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ABSTRACT

This report presents the evaluation of the Fall River Middle School Research and Development Center, a project funded under Title VII of the 1965 Elementary Secondary Act as a model demonstration bilingual program, beginning in 1972-1973. The Title VII bilingual program operated at the fifth grade level in three schools with two bilingual program classes in each school. The program had an enrollment of 111 students--34 English dominant and 77 Portuguese dominant students. The product objectives of the Instructional Component focused on student achievement in the academic areas of mathematics and science; the production of Portuguese and English speech sounds and grammatical structures (oral and written); and the social interaction between Portuguese and English dominant students. The objectives of the Staff Development Component required the staff to increase their academic knowledge of such aspects of bilingual education as use of materials, evaluation, and instructional methodology. Staff training also included efforts to improve the staff's teaching methods in the classroom. Objectives of the Parent-Community component focused on the involvement of parents of participating students and of the community at large in activities related to the bilingual program, and on the dissemination of program information to the parents and the community. (Author/JM)

EVALUATION OF THE FALL RIVER MIDDLE SCHOOL RESEARCH AND DEVELOPMENT CENTER TITLE VII PROGRAM 1972 - 1973

HEURISTICS, INC.
Dedham, Massachusetts

September, 1973

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INTRODUCTION

This report presents the evaluation of the Fall River Middle School Research and Development Center. This project was funded by ESEA Title VII as a model demonstration bilingual program, beginning in 1972-1973. Heuristics, Inc. was engaged to perform the evalution of this first year of program operation. The evaluation was conducted under Office of Education guidelines for assessment of Title VII programs, and focused on the assessment of the degree of accomplishment of product and process objectives for each component of the program. This report presents the summative assessment of the program. Formative assessment was provided orally to the project director during the program year, and in written process reports prepared in October, 1973 and January, 1973, and in the Interim Evaluation Report included in the continuation proposal for the 1973-1974 project year. The project operated according to Title VII guidelines and was subject to the principles of accountability, including an educational audit.

EVALUATION PROCEDURES

The following evaluation activities were performed by Heuristics, Inc. with the cooperation of appropriate program staff members, as part of the assessment of the Fall River Title VII Project:

1. Assistance in the specification of program objectives;
2. Construction and revision of the evaluation design;
3. Analysis of achievement test results;
4. Construction of an Portuguese Oral Test;
5. On-site observation of program classes;
6. Review of program files;
7. Interviews with project staff members;
8. Construction, administration, and analysis of the Parent Survey (a sociological data questionnaire);
9. Preparation of written reports, including the Interim Evaluation Report;

10. Construction and analysis of forms for materials usage and classroom observation;

11. Provision of regular verbal feedback to the project staff;

12. Construction, analysis, and administration of attitude questionnaires to program staff, transitional bilingual education staff, other teachers in bilingual program buildings, and building principals.

This report presents first a general review of program operation, followed by an analysis of the degree of accomplishment of each program objective within each component. It concludes with a section summarizing the program's accomplishments and listing recommendations for improving program operation.

REVIEW OF PROGRAM OPERATION

Introduction

This section of the report presents a description of the Fall River Title VII bilingual program. In addition, opinion data, gathered by interview and questionnaire, concerning various program elements and classroom observational data are discussed.

Staff

The Fall River Title VII program began operating on September 6, 1972, the opening day of the public schools, with its full complement of professional staff. The staff included the following personnel:

Project director - responsible for overall program management;

Staff development specialist - responsible for the development of in-service activities and for liaison between the teachers and the non-instructional staff;

Guidance counselor - responsible for providing counseling services to all participating students;

Parent-community coordinator - responsible for program dissemination activities and for liaison between the project and the community;

Four curriculum specialists - responsible for the development of curriculum units in mathematics, science, social studies, and language arts;

Six teachers - responsible for instruction in all academic subjects;

Six teacher aides - responsible for assisting the teachers in instructional and non-instructional activities.

All non-instructional staff (staff development specialist, guidance counselor, parent-community coordinator, and the curriculum specialists) were fluent in Portuguese and English. Their academic credentials were as follows: two graduates from Southeastern Massachusetts University and one to be graduated from that University in June, 1973; a graduate from the University of Lisbon who is currently enrolled in a Ph.D. program at Brown University; a graduate from the

seminary in Portugual with many years of experience in working with the English and Portuguese communities of Fall River; a graduate of St. Francis College in Maine; and a holder of a Portuguese teaching certificate with seven years teaching experience in Portugual, six years experience as an English as a Second Language (ESL) teacher in Fall River, and currently enrolled in a degree program at Bridgewater State College.

The staff has done a commendable job organizing and implementing the program. Morale was high, and everyone feels that the staff was working hard to make it a good program. They agreed that bilingual instruction is valuable and not just a fad. They considered it a practical approach to the education of non-English speaking children that would not impede their overall education nor retard the "Americanization" process. The majority of Title VII teachers believed that the program was well planned and organized and that the director was readily available to assist them in any way possible. They agreed that the program administrators were responsive to their individual problems. Half of them, however, did indicate a desire for more help and personal contact with the curriculum specialists.

As noted, there were six teachers in the program--four Portuguese dominant and two English dominant teachers. Five of the teachers were bilingual in Portuguese and English (with varying degrees of English language competency) and one was monolingual in English. Three of the four Portuguese dominant teachers have had from four to sixteen years teaching experience in Portugual, and one of the three has also had seven years teaching experience in Fall River as a substitute teacher. All three are presently continuing their education--two at Bristol Community College and one at Bridgewater State College. The fourth Portuguese dominant teacher has had no teaching experience, but had seven years of seminary schooling in Portugual and will receive a B.A. degree in June, 1973 from Southeastern Massachusetts University. One of the two English dominant teachers was a recent graduate of Westfield State College and has had no teaching experience; the other has a Master's degree and fifteen years teaching experience in public and private schools and at the college level. The Education Scale results, discussed fully later in the report, indicate that as a group, the teachers have relatively unfavorable attitudes toward progressive practices in education.

The teachers felt that they have the same status in the school system as non-program teachers. They believed that they understood the methodology of bilingual classroom instruction. However, they admitted that there are special problems in teaching such a class and most of them would like additional in-service training in "how to teach" in the bilingual classroom situation.

All teachers regarded the teacher aides as positive assets to the program. However, the teachers reported that they were given no information on how the aides were to be used in the classroom and that it was left to their own discretion on how to use them. This was disclaimed by the staff development specialist who said that this information was given to all teachers. Classroom observations indicated that teachers are using the aides mostly for tutoring purposes, as well as for material

preparation and general classroom management.

Despite the apparent disagreement, the aides unanimously agreed that they were being used to good advantage in the classroom, and most of them agreed that they were provided with the help they need from their classroom teachers. However, many of the aides indicated that they would like more direction and supervision from the teachers with whom they worked. Most of them also believed that their duties (such as helping to prepare lessons and materials, working with small groups and individual students, and correcting papers) should not be increased. All of the aides considered themselves competent to provide academic instruction for the students; however, the majority of them felt that a great deal of their time was spent in handling disruptive students. All are enrolled in associate degree programs at Bristol Community College, and two of them are to receive their degrees in June, 1973. Most of them, however, desired additional training in bilingual instruction, teaching methods, and classroom management. As measured by the Education Scale, the aides, like the teachers, have relatively unfavorable attitudes toward progressive practices in education, as discussed later in the report.

The program was late in the hiring of the teacher aides. This was not the fault of the program, however. At the end of July, 1972, the director received a letter from the Office of Education that the use of Title VII funds to pay for aides would be illegal in light of Massachusetts' Transitional Bilingual Education law. A waiver was granted by the Massachusetts Department of Education in late August, and by the U.S. Office of Education in late September, for the period September through December 31, 1972. However, aides still could not be hired until final budget approval was received from the Office of Education's regional office in Boston. Approval was received on October 6, 1972, and the first of the six aides was hired on October 10. By November 21, 1972, all of the aides had been hired.

Classes

The Title VII bilingual program operated at the fifth grade level in three Fall River schools--McDonough Annex, Watson, and Hartwell Street--with two bilingual program classes in each school. The McDonough and Watson schools had one Portuguese dominant and one English dominant class; the Hartwell Street School had two Portuguese dominant classes. The average class size was 18 students (see Table 1). In addition, two fifth grade classes at the McDonough School were used as a comparison group. Observation of the program's classes was conducted by the staff development specialist throughout the school year. Observations were standardized from January through May using a form developed by the evaluators and the observer recorded 76 such observations during this period (see Table 2).

Table 1

Bilingual Classes by School and Dominant Language

Dominant Language	Number of Classes			Total
	Watson	McDonough	Hartwell	
Portuguese	1	1	2	4
English	1	1	0	2
Total	2	2	2	6

Concerning the instructional conditions of the classes, the majority of teachers agreed that the physical characteristics of their classrooms were appropriate for instruction and that school supplies were provided in adequate quantities. Most of the teachers also agreed that the class sizes were appropriate for individualized instruction. However, classroom observations indicated that none of the teachers were individualizing instruction to any great extent but were using large group instruction almost exclusively.

Early in the program, teachers were dissatisfied with the amount of instructional and audio-visual materials available for use in the classrooms. Later interviews suggested that the problem with instructional materials was partially rectified by the arrival and distribution of textbooks and workbooks, and by the instructional and supplementary materials produced by the curriculum specialists. The teachers of the English dominant classes considered the textbooks they received too advanced for their students. This necessitated them to continue to create and produce most of their own materials. Post-questionnaire results revealed that teachers were still dissatisfied with the amount and availability of instructional and audio-visual materials. The program director explained that a delay in granting the appropriation of funds was the reason for the lack of audio-visual equipment and instructional materials experienced by the teachers. This problem has since been resolved, and all audio-visual equipment and material have been ordered. Classroom observations revealed that teachers used project prepared material and teacher prepared worksheets almost exclusively. Commercial texts were observed in use only for the subject areas of English and Portuguese Language Arts and on only two occasions did the observer note the use of audio-visual equipment--filmstrip and opaque projector.

Table 2

Classroom Observation by Subject Area,
School and Dominant Language

Subject Area	School: Watson Port. Dom.	Watson Eng. Dom.	McDonough Port. Dom.	McDonough Eng. Dom.	Hartwell Port. Dom. Class A	Hartwell Port. Dom. Class B	Total
Math	3	1	1*	-	4	5	14
Science	1	-	3	1	3	1	9
Eng. Lang. Arts	-	1	-	3	-	-	4
Port. Lang. Arts	7	-	5	-	2	6	20
Soc. Studies	1	-	-	-	2	-	3
ESL	4	-	3	-	-	-	7
PSL	-	5	-	5	-	-	10
Test Obser.	1	1	3	1	2	1	9
Total	17	8	15	10	13	13	76

* Mixed Group--Counted as a Portuguese Dominant classroom observation since instruction was in Portuguese by the Portuguese Dominant classroom teacher.

Students

The program had an enrollment of 111 students--34 English dominant and 77 Portuguese dominant students (see Table 3). English dominant students were selected for the program from the group of students who would normally be going into the fifth grade and who lived in the neighborhood served by the McDonough and Watson schools. This posed somewhat of a problem at the Watson School since

it was scheduled to serve only the first four grades this year. Because it had the classroom space to accommodate the Bilingual Program, some neighborhood students who previously had attended the first four grades at the Watson and had been assigned to the fifth grade at the Fall River Middle School, were reassigned to the Watson. These students formed the fifth grade English dominant class at the Watson school. This was accomplished with the approval of the parents of the students.

Table 3

Program Enrollment by School and Dominant Language

Dominant Language	Number of Students			
	Watson	McDonough	Hartwell	Total
Portuguese	22	13	42*	77
English	18	16	--	34
Total	40	29	42	111

* Two classrooms

Portuguese dominant students were selected for the program through consideration of two factors in addition to their language dominance--fifth grade age level and school neighborhood. For example, if a student was at the age level to be in the fifth grade and lived in the neighborhood served by the McDonough School, he was placed in the fifth grade Portuguese dominant class at the McDonough School, with parental consent. This procedure was successful for the McDonough and Hartwell Street schools. At the Watson, however, this method did not produce a full Portuguese dominant class. To obtain the students needed to fill the class, a few of the oldest grade four students and the youngest grade six students residing in the neighborhood served by the Watson were selected for the program. The students selected had similar educational backgrounds and their age level still fell within the fifth grade age range for the Fall River school system.

Project personnel indicated that bilingual education was as beneficial for English speaking students as it was for Portuguese speaking students, and that the education received by English dominant students participating in the program was not inferior to that received by their peers in the regular school program. At the end of the program, half of the teachers indicated that participating students enjoyed the program--that they were interested in and enthusiastic about it. This represents a change in opinion for some of the teachers. Previously they unanimously agreed that the students enjoyed the program and the majority of them indicated that they thought the students were interested in and enthusiastic about the program. Nevertheless, the entire staff did agree that bilingual education was good for Fall River students and that it would enrich the lives of all participating students.

Schedules

Schedules varied slightly among the three schools. The program operated in the schools according to the schools' established schedule. At the beginning of the school year, classes were not integrated in any of the subject areas in the two schools (the McDonough and the Watson) that contained both Portuguese and English dominant classes. Except for PSL (Portuguese as a Second Language) and ESL (English as a Second Language), all instruction in the academic subjects was taught in the students' native language by the teachers in the program. This situation had changed in the McDonough School. Non-program teachers in all three schools taught the non-academic subjects (such as Music and Art). Instruction in these areas was in English to both groups of students.

In September, the class schedule at the McDonough Annex was the same for both groups of students. Portuguese was the language of instruction for the Portuguese dominant class, and English for English dominant class. After considering recommendations made by the school principal, classroom teachers, non-instructional staff members, and the results of project prepared diagnostic tests, the program director made scheduling changes to be implemented near the end of February. In effect, these changes amounted to more English for the Portuguese dominant students and more Portuguese for the English dominant students, without changing the total number of class periods per week for the academic areas.

Specifically, the changes were (1) to integrate the Portuguese and English dominant classes for one period per week in Mathematics, Science, and Social Studies using English and Portuguese every other week as the instructional language; (2) to teach Language Arts in English five periods per week, and Mathematics and Science in English one period per week to the Portuguese dominant class; (3) to teach Language Arts in Portuguese five periods per week, and Mathematics and Science in Portuguese one period per week to the English dominant class. The new class schedule is shown in Table 4. The Portuguese dominant class had six

periods per week in Mathematics (4 in Portuguese, 1 in English, 1 integrated), 5 in Social Studies (3 in Portuguese, 1 in English, 1 integrated), 6 in Language Arts (1 in Portuguese, 5 in English), and 3 in Science (2 in Portuguese, 1 integrated); and the English dominant class--6 in Mathematics (4 in English, 1 in Portuguese, 1 integrated), 5 in Social Studies (3 in English, 1 in Portuguese, 1 integrated), 6 in Language Arts (1 in English, 5 in Portuguese), and 3 in Science (2 in English, 1 integrated). The number of periods per week for ESL, PSL and the non-academic subjects of Art, Music, etc. remained unchanged.

Table 4

McDonough Annex School Schedule

Class	Periods Per Week
Mathematics	6
Science	3
Social Studies	5
Language Arts	6
ESL or PSL	5
Music	2
Art	2
Sewing/Industrial Arts	2
Gym	2
Health	1
Handwriting	1

At the Watson there was no change in the class schedule. Class periods were 45 minutes long (as they were for the other two schools). The schedule for the Portuguese dominant class is shown in Table 5. The class schedule for the English dominant students was similar; they had one less period of Mathematics per week and one more period of Handwriting--and, of course, they had PSL instead of ESL instruction. Instruction in Language Arts, Mathematics, Science and Social Studies was given in Portuguese to the Portuguese dominant class. With the exception of PSL, the English dominant class received all instruction in English.

Table 5

Watson School Schedule
(Portuguese Dominant Class)

Class	Periods Per Week
Mathematics	5*
Science	3
Social Studies	5
Language Arts	9
ESL	5**
Music	1 (every 2 weeks)
Art	1
Gym	1
Library	1
Health	1
Handwriting	3***

* 4 periods for English dominant class
** PSL for English dominant class
*** 4 periods for English dominant class

Scheduling changes were also made in February at the Hartwell Street School which had two Portuguese dominant classes. The higher ability class received more instruction in English, while the other class received less. The new schedule for the higher ability class is shown in Table 6. The new schedule for the lower ability Portuguese dominant class is shown in Table 7. Non-program teachers on the Hartwell faculty taught ESL and the Mathematics, Science, and Social Studies classes that were given in English. Another change at the Hartwell School implemented in April was the integration of the higher ability bilingual class with the Follow-Through classes for one class period two days per week. The purpose of this mixing was to promote social interaction and cultural awareness between the two groups.

Table 6

Hartwell Street School Schedule
(Higher Ability Class)

Class	Periods Per Week
Mathematics	7 (1 in English)
Science	4 (2 in English)
Social Studies	8 (2 in English)
Language Arts	3
ESL	9
Music	1 (every 2 weeks)
Art	1
Gym	1
Language Laboratory	1

Table 7

Hartwell Street School Schedule
(Lower Ability Class)

Class	Periods Per Week
Mathematics	5 (1 in English)
Science	2
Social Studies	2
Language Arts	7
ESL	13
Music	1 (every 2 weeks)
Art	1
Gym	1
Language Laboratory	1
Health	1
Handwriting	1

Communication

A majority of both the teachers and the aides agreed that communication between program personnel within schools, and between program personnel and non-program personnel within schools was good. However, most of the teachers and all of the aides believed that there should be more communication among program personnel between schools. Most of the teachers thought that regularly scheduled staff meetings would improve the lines of communication among all program personnel. One of the school principals reported that communication between himself and bilingual program personnel was very good. The other principal saw a lack of communication between himself and the program administrators. The director is aware of these situations, and has already initiated procedures to improve them.

