests, and performance tests of program objectives stated in the curriculum guides. Generally, pupils did well on the word knowledge, word discrimination, and math portions of the Metropolitan tests but failed to perform as well on the reading comprehension portion, indicating that teachers are adept at building vocabulary and teaching phonics and word attack skills but need to spend more time on reading comprehension. All grades but grade 4 did well on the Spanish reading test, indicating grade 4 teachers need to spend more time on Spanish language arts. Performance objectives were generally met.

Measures taken to improve teacher and aide performance included preservice and inservice training, observation and constructive criticism by coordinators, verbal interaction analyses of classroom oral discussion, and video-taping of teachers. Evaluation measures included the verbal interaction analyses and teacher and aide rating scales completed by coordinators, principals and/or teachers. Statistically significant improvement in both teacher and aide performance was noted. Eighteen senior student teachers received specialized training and supervision to prepare them for bilingual education.

There was increased involvement and cooperation between school, parents and community as demonstrated by Community Advisory Committee meetings, Parent Circle meetings, parental communications, and volunteer work and aid by both parents and community.

Project coordination among the three members of the consortium and all members of the staff had improved greatly this year, and cooperation was excellent.

There are two recommendations which apply to this particular project: teachers need more training in methodology of teaching English to Spanish-speakers; teachers need to concentrate more heavily on teaching for reading comprehension. Teachers will receive this additional training in a preservice workshop, which will be reinforced in later inservice training. Measures should be taken to insure the second recommendation is carried out.

There are two general recommendations: (1) special preparation for teaching in bilingual education is needed, which should include applied linguistics, Spanish, and student teaching in a bilingual classroom under the supervision of a college supervisor who is a specialist in bilingual education; (2) with public interest at an all-time high, now is the time to institute Spanish as a foreign language in Texas elementary schools for the monolingual English-speaker.

CONTEXT

San Marcos, a university town situated in the south central part of Texas almost midway between Austin and San Antonio, has a local population of some 18,000, which is increased in the winter by approximately 10,000 enrollment at Southwest Texas State University. The people of San Marcos for the most part find employment in educational institutions (SWT, Gary Job Corps, San Marcos Baptist Academy, Brown Schools, or the public schools), small businesses or public services. The population density is desirable except in blighted areas where there are many substandard dwellings.

Harlandale School District, located in San Antonio fifty miles southwest of San Marcos, has much the same population density as San Marcos. Some Harlandale residents are employed in federal installations.

Since neither district has the taxable industry to support the schools adequately, both districts depend heavily upon special fundings to maintain quality educational programs.

Both school districts serve grade levels K-12, having begun kindergarten program only this year. San Marcos has three elementary schools, a kindergarten school, a middle school, a junior high, and a high school. Last year's enrollment approached five thousand. The Harlandale system has fifteen elementary schools, four junior highs and two high schools with an enrollment of more than seventeen thousand. The school enrollment in both districts gradually increases every year.

This bilingual education project currently is operative in three elementary schools in San Marcos and six elementary schools in San Antonio. The elementary school population in each district consists of more than two-thirds Spanish surnames. Spanish-surname population in some target schools is even greater. A language survey conducted this year reveals that the dominant home language for the majority of these students is Spanish; even in those homes where some English is spoken, there remains a language handicap, frequently in both languages. Where only English instruction is given, the Spanish-speaking child often has to remain two years in the first grade, setting up a pattern of failure which may continue in the traditional classroom until usually the child drops out of school.

That the above situation applied in the case of the parents of these children is illustrated by demographic data compiled from a questionnaire filled out on each child in the program by his teacher from school records and other sources of information. Demographic data were roughly equivalent in the two districts. Approximately one-fourth of the parents had less than four years of formal schooling; more than an additional forty percent had less than eight years; less than 10% of the remaining one-third had completed high school. The majority of these parents are under forty years of age and have lived in Texas all of their lives. As might be expected from their educational background, more than 60% have poverty-level incomes. One-third have more than five children, and an additional one-half have more than three. In accordance with the traditional pattern, most of the wives do not work outside the home. More than

one-third of the men are unskilled workers; approximately forty-five percent are skilled workers. The remainder are evenly divided as small businessmen or white collar workers. Only two percent are migrant workers.

Better educational opportunities were felt to be the key to raising the socio-economic status of this group of American citizens, and pilot projects in both Harlandale and San Marcos led to the conclusion that bilingual education offered these better educational opportunities. Thus, when school officials from the two districts and from Southwest Texas State University, which furnishes many of the teachers for the districts, heard of Title VII, they decided to make a cooperative effort to improve educational opportunities for the Mexican-American child. The existing program is the result of their agreement.

PROGRAM DESCRIPTION

Scope of the Program

The program, Bilingual Instruction for grades 1-4, was designed to provide bilingual education for pupils in grades 1-4 who have limited English-speaking ability. The primary goal is to prevent the educational retardation of the Spanish-speaking child by teaching him in Spanish while he is learning English. Another goal is to reinforce his pride in the history and culture of the Mexican-American and to make him literate in both English and Spanish. For the English-speaking child, the primary goal is to broaden his outlook by introducing him to the language and culture of another ethnic group. Additional goals of the program included the training of bilingual teachers and bilingual student teachers, the development of materials, curricula and instructional techniques for bilingual education, involving the parents and the community in the bilingual education program, and the improvement of human relations between two ethnic groups.

There were fifty-seven teachers involved with the program on four grade levels in six schools in Harlandale and in three schools in San Marcos. (See Table I.)

Personnel (See Organizational Chart, Table II.)

A. Project Director

The project director is an Associate Professor of Education at Southwest Texas State University. He holds a doctorate in Elementary Education, has taught bilingual students in elementary schools in Texas and Albuquerque, New Mex., and has a working knowledge of the Spanish language. One half of his salary was paid by the project, and the other half was paid by Southwest Texas State University. His duties with the University involved teaching one class in which bilingual students, majors in elementary education, were enrolled, and the supervision of student teachers who did their internship in project classrooms.

B. Project Coordinators

Two bilingual coordinators were employed--one to work in each of the school districts. It was felt that a minimum of five years teaching experience in the primary/elementary grades was needed to qualify for this position. Their work involved the supervision of teachers, the review and recommendation of materials, and the holding of in-service training sessions for teachers and aides.

TABLE I

TEACHERS, SCHOOLS, AND SUMMARY OF PUPIL DATA

| <u>Teacher</u> | <u>School</u> | <u>Grade</u> | <u>Number of Pupils</u> | <u>Number Spanish Dominant★</u> |
|----------------|----------------------|--------------|-------------------------|---------------------------------|
| Almendarez | Bowie (SM) | 1 | 29 | 8 |
| Muñoz | Bowie (SM) | 2 | 29 | 10 |
| Soto | Bowie (SM) | 3 | 29 | 17 |
| Perales | Collier (H) | 1 | 24 | 10 |
| Rivas | Collier (H) | 2 | 24 | 17 |
| Pacheco | Collier (H) | 3 | 18 | 11 |
| Gonzales | Collier (H) | 4 | 20 | 15 |
| Aguirre | Columbia Heights (H) | 1 | 27 | 22 |
| Kuhl | Columbia Heights (H) | 1 | 25 | 16 |
| Lopez | Columbia Hts. (H) | 1 | 27 | 18 |
| Mithcell | Columbia Hts. (H) | 1 | 29 | 15 |
| Ramirez | Columbia Hts. (H) | 1 | 26 | 20 |
| Vale | Columbia Hts. (H) | 1 | 28 | 14 |
| Williams | Columbia Hts. (H) | 1 | 27 | 18 |
| Carroll | Columbia Hts. (H) | 2 | 24 | 14 |
| Music | Columbia Hts. (H) | 2 | 22 | 22 |
| Pachecano | Columbia Hts. (H) | 2 | 25 | 21 |
| Rendon | Columbia Hts. (H) | 2 | 25 | 23 |
| Rivas | Columbia Hts. (H) | 2 | 27 | 24 |
| Roberts | Columbia Hts. (H) | 2 | 26 | 11 |
| Thompson | Columbia Hts. (H) | 2 | 24 | 14 |
| Allen | Columbia Hts. (H) | 3 | 25 | 20 |
| Chant | Columbia Hts. (H) | 3 | 25 | 14 |
| Pirhala | Columbia Hts. (H) | 3 | 27 | 16 |
| Rodriguez | Columbia Hts. (H) | 3 | 26 | 19 |
| Aguirre | Columbia Hts. (H) | 4 | 29 | 19 |
| McClaran | Columbia Hts. (H) | 4 | 30 | 16 |
| Curlee | Crockett (SM) | 1 | 31 | 25 |
| Nicola | Crockett (SM) | 1 | 31 | 22 |
| Kolbe | Crockett (SM) | 2 | 30 | 11 |
| Rangel | Crockett (SM) | 2 | 29 | 24 |
| Farmer | Crockett (SM) | 3 | 30 | 17 |
| Ramsay | Crockett (SM) | 3 | 31 | 19 |
| Flores | Flanders (H) | 1 | 29 | 14 |
| Hernandez | Flanders (H) | 2 | 23 | 8 |
| Mora | Flanders (H) | 3 | 27 | 21 |
| Pacheco | Flanders (H) | 4 | 25 | 12 |
| Cardenas | Gerald (H) | 1 | 26 | 17 |
| Flores | Gerald (H) | 1 | 27 | 15 |
| Lozano | Gerald (H) | 2 | 20 | 11 |
| Warren | Gerald (H) | 2 | 28 | 11 |
| Harris | Gerald (H) | 3 | 28 | 9 |
| Car | Stonewall (H) | 1 | 22 | 12 |
| Reyna | Stonewall (H) | 1 | 27 | 22 |
| Ayala | Stonewall (H) | 2 | 28 | 20 |
| Rivera | Stonewall (H) | 2 | 29 | 19 |

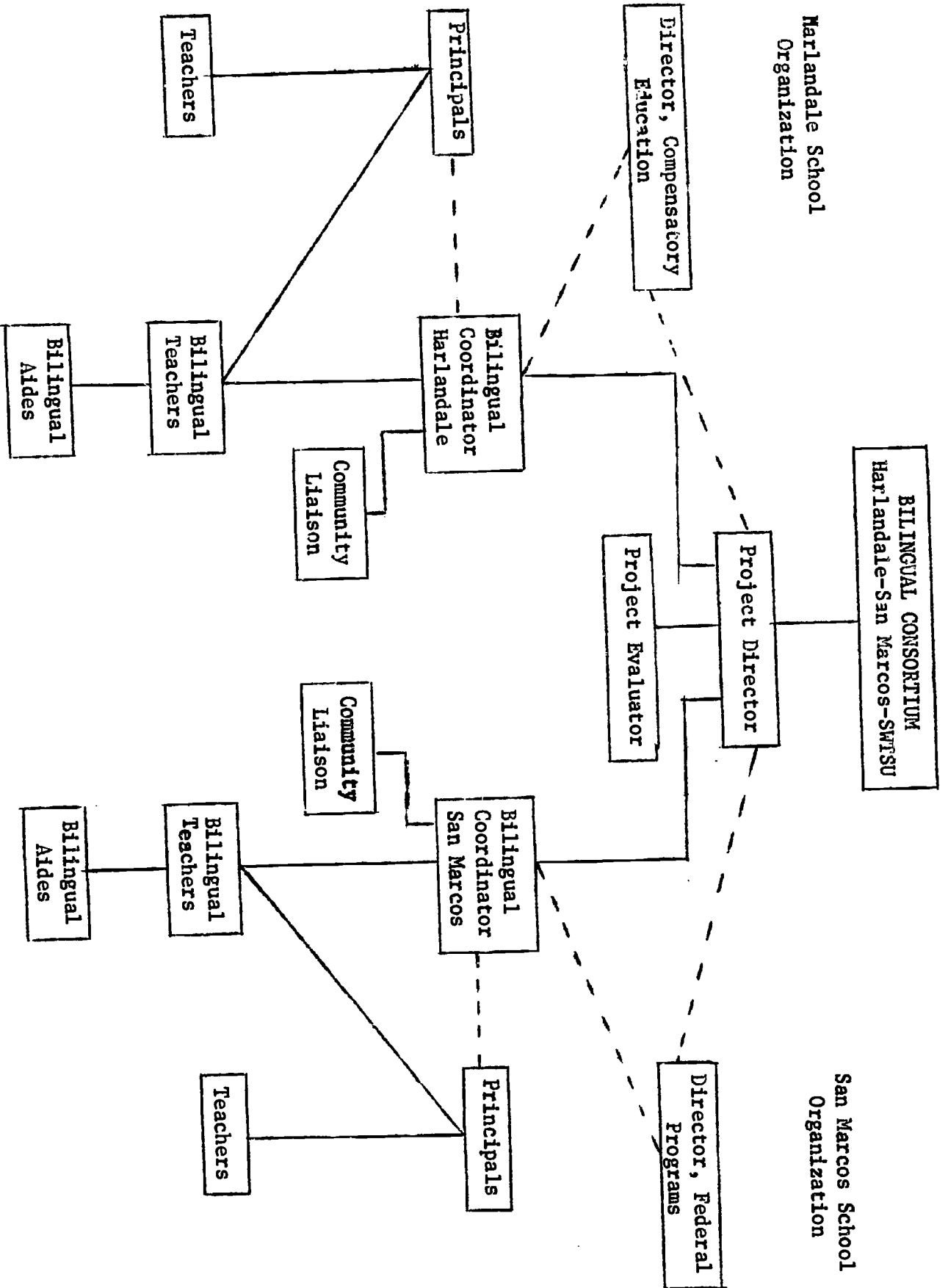
| <u>Teacher</u> | <u>School</u> | <u>Grade</u> | <u>Number of Pupils</u> | <u>Number Spanish Dominant*</u> |
|----------------|---------------|--------------|-------------------------|---------------------------------|
| Harris | Stonewall (H) | 3 | 24 | 20 |
| Perez | Stonewall (H) | 3 | 21 | 7 |
| Wright | Stonewall (H) | 3 | 28 | 5 |
| Aguirre | Stonewall (H) | 4 | 18 | 8 |
| Hill | Stonewall (H) | 4 | 27 | 13 |
| Pena | Stonewall (H) | 4 | 26 | 16 |
| Vance | Travis (SM) | 1 | 29 | 25 |
| Camacho | Travis (SM) | 2 | 24 | 16 |
| Tilton | Travis (SM) | 3 | 25 | 16 |
| Jones | Wright (H) | 1 | 35 | 29 |
| Engel | Wright (H) | 2 | 26 | 22 |

TOTALS:

| | | | | |
|-------------|-----------|------------------|-------------|----------------------------|
| 57 teachers | 9 Schools | 18 First Grades | 499 | 322 |
| | | 18 Second Grades | 463 | 298 |
| | | 14 Third Grades | 364 | 211 |
| | | 7 Fourth Grades | 175 | 99 |
| | | 57 Classrooms | 1501 Pupils | 930 (62%) Spanish Dominant |

* Ascertained from language questionnaire filled out by parents of these pupils.

TABLE II



C. EVALUATOR

B.A. and M.A. in Spanish; Ph.D. in Linguistics; coursework in testing, evaluation and statistics. Eight years teaching experience. Her work involved developing, collecting and analyzing measurement data as well as training and supervising the testing team and preparation of the evaluation report.

D. Teachers (not paid with project funds)

Fifty-seven teachers in grades 1-4 completed the year in the project. Although it was hoped that only teachers with at least two years of experience could be found for the program, several of the teachers had no **previous** experience, while others had master's degrees and many years of experience. Overall, the enthusiasm of the new teachers and the fresh ideas that they brought with them as recent college graduates were an asset to the program, in spite of their lack of experience.

E. Teacher Aides

Thirty-eight teacher aides were employed with Title VII funds. Each teacher had the services of an aide to help in the routine clerical duties in the classroom and to give individual help to pupils under the close supervision of the teacher.

F. Secretary

The program employed a full-time secretary to work in the project director's office. She took dictation, did typing, duplicating, and other clerical work. She kept records and files on project activities and helped in making necessary reports. She served both the project director and internal evaluator and typed reports of the educational accomplishment auditor.

G. Clerk-typists

Each of the project coordinators had the services of a full-time clerk-typist to help in the preparation of reports and in the preparation and dissemination of materials.

H. Student teachers

Eighteen from Southwest Texas State University did their intern experiences in bilingual project classrooms during the school year for periods of 9 weeks (full-time) or 18 weeks (half-time). They prepared materials, developed units and daily lesson plans, and instructed the pupils, bilingually, in individual and group situations.

I. Interns

Several interns from Our Lady of the Lake College's Project Teacher Excellence observed and worked in some of the bilingual classrooms.

J. Community Liaisons

Two, one in each district, bilingual community liaisons worked full-time contacting and aiding parents, arranging and conducting "Parents' Circle" meetings, and involving the community with the program.

K. Volunteers

Mothers occasionally aided the teachers in special classroom activities such as holiday parties. They also accompanied the teachers on off-campus field trips, furnishing transportation and supervision for some of the pupils. Several students from the Campus Christian Community at Southwest Texas State University regularly worked as volunteer tutors at the Southside Community Center in San Marcos. Some pupils who had special educational problems went to the center after school hours for individual help from the college students. The Community Advisory Committees and businessmen of the districts paid for a special Christmas dinner, which was prepared and served by mothers of students in the program.

L. Consultants

Several consultants were used during the school year to aid in the following types of activities:

1. Spanish usage
2. Printing, handwriting and bulletin board training for teachers' aides
3. Evaluation--the analysis of evaluation data and the critiquing of the evaluation

Procedures

This report covers the year 1970-71, the second year this project has been in operation under Title VII.

This year the teachers had inservice training provided in the area they had requested, the Spanish language. The training was done in ten sessions in each of the districts. The teachers showed significant gain from pre-test to post-test covering the information imparted in these sessions.

Instruction in the first grade began with oral activities. Teachers used pictures, objects, and models for oral discussion and vocabulary development. Experiences of the children were used also as a basis for discussion and were later written as experience charts for reading and writing activities. The basic materials for instruction in Spanish were the cuadernos (three for each grade level, 1-4) and the Elena Y Dani Reader or the Laidlaw or Benson Spanish Reader Series, depending on the grade level. Copies of the cuadernos have been furnished the U. S. Office of Education and the Texas Education Agency. The cuadernos contain pictures along with letters of the Spanish alphabet in a basic phonetic presentation. Specific objectives and instructions for presentation are given for each lesson. The teacher moves her class through the cuadernos at whatever rate they are able to go. Pupils may actually write on pages of the cuadernos and take them home for additional reading and writing practice. Incidentally, parents say they enjoy reading the materials. The teacher helps the pupils to see the relationship between the Spanish alphabet and words and their English counterparts so that transition into reading and writing in English may be facilitated.

The English language arts program began with an oral approach in the first grade. Typical language readiness procedures were used, with explanations being made in Spanish when necessary. Children were grouped within the classes as necessary according to their degree of readiness for English reading and writing. Experience charts were used extensively, and basal state-adopted texts were introduced by the teachers as their groups were ready for them. The American Book Company and Houghton Mifflin Company series were used. The curriculum guides, prepared by the project writers in the summer, 1969, served as the guide for adaptation and usage by the teachers.

Similar procedures for English language arts were followed in the second, third, and fourth grades. Pupils were instructed at their level of readiness. Instruction was primarily in English, but vocabulary and concepts were clarified through the use of Spanish. Curriculum guides were furnished second, third and fourth grade teachers for use in conjunction with basal texts.

The instruction in math is done by a majority of the teachers, although somewhat more English than Spanish is used. An oral, concrete experience approach is used in the beginning of the first year, with teachers moving to basal text materials as the pupils are ready for them.

Social Studies instruction is taught through the unit plan. Teachers at all four grade levels are furnished with basic units, which they further develop with their classes. Included among the units at appropriate times (e.g. "Famous Mexican-Americans") are units designed to help the child learn more about the Mexican and Mexican-American culture and heritage. Units are taught in both Spanish and English. Songs which accompany many units are taught in both Spanish and English.

Instruction in other subject areas is carried out bilingually by some teachers, but Spanish is used merely for clarification by others. The curriculum guides contain suggested procedures for adaptation of text material, as well as the necessary Spanish vocabulary, for teaching science, health and safety in both Spanish and English.

The procedures followed in achieving project goals in other components are discussed in the evaluation section of this report.

Budget

The total per pupil cost for the period 1 September, 1970, to June 30, 1971, was \$127. Total expenditures during the period were \$202,120. This figure includes the following: one-half salary for project director, full salaries for two coordinators, full salary for an evaluator, full salaries for three clerk-typists (who also helped in preparation of curriculum materials), full salaries for thirty-eight teacher aides, temporary salaries for curriculum writers and consultants, and teaching and testing materials. No teachers' salaries were paid from Title VII funds. The fifty-seven teachers' salaries were paid from local, state, and other federal funds.

EVALUATION

The primary objective of this project is to provide bilingual education in Spanish and English for the child whose dominant home language is Spanish and who has a limited English-speaking ability. In order to prevent educational retardation, the mother tongue is used as the medium of instruction while the use of English as a second language is developed. The goal is to make the child literate in two languages and to reinforce his pride in his history and culture.

The project involves five interlocking and supporting components:

1. Curriculum Development and Materials Acquisition and Adaptation. The development or revision of curriculum guides for grades 1-4, development of additional social studies units and assembling of various types of teaching materials suitable for bilingual instruction in grades 1-4.
2. Instruction. Teaching English as a second language, Spanish language arts, and two content areas in both Spanish and English (math and social studies). In addition the use of Spanish to clarify concepts in other areas.
3. Staff Development. A systematic program aimed at teacher and aide improvement through preservice workshops, inservice training, and the use of video-tapes, verbal interaction analyses and other feedback devices.
4. Community Involvement. The improvement of cooperation and involvement between the school and home and community.
5. Project Coordination. Efficient economical, cooperative administration among the schools involved.

The specific objectives for each of the components, participants, measurement devices, data obtained, and an analysis of these data are presented in the following paragraphs:

Curriculum Development and Materials Acquisition and Adaptation

The teachers regularly evaluated the curriculum guides which had been developed (for grade 4) and revised (for grades 1-3) by means of rating forms and questionnaires and comments and suggestions which they added to the forms. The ratings were uniformly good, the yearly mean rating being 1.44 on a scale of 1 through 5 with 1 designated as superior and 2 designated as good. Most of the suggestions were helpful. A committee of teachers who are working on revising the guides are taking these suggestions into consideration as a basis for their revision.

Comments and suggestions were also made by the teachers for the cuadernos (used in Spanish language arts) and the social studies units. The suggestions

pertained not only to revisions but also to the schedule of presentation of units and ideas for additional units which were needed. These suggestions have been acted upon. The schedule for presentation of units has been revised for next year. Seventeen new social studies units were developed and utilized in grades 1-4 this year. The first and second grade units were created by San Marcos; the third and fourth, by Harlandale. These new units are listed in Table III.

A locally-made test with both Spanish and English versions for the Bilingual Education Program was completed this year. For this test a two-step evaluation by the evaluator and a consultant who is a specialist on tests and measures included a split-half test of reliability and a subjective judgment of content validity based upon the extent to which the instrument measured the stated objectives of the project curriculum guides. In April the evaluator administered this test to ninety-six students in the Spanish version and to ninety-seven students in the English version for the purpose of the reliability check. Each test was then scored on the number of even-numbered items answered correctly and the number of odd-numbered items answered correctly. A coefficient of internal consistency using the split-half method determined the reliability for the English test to be .95 and for the Spanish test to be .97. In each case the reliability is well beyond the .90 normally accepted as necessary to establish reliability.

A subject by subject analysis by the testing specialist to determine validity on the basis of how well the items in the test relate to the objectives listed in the curriculum guides reveals the following: (1) the health/science/safety portion of the test is quite satisfactory; (2) the spelling and reading portions have some validity but need some revising to be satisfactory; (3) the mathematics portion is invalid, due to the fact that these test items are traditional, although the curriculum guide reflects the modern math approach; (4) the social studies portion of the test is mostly satisfactory, but a few revisions are indicated.

An additional hundred and twelve students were administered the locally-made Bilingual Education Program test in April in order to bring the total number of test scores to three hundred and five and thus give more baseline data for future reference in setting up district norms.

INSTRUCTION

All the teachers who participated in the program either volunteered for it or agreed to be in the bilingual education program when asked by their principals. Pupils in the program were generally chosen on the basis of English language deficiency. Parents consented to their children's being in the program or asked specifically that their children be placed in the bilingual program. Summary of teacher/pupil data was incorporated into Table I.