Native-Born Portuguese Teachers

Nearly all of the teachers agreed that more native born Portuguese teachers should be hired--not only for the bilingual program, but throughout the entire school system. If this is to be accomplished, one of the criteria that should be established is the degree of English language competency possessed by the Portuguese teacher. Indeed, this factor is addressed in the Title VII bilingual program since two of the school principals reported difficulty in communicating with the Portuguese born teachers in their schools. The situation led to the use of an intermediary for communication purposes in these schools. The program director intends to give more weight to English language fluency in the hiring of new teachers for the program when it is extended to the sixth grade.

Progressive versus Traditional Practices in Education

In addition to submitting to the interviews and questionnaires previously reported, program personnel also completed pre- and post-administrations of the Education Scale developed by Kerlinger and Kaya. This scale measures attitudes toward progressive and traditional educational practices. The scale provides three scores--progressive and traditional attitude scores and a total score which is obtained by subtracting the traditional score from the progressive score. The two subscale scores can range from 10 to 70 and the total score from -60 to +60. A high score on the subscale reflects favorable attitudes toward the dimension being measured, i.e., traditional or progressive practices in education. A positive total score indicates progressive attitudes, while a negative total score indicates traditional attitudes toward education. (See Scales for the Measurement of Attitudes by Shaw and Wright, pages 83-86 for further discussion of the Education Scale and Educational and Psychological Measurement, Volume XIX (1959), 13-29 and 305-317 for two studies by Kerlinger and Kaya concerning the construction and validation of the Education Scale.)

The average subscale scores and total score for each group (non-instructional staff, teachers, and aides) are reported in Table 8; graphical presentation of the subscale scores is shown in Figure 1 and of the total score in Figure 2. The Title VII non-instructional staff became slightly more progressive in their attitudes toward education during the school year. This was accomplished by a small decrease in their attitudes toward traditional practices in education rather than any increase in their attitudes toward progressive educational practice (see Figure 1). However, it should be noted that all three groups fell in the first quadrant indicating relatively high subscale scores on both dimensions.

Teachers and aides show a less favorable attitude toward progressive educational practices than the non-instructional staff and this difference became more pronounced during the school year (see Figure 2). Their more traditional attitudes may account for the fact that the teachers were using large group instruction and

little or no small group or individualized instruction. The difference between staff and teacher attitudes may explain why the teachers still indicate a need for more help and personal contact with the curriculum specialists. Two factors may account, at least partially, for this difference in attitudes--the age and educational background of the non-instructional staff as compared to that of the teachers and aides. Nevertheless, the attitudinal results suggest a need that could be met through appropriately designed in-service programs.

Table 8

Education Scale Results--Pre and Post
Mean Subscale Scores and Total Score by Group

Group	Mean Score					
	Progressive		Traditional		Total	
	Pre	Post	Pre	Post	Pre	Post
Staff	54.1	54.0	45.7	42.4	8.4	11.6
Teachers	53.6	49.3	52.1	49.5	1.5	-0.2
Aides	50.3	51.2	46.7	50.6	3.6	0.6

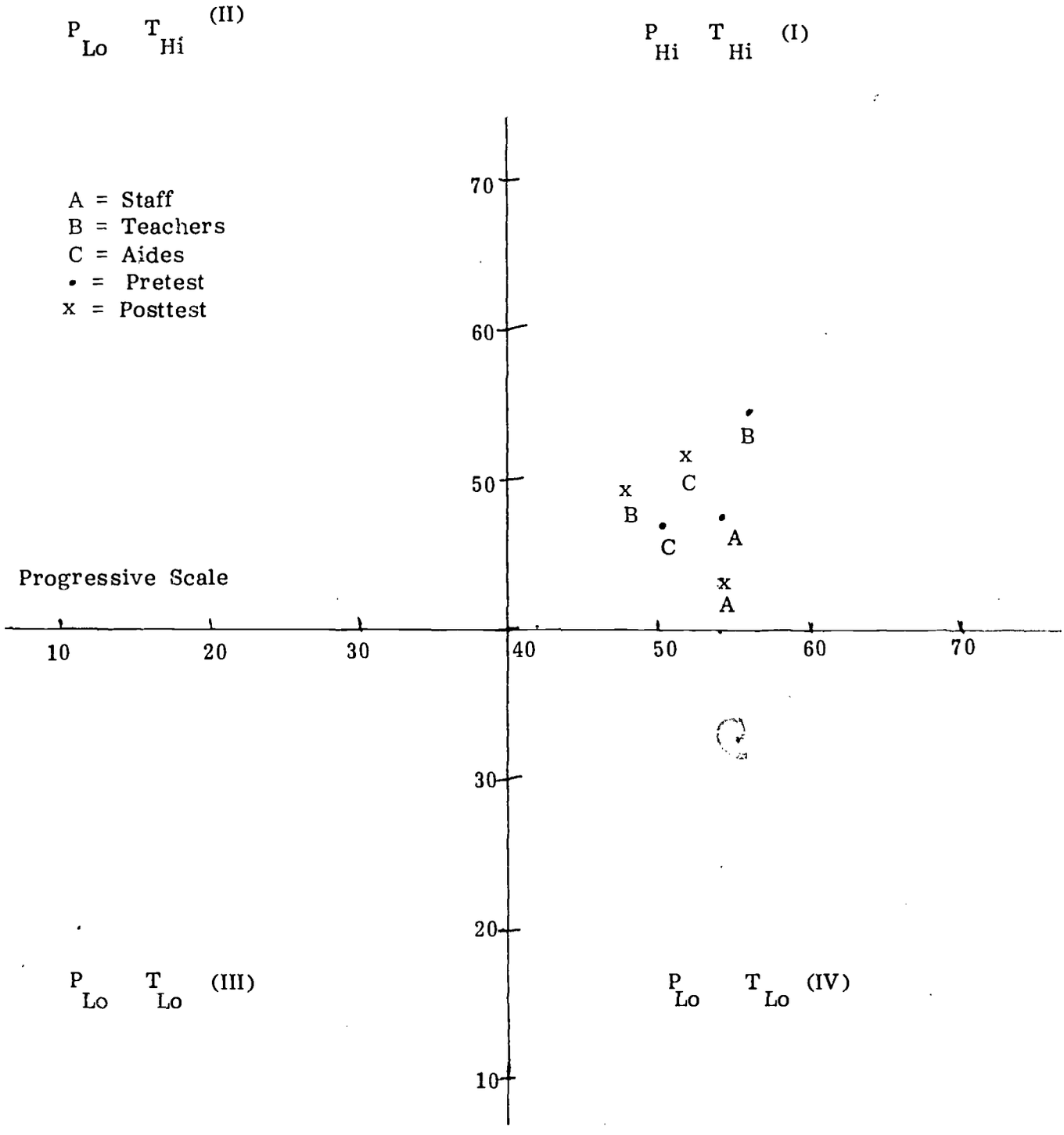

Figure 1: Pre and Post Subscale Mean Scores on the Education Scale for Title VII Staff, Teachers, and Aides

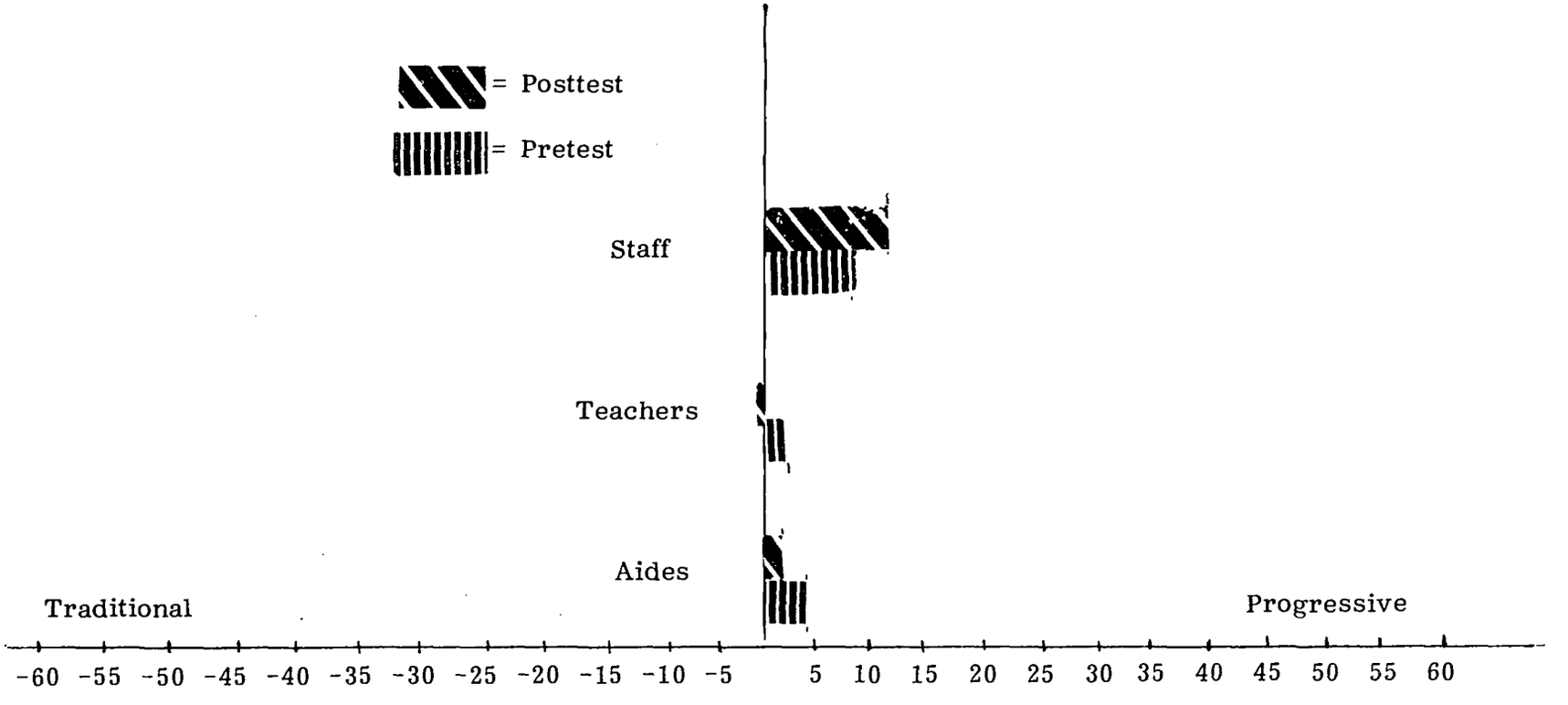

Figure 2: Pre and Post Total Score Means on the Education Scale for Title VII Staff, Teachers, and Aides

INSTRUCTIONAL COMPONENT

Introduction

The product objectives of the Instructional Component focused on student achievement in the academic areas of mathematics and science; the production of Portuguese and English speech sounds and grammatical structures (oral and written); and the social interaction between Portuguese and English dominant students. Data were collected to assess all but one of the product objectives--the exception was the objective concerning social interaction.

During the first part of October, 1972, English dominant students, including the comparison group, were administered the mathematics and science subtests from the 1970 Edition of the Metropolitan Achievement Tests, Intermediate Level. (The comparison group consisted of two regular (non-program) fifth grades in the McDonough School Annex which was the only school participating in the program that contained a fifth grade level other than the bilingual fifth grades.) At the same time, Portuguese dominant students were administered a Portuguese translation of the same subtests, i.e., the Metropolitan mathematics and science subtests. The translation was accomplished by the program's non-instructional staff. Also, in October, the English dominant students were administered the Providence Portuguese Second Language Test.

In January, 1973 the English Through Pictures (ESL) Test was administered to the Portuguese dominant students. During the first part of February, both the English and Portuguese dominant student groups were administered the Portuguese Oral Production Test which was constructed specifically for the bilingual program. Post-testing for all students with all tests took place during the latter part of May, 1973. Pre and post-tests were administered by the same instructional and non-instructional personnel. Pre and post-testing procedures were observed by the evaluators and the staff development specialist and no irregularities were noted.

The instructional process objectives collectively referred to the group of product objectives and not to any one specific product objective. They focused on the methods and activities to be used to accomplish the product objectives, e.g., preparation and utilization of Portuguese curriculum materials, knowledge of bilingual materials, improvement in teaching methods, and knowledge and understanding of the students' social-emotional problems. To assess those process objectives, data were collected through the use of questionnaires, interviews, self-rating scales, logs, and classroom observations. However, since the instructional process objectives were treated as product objectives in other components of the program (Staff development, Materials Development, and Guidance), the evaluation of these objectives, appropriately referenced to component, objective, and page number, will appear in other sections of this report.

Evaluation of Objectives

Product Objective 1:

> Fifth grade Portuguese speaking children, identified as having average or above average language competencies by teacher ratings and standardized tests, will achieve an average raw score equivalent to the fiftieth percentile rank for English speaking students on a battery of standardized achievement tests translated to Portuguese covering the areas of Mathematics and Science.

Evaluation

In October, 1972, fifth grade Portuguese dominant students were administered a Portuguese translation of the mathematics and science subtests from the intermediate level of the Metropolitan Achievement Tests. The subtests were translated into Portuguese by the program's non-instructional staff. Raw score results from the pre and post-tests were statistically analyzed. In addition, the scores were transformed into percentile ranks. It should be noted that norm-referenced scores, such as percentile ranks, are derived from the test as originally constructed and for a specific population. If a test is altered in any way, such as through translation, or the population is different than the one in which the test was normed, then the percentile ranks may be inaccurate. Since no other norms were available, national percentile ranks were used to give additional meaning to the raw scores.

In order to obtain percentiles, raw scores had to be converted to standard scores and then standard scores converted to percentiles. Table 9 presents the mean raw score, the mean standard score, and the percentile equivalent of the standard score mean for both subtests. Table 10 presents the number of students that attained criterion level. Table 11 presents results of the analysis of the pre and post-test score for correlated data. Portuguese dominant students were designated as below average, average, or above average with respect to their language competencies by their classroom teacher in the middle of January. The average and above average categories were then combined for analysis according to the stated product objective. The evaluators believe that the period from September to January provided the teachers ample time to become acquainted with each student and thus enable them to reliably rate their language competencies.

According to the norms provided by the test publisher for English speaking students, Table 9 shows that the Portuguese dominant students rated average or above surpassed the stated objective criterion of achieving an average raw score equivalent to the fiftieth percentile in mathematics and science. In both areas the students as a group exhibited large gains from pre to post-test. These dramatic

Table 10

Number and Proportion of Designated Average and Above Average Portuguese Dominant Students Attaining Criterion on Mathematics and Science Subtests - Metropolitan Achievement Tests - Portuguese Translation

Subtest	Number of Students Below Criterion	Above Criterion	Percent of Students Above Criterion
Mathematics (N=54)	11	43	80
Science (N-51)	14	37	72

Product Objective 2

Fifth grade Portuguese speaking students, identified as having below average language competencies by teacher ratings and standardized tests, will achieve an average raw score equivalent to the thirty-fifth percentile rank for English speaking students on a battery of standardized tests translated to Portuguese covering the areas of Mathematics and Science.

Evaluation

Portuguese dominant students, identified by their classroom teacher as below average in their Portuguese language competency, were pre and post-tested (October and May) with the Portuguese translation of the mathematics and science subtests from the Metropolitan Achievement Tests. The results are presented in Tables 12 - 14. This group was approximately one-fourth as large as the average and above average group with a majority of the students within the group coming from one class (Hartwell St. School - Class L in Tables 15 and 16).

Table 11

Results of the Portuguese Translation of the Metropolitan Achievement Tests - Designated Average and Above Average Portuguese Dominant Students

Subtest	Testing Session	Raw Score $\bar{X}$	Raw Score S	t
Mathematics (N=51)	Pre	24.3	14.4	16.870*
	Post	68.6	22.7	
Science (N=50)	Pre	12.3	9.5	24.557*
	Post	52.1	13.9	

* $p < .001$

Raw scores obtained by the students on the mathematics and science subtests were converted to standard scores which were then averaged producing a standard score mean. The obtained means were then converted to their percentile equivalents. The criterion of the thirty-fifth percentile was not attained by the group on either of the subtests as can be seen from Table 12. Table 13 shows that approximately two-fifths of the students on the mathematics test and one-fifth of the students on the science test attained criterion level.

When the pre and post-test raw score mean difference was analyzed for statistical significance using a t-test for correlated data, the results indicate that the achievement gains exhibited by the group were statistically significant (Table 14.) The pre to post-test raw scores gains of 35 points on the mathematics test and 26 points on the science test represent gains of over 30% of the number of items on the subtests. Given the position of the students at the beginning of the year, these results are indeed commendable. The achievement gains made by the group were educationally significant, although they were not large enough to reach the criterion.

Table 12

Means and Percentile Equivalents for Designated Below Average Portuguese Dominant Students on the Portuguese Translation of the Mathematics and Science Subtests from the Metropolitan Achievement Tests

Subtest	Testing Session	Raw Score Mean	Standard Score Mean	Percentile
Mathematics (N=14)	Pre	7.1	37.4	1
	Post	42.2	76.8	18
Science (N=14)	Pre	3.4	42.9	1
	Post	29.6	72.5	20

Table 13

Number and Proportion of Designated Below Average Portuguese Dominant Students Attaining Criterion on the Portuguese Translation of the Mathematics and Science Subtest from the Metropolitan Achievement Test

Subtest	Number of Students Below Criterion	Number of Students Above Criterion	Percent of Students Above Criterion
Mathematics (N=16)	10	6	38
Science (N=14)	11	3	21

Table 14

Results of the Portuguese Translation of the Metropolitan Achievement Tests - Designated Below Average Portuguese Dominant Students

Subtest	Testing Session	Raw Score $\bar{X}$	Raw Score S	t
Mathematics (N=14)	Pre	7.1	5.9	6.807*
	Post	42.2	19.8	
Science (N=14)	Pre	3.4	3.3	8.190*
	Post	29.6	11.0	

* $p < .001$

The following conditions may have contributed to the gains made by both groups: both students and teachers spoke Portuguese (as a first language) in the classroom; instruction was presented in Portuguese; instructional materials were especially developed and prepared in Portuguese for the academic areas as units and mini-lessons replete with objectives, pre and post-tests, exercises and audio-visual and supplementary materials. Speculation on the reason for lack of attainment of the criterion by the below average group centers on the instructional method and materials used in the classroom. As noted previously, teachers usually used large group instructional approach (which may have worked in favor of the average and above average group) and seldom used the small group or individualized instructional methods (which may have been to the advantage of the below average group). Further, analysis of the Materials Usage Forms data indicate that the teachers felt that many of the project prepared materials were too difficult for the slower students. (See the evaluation of objective MD-1.0 for a complete discussion of this point.)