Various types of measures of pupil achievement and capability were used: beginning and end of year I.Q. tests for first grades; periodic checks of volitional English usage in first grades; standardized achievement tests at end of year in all grades and at beginning of year in grades 2-4; Spanish reading tests at end of year in all grades and at beginning of year in grades 2-4; periodic tests of performance objectives in all grades; and beginning and end of year rating of pupil self-concept in all grades. The results of these measures will be discussed in order delineated.

TABLE III
NEW SOCIAL STUDIES UNITS DEVELOPED
1970-1971

| <u>Unit</u> | <u>Grade</u> |
|--|--------------|
| El Espacio (two units) | 1 and 2 |
| La Escuela (two units) | 1 and 2 |
| Las Estaciones (two units) | 1 and 2 |
| El Hogar (two units) | 1 and 2 |
| Mi cuerpo (two units) | 1 and 2 |
| Todo Crece (two units) | 1 and 2 |
| Transportación (two units) | 1 and 2 |
| Auxiliadores de la Comunidad (two units) | 1 and 2 |
| El Espacio | 3 |
| Mi Herencia | 4 |
| Mexican Americans of Today | 4 |

Goodenough Draw-A-Man I.Q. Tests and Otis Nonverbal Mental Ability Tests, Alpha Edition, were administered in both Spanish and English in all first grades in the fall. These were scored immediately by trained personnel, and feedback for each student was given to the teachers. In May, Otis Nonverbal and Verbal tests were given again in first grades. Three test scores were derived from these: a nonverbal, a verbal, and an overall total score. When maintaining the same score can be considered an achievement, fifteen of the eighteen first grade classrooms showed a gratifying improvement of from three to fifteen points in mean I.Q. from pre-test to post-test on the Otis Nonverbal. (See Table IV.) The overall mean gain is a highly significant 6.6 points.

The evaluator checked the number of students in first grade classes who voluntarily used English for communication in oral discussion four times during the year: October, December, February and April. It had been predicted that 90% of these pupils would demonstrate spontaneous, volitional responses in English. All classes fulfilled this objective, and all but one exceeded the expectation. (See Table V.)

In September Metropolitan Achievement Tests were given as pre-tests to grades 2-4. In May the Metropolitan was given in grades 1-4, being in the nature of a post-test in grades 2-4. Although standardized tests discriminate against those pupils who are deficient in English language ability and also those who are from a low socio-economic background, it is necessary to use a standardized test and we feel the Metropolitan is the best available for our pupils. The test used for grade 1 was the Primary I Battery; that used for grade 2 was the Primary II Battery; and that used for grades 3 and 4 was the Elementary Battery. The examining team giving these tests and the Spanish reading test in both fall and spring was composed of senior student teachers majoring in elementary education and particularly interested in bilingual education. These students were thoroughly trained by the evaluator before they administered the tests. Following administration of the tests, these same students scored the tests and converted and recorded scores under the evaluator's supervision. Feedback was given to the teachers immediately. Test results were then put on cards and electronically processed. Use of the testing team not only increased objectivity in administration but relieved teachers of the necessity of spending hours scoring tests and released their time for more important teaching duties. (The results of these tests are shown on Tables VI, VII, VIII, and IX.)

Since pre-tests were not given to first grade classes, the criterion used for setting objectives was the expected percentage of each class which would reach a certain national percentile in reading skills and mathematics. It was expected that 50% of each class would reach the 30th percentile in reading skills and the 35th percentile in math. There are three components of the reading skills test: word knowledge, word discrimination and reading comprehension. Whereas only four classes from eighteen (23%) fulfilled the expectation in word knowledge and none at all fulfilled the expectation in reading comprehension, nine (50%) reached the objective in word discrimination. However, the overall percentage of first grade students reaching the objective in word knowledge was 33%; in word discrimination, 41%; and in reading comprehension, 24%. This indicated several things: (1) there is a wide range of difference in pupil achievement and performance, and thus a wide range of scores in class performance; (2) the first grade teachers need to do a better job of teaching reading comprehension; (3) textbooks which are used for teaching

TABLE IV
I.Q. DATA - FIRST GRADE

| <u>TEACHER</u> | <u>MEAN GOODENOUGH SEPTEMBER</u> | <u>OTIS MEAN NONVERBAL OCTOBER</u> | <u>OTIS MEAN NONVERBAL MAY</u> | <u>OTIS MEAN VERBAL MAY</u> | <u>OTIS MEAN TOTAL MAY</u> |
|----------------|--|--|--|-------------------------------------|------------------------------------|
| Aguirre, S. | 76 | 90 | 86 | 75 | 77 |
| Almendarez | 90 | 100 | 103 | 97 | 99 |
| Cardenas | 89 | 94 | 104 | 93 | 97 |
| Curlee | 82 | 95 | 102 | 94 | 97 |
| Czar | 79 | 98 | 107 | 95 | 104 |
| Flores, G. | 93 | 93 | 108 | 93 | 99 |
| Flores, S. | 95 | 97 | 109 | 95 | 101 |
| Jones | 101 | 102 | 109 | 110 | 103 |
| Kuhl | 88 | 95 | 104 | 92 | 96 |
| Lopez | 92 | 91 | 100 | 88 | 92 |
| Mitchell | 94 | 102 | 112 | 93 | 100 |
| Nicola | 96 | 94 | 103 | 86 | 92 |
| Perales | 84 | 105 | 102 | 97 | 98 |
| Ramirez | 80 | 97 | 107 | 99 | 103 |
| Rsyna | 84 | 106 | 105 | 101 | 103 |
| Vale | 89 | 98 | 101 | 90 | 93 |
| Vance | 96 | 92 | 98 | 93 | 89 |
| Williams | 86 | 99 | 106 | 95 | 100 |

TABLE V

APRIL ORAL RESPONSES IN ENGLISH OF FIRST GRADE PUPILS
(in a Five Minute Sample Period)

| <u>TEACHER</u> | <u>NUMBER OF PUPILS</u> | <u>PERCENT WHO RESPONDED</u> |
|-----------------------------|-------------------------|------------------------------|
| Aguirre, S. | 27 | 97 |
| Almendárez | 26 | 93 |
| Cardenas | 24 | 96 |
| Curlee | 27 | 100 |
| Czar | 22 | 100 |
| Flores, G. | 25 | 100 |
| Flores, S. | 28 | 97 |
| Jones | 30 | 94 |
| Kuhl | 25 | 96 |
| Lopez | 19 | 90 |
| Mitchell | 26 | 93 |
| Nicola | 28 | 97 |
| Perales | 27 | 100 |
| Ramirez | 23 | 96 |
| Reyna | 25 | 100 |
| Vale | 18 | 95 |
| Vance | 29 | 94 |
| Williams | 27 | 93 |
| TOTAL (MEAN PERCENT) | | 96.11 |

reading to monolingual and monocultural English speakers are not suitable for these pupils and make the teacher's job more difficult; (4) many teachers need additional training in teaching reading particularly training in utilizing linguistics and in specialized techniques for teaching reading in English to the child whose dominant language is not English; (5) teachers need to concentrate heavily on oral language and concept development before beginning to teach reading, and the child therefore should be expected to lag in English reading skills in at least the first two grades.

Eleven (62%) of first grade classrooms fulfilled (or were on the borderline) the expectation of 50% of the class reaching the 35th national percentile in math. Thus, it would seem the majority of teachers are performing close to expectations in math.

A pre-test - post-test procedure was used to determine progress of pupils as indicated by nationally standardized tests. If a pupil holds his own from a Metropolitan test scored for beginning of year to a second Metropolitan test scored for end of year, he has made average academic progress. The exceedingly ambitious goals hoped for in this project were that in grades 2-4 50% of each class would make an increase of ten percentile points from pre-test to post-test in reading skills and an increase of five percentile points in math. There was an additional objective of an increase of ten percentile points in language arts in third and fourth grades by 50% of the students in each class. Achievement of these objective would indicate better than normal progress by national standards.

In second grade seven classes of eighteen (39%) reached (or were borderline) expectations on word knowledge; ten (56%) succeeded on word discrimination; and eight (45%) succeeded on reading comprehension. In third grade, seven of fourteen classes (50%) reached the objective in both word knowledge and word discrimination, and three (22%) reached the objective in reading. Two fourth grade classes of seven (29%) reached the objective in word knowledge; four (57%) succeeded in word discrimination; and one (14%) succeeded in reading. However, 39% of all the fourth graders reached the objective in word knowledge, and 36% succeeded in reading. The language arts objective (10% increase) was met by ten of fourteen classes (72%) in the third grade and by three of seven classes (43%) in the fourth grade. As has been pointed out, the objectives called for more than normal academic progress. The number of classrooms which reached these objectives constitutes an important achievement.

The math objective (5% increase) was achieved in fourteen of eighteen second grade classes (78%), in twelve of fourteen third grade classes (86%) and in six of seven fourth grade classes (86%). As with the first grade classes, these figures constitute a significant number of classrooms achieving the objective. Third and fourth grades received separate math grades on problem solving and concepts. Four of fourteen third grade classrooms (29%) attained the objective, while five of seven fourth grade classrooms (72%) attained the objective.

The Spanish reading test used was the Prueba de Lectura, Serie Interamericana. Nivel 1 was used as a post-test only for the first grade and as pre-test and post-test for second grade. Pre-test and post-test used for third grade was Nivel 2 and for the fourth grade was Nivel 3. Since this test has

TABLE VI
 METROPOLITAN ACHIEVEMENT TEST - FIRST GRADE
 PERCENTAGE OF PUPILS ATTAINING OBJECTIVES

| <u>TEACHER</u> | <u>WORD KNOWLEDGE</u> | <u>WORD DISCRIMINATION</u> | <u>READING</u> | <u>MATH</u> |
|---|---------------------------|--------------------------------|----------------|-----------------|
| Aguirre, S. | 20 | 16 | 12 | 56 |
| Amendarez | 65 | 68 | 43 | 61 |
| Cardenas | 46 | 55 | 41 | 69 |
| Curlee | 40 | 47 | 33 | 75 |
| Czar | 23 | 23 | 14 | 37 |
| Flores, G. | 41 | 45 | 23 | 56 |
| Flores, S. | 49 | 56 | 42 | 69 |
| Jones | 10 | 20 | 26 | 23 |
| Kuhl | 40 | 40 | 20 | 46 |
| Lopez | 16 | 28 | 12 | 16 |
| Mitchell | 47 | 47 | 43 | 47 |
| Nicola | 26 | 36 | 7 | 23 |
| Perales | 30 | 55 | 0 | 55 |
| Ramirez | 20 | 27 | 16 | 35 |
| Reyna | 41 | 41 | 19 | 49 |
| Vale | 22 | 22 | 18 | 33 |
| Vance | 42 | 71 | 38 | 34 |
| Williams | 34 | 53 | 33 | 53 |
| NUMBER AND PERCENTAGE OF CLASSROOMS ATTAINING OBJECTIVES | 4 (23%) | 9 (50%) | 0 | 11 (62%) |
| TOTAL GRADE PERCENTAGE OF PUPILS ATTAINING OBJECTIVES | 33 | 41 | 24 | 46 |

TABLE VII
METROPOLITAN ACHIEVEMENT TEST - SECOND GRADE
PERCENTAGE OF PUPILS ATTAINING OBJECTIVE

| <u>TEACHER</u> | <u>WORD KNOWLEDGE</u> | <u>WORD DISCRIMINATION</u> | <u>READING</u> | <u>MATH</u> |
|---|-----------------------|----------------------------|----------------|-------------|
| Ayala | 32 | 60 | 56 | 68 |
| Camacho | 46 | 41 | 46 | 73 |
| Carroll | 37 | 43 | 58 | 53 |
| Engel | 59 | 42 | 30 | 18 |
| Hernandez | 46 | 82 | 37 | 50 |
| Kolbe | 18 | 29 | 29 | 50 |
| Lozano | 20 | 20 | 14 | 40 |
| Muñoz | 58 | 66 | 54 | 66 |
| Music | 30 | 38 | 46 | 55 |
| Pachecano | 35 | 35 | 31 | 53 |
| Rangel | 22 | 36 | 22 | 36 |
| Rendon | 40 | 53 | 35 | 31 |
| Rivas, E. | 64 | 72 | 44 | 68 |
| Rivas, F. | 25 | 46 | 46 | 50 |
| Rives, T. | 63 | 52 | 49 | 49 |
| Roberts | 22 | 66 | 31 | 70 |
| Thompson | 28 | 56 | 36 | 56 |
| Warren | 47 | 47 | 47 | 60 |
| NUMBER AND PERCENTAGE OF CLASSROOMS ATTAINING OBJECTIVE | 7 (39%) | 10 (56%) | 8 (45%) | 14 (78%) |
| TOTAL GRADE PERCENTAGE OF PUPILS ATTAINING OBJECTIVES | 39 | 52 | 41 | 54 |