The results for both groups on both subtests are graphically summarized in Figures 3 and 4. Figure 3 presents pre and post-test raw score means. The difference between the height of the pre and post-test bars represents the achievement gain for a group in terms of raw score units. As shown in Figure 3, the average -

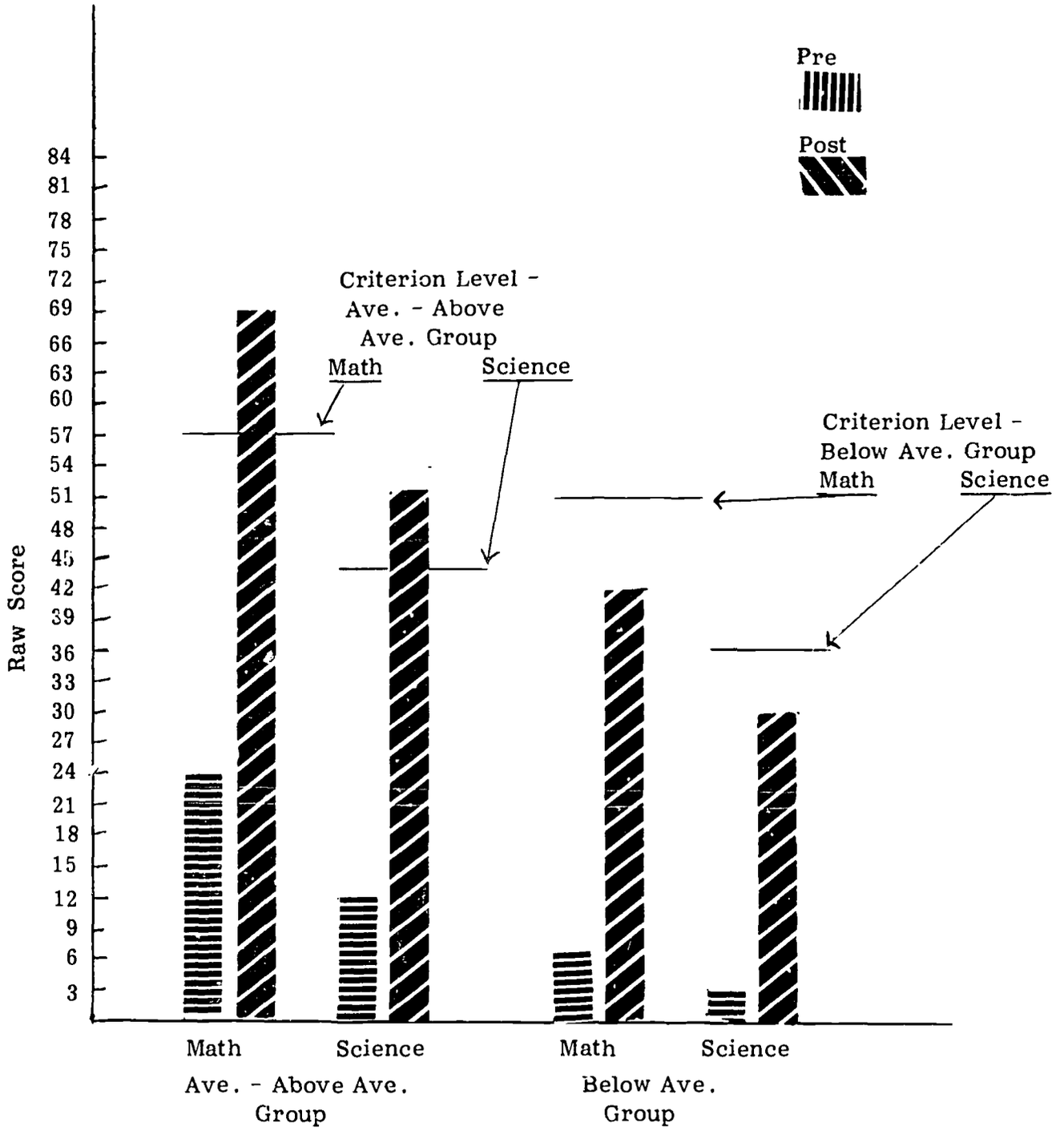

Figure 3: Pre- Post-test Raw Score Means on the Mathematics and Science Subtests

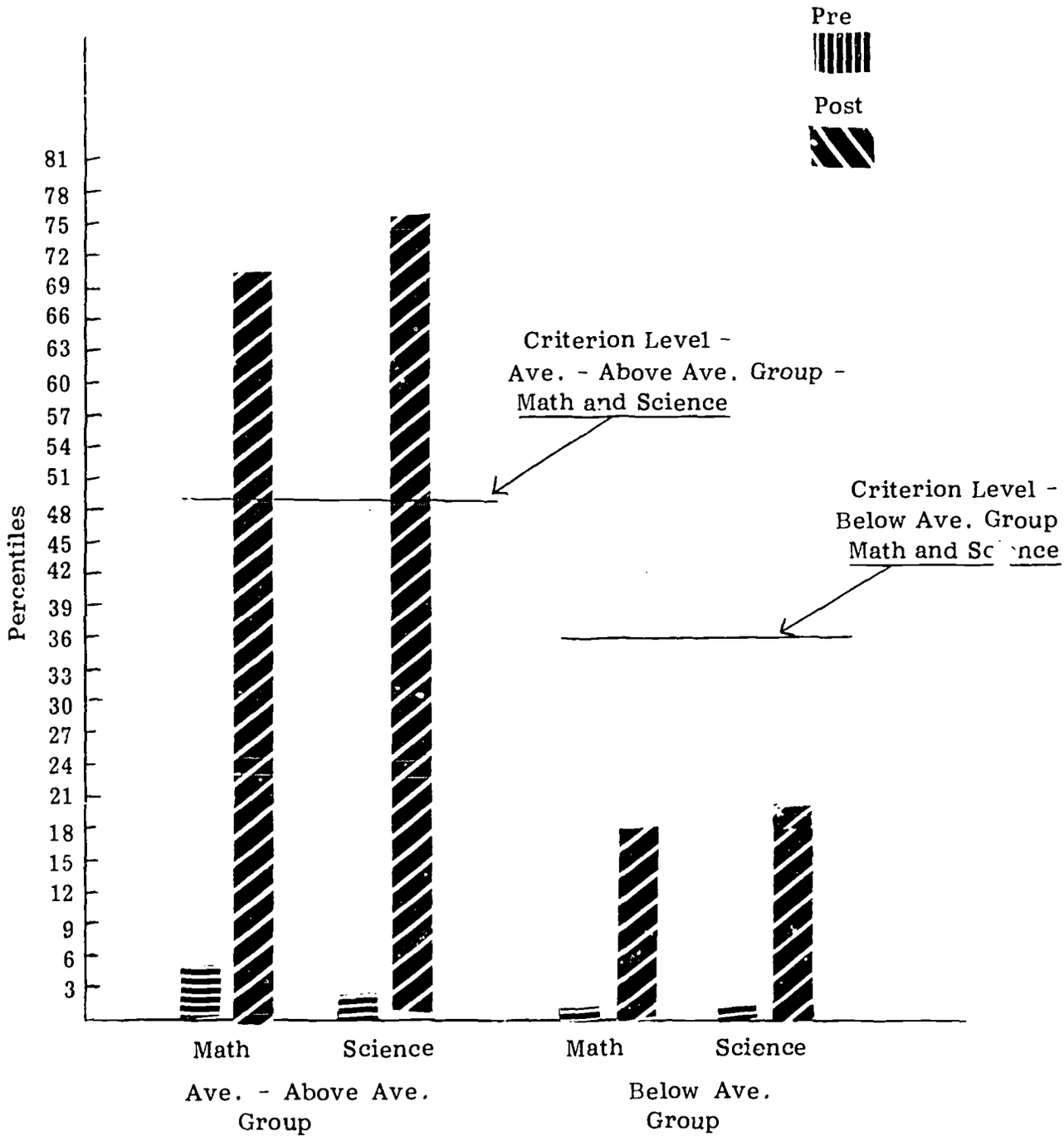

Figure 4: Pre- Post-test Percentile Equivalents on the Mathematics and Science Subtests

above average group made the larger pre to post-test gains on both subtests. When the raw score means were converted to percentile equivalents, however, the difference in achievement between the two groups was dramatically evident as shown in Figure 4.

The test data were also analyzed by class. There was one Portuguese dominant class in the Watson and McDonough schools and two in the Hartwell Street school. The results are presented in Tables 15 and 16 which show that all classes made statistically significant gains in both content areas when the pre- and post-test raw score means were compared using a t-test for correlated data. It should be noted that the lowest scores on both subtests were obtained by Class L in the Hartwell school. As noted previously, most of the students in the class were rated as below average by the classroom teacher; and the majority of students comprising the below average group came from this class.

Additionally, the mathematics and science subtest results were analyzed to see whether there were differences in achievement between the three schools. (The Hartwell classes were combined for the analysis.) One way analysis of covariance was used as the statistical test. The results suggest that no statistically significant differences in achievement gain existed between the three schools.

Raw score means and tneir percentile equivalents are graphically summarized in Figures 5 - 8 for the average-above average group, the below average group, and the four Portuguese dominant classes. The results of the mathematics subtest are presented in Figures 5 and 6, and the science subtest results in Figures 7 and 8.

Product Objective 3

> Ninety percent of the fifth grade Portuguese speaking students will orally produce 100% of the major Portuguese grammatical structures and sounds (as identified by experts) as measured by a specially constructed Portuguese Oral Production Test modeled after the Michigan Oral Languange Production Test.

Evaluation

The Portuguese Oral Production Test was developed by the evaluators. The curriculum specialists also contributed significantly to the development of the test and were particularly helpful with Portuguese grammar. The test is individually administered and was constructed to assess a student's ability to speak Portuguese as a second language. There are four levels of the test that increase in difficulty.

Each item illustrates a particular phonological, morphological, or syntactical feature of the Portuguese language. For each item the student is asked a question about a stimulus picture, asked to respond to a question which does not refer to a picture, or requested to say a complete sentence in Portuguese.

Table 15

Results of the Portuguese Translation of the Metropolitan Achievement Tests - Mathematics Subtest - Portuguese Dominant Students - by School

School	Testing Session	Raw Score $\bar{X}$	Raw Score S	Percentile	t
Watson (N=19)	Pre	15.2	11.1	1	13.980*
	Post	66.0	21.7	62	
McDonough (N=12)	Pre	32.8	12.4	16	19.965*
	Post	79.0	13.9	82	
Hartwell - Class R (N=17)	Pre	26.9	14.5	6	13.765*
	Post	76.9	11.7	80	
Hartwell - Class L (N=15)	Pre	11.0	8.6	1	5.837*
	Post	31.2	11.2	6	

* $p < .001$

Table 16

Results of the Portuguese Translation of the Metropolitan Achievement Tests - Science Subtest - Portuguese Dominant Students - by School

School	Testing Session	Raw Score $\bar{X}$	Raw Score S	Percentile	t
Watson (N=19)	Pre	8.9	8.5	1	19.416*
	Post	53.9	12.7	78	
McDonough (N=12)	Pre	14.0	6.1	4	16.453*
	Post	57.1	9.7	84	
Hartwell - Class R (N=17)	Pre	14.8	11.9	2	10.644*
	Post	51.1	13.8	74	
Hartwell - Class L (N=16)	Pre	4.3	4.0	1	13.490*
	Post	28.3	7.0	18	

* $p < .001$

In reviewing the test--administration procedures and item content in particular--with the curriculum specialists, they indicated some dissatisfaction with using the test with native speakers of Portuguese since the test was constructed for use with non-native Portuguese speakers. It was their opinion that many of the stimulus questions would not elicit the desired features being measured because of the native speaker's use of idiomatic expressions, language conventions and the like. Such usage would enable the speaker to speak in complete sentences using idiomatically acceptable Portuguese, but not produce the desired features. It was

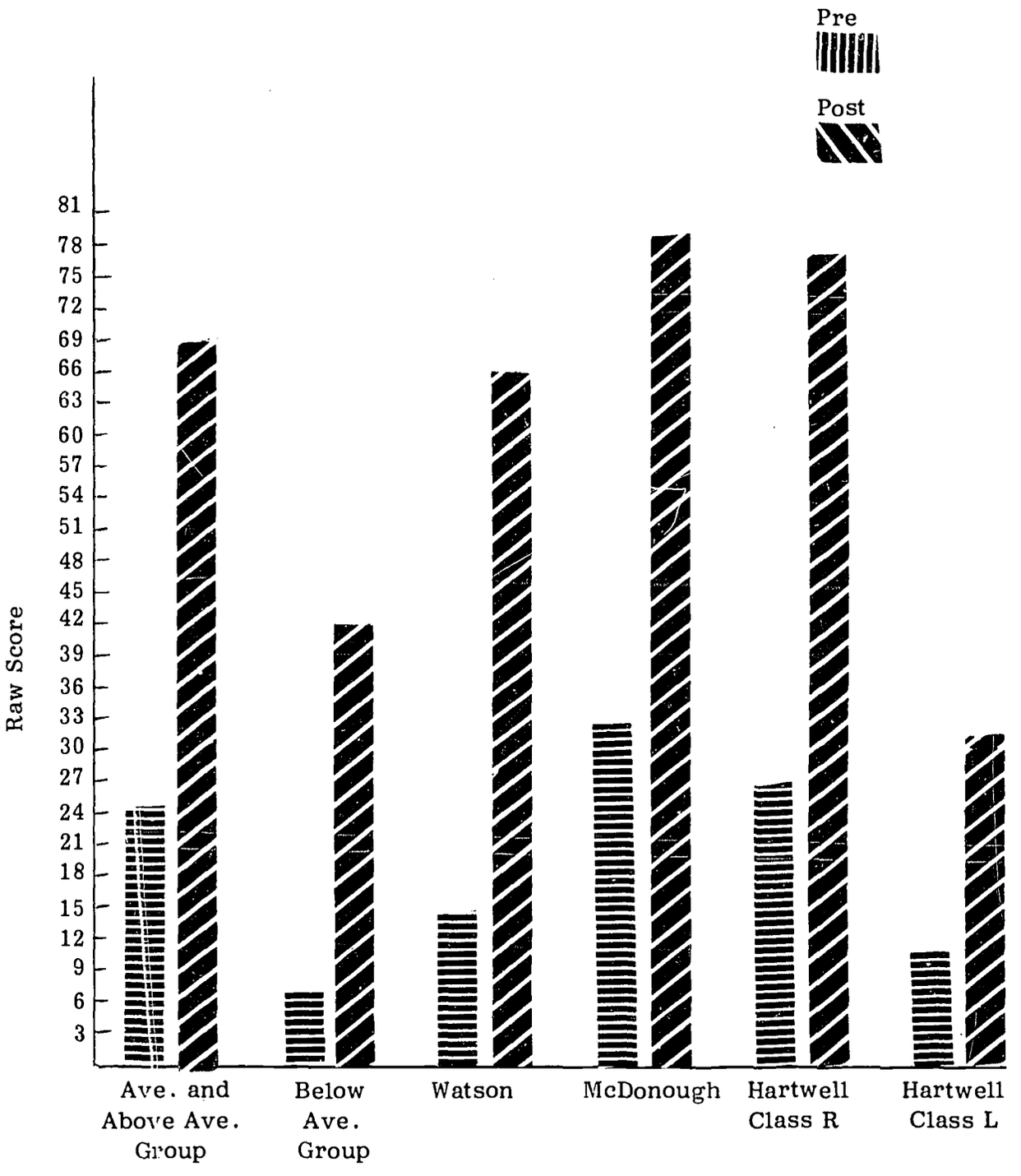

Figure 5: Pre and Post-test Raw Score Means on the Mathematics Subtest for the Portuguese Dominant

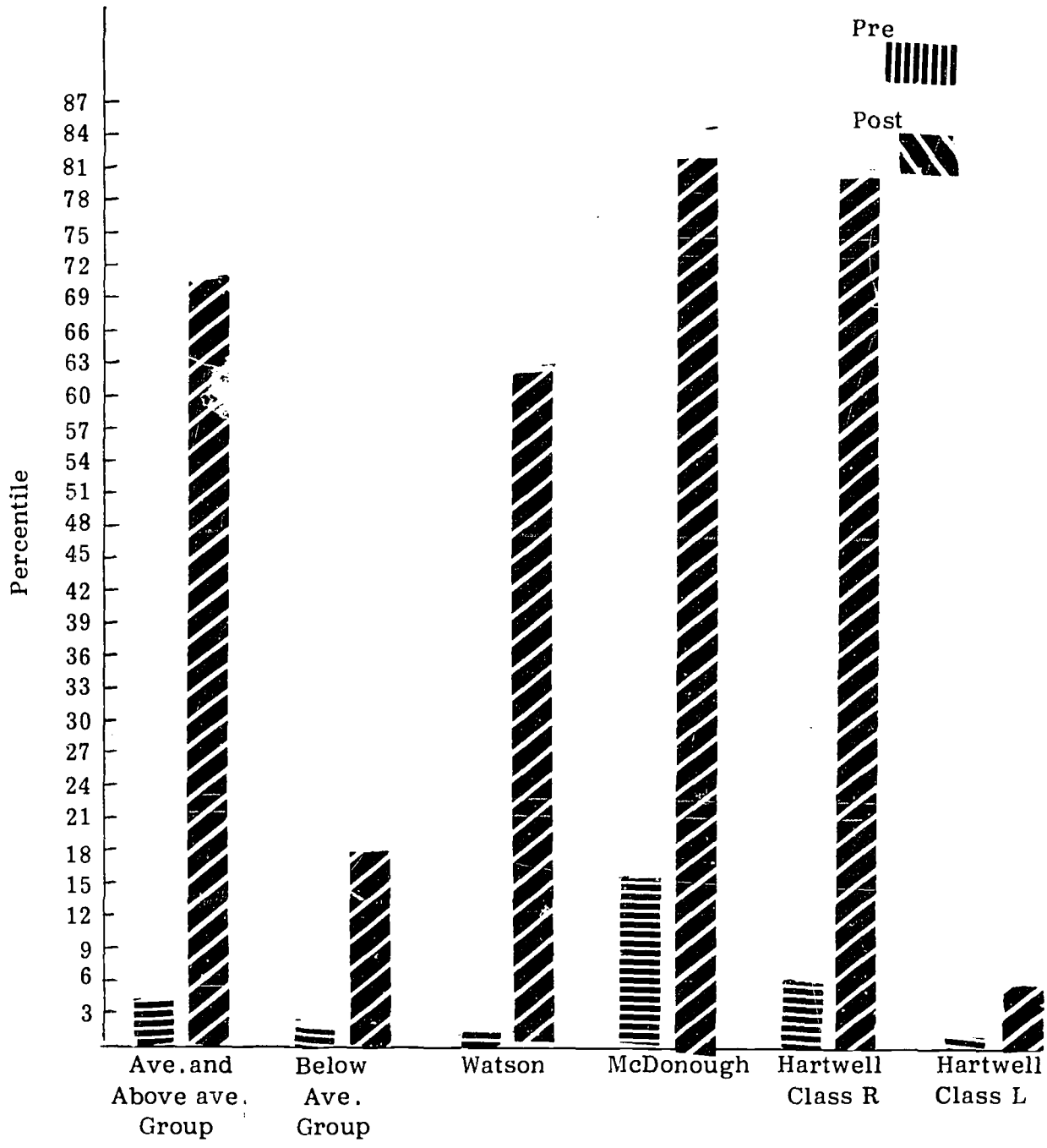

Figure 6: Pre and Post-test Percentile Equivalents for the Standard Score Means on the Mathematics Subtest for the Portuguese Dominant Classes

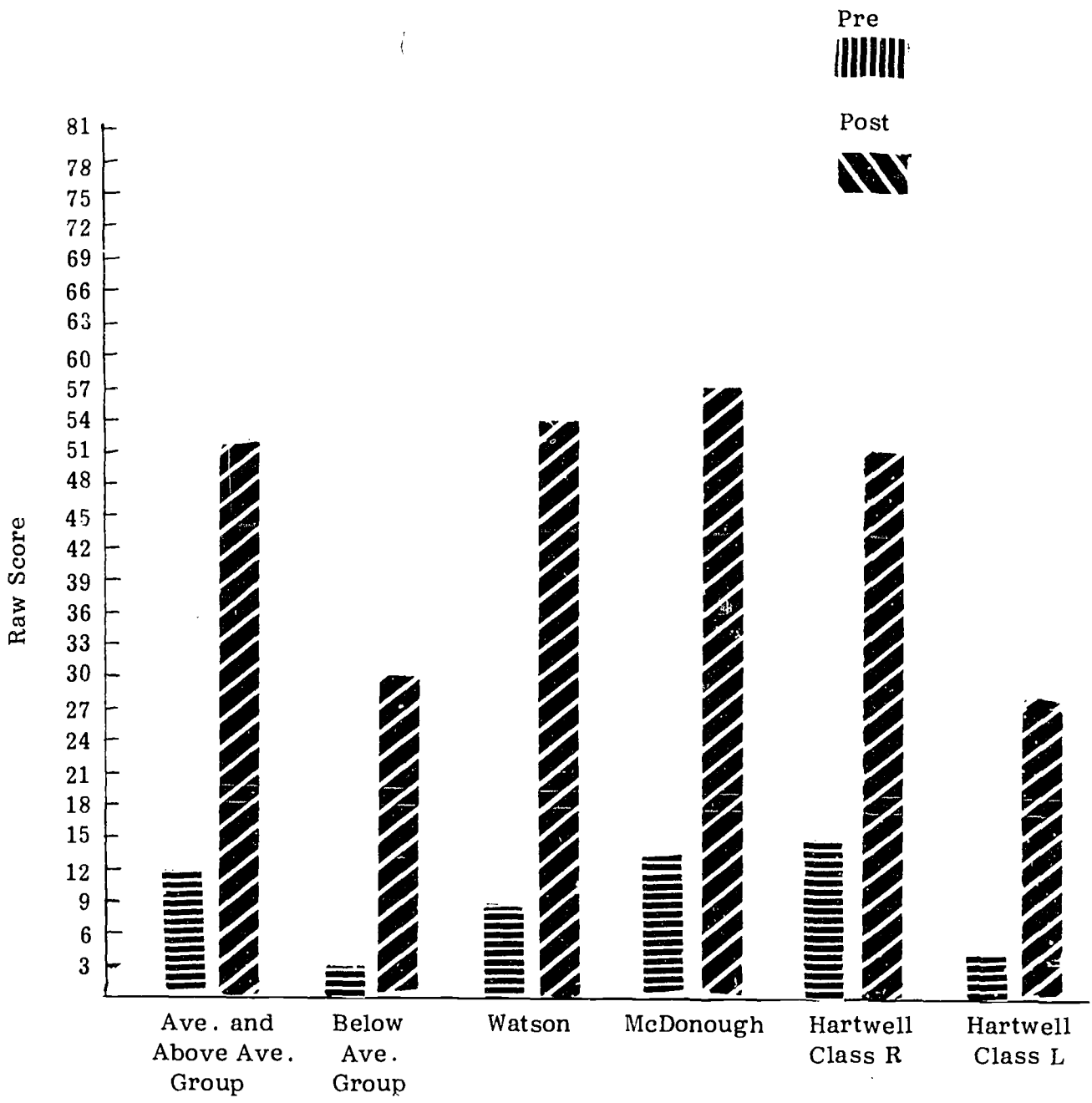

Figure 7: Pre and Post-test Raw Score Means on the Science Subtest for the Portuguese-Dominant Classes

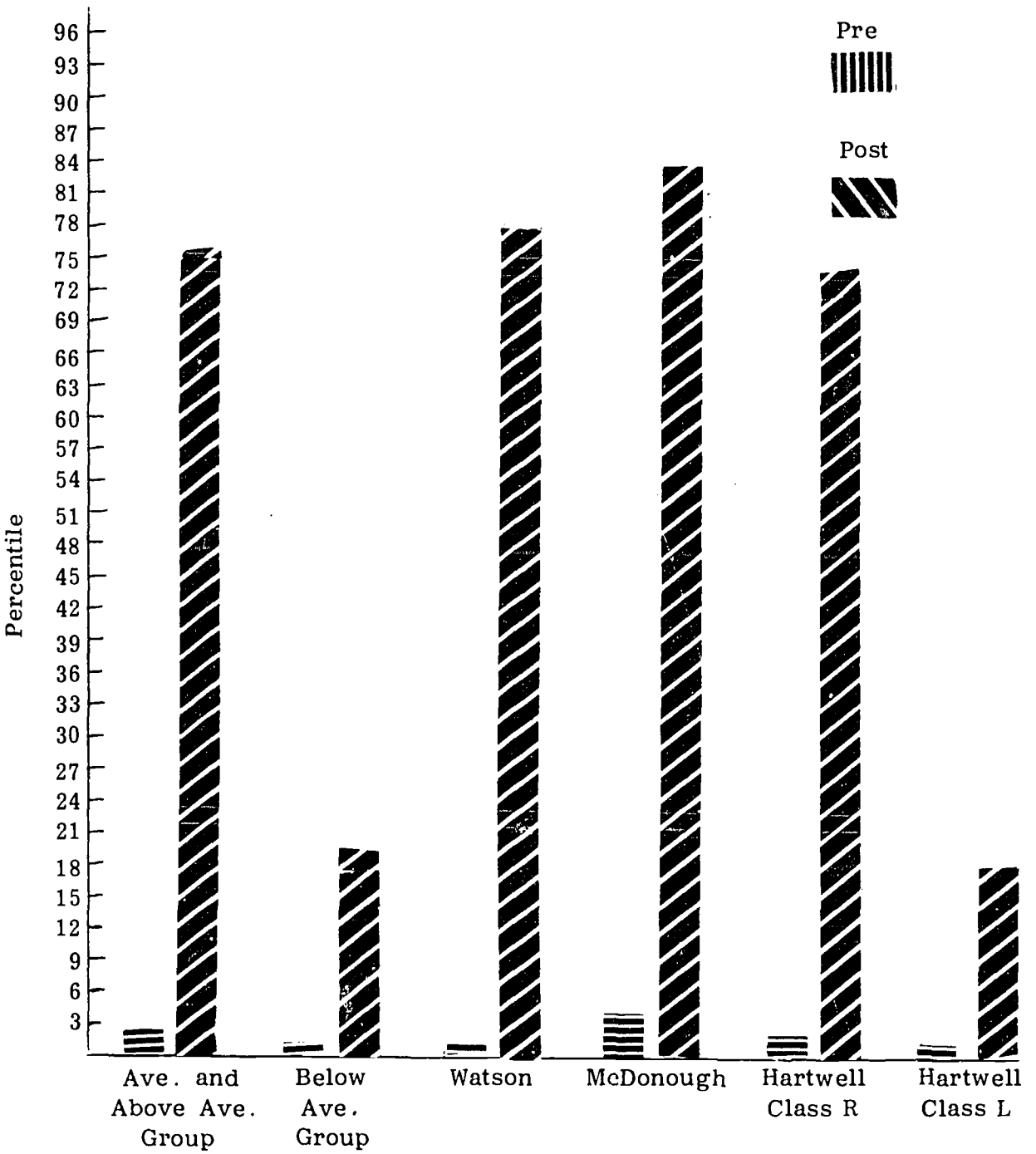

Figure 8: Pre and Post-test Percentile Equivalents for the Standard Score Means on the Science Subtest for the Portuguese Dominant Classes

Table 17

Number of Portuguese Dominant Students Attaining Criterion Score of One Hundred Percent on the Portuguese Oral Production Test

Test Level	Highest Possible Score	Obtained Score Range	Raw Score Mean	Number of Students in Percent of Test Correct Intervals			Percent of Students Attaining Criterion
				0 - 49	50 - 99	100	
Level 2 (N=30)	28	9 - 20	15	11	19	-	0
Level 3 (N=41)	30	4 - 23	15	15	26	-	0
Level 4 (N=10)	39	17 - 28	21	5	5	-	0

decided that the test would be used and to withold judgment about post-testing until the pre-tests were scored and the responses were analyzed.

Three levels of the test were administered to the Portuguese dominant students on February 8, 1973--level 2 to approximately 1 1/2 classes, level 3 to 2 1/2 classes, and level 4 to several selected students. The test was administered by the non-instructional staff who were all native speakers of Portuguese. Testing procedure was observed by the evaluators. The results, as presented in Table 17, show that not one student attained the criterion level of 100% when the results were scored according to the scoring key. However, when the responses were analyzed for grammatical usage and sentence structures in relation to the stimulus questions, many were found to be idiomatically acceptable. Thus, the data suggest that the test be used only as a second language test, as it was originally designed, and not as a first language test. Therefore, the Portuguese dominant students were not post-tested and the evaluators recommend that the objective be rewritten for or deleted from next year's program.

Product Objective 4

> Seventy-five percent of the fifth grade Portuguese speaking students will be able to orally produce English grammatical structures and sounds as measured by a fifty percent proficiency score on the English Through Pictures, English as a second language test.

Evalution

The English Through Pictures Tests are a series of tests that accompany and parallel the English Through Pictures Test. The tests were designed to provide a measure of a student's ability to comprehend English as a second language. The tests come in three levels--beginner, intermediate, and advanced. Test I - 1 (beginner) assesses the student's ability to recognize and distinguish between singular and plural nouns; test A - II (intermediate) and test F (advanced) measures a student's reading comprehension ability by requesting the student to read a story and then answer a series of questions related to the story. They are group administered and the maximum score possible on each test is one hundred. Pre-testing took place at the end of January and post-testing toward the end of May. The tests were administered by the ESL faculty members at the Hartwell Street School.

Students were administered a level of the test based on the classroom teacher's judgment of the English language ability of the class as a whole. One of the two Portuguese dominant classes at the Hartwell received level I - 1 and the other level A - II; the two remaining classes--one at the Watson and one at the McDonough--received test F. The results are presented in Tables 18 and 19. A considerable ability range within each group is reflected by the range of scores (Table 18) and test means and standard deviations (Table 19).

Table 18

Number of Portuguese Dominant Students Below and Above a Proficiency Score of Fifty Percent on the *English Through Pictures Test (ETP)*

ETP Test	Highest Possible Score	Testing Session	Obtained Score Range	Number of Students		Percent of Students Above Criterion
				Below Criterion	Above Criterion	
I - 1	100	Pre (N=16)	0 - 45	16	-	0
		Post (N=12)	0 - 100	4	8	67
A - II	100	Pre (N=16)	0 - 60	14	2	12
		Post (N=12)	0 - 97	3	9	75
F	100	Pre (N=30)	0 - 100	20	10	33
		Post (N=27)	0 - 100	14	13	48

Table 18 (cont.)

ETP Test	Highest Possible Score	Testing Session	Obtained Score Range	Number of Students		Percent of Students Above Criterion
				Below Criterion	Above Criterion	
Total		Pre (N=62)		50	12	19
		Post (N=51)		21	30	59

Table 19

Results of the English Through Pictures (ETP) Tests - Portuguese Dominant Students

Test	Testing Session	Raw Score $\bar{X}$	Raw Score S	t
Test I - (N=12)	Pre	6.2	11.0	7.073*
	Post	64.0	31.6	
Test A - II (N=12)	Pre	24.7	19.9	5.720*
	Post	74.7	29.8	
Test F (N=27)	Pre	38.3	40.6	1.037 (NS)
	Post	41.7	40.5	

* $p < .001$

The data indicated that the criterion of 75% of the Portuguese dominant students achieving a 50% proficiency score was not attained (see Table 18). However, more than half of the students did achieve criterion. When the test data were analyzed with t-tests, statistically significant gains were found for ETP tests I - 1 and A - II, but not for test F. One factor that may partially account for the difference in results between the Hartwell school (tests I - 1 and A-II) and the Watson and McDonough schools (test F) was that the ESL classes at the Hartwell were taught by ESL faculty (non-program personnel) of the school. These teachers were more experienced in teaching ESL, in using the ETP test and supplementary materials, and used the text and materials more rigorously than their counterparts at the other two schools. Of course, another factor to be considered is that the ETP test

F was a more difficult test and one on which the students would be less likely to show major gains. Nevertheless, discussions with the program's non-instructional personnel, including the program director, suggest that more attention be directed toward strengthening the ESL and PSL aspects of the bilingual program by coordinating the curriculum methods, activities, texts, and materials for the participating schools. In this regard, the evaluators recommend the hiring of an ESL coordinator.

Product Objective 5

> Fifth grade English speaking students will achieve an average percentile rank equivalent to the fifth grade students in the school who are not participating in the program on a battery of standardized achievement tests in Mathematics and Science.

Evaluation

Fifth grade English speaking students (the two bilingual classes and the comparison group) were pre and post-tested with the mathematics and science subtests from the Metropolitan Achievement Tests in October and May. Percentile equivalents for the two groups--the bilingual program's English dominant students and the non-program English dominant students at the McDonough school--were obtained by converting raw scores to standard scores, averaging the standard scores, and then converting the standard score average to its percentile equivalent. The results are presented in Tables 20 - 21 and Figures 9 and 10.

The minimum acceptable level of performance for the program's English dominant student group (the combined classes at the Watson and McDonough schools) was the achievement of a percentile rank equal to that achieved by the comparison group (the combined non-program classes at the McDonough school). The data presented in Table 20 indicate that the English dominant group had to attain the 50th percentile on the mathematics subtest and the 34th percentile on the science subtest in order to achieve the objective. The criterion level was not attained on either of the sub-tests by the English dominant group; furthermore, they show a slight decrease in percentile rank from pre to post-test in science. In converting standard score means to their percentile equivalents, "beginning of year" norms were used for the pretest and "end of the year" norms for the post-test. This requires higher standard scores on the post-test than on the pre-test to equal the same percentile ranks. Therefore, even though the English dominant group show an increase in their average standard score from pre-test to post-test, the increase was not large enough to equal the percentile rank obtained on the pre-test.

Table 20

Means and Percentile Equivalents for English Dominant Students and the Comparison Group on the Mathematics and Science Subtests from the Metropolitan Achievement Tests

Subtest and Group	Testing Session	Raw Score Mean	Standard Score Mean	Percentile
Mathematics				
English Dominant (N=26)	Pre	33.2	71.3	14
	Post	43.8	79.0	22
Comparison (N=37)	Pre	37.7	75.6	28
	Post	59.4	87.0	50
Science				
English Dominant (N=24)	Pre	21.5	65.5	14
	Post	24.5	68.1	10
Comparison (N=36)	Pre	24.1	67.4	16
	Post	36.6	77.3	34

The pre- post-test standard score mean differences on each subtest for both groups were also analyzed for statistical significance. The results of the t-tests are presented in Table 21 and show that the gains exhibited by both groups were statistically significant with the exception of the English dominant group in science. Factors that may have affected the performance of the English dominant students were 1) the program was in its first year of operation and placed more emphasis on the development and preparation of curricula and related materials for use with the Portuguese dominant students than it did for the English dominant students; 2) classroom visits were made to the Portuguese classes by the curriculum specialists to observe and advise the teachers on the use, methods, and activities associated with the curriculum; 3) the subject area curricula for the English dominant students consisted mainly of the same textbooks that were used in the public schools

(the teachers of the English dominant students thought that these texts were too advanced for use with their students necessitating the design and preparation of supplementary materials); 4) there was little interchange of ideas, activities, materials, etc. between the English dominant teachers (since they were located in different schools) and between the English dominant teachers and public school teachers in the same school. Nevertheless, the data strongly suggest that the program must focus more sharply on the curricular needs of the English dominant students. To strengthen the English dominant facet of the bilingual program, the evaluators suggest appointing a person to correlate and coordinate the activities, methods, and curricula for the English speaking students and teachers. It may be that the duties of the ESL coordinator previously recommended could encompass the needs noted above.