TABLE VIII
METROPOLITAN ACHIEVEMENT TEST - THIRD GRADE
PERCENTAGE OF PUPILS ATTAINING OBJECTIVE

| <u>TEACHER</u> | <u>WORD KNOWLEDGE</u> | <u>WORD DISCRIMINATION</u> | <u>READING</u> | <u>LANGUAGE</u> | <u>PROBLEM SOLVING</u> | <u>MATH</u> |
|---|---------------------------|--------------------------------|----------------|-----------------|----------------------------|-------------|
| Allen | 43 | 54 | 50 | 58 | 50 | 58 |
| Chant | 28 | 20 | 16 | 40 | 24 | 56 |
| Farmer | 44 | 44 | 54 | 60 | 37 | 80 |
| Harris, J. | 34 | 25 | 38 | 38 | 21 | 21 |
| Harris, M. | 68 | 65 | 36 | 61 | 25 | 47 |
| Mora | 72 | 52 | 36 | 48 | 28 | 24 |
| Pacheco | 23 | 34 | 23 | 39 | 12 | 67 |
| Perez | 71 | 75 | 38 | 59 | 55 | 96 |
| Pirhala | 49 | 49 | 41 | 49 | 63 | 56 |
| Ramsay | 46 | 36 | 33 | 42 | 20 | 84 |
| Rodriguez | 48 | 34 | 38 | 58 | 29 | 62 |
| Soto | 44 | 47 | 40 | 60 | 54 | 60 |
| Tilton | 56 | 52 | 48 | 64 | 28 | 80 |
| Wright | 33 | 40 | 36 | 50 | 33 | 79 |
| NUMBER AND PERCENTAGE OF CLASSROOMS ATTAINING OBJECTIVE | 7 (50%) | 7 (50%) | 3 (22%) | 10 (72%) | 4 (29%) | 12 (86%) |
| TOTAL GRADE PER- CENTAGE OF PUPILS ATTAINING OBJECTIVES | 47 | 45 | 38 | 52 | 35 | 63 |

TABLE IX
METROPOLITAN ACHIEVEMENT TEST - FOURTH GRADE
PERCENTAGE OF PUPILS ATTAINING OBJECTIVE

| <u>TEACHER</u> | <u>WORD KNOWLEDGE</u> | <u>WORD DISCRIMINATION</u> | <u>READING</u> | <u>LANGUAGE</u> | <u>PROBLEM SOLVING</u> | <u>MATH</u> |
|--|-----------------------|----------------------------|----------------|-----------------|------------------------|-------------|
| Aguirre, C. | 40 | 40 | 45 | 35 | 65 | 60 |
| Aguirre, R. | 38 | 38 | 21 | 35 | 69 | 69 |
| Gonzales | 45 | 45 | 35 | 45 | 60 | 55 |
| Hill | 37 | 34 | 26 | 41 | 41 | 49 |
| McClaran | 24 | 97 | 30 | 50 | 67 | 87 |
| Pacheco | 44 | 48 | 44 | 60 | 44 | 36 |
| Peña | 50 | 66 | 54 | 66 | 62 | 70 |
| NUMBER AND PER- CENTAGE OF CLASS- ROOMS ATTAINING OBJECTIVE | 2 (29%) | 4 (57%) | 1 (14%) | 3 (43%) | 5 (72%) | 6 (86%) |
| TOTAL GRADE PER- CENTAGE OF PUPILS ATTAINING OBJECTIVES | 39 | 54 | 36 | 48 | 59 | 62 |

not been standardized nor have national norms been set for it, only raw scores are derived from it. Scores from this year will be used to set up district norms for next year. Feedback was given to the teachers on the basis of total possible score. The criterion for evaluation was set as a ten point increase from pre-test to post-test in grades 2-4. Since there could be no pre-test with the first grade, the post-test scores will simply be used for baseline data for next year. Data from the test was electronically processed. Sixteen of eighteen second grade classes (89%) and eight of fourteen third grade classes (57%) achieved this increase, but only one of seven fourth grade classes (14%) succeeded. (See Table X.) While the second and third grades did quite well, it would appear from the performance of the fourth grades that the teachers need to spend more time on both Spanish and English language arts. Closer supervision of these teachers by coordinators might help to improve procedures. It should also be noted that not all of the fourth grade pupils have had the benefits of bilingual teaching for a full four years since they have been added to the classes as transfers from other schools.

During the year performance tests were given in all grades to ascertain whether pupils were meeting the objectives set forth in the curriculum guides. Generally, the objectives in English as a second language and Spanish language arts were met. Objectives in social studies were seldom met, on the whole. However, analysis of these objectives reveals that on six of the eight performance tests which half or more of the classrooms failed, the criterion stated was "with no errors". It appears that this criterion is unrealistic for it is far too easy for even a student who knows the materials being tested to make at least one error due to carelessness, inattention, emotional upset or physical discomfort. Also in any classroom there will always be students who are deficient in intelligence, even to the point of mental retardation, and students who attend school too seldom to meet standards met by their classmates, and even students who have just transferred into the class and thus have had no opportunity to assimilate the material being tested. If this is taken into consideration, it is not surprising that performance tests with this criterion were failed.

Eleven performance tests were done with the first grade. The objectives for four of these were not met by half or more of the classes. For three of these, the criterion was "no errors". The one remaining was in the area of Spanish language arts. Seven objectives in three subject matter areas were met by a majority of the classes, frequently by quite a higher percentage of pupils than that specified. (See Table XI.)

Nine performance tests were undertaken by the second grade. Six of these tests were successful in most classes. One of the three remaining tests had specified the no errors criterion. Two of the other tests, one in English language arts and one in social studies, specified that 90% of the pupils would be successful. Had the criterion been 60%, nearly all classrooms would have fulfilled the prediction. (See Table XII.)

Nine performance tests were done by the third grade classrooms. Six were successful, and performance was a great deal higher than the criteria established, in nearly every classroom. Two of the three which were not successful had specified the "No error" criterion. The other failure was in Spanish language arts. (See Table XIII.)

TABLE X

SERIE INTERAMERICANA SPANISH READING TEST

| <u>TEACHER</u> | <u>GRADE</u> | <u>PERCENTAGE OF PUPILS ATTAINING OBJECTIVE</u> | <u>TEACHER</u> | <u>GRADE</u> | <u>PERCENTAGE OF PUPILS ATTAINING OBJECTIVE</u> |
|---|--------------|---|-------------------------|--------------|---|
| Ayala | 2 | 75 | Allen | 3 | 77 |
| Camacho | 2 | 69 | Chant | 3 | 40 |
| Carroll | 2 | 74 | Farmer | 3 | 57 |
| Engel | 2 | 71 | Harris, J. | 3 | 25 |
| Hernandez | 2 | 96 | Harris, M. | 3 | 29 |
| Kolbe | 2 | 65 | Mora | 3 | 88 |
| Lozano | 2 | 60 | Pacheco | 3 | 73 |
| Muñoz | 2 | 89 | Perez | 3 | 63 |
| Music | 2 | 67 | Pirhala | 3 | 78 |
| Pachecano | 2 | 79 | Ramsay | 3 | 52 |
| Rangel | 2 | 50 | Rodriguez | 3 | 67 |
| Rendon | 2 | 66 | Soto | 3 | 30 |
| Rivas, E. | 2 | 72 | Tilton | 3 | 24 |
| Rivas, F. | 2 | 30 | Wright | 3 | 18 |
| Rives, T. | 2 | 71 | TOTAL PERCENTAGE | | 51 |
| Roberts | 2 | 61 | Aguirre, C. | 4 | 10 |
| Thompson | 2 | 72 | Aguirre, R. | 4 | 35 |
| Warren | 2 | 34 | Gonzales | 4 | 20 |
| TOTAL GRADE PERCENTAGE OF PUPILS ATTAINING OBJECTIVE | | 66 | Hill | 4 | 8 |
| | | | McClaran | 4 | 57 |
| | | | Pacheco | 4 | 4 |
| | | | Peña | 4 | 23 |
| | | | TOTAL PERCENTAGE | | 24 |

TABLE XI

INSTRUCTIONAL - FIRST GRADE PERFORMANCE TESTS
PERCENT OF PUPILS IN CLASS WHO ATTAINED CRITERION

| TEACHER | ENGLISH AS A SECOND LANGUAGE | | | | SPANISH LANGUAGE ARTS | | | | SOCIAL STUDIES | | | |
|-------------|------------------------------|-------------|-------------|-------------|-----------------------|-------------|-------------|-------------|----------------|-------------|-------------|-------------|
| | ITEM NUMBER | ITEM NUMBER | ITEM NUMBER | ITEM NUMBER | ITEM NUMBER | ITEM NUMBER | ITEM NUMBER | ITEM NUMBER | ITEM NUMBER | ITEM NUMBER | ITEM NUMBER | ITEM NUMBER |
| Aguirre, S. | 1.3* | 1.4* | 1.5* | 5.1* | 5.2* | 5.3* | 5.4* | 13.1* | 13.2* | 13.3* | 13.4* | |
| | 90% | 78% | 79% | 54% | 27% | 66% | 96% | 40% | 96% | 0% | 11% | |
| Almendarez | 80% | 100% | 68% | 90% | 14% | 75% | 54% | 93% | 100% | 0% | 76% | |
| | 66% | 100% | 80% | 48% | 60% | 100% | 55% | 84% | 92% | 0% | 17% | |
| Curlee | 86% | 100% | 39% | 80% | 52% | 81% | 21% | 100% | 100% | 45% | 39% | |
| | 58% | 91% | 73% | 52% | 35% | 60% | 64% | 69% | 83% | 32% | 87% | |
| Flores, G. | 36% | 100% | 83% | 81% | 58% | 88% | 79% | 96% | 85% | 20% | 0% | |
| | 87% | 100% | 61% | 94% | 77% | 76% | 57% | 67% | 87% | 28% | 17% | |
| Jones | 60% | 94% | 74% | 61% | 85% | 45% | 53% | 68% | 85% | 34% | 16% | |
| | 78% | 93% | 28% | 80% | 28% | 97% | 29% | 68% | 97% | 12% | 11% | |
| Mitchell | 86% | 96% | 58% | 93% | 59% | 76% | 59% | 97% | 96% | 83% | 38% | |
| | 60% | 100% | 59% | 94% | 84% | 100% | 55% | 100% | 100% | 100% | 88% | |
| Perales | 64% | 100% | 80% | 88% | 88% | 60% | 96% | 89% | 92% | 23% | 24% | |
| | 54% | 46% | 31% | 28% | 76% | 55% | 50% | 38% | 46% | 50% | 0% | |
| Reyna | 93% | 100% | 71% | 89% | 52% | 72% | 55% | 97% | 96% | 19% | 50% | |
| | 71% | 100% | 92% | 97% | 66% | 83% | 68% | 77% | 89% | 26% | 17% | |
| Vance | 90% | 100% | 64% | 96% | 70% | 93% | 77% | 100% | 100% | 0% | 97% | |

TABLE XI CON'T:

- *Item 1.3: Shown flash cards of colors, 80% of the students correctly identify red, blue, green, and yellow with no errors.
- *Item 1.4: Shown flash cards of classroom objects, 80% of the students correctly identify 70% of the objects.
- *Item 1.5: Given the topic "The School", 50% of the students will write a story of not less than five sentences.
- *Item 5.1: Given a set of 10 cards, each of which has an illustration of a letter of the Spanish alphabet and a picture which represents a word that begins with that letter, 90% of the class will say the word represented with 80% accuracy.
- *Item 5.2: When the teacher states orally a series of ten common Spanish words, e.g., names of articles in the classroom, 60% of the class will demonstrate aural discrimination of sounds by repeating the words with no errors.
- *Item 5.3: 50% of the class will read aloud two pages from the last quarter of a Spanish reader, book one, with a maximum of six errors in word recognition.
- *Item 5.4: Given the topic "La Familia", 50% of the class will write a story of not fewer than five sentences in Spanish.
- *Item 13.1: Shown pictures of five zoo animals, 50% of the students will be able to recite the proper names for 4 of the animals in both Spanish and English.
- *Item 13.2: 80% of the students will be able to name 7 of 10 body parts (list prepared by Coordinators) in both Spanish and English as they point to the appropriate part of the body.
- *Item 13.3: 100% of the students will make proper use of the greetings "good morning", "good afternoon", "hello", and "goodbye" in both Spanish and English with no errors.
- *Item 13.4: Shown photographs of the school's principal, nurse, cook, secretary and custodian, 75% of the students will recite their job titles in both Spanish and English with no errors.