Table 21

Results of the Metropolitan Achievement Tests - Mathematics and Science Subtests - English Dominant Students and Comparison Group

Subtest and Group	Testing Session	Standard Score $\bar{X}$	Standard Score S	t
Mathematics				
English Dominant (N=26)	Pre	71.3	12.6	5.481*
	Post	79.0	8.6	
Comparison (N=37)	Pre	75.6	8.1	10.840*
	Post	87.0	7.6	
Science				
English Dominant (N=24)	Pre	65.5	9.1	1.651 (NS)
	Post	68.1	9.6	
Comparison (N=36)	Pre	67.4	11.4	6.327*
	Post	77.3	7.6	

* $p < .001$

Table 22

Results of the Metropolitan Achievement Tests - Mathematics and Science Subtests - English Dominant Students and Comparison Group by School

Subtest and School	Testing Session	Standard Score $\bar{X}$	S	Percentile	t
Mathematics					
Watson (N=16)	Pre	78.4	5.3	32	4.701*
	Post	82.8	7.1	36	
McDonough (N=10)	Pre	59.9	12.5	2	5.003*
	Post	73.0	7.4	10	
Comparison (N=37)	Pre	75.6	8.1	28	10.840*
	Post	87.0	7.6	50	
Science					
Watson (N=14)	Pre	70.0	7.1	22	2.869**
	Post	73.2	7.5	20	
McDonough (N=10)	Pre	59.2	7.9	6	0.501 NS
	Post	61.0	7.3	4	
Comparison (N=36)	Pre	67.4	11.4	16	6.327*
	Post	77.3	7.6	34	

* $p < .001$

** $p < .05$

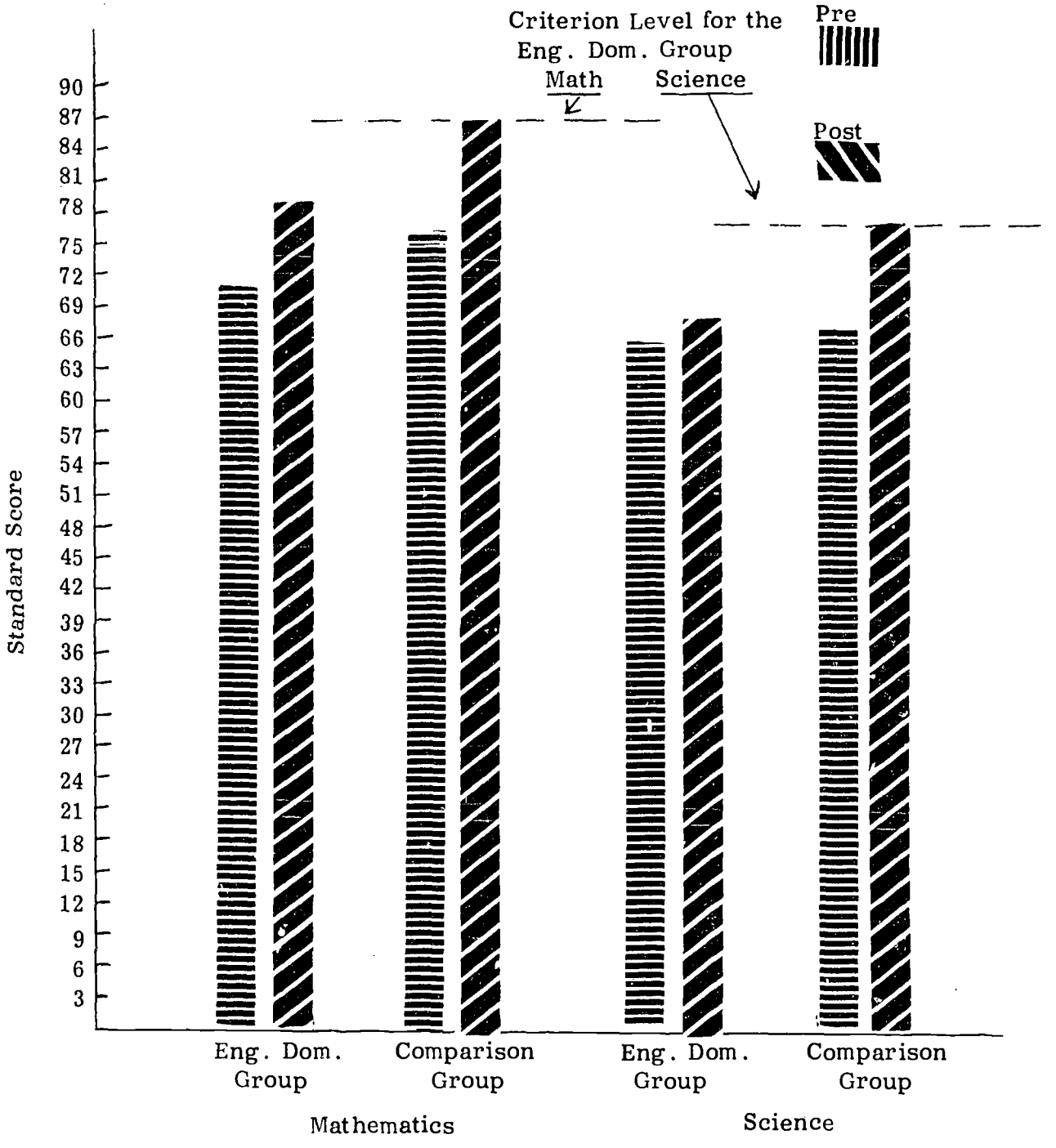

Figure 9: Pre - Post-test Standard Score Means for the English Dominant and Comparison Groups on the Mathematics and Science Subtests

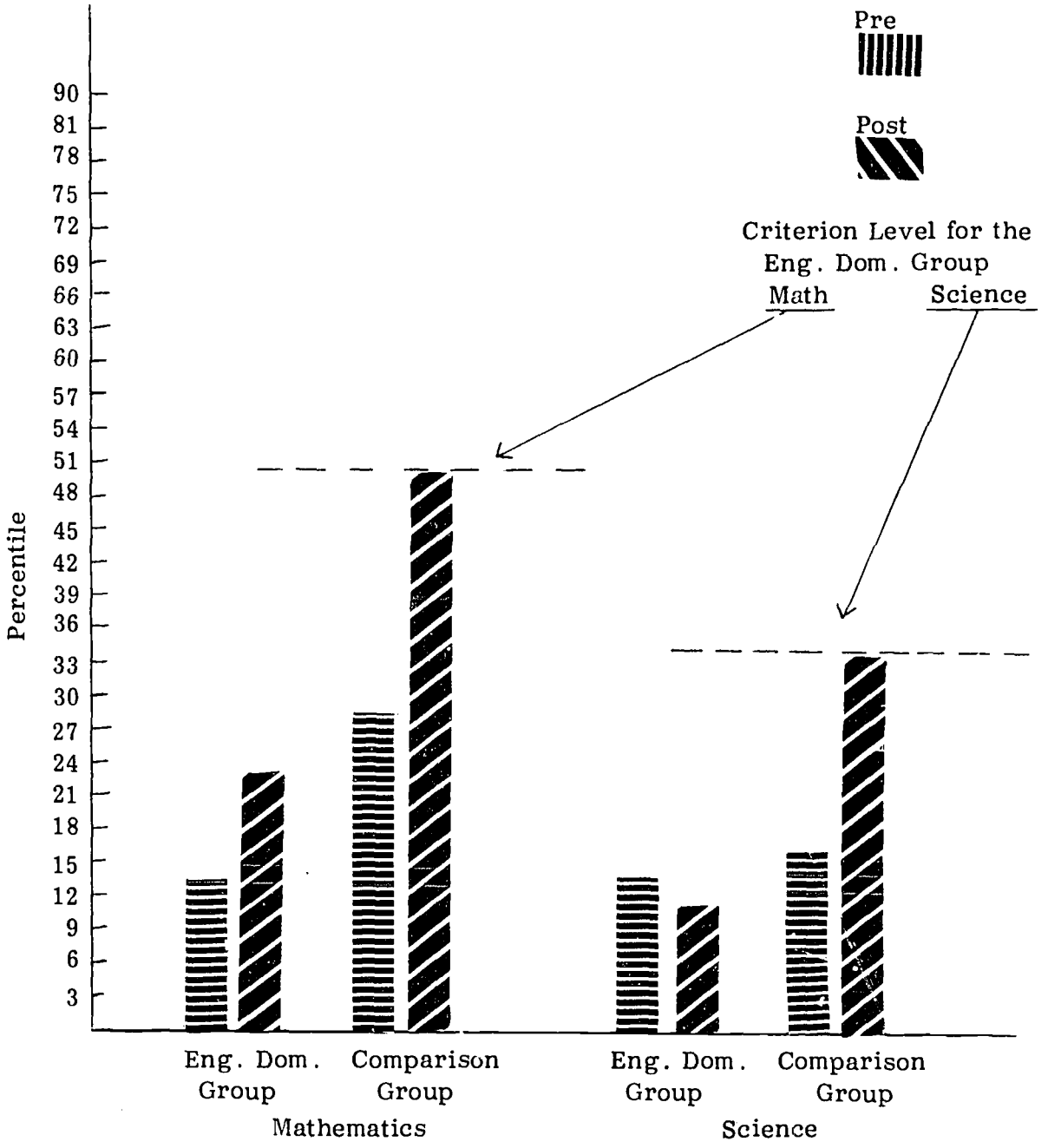

Figure 10: Pre- Post-test Percentile Equivalents for the Standard Score Means for the English Dominant and Comparison Groups on the Mathematics and Science Subtests

Table 22 presents the subtest results for the two separate English dominant bilingual classes and the comparison group. With the exception of the McDonough bilingual classroom in science, all groups made statistically significant achievement gains. In science, both bilingual classrooms show standard score gains. However, in both instances, when the average standard scores were converted to percentiles, they showed a drop in percentile ranking from pre to post-test. The data also suggest that the McDonough bilingual classroom may have been of lower academic ability than the Watson bilingual classroom. It is also interesting to note that the Watson bilingual class had slightly higher pretest scores than the comparison group on both subtests, but did not exhibit the same degree of achievement growth experienced by the comparison group.

The results for the comparison group, the English dominant group (the combined bilingual classrooms), and the Watson and McDonough bilingual classrooms separately are summarized graphically in Figures 11 and 12.

Product Objective 6

> Seventy-five percent of the fifth grade English speaking students will orally produce the major Portuguese grammatical structures and sounds (as identified by Portuguese language experts) as measured by a proficiency score of 50% on the special constructed Portuguese Oral Production Test.

Evaluation

The English speaking students were administered the Portuguese Oral Production Test in February and May. The instrument was developed by the evaluators to measure a students' ability to speak Portuguese as a second language. The test was administered individually to the students by the curriculum specialists and testing procedures were observed by the evaluators. (See the evaluation of Product Objective 3 for a more complete discussion of the Portuguese Oral Production Test.) Level 1 of the test was administered to the English dominant class at the Watson and level 2 to the class at the McDonough school. Different levels of the instrument were used at the two schools because the curriculum specialists believed that the McDonough class was the better PSL (Portuguese as a second language) class--the oral test data supported their opinion. The results are presented in Tables 23 and 24.

Examination of Table 23 reveals that by May approximately half of the students tested with level 1 and all of the students tested with level 2 achieved a proficiency score of 50% or better on the oral production test. Furthermore, the average

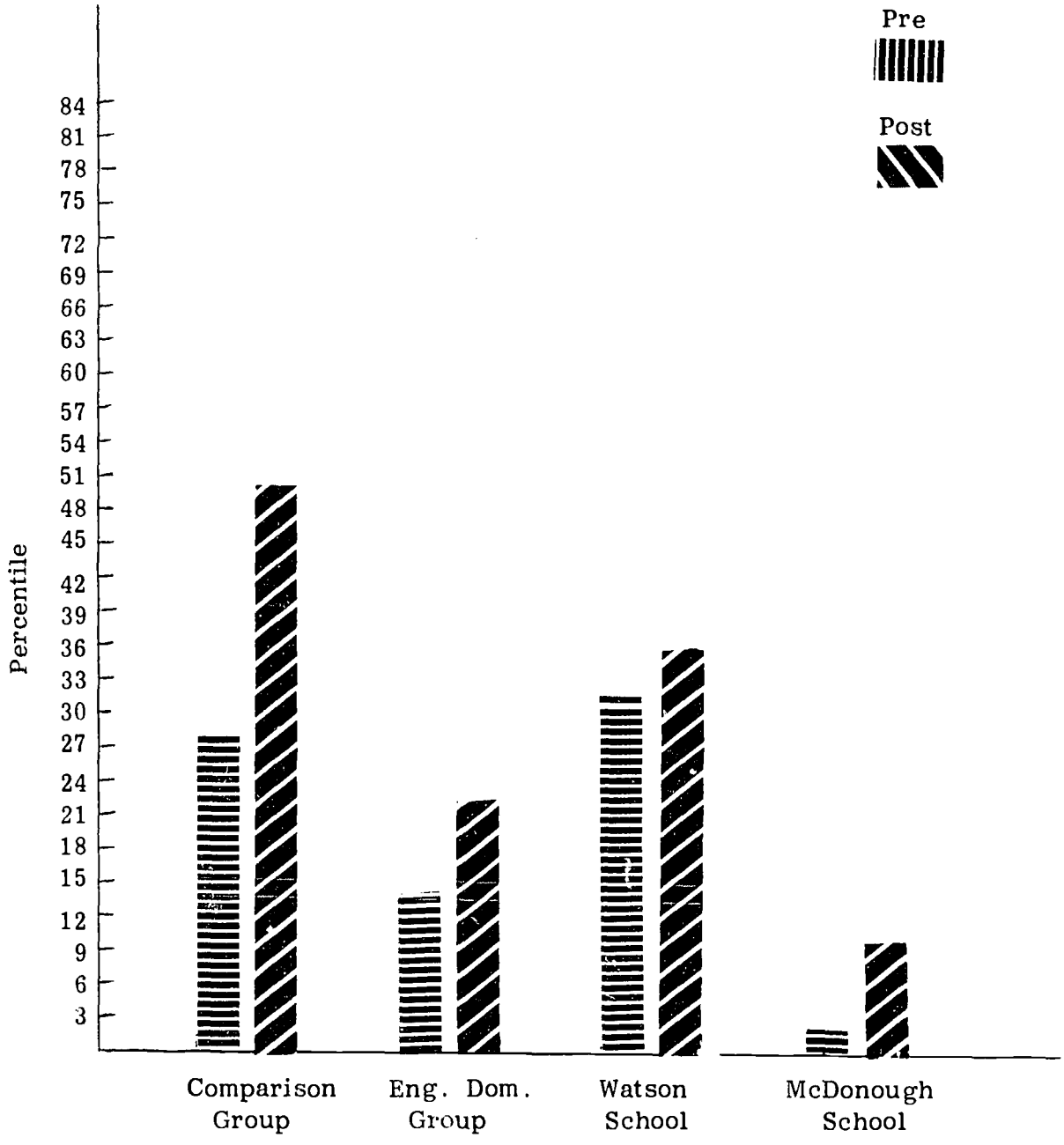

Figure 11: Pre - Post-test Percentile Equivalents for the Standard Score Means on the Mathematics Subtest for the Comparison and English Dominant Groups and the Watson and McDonough Schools

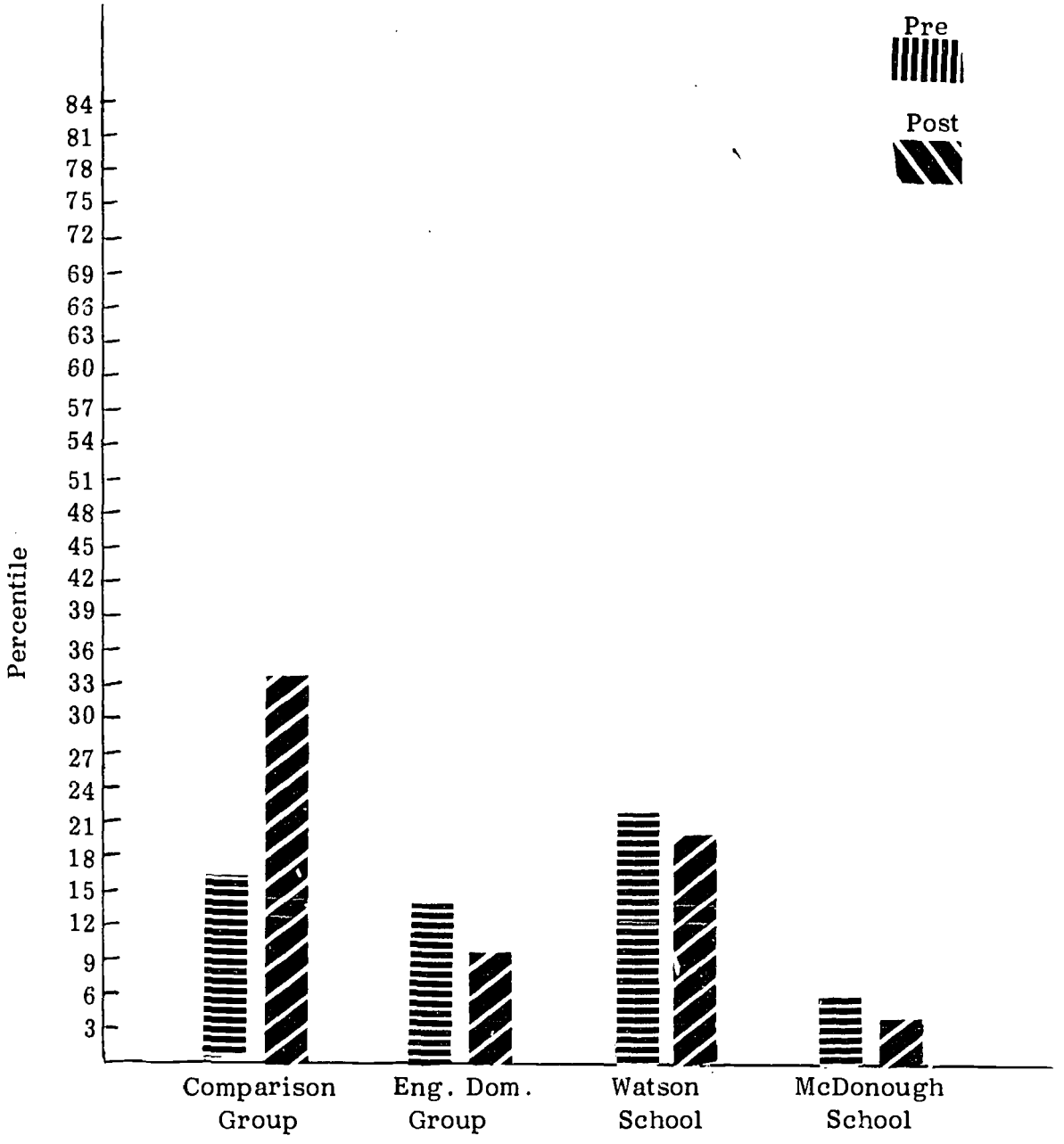

Figure 12: Pre - Post-test Percentile Equivalents for the Standard Score Means on the Science Subtest for the Comparison and English Dominant Groups and the Watson and McDonough Schools

Table 23

Number of English Dominant Students Below and Above a Proficiency Score of Fifty Percent on the Portuguese Oral Production Test

Test Level	Highest Possible Score	Testing Session	Obtained Score Range	Number of Students		Percent of Students Above Criterion
				Below Criterion	Above Criterion	
Level 1	37	Pre (N=16)	3 - 29	10	6	37
		Post (N=15)	6 - 33	7	8	53
Level 2	28	Pre (N=13)	17 - 21	-	13	100
		Post (N=13)	17 - 24	-	13	100
Total	-	Pre (N=29)	-	10	19	65
		Post (N=28)	-	7	21	75

achievement gains made by both classes were statistically significant (see Table 24). It must be noted that the McDonough class (level 2) was at criterion on the pre-test. However, the class did make a statistically significant gain in raw score from pre- to post-test. When the students attaining a score of at least 50% on the test in both classes are combined, the criterion of 75% of the English dominant students achieving a proficiency score of 50% on the Portuguese Oral Production Test was attained.