On seven of nine performance tests the criteria set in fourth grade classes were reached or excelled. One of the others had the "No error" criterion. The other specified a 90% criterion in the social studies area. (See Table XIV.)

An Inferred Self-Concept Scale was completed for each pupil in the program by his teacher in October and again in May. This scale, developed by Dr. Elizabeth McDaniel as part of her doctoral dissertation at the University of Texas, was field-tested with pupils of both Negro and Mexican-American extraction who came from low socio-economic backgrounds after its validity and reliability had been established. This scale and a manual for its use have been published by San Felipe Press.

The Scale is based on a 5.00 rating, 5.00 being the superior pupil with a perfect self-concept. A rating of 2.50 should be found for the average pupil. A copy of the scale is included in the Appendix to this report. The self-concept objective was an increase of .25 in score by 50% of the pupils in each class between fall and spring ratings, although studies by McDaniel revealed a general decrease in self-concept score with children of low-income families who were taught in traditional classrooms. A total of one first grade, six second grades, three third grades, and no fourth grades accomplished this objective. However, it will be noted from studying the mean self-concept score for each classroom that fall ratings invariably were far above average, making it extremely difficult for a .25 increase to be possible. On the other hand, nine first grades (50%), eight second grades (45%), eight third grades (58%), and two fourth grades (29%) showed an increase in mean self-concept score between fall and spring rating. (See Table XV.) Thus 48% of the classrooms in the program did show an increase in self-concept rather than the decrease which is usual. It would appear that the positive measures for developing a favorable self-image taken by the teachers did help and that some of the teachers are employing these measures more faithfully than others.

STAFF DEVELOPMENT

The objective for this component was to improve teacher and aide performance in bilingual education through preservice workshops, inservice training, the use of video-tapes, verbal interaction analyses and other feedback devices. An additional objective was recruitment and training of senior elementary education students for work in bilingual education.

Eighteen of these students from Southwest Texas State University were enrolled in a class under the director, where they were instructed in philosophy and techniques of bilingual education in general and in relation to our project in particular. These students did their observations in bilingual classrooms and later did their student teaching internship in bilingual education classrooms under the supervision of the director for eighteen weeks (half-time) or nine weeks (full-time). Most of these students also served on the spring or fall testing team for this bilingual project under the supervision of the evaluator, where they received training and experience in giving and scoring tests in English and Spanish. The evaluator observed each member of the testing team in the classroom while tests were being administered and checked for accuracy of scoring done afterward by the team. Their performance in this testing was superior.

TABLE XII

INSTRUCTIONAL - SECOND GRADE PERFORMANCE TESTS
PERCENT OF PUPILS IN CLASS WHO ATTAINED CRITERION

| TEACHER | ENGLISH AS A SECOND LANGUAGE | | | | SPANISH LANGUAGE ARTS | | | | SOCIAL STUDIES | | |
|-----------|------------------------------|-------------|-------------|-------------|-----------------------|-------------|-------------|-------------|----------------|-------------|-------------|
| | ITEM NUMBER | ITEM NUMBER | ITEM NUMBER | ITEM NUMBER | ITEM NUMBER | ITEM NUMBER | ITEM NUMBER | ITEM NUMBER | ITEM NUMBER | ITEM NUMBER | ITEM NUMBER |
| Ayala | 2.2* | 2.3* | 6.1* | 6.2* | 6.3* | 6.4* | 14.1* | 14.2* | 14.3* | | |
| Camacho | 79% | 50% | 89% | 100% | 96% | 16% | 35% | 76% | 93% | | |
| Carroll | 38% | 20% | 76% | 85% | 85% | 33% | 60% | 10% | 96% | | |
| Engel | 64% | 74% | 96% | 96% | 93% | 50% | 81% | 64% | 97% | | |
| Hernandez | 77% | 100% | 64% | 100% | 100% | 100% | 56% | 62% | 89% | | |
| Kolbe | 100% | 74% | 96% | 87% | 92% | 61% | 61% | 87% | 92% | | |
| Munoz | 83% | 65% | 74% | 84% | 100% | 4% | 47% | 48% | 100% | | |
| Music | 84% | 82% | 83% | 100% | 83% | 79% | 71% | 64% | 78% | | |
| Pachecano | 65% | 58% | 88% | 100% | 100% | 30% | 84% | 46% | 68% | | |
| Rangel | 63% | 88% | 76% | 96% | 100% | 80% | 44% | 83% | 39% | | |
| Rendon | 73% | 43% | 52% | 90% | 100% | 23% | 38% | 14% | 100% | | |
| Rivas, E. | 64% | 84% | 80% | 92% | 96% | 89% | 92% | 100% | 100% | | |
| Rivas, F. | 85% | 67% | 85% | 81% | 62% | 50% | 66% | 74% | 89% | | |
| Rives | 62% | 9% | 75% | 84% | 96% | 42% | 79% | 56% | 58% | | |
| Roberts | 100% | 97% | 100% | 100% | 100% | 90% | 100% | 100% | 90% | | |
| Thompson | 81% | 47% | 85% | 85% | 46% | 54% | 64% | 100% | 80% | | |
| Warren | 85% | 45% | 86% | 96% | 62% | 41% | 89% | 76% | 93% | | |
| | 60% | 60% | 46% | 60% | 50% | 20% | 36% | 83% | 68% | | |

TABLE XII CON'T:

- *Item 2.2: Shown flashcards containing 20 words from the vocabulary word lists from the basal reading series and the names of five community helpers from the social studies unit, 90% of the students will correctly identify 75% of the words.
- *Item 2.3: Given the topic "Community Helpers", 50% of the students will write a story of not less than 10 sentences.
- *Item 6.1: When read an unfamiliar story from a Spanish book (second grade reading level,) 75% of the class will answer at least 3 of 4 comprehension questions which the teacher asks concerning the story.
- *Item 6.2: Given a bowl of artificial fruit (banana, orange, grapes, apple and lemon) 75% of the class will orally describe in Spanish each fruit, using complete sentences. Description will include at least three of the following: name, color, shape, and whether or not he likes the fruit. Teacher will initiate activity by saying, "Dime algo de esta fruta" and may add, "Dime mas."
- *Item 6.3: 75% of the class will read orally two pages from the last quarter of the Spanish basal reader, book two, with no more than 6 errors in word recognition.
- *Item 6.4: Given the topic "Auxiliadores en la Comunidad," 50% of the pupils will write a story of at least ten sentences.
- *Item 14.1: 90% of the students will be able to name five cities of Mexico.
- *Item 14.2: 90% of the students will make proper use of mother, father, brother, sister, grandmother, grandfather, aunt, and uncle, and their Spanish equivalents with no errors.
- *Item 14.3: 90% of the students, shown pictures of a car, an airplane, a bus, and a train will be able to recite the English and Spanish words for each with no errors.



TABLE XIII

INSTRUCTIONAL - THIRD GRADE PERFORMANCE TESTS
 PERCENT OF PUPILS IN CLASS WHO ATTAINED CRITERION

| TEACHER | ENGLISH AS A SECOND LANGUAGE | | | SPANISH LANGUAGE ARTS | | | SOCIAL STUDIES | | |
|------------|------------------------------|-------------|-------------|-----------------------|-------------|-------------|----------------|-------------|------|
| | ITEM NUMBER | ITEM NUMBER | ITEM NUMBER | ITEM NUMBER | ITEM NUMBER | ITEM NUMBER | ITEM NUMBER | ITEM NUMBER | |
| Allen | 60% | 67% | 54% | 58% | 97% | 81% | 100% | 53% | 84% |
| Chant | 74% | 100% | 70% | 91% | 100% | 83% | 100% | 36% | 84% |
| Farmer | 87% | 77% | 77% | 60% | 77% | 54% | 77% | 45% | 40% |
| Harris, J. | 79% | 78% | 28% | 71% | 85% | 68% | 63% | 24% | 33% |
| Harris, M. | 46% | 100% | 100% | 55% | 100% | 91% | 100% | 5% | 60% |
| Mora | 92% | 93% | 97% | 89% | 100% | 100% | 97% | 93% | 75% |
| Pacheco | 100% | 63% | 32% | 27% | 92% | 56% | 65% | 73% | 42% |
| Perez | 100% | 100% | 76% | 100% | 56% | 92% | 92% | 87% | 100% |
| Pirhala | 80% | 93% | 74% | 100% | 100% | 86% | 86% | 78% | 81% |
| Ramsay | 52% | 39% | 65% | 20% | 72% | 33% | 35% | 35% | 36% |
| Rodriguez | 94% | 50% | 45% | 60% | 78% | 77% | 90% | 57% | 50% |
| Soto | 90% | 82% | 60% | 68% | 30% | 70% | 97% | 40% | 71% |
| Tilton | 84% | 64% | 50% | 50% | 75% | 30% | 55% | 63% | 60% |
| Wright | 60% | 96% | 75% | 68% | 75% | 64% | 66% | 19% | 60% |

TABLE XIII CON'T:

- *Item 3.2: 50% of the students will read 2 pages from the second quarter of the basal reader with a maximum of 6 errors in word recognition.
- *Item 3.3: Given the topic "The School" 50% of the students will write a story of no fewer than 12 complete sentences.
- *Item 7.1: Given a Spanish basal reader, book Three, 50% of the class will read orally two pages from the last quarter of the book with no more than six errors in word recognition.
- *Item 7.2: Given the topic "La Escuela," 75% of the class will write a short story of at least 12 complete sentences.
- *Item 7.3: 70% of the class will demonstrate oral facility in Spanish by giving a two minute review of a Spanish story book they have read.
- *Item 7.4: 50% of the class will spell correctly in writing 15 of 20 Spanish words commonly used in third grade materials. Words chosen by coordinators.
- *Item 15.1: 90% of the students will be able to name orally five Texas heroes whom they have studied during the year.
- *Item 15.2: 95% of the students will be able to name the seasons of the year in both Spanish and English with no errors.
- *Item 15.3: Given a matching exercise concerning Lincoln, Washington, Hidalgo, and Juarez, 90% of the students will complete the exercise with no errors.

TABLE XIV

INSTRUCTIONAL - FOURTH GRADE PERFORMANCE TESTS
PERCENT OF PUPILS IN CLASS WHO ATTAINED CRITERION

| TEACHER | ENGLISH AS A SECOND LANGUAGE | | SPANISH LANGUAGE ARTS | | | | SOCIAL STUDIES | | |
|-------------|------------------------------|------|-----------------------|------|------|-------------|----------------|-------|-------|
| | ITEM NUMBER | | ITEM NUMBER | | | ITEM NUMBER | | | |
| Aguirre, C. | 4.2* | 4.3* | 8.2* | 8.3* | 8.4* | 8.5* | 16.1* | 16.2* | 16.3* |
| | 33% | 0% | 27% | 75% | 88% | 25% | 69% | 25% | 96% |
| Aguirre, R. | 66% | 79% | 83% | 84% | 75% | 97% | 100% | 72% | 93% |
| | 81% | 50% | 63% | 90% | 100% | 55% | 67% | 89% | 91% |
| Hill | 84% | 20% | 39% | 75% | 93% | 100% | 82% | 70% | 81% |
| | 97% | 83% | 80% | 93% | 82% | 97% | 97% | 100% | 86% |
| McClaran | 92% | 88% | 96% | 96% | 100% | 92% | 100% | 92% | 84% |
| | 81% | 77% | 39% | 78% | 58% | 80% | 84% | 70% | 54% |
| Paña | | | | | | | | | |

*Item 4.2: 50% of the class will read two pages from the second quarter of the basal reader with no more than six errors in word recognition.

*Item 4.3: Given the topic "Mexico, Our Neighbor to the South," 50% of the students will write a short story of not less than one hundred words with not more than 5 spelling errors and not more than 5 grammatical errors.

*Item 8.2: Given a Spanish basal reader, book four, 50% of the class will read orally two pages from the last quarter of the book with no more than 6 errors in word recognition.

*Item 8.3: Given the topic, "Mexico, Nuestro Vecino al Sur", 75% of the class will write a short story of not less than 100 words with not more than 5 spelling errors and not more than 5 grammatical errors.

TABLE XIV CON'T:

- *Item 8.4: 75% of the class will demonstrate oral facility in Spanish by giving a three-minute review of a Spanish story book they have read.
- *Item 8.5: 50% of the class will spell correctly in writing 15 of 20 Spanish words chosen by the coordinators.
- *Item 16.1: Shown pictures of children dressed in native costumes of countries studied during the year, 90% of the students will correctly identify the country represented in a minimum of four pictures.
- *Item 16.2: 80% of the students will be able to name the state bird, song, flower, tree, and motto of Texas with no errors.
- *Item 16.3: Given a list of names of Mexican-Americans who have been studied, 70% of the students will be able to list one significant fact about at least 5 persons.

TABLE XV
INFERRED SELF-CONCEPT SCALE

| <u>TEACHER</u> | <u>GRADE</u> | <u>PERCENTAGE OF PUPILS ATTAINING OBJECTIVE</u> | <u>FALL MEAN SCORE</u> | <u>SPRING MEAN SCORE</u> |
|----------------|--------------|---|------------------------|--------------------------|
| Aguirre | 1 | 40 | 3.00 | 3.27 |
| Almendarez | 1 | 18 | 3.85 | 3.6 |
| Cardenas | 1 | 32 | 3.12 | 3.12 |
| Curlee | 1 | 97 | 4.02 | 4.42 |
| Czar | 1 | 5 | 4.14 | 3.55 |
| Flores, G. | 1 | 34 | 3.96 | 3.56 |
| Flores, S. | 1 | 21 | 3.83 | 3.50 |
| Jones | 1 | 26 | 3.59 | 3.38 |
| Kuhl | 1 | 44 | 3.21 | 3.39 |
| Lopez | 1 | 8 | 3.57 | 3.05 |
| Mitchell | 1 | 8 | 4.49 | 4.17 |
| Nicola | 1 | 26 | 4.57 | 4.73 |
| Perales | 1 | 34 | 4.57 | 4.56 |
| Ramirez | 1 | 12 | 3.89 | 3.63 |
| Reyna | 1 | 19 | 4.14 | 4.05 |
| Vale | 1 | 22 | 3.84 | 4.16 |
| Vance | 1 | 34 | 3.96 | 4.20 |
| Williams | 1 | 37 | 3.76 | 3.97 |
| Ayala | 2 | 44 | 3.87 | 3.74 |
| Camacho | 2 | 64 | 4.08 | 4.19 |
| Carroll | 2 | 16 | 3.97 | 3.54 |

TABLE XV CON'T:

| <u>TEACHER</u> | <u>GRADE</u> | <u>PERCENTAGE</u> | <u>FALL MEAN SCORE</u> | <u>SPRING MEAN SCORE</u> |
|----------------|--------------|-------------------|----------------------------|------------------------------|
| Engel | 2 | 12 | 4.33 | 3.68 |
| Hernandez | 2 | 0 | 4.33 | 3.70 |
| Kolbe | 2 | 97 | 3.38 | 3.97 |
| Lozano | 2 | 55 | 3.71 | 3.97 |
| Muñoz | 2 | 89 | 3.98 | 4.52 |
| Music | 2 | 13 | 4.09 | 3.44 |
| Pachecano | 2 | 66 | 3.95 | 3.57 |
| Rangel | 2 | 33 | 3.93 | 3.90 |
| Rendon | 2 | 40 | 3.79 | 3.70 |
| Rivas, E. | 2 | 4 | 4.63 | 3.46 |
| Rivas, F. | 2 | 21 | 3.96 | 3.72 |
| Rives, T. | 2 | 37 | 4.10 | 4.11 |
| Roberts | 2 | 61 | 3.91 | 4.00 |
| Thompson | 2 | 44 | 3.58 | 3.73 |
| Warren | 2 | 30 | 3.71 | 3.63 |
| Allen | 3 | 35 | 3.78 | 3.68 |
| Chant | 3 | 32 | 3.95 | 4.15 |
| Farmer | 3 | 37 | 3.92 | 3.95 |
| Harris, J. | 3 | 5 | 4.33 | 4.19 |
| Harris, M. | 3 | 15 | 4.32 | 3.92 |
| Mora | 3 | 16 | 4.17 | 4.11 |
| Pacheco | 3 | 12 | 4.01 | 3.94 |
| Perez | 3 | 30 | 3.62 | 3.69 |
| Pirhala | 3 | 12 | 3.72 | 3.50 |

TABLE XV CON'T:

| <u>TEACHER</u> | <u>GRADE</u> | <u>PERCENTAGE</u> | <u>FALL MEAN SCORE</u> | <u>SPRING MEAN SCORE</u> |
|----------------|--------------|-------------------|----------------------------|------------------------------|
| Ramsay | 3 | 39 | 4.24 | 4.37 |
| Rodriguez | 3 | 86 | 3.73 | 4.46 |
| Soto | 3 | 64 | 4.04 | 4.38 |
| Tilton | 3 | 24 | 3.73 | 3.83 |
| Wright | 3 | 47 | 3.43 | 3.62 |
| Aguirre, C. | 4 | 5 | 4.31 | 3.49 |
| Aguirre, R. | 4 | 14 | 4.21 | 4.10 |
| Gonzales | 4 | 25 | 4.03 | 3.79 |
| Hill | 4 | 8 | 3.60 | 3.35 |
| McClaran | 4 | 10 | 4.59 | 4.52 |
| Pacheco | 4 | 4 | 4.40 | 4.26 |
| Pena | 4 | 39 | 3.98 | 4.09 |

Students were evaluated through the University rating scale for student teachers. A copy of this scale was filled out by supervising teachers, the director, and the students themselves. Video-tapes were also made, affording the students an opportunity to see and evaluate their own classroom performance. Most of the students received above average ratings on the University scale. Many will be teaching next year in bilingual programs. Several will be assuming regular teaching positions in our project schools.

In addition to the student teachers from SWTSU, a number of students from Our Lady of the Lake College's Project Teacher Excellence did their intern experiences with bilingual teachers in this project.

Teachers in this project attended a preservice workshop in the fall where they were instructed on the importance of oral activity in the classroom and on the type of verbal interaction conducive to a good learning situation. In addition, teachers and aides attended ten sessions of inservice training in Spanish language skills, both in Harlandale and in San Marcos school districts. Participants completed questionnaires at the end of each session, evaluating that session and giving suggestions for succeeding sessions. These communications were read and used to effect constructive changes in the workshops.

Pre-tests on Spanish grammar and lexicon were given at the commencement of inservice training to enable the consultants to ascertain where participants' deficiencies in Spanish lay. Equivalent post-tests were given at the end of these sessions. A T test, run to determine whether the difference in scores between pre- and post-test was a matter of chance, showed the increase in scores to be significant at the .001 level in San Marcos and at the .01 level in Harlandale. This represented a much-needed gain in knowledge of the Spanish language on the part of the participants.

Coordinators observed teachers at least twice a month in each district and offered constructive criticism in the conferences which followed these observations. Requests for help and supervision were followed up quickly by coordinators. Coordinators discussed these observations in monthly conferences with the director.

The director video-taped all San Marcos and many San Antonio teachers. Teachers reported that observing their classroom performance was instructive and helpful. The reason the remaining San Antonio teachers could not be video-taped was the malfunctioning of the camera, which took some time to repair.

The evaluator did verbal interaction analysis for each teacher in the project in October and again in April. (See Table XVI.) This five-minute analysis determines the amount and type of teacher-student talk and silence or confusion. A T test, run to ascertain whether the increase in student talk and participation in April was significant, showed the increase to be significant at the .01 level of confidence.

TABLE XVI

VERBAL INTERACTION ANALYSIS*

| TEACHER/SCHOOL/GRADE | TEACHER TALK | | STUDENT TALK | | SILENCE/CONFUSION | |
|----------------------|--------------|------|--------------|------|-------------------|------|
| | Oct. | Apr. | Oct. | Apr. | Oct. | Apr. |
| Aguirre, S. /C.H/ 1 | 45 | 34 | 55 | 66 | 0 | 0 |
| Almendarez / B / 1 | 71 | 52 | 29 | 48 | 0 | 0 |
| Cardenas / G / 1 | 64 | 47 | 30 | 51 | 6 | 2 |
| Curlee /Cr./ 1 | 77 | 33 | 22 | 45 | 1 | 22 |
| Czar / S / 1 | 50 | 36 | 50 | 62 | 0 | 2 |
| Flores, G. / G / 1 | 59 | 53 | 41 | 47 | 0 | 0 |
| Flores, S. / F / 1 | 71 | 47 | 24 | 43 | 5 | 10 |
| Jones / W / 1 | 64 | 40 | 33 | 52 | 3 | 8 |
| Kuhl /C.H/ 1 | 50 | 30 | 50 | 66 | 0 | 4 |
| Lopez /C.H/ 1 | 55 | 24 | 42 | 74 | 3 | 2 |
| Mitchell /C.H/ 1 | 74 | 46 | 22 | 52 | 4 | 2 |
| Nicola /Cr./ 1 | 57 | 28 | 39 | 72 | 4 | 0 |
| Perales / C / 1 | 72 | 50 | 24 | 50 | 4 | 0 |
| Ramirez /C.H/ 1 | 47 | 33 | 42 | 50 | 11 | 17 |
| Reyna / S / 1 | 63 | 41 | 33 | 49 | 4 | 0 |
| Vale /C.H/ 1 | 58 | 31 | 38 | 63 | 4 | 6 |
| Vance / T / 1 | 78 | 57 | 19 | 43 | 3 | 0 |
| Williams /C.H/ 1 | 63 | 51 | 37 | 47 | 0 | 2 |
| Ayala / S / 2 | 61 | 34 | 33 | 59 | 6 | 7 |
| Camacho / T / 2 | 60 | 50 | 35 | 47 | 5 | 3 |
| Carroll /C.H/ 2 | 72 | 46 | 28 | 53 | 0 | 1 |
| Engel / W / 2 | 78 | 52 | 18 | 47 | 4 | 1 |
| Hernandez / F / 2 | 78 | 26 | 17 | 74 | 5 | 0 |

TABLE XVI CON'T:

| TEACHER/SCHOOL/GRADE | TEACHER TALK | | STUDENT TALK | | SILENCE/CONFUSION | |
|----------------------|--------------|------|--------------|------|-------------------|------|
| | Oct. | Apr. | Oct. | Apr. | Oct. | Apr. |
| Kolbe /Cr./ 2 | 56 | 40 | 40 | 57 | 4 | 3 |
| Lozano / G / 2 | 45 | 33 | 50 | 63 | 5 | 4 |
| Muñoz / B / 2 | 63 | 40 | 36 | 54 | 1 | 6 |
| Music /C.H/ 2 | 71 | 30 | 29 | 65 | 0 | 5 |
| Pachecano /C.H/ 2 | 54 | 42 | 32 | 57 | 4 | 1 |
| Rangel /Cr./ 2 | 82 | 39 | 12 | 56 | 6 | 5 |
| Rendon /C.H/ 2 | 71 | 27 | 27 | 69 | 2 | 4 |
| Rivas, E. /C.H/ 2 | 71 | 73 | 24 | 25 | 5 | 2 |
| Rivas, F. / C / 2 | 60 | 50 | 31 | 44 | 9 | 6 |
| Rives, T. / S / 2 | 62 | 41 | 33 | 59 | 5 | 0 |
| Roberts /C.H/ 2 | 54 | 35 | 37 | 50 | 9 | 15 |
| Thompson /C.H/ 2 | 57 | 50 | 41 | 50 | 2 | 0 |
| Warren / G / 2 | 47 | 55 | 57 | 39 | 6 | 6 |
| Allen /C.H/ 3 | 71 | 50 | 25 | 49 | 4 | 1 |
| Chant /C.H/ 3 | 62 | 39 | 35 | 60 | 3 | 1 |
| Karmer /Cr./ 3 | 62 | 62 | 36 | 38 | 2 | 0 |
| Harris, J. / S / 3 | 58 | 48 | 36 | 45 | 6 | 7 |
| Harris, M. / G / 3 | 52 | 47 | 37 | 52 | 11 | 1 |
| Mora / F / 3 | 52 | 49 | 44 | 51 | 4 | 0 |
| Pacheco / C / 3 | 55 | 54 | 24 | 45 | 21 | 1 |
| Perez / S / 3 | 63 | 50 | 30 | 45 | 7 | 5 |
| Pirhala /C.H/ 3 | 32 | 40 | 65 | 59 | 3 | 1 |
| Ramsay /Cr./ 3 | 75 | 56 | 22 | 38 | 3 | 6 |
| Rodriguez /C.H/ 3 | 61 | 56 | 25 | 43 | 14 | 1 |
| Toto / B / 3 | 57 | 56 | 33 | 38 | 10 | 6 |

TABLE XVI CON'T:

| TEACHER/SCHOOL/GRADE | TEACHER TALK | | STUDENT TALK | | SILENCE/CONFUSION | |
|----------------------|--------------|------|--------------|------|-------------------|------|
| | Oct. | Apr. | Oct. | Apr. | Oct. | Apr. |
| Tilton / T / 3 | 58 | 57 | 39 | 29 | 3 | 4 |
| Wright / S / 3 | 83 | 24 | 14 | 74 | 3 | 2 |
| Aguirre, C. / S / 4 | 75 | 21 | 15 | 79 | 10 | 0 |
| Aguirre, R. /C.H/ 4 | 72 | 52 | 28 | 42 | 0 | 6 |
| Gonzales / C / 4 | 49 | 42 | 49 | 54 | 2 | 4 |
| Hill / S / 4 | 75 | 41 | 24 | 59 | 1 | 0 |
| McClaran /C.H/ 4 | 48 | 72 | 52 | 26 | 0 | 2 |
| Pacheco / F / 4 | 82 | 67 | 14 | 33 | 4 | 0 |
| Peña / S / 4 | 72 | 55 | 26 | 35 | 2 | 10 |

* Figures shown are percentages of total talk.