Table 24

Results of Portuguese Oral Production Test--English Dominant Students--by Test Level

Test Level	Testing Session	Raw Score $\bar{X}$	Raw Score S	t
Level 1 (N=14)	Pre	15.0	9.0	5.973**
	Post	19.4	8.6	
Level 2 (N=13)	Pre	18.5	1.2	3.308*
	Post	20.5	2.2	

* $p < .05$
** $p < .001$

Additional data was collected concerning the ability of the English dominant students to read in Portuguese. The instrument used was the Providence Portuguese as a Second Language Reading Test, 1971 edition. The test is one of a series of tests developed at Curriculum Research and Development Center, University of Rhode Island under a subcontract awarded to the University by the Providence (Rhode Island) Title VII Bilingual Program. The test assesses a student's ability to read and comprehend Portuguese. The instrument presents to the student a series of eight short paragraph stories each followed by four multiple choice items. Students were pre and post-tested in October and May. The results, measured against the 50% criterion as specified in objective 6, are presented in Table 25. Table 26 contains the results of the t-test applied to the data.

Table 25

Number of English Dominant Students Below and Above a Proficiency Score of Fifty Percent on the Providence Portuguese As A Second Language Reading Test

School	Highest Possible Score	Testing Session	Obtained Score Range	Number of Students		Percent of Students Above Criterion
				Below Criterion	Above Criterion	
Watson	32	Pre (N=19)	0 - 30	6	13	68
		Post (N=17)	18 - 32	-	17	100
McDonough	32	Pre (N=14)	2 - 20	11	3	21
		Post (N=13)	8 - 32	2	11	85
Total	32	Pre (N=33)	0 - 30	17	16	48
		Post (N=30)	8 - 32	2	28	93

Inspection of Table 25 indicates that both English dominant classes surpassed the stated objective criterion on the post-test. Also, the achievement gains exhibited by the two groups were statistically significant as evidenced by the data presented in Table 26. In this case, as opposed to the oral test results, more students in the Watson class than in the McDonough class scored above criterion on both pre and post-tests.

Table 26

Results of Providence Portuguese As A Second Language Reading Test - English Dominant Students - by School

School	Testing Session	Raw Score $\bar{X}$	S	t
Watson (N=17)	Pre	15.8	7.8	5.572*
	Post	24.9	5.2	
McDonough (N=11)	Pre	13.8	3.6	5.588*
	Post	26.4	7.7	

* $p < .001$

Product Objective 7

Fifth grade English and Portuguese speaking students will demonstrate increased social interaction indicated by a statistically significant increased frequency of contact between English and Portuguese speaking students as measured by a sociogram administered at least six months apart during the project year.

Evaluation

No attempt was made to measure this objective since there was little or no significant interaction between the English and Portuguese dominant students. This lack of student interaction was due to the exigencies associated with the implementation of the first year of the program such as enrollment, programming, hiring

of staff, and the demands of establishing curricula. However, in two of the participating schools, the mixing of classes in the academic areas for one or two periods per week was begun toward the end of February. In the third school, which contained no English dominant classes, one of the Portuguese dominant classroom teachers in conjunction with the Following Through teachers began mixing their classes for the purpose of promoting cultural and social awareness. This began in April and continued for the remainder of the school year. Nevertheless, although no data concerning the accomplishment of the objective is available this year, the evaluators believe that the intent of the objective is a desirable product of the program and it should be continued as one of the objectives of the program's second year of operation.

Process Objective 1

The curriculum specialists will prepare fifth grade Portuguese curriculum materials as needed by the teachers. The curriculum will include: 1) outline of topical areas, 2) written materials for each area of the outline, 3) major objectives for each area, 4) catalogue of materials: audio-visual, textbooks, workbooks, library books. The following subject areas will be included: Social Studies: American History; Portuguese History and Culture (in English also), Language Arts: Portuguese as a Second Language (oral), Reading, and Writing for dominant language. Science: dominant language and Portuguese as a second language. Math: dominant language and Portuguese as a second language. Evidence of attainment of the objective will be a file of materials accompanied by evaluations recorded on a specially prepared materials evaluation questionnaire.

Evaluation

Refer to the Materials Development section; objective MD-1.0; p. 110.

Process Objective 2

The program's teachers will know and understand the nature of their student's social-emotional problems, as evidenced by responses to interviews conducted by the evaluators using a specially prepared instrument. Evidence of success will be a 70% correct response to the items.

Evaluation

Refer to the Guidance section; objective G-3.0; p. 71.

Process Objective 3

The bilingual teachers will demonstrate increased knowledge of bilingual instructional materials as measured by Staff Development Specialist ratings, and self rating questionnaires. Evidence of increased knowledge will be an average gain of at least one unit on a 5 point scale.

Evaluation

Refer to the Staff Development section; objective SD-1.0; p. 54.

Process Objective 4

The bilingual teachers will utilize the new curricula developed by the curriculum specialists as evidenced by logs kept by teachers and the Staff Development Specialists as well as records of observation of the evaluator.

Evaluation

Refer to Staff Development section; objective SD-2.0; p. 57.

Process Objective 5

The bilingual teachers and aides will exhibit improvement in their teaching methods as measured by an increasing positive rating, throughout the school year, on an evaluator constructed rating scale used by the Staff Development Specialis Each teacher and aide will improve their rating in at least one area which was identified as weak at the beginning of the year.

Evaluation

Refer to Staff Development section; objective SD-6.0; p. 62.

STAFF DEVELOPMENT COMPONENT

Introduction

The Staff Development Component included six product and six process objectives which focused on developing the professional competence of the program staff. These objectives required the staff to increase their academic knowledge of such aspects of bilingual education as use of materials, evaluation, and instructional methodology. Staff training also included efforts to improve the staff's teaching methods in the classroom.

A staff development specialist was included in the project staff and, with the Project Director, was responsible for scheduling activities required to accomplish the objectives of this component. The staff development specialist regularly observed program classes to assess teachers' and aides' performance in the classroom, and met with them to discuss their instruction. Project staff participated in in-service sessions conducted at Brown University, by Project SPOKE, and in the Fall River School System.

Evaluation of Objectives

Objective SD-1.0

> The bilingual teachers will demonstrate increased knowledge of bilingual instructional materials as measured by staff development specialist's ratings and self-rating questionnaires. Evidence of increased knowledge will be an average gain of at least one unit on a five point scale.

Evaluation

The teacher's knowledge of bilingual instructional materials was rated by the curriculum specialists, rather than by the staff development specialist as stated in the objective, as part of their regular observation of program classes. Also, the non-instructional staff felt that, since they had constructed the materials and were, therefore, most familar with their intent and use, they were the most appropriate staff members to judge the teachers' abilities to use the materials.

An observation instrument specially designed by the evaluators and the specialists was constructed for their use in observing classes; three of its items rated the teachers' knowledge and use of materials. Table 27 reports for time periods before and after February the percentage of favorable ratings that teachers received on each of the three items. A comparison of the two sets of percentages indicates that the teachers demonstrated significant and highly positive knowledge of the materials at both times, and that a slight improvement in usage occurred, as reflected by the increase in percentage between ratings. The evaluators feel that objectives SD-1.0 can be rated as accomplished.

Table 27

Teachers' Knowledge and Use of Bilingual Materials

Quality	Before February			February-May		
	Number of Ratings	Favorable Ratings N	%	Number of Ratings	Favorable Ratings N	%
The teachers used materials to teach an appropriate skill.	43	39	91	52	51	98
The teacher implemented the materials correctly.	43	39	91	54	54	100
The teacher used the materials in sequence in the curriculum.	52	47	90	56	53	95

Objective SD-1.1

The bilingual teachers will participate in pre and in-service courses offered at Brown University and in Fall River.

Evaluation

Teachers participated in a variety of in-service activities: 1) Bilingual Institute at Brown University, 2) sessions offered by Project SPOKE, 3) monthly Fall River School System in-service meetings, and 4) informational sessions offered by several other individuals and groups. In-service at Brown University included a three week summer institute and four all day sessions during the program year. Five Title VII staff members attended the summer institute, which included classes in language instruction, bilingual education principles, linguistics, and curriculum development workshops. The same five Title VII members attended the four day-long sessions. The first conference, on November 11, 1972, was titled "Initiating a Fifth Grade Bilingual Curriculum" and included reports about the projects participating in the Institute, as well as workshops to discuss program instruction in Portuguese as a Second Language and linguistics, and to write Portuguese materials. The second conference, on January 20, 1973, was titled, "Developing a Bilingual Curriculum;" consultants spoke about bilingual education and teaching vernacular reading in the intermediate grades. Workshops included a discussion of the above topics, of programmed instruction in PSL, and individual or group writing of materials. The third workshop, "Bilingual Methods and Materials," was held on March 24, 1973, and focused on a discussion of ESL materials; workshops were also offered in programmed instruction in linguistics and P.S.L., and the preparation of second language and other materials. The activities of the fourth workshop, held on May, 1973 focused on the evaluation of the effect of the Institute on program participants; also presented were video tapes from the Bilingua/Bicultural Task Force of California

All project teachers and supporting staff attended workshops sponsored by Project SPOKE. Most staff members attended sessions at the Project SPOKE office. These week-long workshops focused on the preparation of individualized curriculum units, including specification of behavioral objectives, formulation of pre and post-tests, writing of exercises and narratives, and identification and preparation of audio-visual materials related to the unit's topic. A few teachers attended two sessions in March, 1973 held in Fall River; these focused on increasing the participants' knowledge of how to individualize curriculum materials, and especially the specification of behavioral objectives. A workshop of four half-day sessions for Title VII teacher aides was conducted by Project SPOKE in Fall River in June, 1973.

No formal in-service was conducted by the Fall River Bilingual Project. The staff attended the monthly Fall River Public Schools release time in-service sessions; some of these were devoted to activities related to the project, such as the completion of attitude questionnaires on December 14, 1973, an explanation of Materials Usage Forms on March 5, 1973, and distribution and explanation of the post-tests on May 8, 1973. However, the staff's attendance at the monthly sessions can be considered sufficient for the accomplishment of the objective. The

evaluators have discussed with the project director the possibility of scheduling formal in-service sessions organized by the Title VII staff for program teachers and aides, in addition to the Fall River Public Schools monthly release time. The project director reported that he plans to increase the number of such sessions during 1973-1974.

A number of participants attended other workshops. Day-long workshops were held at the Southeastern New England Bilingual Center at Rhode Island College on such topics as the analysis of Portuguese materials, comparative studies in Portuguese/English curriculum, and discussion of Portuguese tests. Also, some staff members attended sessions led by a consultant from Continuous Progress Laboratories about their use. In addition, Bristol Community College's Ibero-American Center presented a two-day symposium about the Portuguese of southern New England which several staff members attended. Furthermore, two staff members attended the TESOL Conference.

The evaluators rate objective SD-1.1 as being accomplished, but recommended the expansion of in-service in Fall River as a way to increase communication in the program.

Objective SD-2.0

> The bilingual teacher [illegible] utilize the new curricula developed by the curriculum specialists as evidenced by logs kept by teachers and the staff development specialist as well as records of observation of the evaluators.

Evaluation

The primary evidence of the accomplishment of this objective were records maintained by the curriculum specialists and the staff development specialist during their weekly visits to the classrooms, and the Materials Usage Forms completed by the program teachers. Table 28 summarizes the number and/or percentage of times, during each month from January to May, in which the curriculum specialists, teachers, and staff development specialist reported that the bilingual teachers were using materials. These data suggest that objective SD-2.0 was accomplished.

Table 28

Bilingual Teachers Use of New Curricula

Observer/ Reporter	Number of Observations	Frequency of Use	Percentage of Use
Curriculum Specialists	117	91	77
Teachers	-	53	-
Staff Development Specialist	66	39	59

Objective SD-2.1

The staff development specialist will serve as a liaison between teachers and curriculum specialists. She will meet with the teachers at least once a week and keep a log of her visits. Her effectiveness will be measured by positive comments during interviews with the teachers and the administration of questionnaires.

Evaluation

The staff development specialist visited the classrooms weekly and spoke with the teachers each time she visited the classroom. She discussed any problems they were encountering in instruction and offered suggestions for improving instruction. She also met with the curriculum specialists weekly to discuss her observations in the classes, to describe the teachers' use of materials, and to cite any difficulties they were encountering or additional materials they needed. In this way the staff development specialist served as a liaison between teachers and curriculum specialists, as required by the objective.

The effectiveness of the staff development specialist was indicated in informal interviews with the curriculum specialists and with the classroom teachers; all commented that she had successfully fulfilled the role described in the objective. The curriculum specialists indicated that they received sufficient feedback to

alter materials when necessary or to understand the level or types of materials required. The teachers indicated in post-program questionnaires that they had enough contact with the staff development specialist and that the specialist had helped them. Objective SD-2.1 was accomplished. The evaluators recommend that this objective be included in the 1973-1974 program year. Its impact on the teachers' performance is indicated by the accomplishment of the corresponding product objective. Serving as a link between teachers and curriculum specialists remains an important role of the staff development specialist.

Objective SD-3.0

> Teachers will show a substantial improvement in their knowledge of their rationale of testing and evaluation as related to the bilingual program, as measured by gains on mean raw scores on a specially prepared questionnaire.

Evaluation

An 18 item questionnaire was administered to program teachers and other staff in February, 1973 and May, 1973 to assess their knowledge of the rationale of testing and evaluation related to the Bilingual Program. The highest possible score was 18. Table 29 reports the t-test for uncorrelated data used to compare the two sets of scores; since the forms were completed anonymously in many cases the use of a t-test for correlated data was not possible. No statistically significant difference existed between the two sets of scores. This may be explained by the lack of process activities directed toward accomplishing this product. The evaluators feel, however, that the degree of knowledge of rationale of testing and measurement by the teachers is at a sufficiently high level to allow the exclusion of this objective from the 1973-1974 program.

Table 29

Comparison of February and May Raw Scores on the Evaluation Questionnaire with a t-test for Uncorrelated Data

	N	$\bar{X}$	SD	t	p
February	13	10.54	3.23		
				0.990	NS
May	13	9.08	3.97		

Objective SD-3.1

The evaluators will participate in at least three in-service programs during which testing and evaluation are discussed with the teachers.

Evaluation

The evaluators participated in two in-service meetings--one in December, 1972 and one in May, 1973. At the first, the program teachers and other staff members were informed about the purpose of attitude scales they were completing; at the second, post-tests were distributed and explained. No further discussions of testing and evaluation were scheduled. Since the first meeting was held before the pre-questionnaire was administered, the single session about evaluation between testings seems to have been insufficient to result in the accomplishment of the corresponding product objective. The partial accomplishment of objective SD-3.1 explains the lack of accomplishment of the corresponding product objective.

Objective SD-4.0

The bilingual teachers will evaluate the new curriculum materials developed by the curriculum specialists as measured by a specially designed checklist assessing the curricula.

Evaluation

Beginning in March, 1973 the project teachers completed the Materials Usage Form for all project developed materials they used. This form was distributed to the teachers in January, 1973. Lack of understanding concerning its use prevented its completion until March, when an in-service meeting was held specifically to explain the use of this form. The form required the teachers to report about such selected qualities of the materials as content, pictures, directions, and flexibility. An analysis of their responses is included in the evaluation of objective MD-1.0. Objective SD-4.0 was accomplished.

Objective SD-4.1

The staff development specialist will instruct the teachers in the use of the evaluation checklist on all curriculum materials. Their use and results will be reviewed in at least three in-service sessions.

Evaluation

Copies of the Materials Usage Form were distributed to each teacher individually in January, 1973 by the staff development specialist. At that time she briefly explained its use. This explanation, however, was not sufficient, since the teachers had many questions about how to complete the form. Therefore, an in-service meeting was held on March 5, 1973 to explain the use of the Materials Usage Form to the teachers.

No in-service sessions were held during the second part of the school year which included a discussion of the results of these forms. Therefore, objective SD-4.1 was only partially accomplished. The evaluators note the importance of reviewing the results of the checklists with the teachers as a group. It is true, of course, that the curriculum specialists considered the responses of the teachers in revising the materials. However, an indication that such revision occurred should be communicated to the teachers, so that they will continue to offer their cooperation in providing information about the materials. The evaluators recommend that Objective SD-4.1 be included in next year's program activities.

Objective SD-5.0

> The project staff will show empathy toward the problems of the children in the bilingual program as evidenced by a majority of positive responses on a specially designed attitude scale.

Evaluation

A Likert-type attitude scale was administered to all program staff in December, 1972 and May, 1973. This attitude scale included several items which, together, assessed the staff's empathy toward the problems of children in the bilingual program. A detailed discussion of the results of the attitude scale is included in an earlier section of this report. On the items of the scale which describe empathy toward program children's problems, the majority of the staff's responses both in December and May demonstrated positive attitudes. Objective SD-5.0 was accomplished.

Objective SD-5.1

> The staff development specialist and project director will identify and bring for discussions at the monthly staff meetings any pertinent topics and problems which may arise in the program.

Evaluation

Although few staff meetings were conducted by the project director and staff development specialist, any discussions held included pertinent topics and problems which arose in the program. The weekly meetings of the non-instructional staff focused on the discussion of problems in the program. Individual discussions between the staff development specialist and the teachers included discussions on problems they were encountering during instruction. Thus, although the objective was not accomplished exactly as specified, activities with the same purpose as those specified did occur. The evaluators feel that these activities contributed to the accomplishment of objective SD-5.0. The evaluators do note, however, the importance of accomplishing objective SD-5.1 as specified. The need for the teachers to communicate among themselves about problems they are encountering is essential to developing a cohesive program, especially since classes are located in several schools. Monthly staff meetings should be held during the next program year. Objective SD-5.1 was accomplished with different activities than specified.

Objective SD-6.0

> The bilingual teachers and aides will exhibit improvement in their teaching methods as measured by an increasing rating throughout the school year on an evaluator constructed rating scale used by the staff development specialist. Each teacher and aide will improve their rating in at least one area which was identified as weak at the beginning of the year.

Evaluation

Two rating scales--one to assess the teachers' and one to assess the aides' teaching methods--were constructed by the evaluators. These forms were completed monthly by the staff development specialist. Her ratings were based on data gathered during her classroom observations and from anecdotal records on the performance of teachers and aides. Teachers were rated on 40 desired behaviors, using a five-point scale representing the frequency of performance of a behavior. A mean rating was obtained for each teacher for each monthly evaluation by summing the ratings and dividing the sum by the number of ratings. Table 30 reports these data. In general, a trend toward increased positive ratings from January to May is indicated. Also, each teacher improved on several ratings from January to May, as shown in the last column of Table 30. These data suggest that objective SD-6.0 was accomplished by the teachers.

Table 30

Teacher Evaluation Ratings

Teacher Number*	Mean Rating January	February	March	April	May	Number of Improved Ratings January - May
1	3.90	3.70	4.18	4.47	4.44	20
2	3.21	3.15	3.18	3.98	3.73	20
3	3.28	3.50	3.82	4.25	4.10	27
4	3.50	3.50	3.73	4.10	4.25	23
5	3.18	3.35	3.65	4.00	4.28	35
6	3.35	3.33	3.75	4.65	3.93	29

* These numbers do not correspond to those presented in the Interim Evaluation Report.

Aides were rated on their frequency of performance of 25 behaviors which can be grouped into two categories: 1) instructional and 2) non-instructional (supervisory, materials preparation, and clerical). Mean ratings in each of these two categories were determined monthly for each aide by summing the ratings of the items in the category, and then dividing by the number of items in the category. Table 31 reports these data. Improvement in performance can be judged as an increased mean rating in the Instructional Category accompanied by a decreased mean rating in the non-instructional category. Table 31 suggests that some improvement in their performance occurred since the mean ratings in the instructional category increased. However, their mean ratings in the non-instructional categories also tended to increase. The evaluators believe that additional training for the aides would be appropriate, since training especially suited to their needs was not provided during 1972-1973. Discussions with the project director and staff development specialist indicate that staff development plans for 1973-1974 include provisions for such training. Table 31 also shows that all aides improved their ratings (increased rating for an instructional behavior, decreased rating for a non-instructional behavior) in at least one area. These data suggest that objective SD-6.0 was also accomplished for the aides.

Table 31

Aide Evaluation Ratings

Aide Number*	Mean Rating January	February	March	April	May	Number of Improved Ratings
			Instructional			
1	2.54	-	3.37	3.15	2.85	4
2	2.92	2.91	3.31	3.85	3.85	12
3	3.42	3.15	3.30	4.00	3.77	6
4	3.33	3.08	3.70	-	-	7
5	2.92	3.92	3.54	3.70	3.54	5
6	3.31	2.92	3.62	3.85	3.70	5
			Non-instructional			
1	2.33	-	3.17	3.25	3.25	1
2	2.64	3.00	3.50	3.83	3.75	1
3	3.00	3.00	3.58	3.83	4.09	0
4	2.75	3.42	4.27	-	-	0
5	2.50	3.08	3.75	4.58	4.17	0
6	3.73	3.33	4.18	4.17	4.17	1

* These numbers do not correspond to those presented in the Interim Evaluation Report.

Objective SD-6.1

The staff development specialist will work regularly to improve the teachers bilingual teaching methods. The specialist will meet every week with the teachers to discuss specific problems. More general problems will be discussed at the regular staff meeting. The specialist will keep a log of the activities on a daily basis.

Evaluation

The staff development specialist visited each classroom at least once during the week. During these visits she observed classroom activities and met with the classroom teachers to discuss any problems they were encountering during instruction or in the use of program materials. The specialist also met with the aides when appropriate, although the primary focus of her efforts were toward improving the instructional methods of the teachers. The staff development specialist also offered suggestions for improving the staff's instructional methodology. General problems were discussed at those staff meetings held. Objective SD-6.1 was accomplished.

The evaluators feel, however, that specific activities should be organized for improving the skills of the aides. Special in-service meetings which focus solely on discussions of their responsibilities and activities should be held. Although the activities performed in relation to objective SD-6.1 were sufficient to result in the accomplishment of the corresponding product objective, their scope should be expanded so that regular meetings which focus on instructional methodology are held for both teachers and aides. A review of the log maintained by the staff development specialist may indicate particular areas which should receive attention as part of staff training.

GUIDANCE COMPONENT

Introduction

The Guidance Component included four product objectives which related to the formulation of a guidance curriculum for fifth grade students and the regular counseling of program students. A series of process objectives contributed to the accomplishment of these product objectives. The Guidance Component activities were the responsibility of a guidance counselor. The counselor met with each program student in October, as a result of these interviews and of the recommendations of classroom teachers, he identified those students who required regular counseling assistance. In addition, he organized and maintained records on the needs, interests, and abilities of program students. His responsibilities also included meeting with the classroom teachers to obtain any referrals they had identified and to discuss the progress of the students he was counseling. The guidance curriculum was planned to incorporate activities related to the identified problems of the fifth grade students, and to consider the abilities, needs, and interests of this group.

Evaluation of Objectives

Objective G-1.0

The guidance counselor will identify the bilingual program students' needs, abilities and interests. These will be described in a written report to the director.

Evaluation

A written report was submitted to the project director in March, 1973. This report described the needs, abilities, and interests of the program students. Three needs of the group were identified: improved social interaction skills, increased health information, and additional vocational counseling. Interests of the immigrant child related closely to their abilities. Data for the report were obtained during interviews with program students, teachers, parents, and other relevant community members. The identification of needs, abilities, and interests was a preliminary step in the formulation in the guidance curriculum described in the evaluation of objective G-4.0. Objective G-1.0 was accomplished.

Objective G-1.1

The guidance counselor will organize a file for each child in the program. It will include his (her) test scores, grades, personal data, family background, etc.

Evaluation

The guidance counselor organized a file for each child in the program. This file included the student's scores on standardized achievement tests, unit tests administered by program teachers, and pre, intermediate, and mastery tests constructed and administered by the curriculum specialists. In addition, the students' grades, personal information, such as health records, and family background information, based on interviews with the students and information on the Parent Survey were included in the file. Objective G-1.1 was accomplished.

Objective G-2.0

The majority of students with socio-emotional problems as identified by the program teachers and guidance counselor will show improvement in behavior as measured by the Pupil Behavior Inventory. Evidence of gain will be any positive change of raw score on one of the four subtests or total scores.

Evaluation

The Pupil Behavior Inventory was completed by the classroom teacher for each student in the class in December, 1972 and May, 1973. This 28 item scale is composed of four subscales: Classroom Conduct, Academic Motivation and Performance, Socio-Emotional State, and Teacher Dependence. For each item on the Inventory the teacher indicated whether the student demonstrated the behavior "very frequently," "frequently," "sometimes," "infrequently," or "very infrequently." These ratings were transformed into a numerical scale ranging from five to one, with five representing a very frequent demonstration of a positive behavior, such as "shows initiative"--or a very infrequent demonstration of a negative behavior. The ratings for all items in a dimension are summed, yielding a dimension score between five and one, with five representing extremely desirable behavior and one representing extremely undesirable behavior.

The Classroom Conduct dimension is a twelve-item subscale which assesses the classroom behavior of a student by rating his behavior among other students

and his relationship to the teacher. Two examples of items on this scale are "resistant to teacher" and "aggressive toward peers."

The Academic Motivation and Performance dimension "focuses on the pupil's motivation toward and performance of academic tasks." This dimension includes such items as "hesitant to try, or gives up easily" and "uninterested in subject matter." The test manual notes: "although ratings of pupils on this dimension should correlate closely with course grades, experience suggests that the P.B.I. is more sensitive to teacher perceptions of change in student motivation than course grades."

The Socio-Emotional State dimension includes five items designed to assess the emotional and social adjustment of the student, especially his interaction with his peers. Items in this dimension include "friendly and well received by other pupils," and "isolated, few or no friends."

The fourth dimension assessed was Teacher Dependence, which provides a measure of the student's needs for reassurance from the teacher. This dimension contains only two items: "seeks constant reassurance" and "possessive of teacher." The manual suggests that this dimension successfully identifies withdrawn behavior. The evaluators note that in most cases where a program encourages a child to seek reassurance from a teacher, the scores from this dimension should decrease.

Tests for reliability and validity indicated that the Pupil Behavior Inventory meets the criteria for a reliable and measurable instrument. Reliability was determined using a modified split-half analysis by dividing in half randomly both the normal group and a malperforming group of students and then using a t-test to compare, within each group, the performance of the two halves. Only two of the 32 comparisons showed statistically significant differences, confirming the high reliability of the Inventory. The validity of the test was determined by comparing the performance of the group identified as normal and the one identified as malperforming on this test. The statistically significant difference between the performance of the two groups according to their ratings on the Inventory reflects its validity.

A comparison of the pre and post ratings was made with t-tests for correlated data for two groups of students: 1) all program participants and 2) those students with socio-emotional problems. Table 32 summarizes the results of these comparisons.

Although no statistically significant differences existed for students identified as having socio-emotional problems, they did demonstrate a positive change in raw score on the total score and on three subtest scores (including a decrease in

Table 32

Student Ratings on the Pupil Behavior Inventory

Score	$\bar{X}$ Pre	$\bar{X}$ Post	SD Pre	SD Post	t	p
	Students with Socio-Emotional Problems (N=16)					
Classroom Conduct	2.25	2.16	0.95	0.83	0.554	NS
Academic Motivation and Performance	2.09	2.33	0.81	0.70	1.233	NS
Socio-Emotional State	3.00	3.23	0.63	0.60	1.421	NS
Teacher Dependence	2.97	2.66	0.80	0.72	1.989	NS
Total	2.39	2.45	0.74	0.36	0.563	NS
	All Program Students (N=71)					
Classroom Conduct	3.64	3.51	0.61	0.71	2.006	< .05*
Academic Motivation and Performance	3.36	3.12	0.91	0.94	2.482	< .05*
Socio-Emotional State	3.86	3.73	0.46	0.38	2.039	< .05
Teacher Dependence	3.48	3.57	0.56	0.60	1.059	NS
Total	3.58	3.43	0.51	0.55	3.320	< .01*

*Statistically significant

teacher dependence score which is viewed as an improvement in teacher-student relationship.) The evaluators cannot rate Objective G-2.0 as accomplished because of the lack of statistical significance of the gains, however, the obvious trend toward improvement is noted and considered a positive achievement of the program.

The positive change, even with the absence of statistical significance, is especially noteworthy since the program students taken as a total group generally demonstrated less satisfactory behavior on the post-test than on the pre-test. Several of these decreases were statistically significant (see Table 32). Perhaps the implementation of the guidance curriculum during 1973-1974 will correct this situation.

Objective G-2.1

> The guidance counselor will provide counseling assistance bi-weekly to any child in the program that has been identified by the program teacher and guidance counselor as having social-emotional problems. The guidance counselor will keep a log of these sessions.

Evaluation

A review of the log of the guidance counselor and informal discussions with him indicated that initial screening of program participants was performed in October, 1972. As a result of this screening, a list of students requiring counseling assistance was formulated. Additions and modifications of the list occurred during the program year as a result of information received during the counseling of individual students and from discussions with classroom teachers.

The frequency of counseling assistance provided to children identified by the program teachers and the guidance counselor as having social emotional problems is summarized in Table 33. A review of this table indicates that while the absolute frequency of counseling sessions increased during the program year, the number of counseling sessions averaged less than two per month, or bi-weekly as required by the objective. Objective G-2.1 was partially accomplished. A more frequent performance of the process activities might have resulted in statistically significant changes in the students' ratings with the P.B.I. (see Table 32). The evaluators recommend that high priority students be counseled bi-weekly during the entire program year.

Table 33

Frequency of Counseling Sessions with
Students Identified as Having Socio-Emotional Problems

	Before February (4 months)*	February - May (4 months)*
Number of Students Counseled	6	11
Range of Total Number of Sessions for a Student	2 to 16	4 to 17
Total Number of Sessions for All Students**	42	68
Average Number of Sessions for A Student Per Month	1.75	1.55

* 4 months considered as 16 weeks

** One student was driven to school by the counselor and received informal counseling several times a week; for the purposes of this report, these meetings are considered to constitute a weekly session.

Objective G-3.0

The program teachers will know and understand the nature of the students' socio-emotional problems as evidenced by responses to interviews conducted by the evaluators using a specially prepared instrument. Evidence of success will be a 70% correct response to the item.

Evaluation

In February, 1973 and May, 1973 classroom teachers and the guidance counselor completed a written instrument which required them to identify those students with socio-emotional problems, to describe the nature and perceived cause of the problem and to list any action or progress made by the student.

A comparison of the responses of the teachers and guidance counselor were made for both measurement periods to determine if the teachers knew and understood the nature of their students' problems. Table 34 indicates that the teachers could correctly identify those students who had socio-emotional problems (95% in February and May). In addition, cases where both the counselor and teacher agreed that the student had a problem, they also agreed to a large degree (88% and 78% in February and May respectively) on the nature of the problem. Since both rates of agreement are greater than 70%, objective G-3.0 was accomplished.

Table 34

Comparison of Guidance Counselor's and Teachers' Responses on the Socio-Emotional Problem Form

	February		May	
	N	%	N	%
Number of Students Rated	95	-	111	-
Agreement on Existence or Non-Existence of Problem	90	95	105	95
Disagreement on Existence or Non-Existence of Problem	5	5	6	5
Number with Problems Identified by Counselor and Teacher	17	-	9	-
Agreement on Nature of Problem	15	88	7	78
Disagreement on Nature of Problem	2	12	2	22

Objective G-3.1

The guidance counselor will meet with program teachers bi-weekly to discuss any student's socio-emotional problems. A log of these meetings will be kept.

Evaluation

A review of the counselor's log and discussions with him indicate that he was available in the schools to meet with the teachers weekly. Depending on the number of problems within a class, his meetings with the staff may have been as frequent as weekly or as ir frequently as monthly or bi-monthly. Since objective G-3.1 was accomplished, this frequency of meeting with teachers seems to have been satisfactory. Objective G-3.1 was accomplished.

Objective G-4.0

By June, 1973 the guidance counselor will develop a bilingual counseling curriculum based on the needs of the project students.

Evaluation

A guidance curriculum was developed for the fifth grade counseling students. By June 1973 packets were prepared or were being prepared on the following topics: Social Interaction, Health and Hygiene, and Vocational Counseling. The units included objectives, activities, a pre-test and post-test, a resource bibliography, and audio-visual materials. Objective G-4.0 was partially accomplished.

Objective G-4.1

The guidance counselor will identify the bilingual program students' needs, abilities, and interests. These will describe in a written report to the project director.

Evaluation

Refer to the evaluation of Objective G-1.0 for the discussion of the degree of accomplishment of this objective.

Objective G-4.2

The guidance counselor will organize a file for each child in the program. It will include his (her) test scores, grades, personal data, family background, etc.

Evaluation

Refer to the evaluation of Objective G-1.1 for the assessment of the degree of accomplishment of this objective.

PARENT-COMMUNITY COMPONENT

Introduction

Objectives of the Parent-Community component focused on the involvement of parents of participating students' and of the community at large in activities related to the bilingual program, and on the dissemination of program information to the parents and the community. With these activities in mind, the parent-community coordinator planned, implemented, and coordinated all activities related to accomplishing the stated program objectives. Data related to the assessment of these objectives were obtained from the coordinator's files, discussions with the coordinator and the program director, and the administration of the Parent Survey instrument. In addition, demographic data obtained from the Parent Survey are also discussed.