The coordinators and teachers completed a rating scale for their bilingual aides in December and in May. A copy of the scale is found in the appendix. Recommendations for inservice training were also asked for in this scale. These recommendations were used as the basis for selecting subjects for spring inservice training for the aides. The subjects covered by this training were printing, handwriting, and preparation of bulletin boards. It had been expected that aides would show improvement on the May ratings, and twenty of these aides received better ratings in May than in December. (See Table VII.) It seems likely that there may have been more teacher aide improvement than the ratings would indicate, due to the human factor: the teacher starts out the year pleased to have an aide, expecting a great deal, and not noting many faults the aide may have; by the end of the year normal abrasion in the relationship has occurred, and most faults have been thoroughly noticed.

Teachers also were rated in December and in May by their coordinator and their principal. In addition, they completed a self-rating scale in December. There was space provided on this form for the type of inservice training felt needed, and an additional opportunity for requests on this subject was given teachers in April. The requested training in teaching English to Spanish-speakers and a briefing on the evaluation design will be given by the evaluator in one-week workshops, the second week in August for the San Marcos district and the third week in August for the Harlandale district. Other subjects in which some of the teachers desired training will be incorporated in a series of self-training kits which teachers can complete individually.

The objective of improvement in teacher ratings between December and May, due to the measures mentioned earlier, was achieved by twenty-four teachers in the coordinators' ratings and by thirty teachers in the principals' ratings. (See Table XVIII.) Of the fifty-seven teachers involved in the program, fourteen had no previous experience in elementary teaching. Yet the fact that there is only one teacher who received one rating which was not at least a little above average reflects the better-than-average calibre of most teachers in this program, as rated by the principals and coordinators.

COMMUNITY INVOLVEMENT

The objective of this component was the improvement of cooperation and involvement between school, home and community. The community liaison personnel, one in each district, were quite effective in establishing communications with parents of pupils in the Bilingual Education Program and increasing parental involvement with the school. Each liaison made home visits when children were absent from school more than two consecutive days, helped with problems of individual children and parents by acquainting parents with available community activities, and explained school policies and procedures and the Bilingual Education Program to the community.

Monthly Parent Circle meetings were held in each school. Almost three thousand parents in the two districts attended these meetings. The most popular subject of these meetings, aside from programs put on by the children, was methods which the parents could use in helping children with school work.

TABLE XVII
RATING OF BILINGUAL AIDES

| <u>SCHOOL</u> | <u>AIDE</u> | <u>TEACHER</u> | <u>COORDINATORS</u> | <u>COORDINATORS</u> ' | <u>TEACHERS</u> ' | <u>TEACHERS</u> ' |
|---------------|---------------|------------------|---------------------|-----------------------|-------------------|-------------------|
| | | | PRE | POST | PRE | POST |
| Bowie | Morales, R. | Almendarez | 3.00 | 2.94 | 2.11 | 2.05 |
| | Rodriguez, D. | Munoz & Soto | 2.50 | 2.44 | 2.44 | 1.61 |
| Collier | Chavez, G. | Perales | 1.56 | 1.78 | 1.50 | 1.00 |
| | Garcia, P. | Rivas & Gonzales | 2.17 | 2.83 | 1.39 | 1.00 |
| | Schomberg, R. | Pacheco | 1.56 | 2.19 | 2.72 | 2.78 |
| Col. Hts. | Arocha, R. | MUSIC | 1.83 | 2.61 | 1.61 | 2.44 |
| | Cantu, A. | Aguirre(1) | 1.28 | 2.11 | 2.06 | 1.72 |
| | Castro, E. | Rodriguez | 2.52 | 2.33 | 1.06 | 1.67 |
| | Hernandez, G. | Ramirez | 1.56 | 1.83 | 1.00 | 1.06 |
| | Jimenez, Y. | Mitchell | 1.39 | 1.56 | 1.00 | 1.06 |
| | Medellin, B. | Pachecano | 1.39 | 3.33 | 3.17 | 3.06 |
| | Rodriguez, A. | Chant | 1.78 | 2.50 | 1.61 | 1.44 |
| | Rodriguez, Y. | Martinez(5) | 1.50 | 2.44 | 1.78 | 2.28 |
| | Sandoval, T. | Aguirre (4) | 1.67 | 2.28 | 1.56 | 2.39 |
| | Soriano, A. | Lopez | 1.67 | 2.83 | 2.06 | 2.58 |
| | Trevino, E. | Rivas & Thompson | 1.61 | 3.28 | 1.72 | 1.83 |
| | Zamora, S. | Vale | 1.61 | 2.78 | 2.06 | 1.67 |
| | Crockett | Flores, G. | Curlee | 2.50 | 2.50 | 2.50 |
| Perez, F. | | Nicola | 2.83 | 2.44 | 1.50 | 1.76 |
| Rodriguez, L. | | Koibe & Rangel | 3.06 | 3.05 | 3.33 | 3.05 |
| Tristan, J. | | Farmer & Ramsay | 2.67 | 2.50 | 1.39 | 1.00 |

| <u>SCHOOL</u> | <u>AIDE</u> | <u>TEACHER</u> | <u>COORDINATORS PRE</u> | <u>COORDINATORS POST</u> | <u>TEACHERS PRE</u> | <u>TEACHERS POST</u> |
|---------------|----------------|---------------------|-----------------------------|------------------------------|-------------------------|--------------------------|
| Flanders | Garcia, C. | Flores | 1.61 | 2.27 | 2.17 | 2.11 |
| | Reyes, G. J. | Hernandez | 1.39 | 1.83 | 2.28 | 1.94 |
| | Whitworth, J. | Mora | 1.50 | 1.50 | 2.72 | 2.22 |
| Gerald | Fernandez, M. | Cardenas | 1.12 | 1.44 | 1.22 | 1.17 |
| | Juarez, B. | Warren | 1.17 | 1.44 | 1.94 | 1.11 |
| | Sanchez, M. E. | Flores | 1.17 | 1.28 | 1.56 | 1.44 |
| Stonewall | Anthony, J. | Reyna | 1.33 | 2.06 | 2.06 | 3.00 |
| | Cardenas, V. | Czar | 2.06 | 2.72 | 2.61 | 3.17 |
| | Castillo, E. | Peña | 1.50 | 2.17 | 1.61 | 2.28 |
| | Escamilla, G. | Wright | 2.28 | 2.33 | 2.94 | 3.06 |
| | Garza, R. | Aguirre | 1.61 | 2.33 | 2.62 | 3.00 |
| | Gomez, C. | Rives | 1.56 | 2.33 | 1.39 | 1.33 |
| | Vasquez, S. | Perez | 1.61 | 2.28 | 2.83 | 2.89 |
| Gravis | Rodriguez, E. | Camacho & Tilton | 2.72 | 2.67 | 1.81 | 2.00 |
| | Rodriguez, S. | Vance | 3.17 | 2.72 | 2.81 | 2.11 |
| Kright | Flores S. | Jones | 1.22 | 2.17 | 1.17 | 1.67 |
| | Sanchez, M. F. | Engel | 1.22 | 2.17 | 1.56 | 1.44 |

TABLE XVIII
RATING OF BILINGUAL TEACHERS

| TEACHER | GRADE | COORDINATOR'S | COORDINATOR'S | PRINCIPAL'S | PRINCIPAL'S | TEACHER'S |
|-------------|-------|---------------|---------------|-------------|-------------|-------------|
| | | PRE | POST | PRE | POST | SELF-RATING |
| Aguirre, S. | 1 | 1.08 | 1.46 | 1.28 | 1.08 | 1.20 |
| Almendarez | 1 | 2.62 | 2.83 | 1.76 | 1.51 | 2.20 |
| Cardenas | 1 | 1.17 | 1.29 | 2.05 | 1.57 | 2.25 |
| Curlee | 1 | 2.72 | 2.54 | 1.10 | 1.08 | 2.27 |
| Czar | 1 | 1.91 | 2.71 | 1.48 | 1.74 | 2.54 |
| Flores, G. | 1 | 2.46 | 1.63 | 3.14 | 2.22 | 2.51 |
| Flores, S. | 1 | 1.33 | 1.42 | 1.46 | 1.42 | 2.58 |
| Jones | 1 | 1.50 | 2.08 | 2.00 | 2.05 | 1.16 |
| Kohl | 1 | 2.03 | 1.97 | 2.78 | 1.55 | 1.65 |
| Lopez | 1 | 1.71 | 1.96 | 1.21 | 1.04 | 1.96 |
| Mitchell | 1 | 1.21 | 1.33 | 1.38 | 1.08 | 1.50 |
| Nicola | 1 | 2.56 | 2.80 | 1.28 | 2.33 | 1.44 |
| Perales | 1 | 1.25 | 1.38 | 2.04 | 2.04 | 2.29 |
| Ramirez | 1 | 1.27 | 1.71 | 1.25 | 1.04 | 2.04 |
| Reyna | 1 | 1.00 | 1.54 | 2.00 | 1.52 | 2.46 |
| Vale | 1 | 1.63 | 2.04 | 1.33 | 1.08 | 2.21 |
| Vance | 1 | 2.66 | 2.50 | 1.00 | 1.45 | 2.34 |
| Williams | 1 | 2.13 | 2.05 | 2.31 | 2.08 | 1.78 |
| Avala | 2 | 1.42 | 2.21 | 1.71 | 1.50 | 1.58 |
| Camacho | 2 | 2.71 | 2.64 | 1.08 | 1.96 | 1.66 |
| Carroll | 2 | 1.63 | 1.50 | 1.08 | 1.04 | 2.67 |
| Engel | 2 | 1.25 | 1.76 | 2.00 | 2.05 | 1.96 |
| Hernandez | 2 | 1.08 | 1.38 | 1.08 | 1.13 | 2.16 |

| <u>TEACHER</u> | <u>GRADE</u> | <u>COORDINATOR'S PRE</u> | <u>COORDINATOR'S POST</u> | <u>PRINCIPAL'S PRE</u> | <u>PRINCIPAL'S POST</u> | <u>TEACHER'S SELF-RATING</u> |
|----------------|--------------|------------------------------|-------------------------------|----------------------------|-----------------------------|----------------------------------|
| Kolbe | 2 | 2.83 | 2.68 | 1.05 | 1.13 | 1.68 |
| Lozano | 2 | 2.85 | 2.80 | 1.72 | 1.57 | 2.13 |
| Munoz | 2 | 2.75 | 2.87 | 1.80 | 1.51 | 2.85 |
| Music | 2 | 1.29 | 2.00 | 2.48 | 1.39 | 2.18 |
| Pachecano | 2 | 1.29 | 1.38 | 1.04 | 1.08 | 2.67 |
| Rangel | 2 | 2.56 | 2.60 | 1.05 | 1.33 | 2.44 |
| Rendon | 2 | 1.42 | 1.54 | 1.12 | 1.04 | 3.08 |
| Rivas, E. | 2 | 1.83 | 1.63 | 1.16 | 1.32 | 2.28 |
| Rivas, F. | 2 | 2.08 | 2.92 | 2.04 | 2.75 | 2.04 |
| Rives, T. | 2 | 1.08 | 1.08 | 1.56 | 1.18 | 2.04 |
| Roberts | 2 | 1.53 | 1.31 | 1.18 | 1.22 | 2.70 |
| Thompson | 2 | 1.63 | 1.29 | 1.09 | 1.08 | 2.74 |
| Warren | 2 | 2.38 | 2.29 | 1.38 | 1.10 | 2.63 |
| Allen | 3 | 1.64 | 1.33 | 1.05 | 1.05 | 2.26 |
| Chant | 3 | 1.82 | 1.35 | 1.09 | 1.05 | 2.57 |
| Farmer | 3 | 2.83 | 2.68 | 1.04 | 1.06 | 1.56 |
| Harris, J. | 3 | 2.50 | 3.17 | 2.23 | 1.75 | 2.52 |
| Harris, M. | 3 | 1.79 | 2.17 | 1.71 | 1.36 | 1.79 |
| Mora | 3 | 1.00 | 1.00 | 1.04 | 1.12 | 2.32 |
| Pacheco | 3 | 2.21 | 2.46 | 2.38 | 2.88 | 2.71 |
| Perez | 3 | 1.33 | 1.28 | 1.20 | 1.35 | 2.96 |
| Pirhala | 3 | 1.67 | 1.35 | 1.00 | 1.05 | 2.85 |
| Ramsay | 3 | 2.60 | 2.76 | 1.04 | 1.06 | 1.44 |
| Rodriguez | 3 | 1.44 | 1.40 | 1.20 | 1.28 | 2.80 |
| Soto | 3 | 2.50 | 2.58 | 1.76 | 1.63 | 2.50 |
| Tilton | 3 | 2.96 | 2.86 | 1.04 | 1.95 | 2.29 |
| Tight | 3 | 1.28 | 1.63 | 1.41 | 1.50 | 3.13 |

| <u>TEACHER</u> | <u>GRADE</u> | <u>COORDINATOR'S PRE</u> | <u>COORDINATOR'S POST</u> | <u>PRINCIPAL'S PRE-</u> | <u>PRINCIPAL'S POST</u> | <u>TEACHER'S SELF-RATING</u> |
|----------------|--------------|------------------------------|-------------------------------|-----------------------------|-----------------------------|----------------------------------|
| Aguirre, C. | 4 | 1.79 | 1.33 | 1.79 | 1.08 | 1.33 |
| Aguirre, R. | 4 | 1.24 | 1.12 | 1.33 | 1.08 | 1.36 |
| Gonzales | 4 | 1.46 | 1.96 | 1.63 | 2.33 | 2.67 |
| Hill | 4 | 3.20 | 2.89 | 2.18 | 2.11 | 2.67 |
| McClaran | 4 | 1.36 | 2.17 | 2.50 | 2.18 | 2.11 |
| Pacheco | 4 | 1.06 | 1.16 | 1.05 | 1.06 | 2.24 |
| Pena | 4 | 1.00 | 1.20 | 1.64 | 1.23 | 1.92 |

Monthly newsletters in Spanish and in English giving information about the program and utilizing contributions from the pupils were sent to all parents of pupils in the Program by the community liaison persons. A questionnaire in one of the spring newsletters was filled out and returned by forty-three percent of the parents in Harlandale and sixty-one percent of the parents in San Marcos. There were six questions which the parents answered: (1, 2 and 3) ninety-eight percent thought the Bilingual Education Program was a good idea, that it was helping their child, and that the child liked school; (4) forty percent had visited a bilingual classroom at least once; (5) sixty-seven percent were willing to help with school activities, such as parties and field trips; and (6) eighty-five percent were interested in learning more about bilingual education. One hundred seventy-five comments were added to the questionnaires; one hundred seventy-one of these were complimentary to the program.

Parental contacts with teachers, coordinators or community liaisons numbered more than eight thousand in Harlandale and almost twenty-five hundred in San Marcos. These contacts were either notes, phone calls, or visits. The number of spring contacts surpassed the prediction of being ten percent higher than the fall figure: the figure was better than eleven percent higher in Harlandale and twenty-six percent higher in San Marcos.

Community involvement with the Bilingual Education Program has been high in both districts. Four Advisory Committee meetings during the year in each district have been well attended by persons not having children in the program as well as those having children in the program. Interest has been high, and the coordinators have answered many questions in the lively interaction. One outgrowth of these meetings was the formation of publicity committees to disseminate information about bilingual education. Another encouraging dividend was the financing of a Christmas dinner (following the Christmas program at school) by the business community in San Marcos. This dinner was prepared and served by mothers of children in the Bilingual Education Program.

The general public has been kept informed about the Program through the many articles appearing in the San Marcos Record, the San Antonio Light and the San Antonio Express. References to the program in various books and journals have helped to inform the educational community. The frequent attendance of various members of the staff including the director at educational conferences has resulted in exchanges of information. These conferences included the U.S.O.E. Institute on Educational Accountability at San Diego, California, the Annual Conference of the Southwest Council on Bilingual Education at El Paso, Texas, the Council on Promising Educational Practices at McAllen, Texas, and the annual convention of Teachers of English to Speakers of Other Languages at New Orleans, Louisiana.

PROJECT COORDINATION

The objective of this component was efficient, cooperative administration among the schools involved in order to achieve project goals successfully and economically.

The coordinators, evaluator and director held monthly staff meetings to discuss plans for the coming month, problems which had come up, and information which might be beneficial to other members of the staff. A spirit of cooperation and helpfulness was evident not only in these meetings but at all times. All four members were efficient, competent and responsible.

As is evident from the organizational chart on page nine of this report, a possible area of difficulty lay in the relationship between principals, coordinators and bilingual teachers. However, few problems arose in this area, possibly because in each district several meetings were held with principals of schools involved, the coordinator, the evaluator and the director. In these meetings the evaluation design, future plans, and the proposal for 1971-72 were discussed. The meetings were quite productive and resulted in valuable exchanges of information and improvements in all aspects of the program.

Meetings with project teachers, and the coordinator, the evaluator and the director were also held in each district to discuss the evaluation design, future plans and the new proposal. Cooperation between all members of the staff resulted from such meetings, and this cooperation has been commendable.

Next year a curriculum specialist is being added to the project staff. Plans are underway to utilize this individual in establishing a closer coordination between curriculum development and other program components.

RECOMMENDATIONS

General recommendations:

(1) There should be special college preparation for teaching in bilingual education. This training should include applied linguistics, methodology of teaching English to speakers of other languages (tesol), Spanish courses, Mexican-American culture and heritage, philosophy of bilingual education, and student teaching done in a bilingual classroom with the college supervisor being a specialist in bilingual education.

(2) With public interest at an all-time high, now would be the time to institute Spanish as a foreign language in the elementary schools of Texas for monolingual English speakers.

Recommendations for this particular project:

(1) Teachers need more training in methodology of teaching English to Spanish-speakers. This will be accomplished through a preservice training workshop and later reinforced through inservice training.

(2) More concentration on reading comprehension in the classroom is needed. Supervisors should work closely with teachers regarding this item.

(3) Closer check should be kept of the amount of time spent teaching various parts of the curriculum and the amount of time spent teaching in English and in Spanish. This should be done by all staff member observers: coordinators, curriculum specialist, evaluator and director, as well as the building principals.

APPENDIX I

SAMPLE RATING SCALES, QUESTIONNAIRES AND NEWSLETTER

Curriculum Guide Rating Form

Self-Concept Rating Scale

Verbal Interaction Analysis

Principals and Coordinators Rating of Teachers

Teacher Self-Evaluation

Teachers Evaluation of Bilingual Aide

Parents Questionnaire

Bilingual Newsletter

BILINGUAL EDUCATION PROGRAM

Curriculum Guide Rating Form To Be Completed
by the teachers

Teacher _____ School _____

Circle the answer which most nearly reflects your opinion of the statement as it applies to the four subject matter sections of the curriculum guide.

Key for Rating Scale

- SA Strong agreement with the statement.
- A Agreement with the statement.
- ? Uncertainty
- D Disagreement with the statement.
- SD Strong disagreement with the statement.

| | English as a Second Language | Spanish Language Arts | Math | Social Studies |
|---|---------------------------------|--------------------------|-------------|-------------------|
| 1. The objectives are clearly stated. | SA A ? D SD | SA A ? D SD | SA A ? D SD | SA A ? D SD |
| 2. The objectives are appropriate for my grade level. | SA A ? D SD | SA A ? D SD | SA A ? D SD | SA A ? D SD |
| 3. The resource materials are appropriate for my grade level. | SA A ? D SD | SA A ? D SD | SA A ? D SD | SA A ? D SD |
| 4. The activities are appropriate for my grade level. | SA A ? D SD | SA A ? D SD | SA A ? D SD | SA A ? D SD |
| 5. The resource materials are consistent with the objectives. | SA A ? D SD | SA A ? D SD | SA A ? D SD | SA A ? D SD |
| 6. The activities are consistent with the objectives. | SA A ? D SD | SA A ? D SD | SA A ? D SD | SA A ? D SD |

7. The guides are concise enough.

SA A ? D SD SA A ? D SD SA A ? D SD SA A ? D SD

8. The guides are flexible enough.

SA A ? D SD SA A ? D SD SA A ? D SD SA A ? D SD

9. Should anything be added? _____

If so, what?

10. Should anything be deleted? _____

If so, what?

11. Comments/suggestions/or questions.

Date _____

Signature _____

**INFERRED SELF-CONCEPT JUDGMENT SCALE
FOR USE IN A SCHOOL SETTING**

We are concerned here with your judgment of the student's "view of himself" ("self-concept") as it is generated by and in the school setting. You are asked to describe your perception of a student's self-concept in terms of the following items. Please indicate your rating on each item, using the scale below.

1. _____ Never
 2. _____ Seldom
 3. _____ Sometimes
 4. _____ Usually
 5. _____ Always

- | | |
|---|--|
| <p>_____ 1. Enjoys working with others</p> <p>_____ 2. Exhibits self-confidence</p> <p>_____ 3. Plays with smaller or younger children</p> <p>_____ 4. Evidences strong pleasure in good work</p> <p>_____ 5. Is antagonistic to adults</p> <p>_____ 6. Has unrealistic expectations for himself</p> <p>_____ 7. Is easily discouraged</p> <p>_____ 8. Appears unsociable</p> <p>_____ 9. Cries easily</p> <p>_____ 10. Is unfriendly to classmates</p> <p>_____ 11. Tries to dominate or bully</p> <p>_____ 12. Fights</p> <p>_____ 13. Talks compulsively</p> <p>_____ 14. Seems afraid of teacher</p> <p>_____ 15. Feels he is "picked on" by classmates</p> | <p>_____ 16. Gives up easily</p> <p>_____ 17. Is defiant</p> <p>_____ 18. Thinks he is right</p> <p>_____ 19. Is ready to accept blame when at fault</p> <p>_____ 20. Is trusting</p> <p>_____ 21. Seems to have a "chip" on his shoulder</p> <p>_____ 22. Is quarrelsome or argumentative</p> <p>_____ 23. Is "Over-sensitive"</p> <p>_____ 24. Provokes hostility from classmates</p> <p>_____ 25. Thinks his teacher likes him</p> <p>_____ 26. Tattles</p> <p>_____ 27. Is withdrawing</p> <p>_____ 28. Is fearful</p> <p>_____ 29. Seems satisfied with level of performance</p> <p>_____ 30. Appears worried</p> |
|---|--|

CHILD'S NAME _____

GRADE _____

SCHOOL _____

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ANALYSIS OF VERBAL INTERACTION IN CLASSROOM

INSTRUCTIONS: A tally of teacher/pupil verbalization will be kept in appropriate categories at 5 second intervals for a period of 3 minutes.

TEACHER:

SPANISHENGLISH

1. LECTURES: gives facts and/or opinions concerning content or procedures (teacher initiated).
2. GIVES DIRECTIONS: gives instructions, commands, or orders which a student is expected to carry out.
3. ASKS QUESTIONS: questions about content or procedures expecting student answers.
4. ANSWERS QUESTIONS/DISCUSSES: (pupil-initiated).
5. PRAISES/ENCOURAGES/REINFORCES: response to pupil efforts.
6. CRITICIZES: non-accepting of behavior or response.

PUPIL:

7. STUDENT TO TEACHER TALK--
teacher-initiated.
8. STUDENT TO TEACHER TALK--
pupil-initiated.