The following activities were initiated by the coordinator to attain the objectives of the program: dissemination of program information through radio and press releases, an appearance on television, letters to parents, talks to students, group meetings with parents, speaking engagements, personal contact with community members and parents, formation of an advisory council, second language instruction for Portuguese and Anglo parents, and the administration of the Parent Survey instrument. The administration of the Parent Survey took a disproportionate amount of the coordinator's time--much more than originally planned; the coordinator found it necessary to administer the instrument on an individual basis instead of in a series of group meetings as originally scheduled.

Evaluation of Objectives

Objective P-1.0

> Parents will become involved with the bilingual program as evidenced by the formation of a parent-community advisory group by the end of the school year. It will consist of representatives of Portuguese and English parents, and other interested community leaders.

Evaluation

The plan for the formation of the advisory council for the Title VII bilingual program was to use the guidelines and regulations for establishing advisory councils as stated in chapter 71A, Massachusetts Transitional Bilingual Education Act as a model. In this regard, the director and coordinator attended a one-day workshop

on Parent Advisory Councils (PAC) sponsored by the Massachusetts Department of Education's Bureau of Transitional Bilingual Education. The workshop took place on February 7, 1973 in Wareham, Massachusetts.

The advisory council formed by the coordinator consists of seven people--three Portuguese parents, two anglo parents, and two community persons. Parents were selected from those who completed the Parent Survey instrument which was administered to parents of students participating in the program. The director and parent-community coordinator based their selection on four criteria: 1) interest in education, 2) interest in the bilingual program, 3) English language competency, and 4) potential leadership qualities. Community members were selected on the basis of their interest in education, interest in bilingual education, leadership qualities, and positive attitudes toward immigrants (and minorities).

Two meetings of the PAC were held--May 31 and June 12. The May 31st meeting was mainly for orientation and organizational purposes. The main agenda item for the June 12 meeting was the election of officers--President, Vice-president and Secretary. To aid the membership to prepare for this meeting, each member was mailed, a week in advance, material containing short biographical information on each PAC member and general background information on advisory councils. The two community representatives were elected president and secretary, and an anglo parent vice-president.

Objective P-1.1

> The parent-community coordinator will involve the parents and community by a) letters from the project, b) direct personal contact with the parents and community leaders, c) conducting group meetings, d) radio and television presentations, e) individual meetings, f) newsletter, g) meetings with other community groups, h) the bilingual program's Family Book.

Evaluation

Letters, in both languages, were sent to all parents inviting them to attend parental meetings. Letters and reminders were sent to parents of students attending the McDonough School on November 22, 27, 30, and December 4, 1972; to parents of Watson School students on November 29, December 2, 5, 7; and to Hartwell Street School parents on December 7 and 11, 1972. On February 5, 1973 letters, in both languages, were mailed to all parents informing them of the availability of courses for instruction in Portuguese and English and the course schedules. Also, on February 12, letters were mailed to all parents providing them general information about their child's progress in the program.

The coordinator and other members of the non-instructional staff (director, staff development specialist, guidance counselor) have met with parents individually. The coordinator has also met individually with such community leaders as the Catholic Bishop and Vicar General for Fall River, Bristol Community College personnel, Chamber of Commerce personnel, Shelburn Shirt Company representatives, PYCO Center Advisory Board, personnel director of Sacred Heart Academies, non-program school principals and teachers, the director of the Portuguese Hour (a radio program on station WGCY), the president of the Portuguese Times newspaper, and the news editor for the Herald News. The entire Title VII staff met many parents and community leaders at three festivals given by the Portuguese community on February 17 at St. Michael's Hall, March 3 at Temple Hall, and on April 21 at the Elks Hall.

The coordinator has held seven parent meetings--two at the McDonough School on November 30 and December 7; two at the Watson School on December 5 and 12; one on December 14 at the Hartwell Street School, and two at St. Michael's School on January 28 and February 4, 1973. He has talked to each class in the program--November 29 and December 6 (McDonough School), December 4 and 11 (Watson School), and December 13 (Hartwell Street). Additionally, he has held two PAC meetings--May 31 and June 12, 1973.

Articles about the bilingual program have been printed in local newspapers. Two articles appeared in the January 11, 1973 issue of the Portuguese Times--one in Portuguese and the other in English; two in the Providence Journal--July 2, 1972 and January 14, 1973; and two other articles in the Herald News--May 23 and 29, 1973. The coordinator has also spoken over radio station WGCY and has appeared on television Channel 6 concerning the Fall River Bilingual program. He has fulfilled speaking engagements before many community groups conerning bilingual-bicultural education: the Portuguese Community Involvement group (October 7, 21, 28, November 11, December 9, 1972, and after January, 1973), American Born Community Involvement group (October 10, November 7, 1972, January 9, February 13, March 13, 1973), the Portuguese-American Federation (October 22, with the director also present), the senior class at Bridgewater State College (November 7, director present), the teachers at Girls' Vocational School (November 16), the Chamber of Commerce (December 13, director present), and the PYCO Center Advisory Board (May 29, director and two staff members present). Furthermore, the coordinator was directly involved with Bristol Community College personnel in planning and organizing the Portuguese Spring Festival which was held on the BCC campus May 25-27 and at which the Title VII project had an exhibit booth. He met with the festival planning group on six occasions--March 20, 27, April 3, 10, 24, and May 1. Along with other representatives from the professional community the coordinator was invited by the vice-president of the Shelburn Shirt Company to participate in series of meetings to advise and assist the Company in implementing a second language (English) instructional program for its Portuguese employees. He attended two such meetings--May 22 and May 31.

The publication of the Bilingual Program's Family Book will not be accomplished this year. The Family Book is a novel attempt to foster community spirit by a "year-book" type of publication containing pictures of all families involved in the bilingual project. Contact was made with Bytell Associates of Valley Stream, New York concerning the Family Book by the parent-community coordinator. A meeting scheduled for February between the coordinator, director, and the Bytell representative had to be cancelled and was rescheduled for March 16, 1973. As a result of the meeting, the director decided that the cost would be to great for Bytell Associates to perform the work and that the program would construct their own Family Book next year. Also, the program's newsletter was not published this year, however, this remains one of the objectives for next year.

Objective P-2.0

> Both Portuguese and Anglo parents will demonstrate more positive attitudes toward bilingual and bicultural education as evidenced by 25% more positive responses from pre- to post-test using a specially prepared structured interview conducted by the parent-community coordinator.

Evaluation

A Parent Survey Instrument was constructed by the evaluators and the parent-community coordinator to obtain a measure of parental attitudes toward bilingual-bicultural education as well as to collect demographic information. To provide parents the opportunity to complete the instrument, the coordinator scheduled five night meetings during the four month period September through December. Two meetings each were held at the McDonough and Watson schools and one was held at the Hartwell Street School (McDonough: November 30, December 7; Watson: December 5 and 12; Hartwell: December 14). In addition, two Sunday afternoon meetings were scheduled on January 28 and February 4, 1973 at St. Michael's Church for parents from all three schools. Parents were notified of all meetings through notices, in both languages, sent home by the students. These meetings were not successful in attracting parents. From those parents who did attend, however, the coordinator found that most of them required a great deal of individual attention to complete the instrument. Because of these two facts--poor attendance and the need for individual attention--the coordinator engaged in arranging day, evening, and weekend appointments to administer the instrument on an individual basis to remaining parents. With the help of community aides from the Information and Referral Center, the coordinator completed the Survey administration by early March. (The Information and Referral Center is sponsored by the Portuguese Youth Cultural Organization and is funded by the Campaign for Human Development, Washington, D.C. Subsequent to the completion of the Survey, the aides have been useful in disseminating program information to Portuguese parents.)

The Survey was completed by 92 parents--71 Portuguese and 21 Anglo. This number is less than the number of students participating in program (111) because some parents had more than one child in the program and a few parents were not contacted because of inaccurate addresses. Because of the time taken to complete the administration and the time required for individually administering the Survey. no post-testing of parent attitudinal changes toward bilingual education was attempted by the coordinator. Therefore, the objective was changed to read--both Portuguese and Anglo parents will demonstrate positive attitudes toward bilingual-bicultural education as evidenced by a majority of positive responses on a specially prepared Parent Survey instrument administered by the parent-community coordinator.

A large majority of both groups of parents held the opinion that bilingual education was good for their children, and that it was both useful and desirable for their children to learn Portuguese in school. The two groups had differing opinions concerning the desirability of their children studying their academic subjects in Portuguese; nearly all the Portuguese parents thought that it was desirable as opposed to only approximately one-third of the Anglo parents.

The majority of parents thought that participation in the bilingual program would enrich the lives of their children and expected them to gain from the program such benefits as--a good education, development of language skills, increased understanding of immigrant groups, and the ability to communicate with one another. (The responses of the Anglo parents--their desire to understand and communicate with immigrant groups, the usefulness and desirability of learning Portuguese, but not to the extent of studying their academic subjects in Portuguese--may suggest that a preference for a transitional approach toward bilingualism rather than the Title VII bilingual method.) Furthermore, most parents (particularly Portuguese parents) did not think that bilingual education would slow down the "Americanization" process of participating Portuguese dominant students. However, approximately half of the Portuguese parents and slightly more than half of the Anglo parents indicated that they thought the Portuguese dominant children would get more out of the program than the English dominant students; and slightly less than half of both parent groups were of the opinion that participating English dominant students would keep up academically with their non-program peers.

In sum, parental responses to the items on the Survey instrument that dealt with opinions toward the bilingual program generally indicate a positive attitude toward bilingual-bicultural education. (For a complete discussion of the Parent Survey Instrument see the following section titled "Demographical and Sociological Survey Results.)

Objective P-2.1

The parent-community coordinator will involve the parents and community by (a) letters from the project, (b) direct personal contact with the parents and community leaders, (c) conducting group meetings, (d) radio and television presentations, (e) individual meetings, (f) newsletter, (g) meetings with other community groups, (h) the bilingual program's Family Book.

Evaluation

Refer to the evaluation of objective P-1.1 for the discussion of the degree of accomplishment of this objective.

Objective P-3.0

At least two articles will appear concerning the bilingual program in the Fall River Newspapers during the year.

Evaluation

Six articles concerning the Fall River bilingual program were published in local newspapers. The Providence Journal published two articles--one on July 2, 1972 and the other on January 14, 1973. Two different articles, one in Portuguese and one in English, appeared in the January 11, 1973 edition of the Portuguese Times. Also, two issues of the Herald News--May 23 and May 29, 1973--contained articles about the bilingual program.

Objective P-3.1

The parent-community coordinator will arrange with the Fall River newspapers to publish at least two articles which the coordinator and/or others may prepare.

Evaluation

The coordinator and others wrote and had published six articles about the Fall River bilingual education. Five of the articles were written in English and one was written in Portuguese. The articles were in the Herald News, the Providence Journal, and the Portuguese Times.

Objective P-4.0

The bilingual program will become more valued, during the year, by the community at large as evidenced by the receipt of at least four invitations to staff members to speak about the program.

Evaluation

The parent-community coordinator received and accepted invitations to speak about the bilingual program from twelve community groups. They were as follows: six different subgroups of the Portuguese Community Involvement Group on October 7, 21, 28, November 11, December 9, 1972 and January 27, 1973; five subgroups of the American Born Community Involvement Group--October 10 and November 7, 1972, January 9, February 13 and March 13, 1973; and the teachers' association of the Girl's Vocational School on November 16, 1972. In addition, four invitations were extended to and accepted by the program director and the coordinator from the Portuguese-American Federation (October 22, 1972), the senior class at Bridgewater State College (November 7, 1972), the Chamber of Commerce (December 13, 1972), and the PYCO Center Advisory Board (May 29, 1973). All speaking engagements were fulfilled.

The coordinator received many invitations from diverse groups and organizations which he could not accept because of conflicting dates. However, the number of invitations received and the number of fulfilled speaking engagements suggests an awareness of and interest in the bilingual program by the community.

Objective P-4.1

The parent-community coordinator will involve the parents and community by (a) letters from the project, (b) direct personal contact with the parents and community leaders, (c) conducting group meetings, (d) radio and television presentations, (e) individual meetings, (f) newsletters, (g) meetings with other community groups, (h) the bilingual programs' Family Book.

Evaluation

Refer to the evaluation of objective P-1.1 for the discussion of the degree of accomplishment of this objective.

Objective P-5.0

Portuguese and Anglo parents will show interest in the other language and culture as evidenced by 25% of the parents taking instruction in the second language and attending 50% of the classes.

Evaluation

On February 5, 1973 letters were mailed to all parents informing them of the English and Portuguese second language classes. The letters were written in both Portuguese and English. Enclosed with each letter was a class schedule for the courses offered by the bilingual program and by the Fall River school system.

The results of the Parent Survey show that approximately two-thirds of the Portuguese parents indicated an interest "in going to classes to learn the English language and American culture" and approximately 9% of the Anglo parents expressed an interest "in taking a course in Portuguese language and culture." However, only six parents enrolled in the courses offered by the program and all six parents were Portuguese; thus the criterion as stated in the objective was not attained. According to the coordinator the six parents were very regular in their attendance although no formal records were kept. He also stated that five of the parents attended the English second language classes nights at St. Michael's School (which was open to the community and not just to parents of students participating in the bilingual program,) and one parent attended days at the Academy Building (which was limited to only parents of students in the program).

Objective P-5.1

Second language instruction in both Portuguese and English will be held in the afternoon or evenings in the Spring.

Evaluation

The schedule for the second language classes was as follows: English as a second language--Monday and Wednesday mornings at the Academy Building from 9:30 to 11:30 a.m.; and Monday and Wednesday evenings at St. Michael's School from 7 to 9 p.m.; Portuguese as a second language--Tuesday and Thursday mornings from 9:30 to 11:30 a.m. Since no Anglo parents enrolled in the Portuguese language class, the day time English language class at the Academy Building was changed from Monday and Wednesday to Tuesday and Thursday mornings in April. The classes at the Academy Building began on March 20, 1973 and were limited to parents of students in the bilingual program; the class at St. Michael's School,

which began in September, was sponsored by the Fall River school system and was open to the community. The parent-community coordinator was the instructor for both classes, i.e., Portuguese and English as second languages.

Demographic and Sociological Survey Results

Introduction

The parents of the children in the bilingual program were asked to complete a questionnaire designed to gather information concerning 1) selected dimensions of their sociological background, 2) their language dominance, 3) their perceptions of education and 4) their perception of community problems.

The questionnaire, written in both English and Portuguese was administered once during the program. The parent-community coordinator scheduled seven parent meetings for administration of the Survey during the first part of the school year. These meetings, however, were not successful in attracting parents, but from those who did attend, the coordinator found that parents needed individual attention to complete the instrument. Accordingly, the coordinator engaged in scheduling day, evening, and weekend appointments to individually administer the Survey to the remaining parents. The coordinator completed the task in early March with the help of the community aides from the Information and Referral Center.

Ninety-two parents completed questionnaires. Of this number, 71 categorized themselves Portuguese and 21 said they were Anglo.

The discussion of the responses to this questionnaire is presented in four sections as follows: Sociological Background, Language Dominance, Perceptions Concerning Education, and Perceptions Concerning Community Problems. The discussion concludes with a brief summary of the major findings reported in each section.

Sociological Background

The sociological information elicited by the questionnaire concerned the ages, occupations, number of children, places of residence, and educational levels of the respondents.

Age. Table 35 displays the ages of the Portuguese and Anglo parents within selected categories. Analyses of this table indicates that the ages of the Portuguese and Anglo parents were quite similar. The ages of both groups ranged from 26 to over 51 years. Moreover, more than one-half of both sets of parents were between 31 and 45 years old. Median ages, however, were slightly different. Anglo wives were, on average, 5 years younger than Portuguese wives and 10 years younger than Portuguese husbands. Anglo husbands were 5 years younger, on average, than Portuguese husbands. Both Portuguese and Anglo wives were 5 years younger, on average than their husbands.

Table 35

Ages of Parent Groups

	Ages						
	26-30	31-35	36-40	41-45	46-50	51 +	Median
Portuguese							
Husband (N=69)	-	6	16	21	11	15	43
Wife (N=71)	1	12	26	14	9	9	38
Anglo							
Husband (N=18)	1	3	6	7	-	1	38
Wife (N=19)	4	7	4	3	1	-	33
TOTAL (N=177)	6	28	52	45	21	25	43

Occupations. Table 36 shows the occupations of the parent groups within selected categories. Inspection of Table 36 indicates that there are noticeable differences in the occupational patterns of the Portuguese and Anglo parents. For example, almost one-half of the Portuguese husbands and more than half of the Portuguese wives are factory employees. In contrast, only one ninth and one fourth of the Anglo husbands and wives, respectively, are factory workers. It is also interesting to note that only one Portuguese husband out of 66 (less than 2%) could be categorized as a skilled worker while 5 out of 18 Anglo husbands (28%) were so classified. Moreover, of the seven unemployed parents all are Portuguese. It seems reasonable to conclude that the Anglo parents, for the most part, enjoyed higher level occupations than the Portuguese parents.

Table 36

Occupations of Parent Groups

	Portuguese		Anglo	
	Husband (N=66)	Wife (N=71)	Husband (N=18)	Wife (N=20)
Construction	16	-	6	-
Skilled	1	-	5	2
Semi-skilled	8	4	4	4
Unskilled	5	5	1	2
Factory	30	38	2	5
Housewife	-	23	-	7
Unemployed	6	1	-	-

Children. Tables 37 and 38 display information concerning the number of children in the Portuguese and Anglo families and the extent to which these children play with other Portuguese-speaking children.

Examination of Table 37 reveals that Portuguese and Anglo parents have, on the average approximately the same number of children; 5.2 and 4.7 children respectively. Inspection of the percentages displayed in Table 38 also indicates little differences in the preference for playmates of the children of Portuguese and Anglo parents. The majority of both sets of children play with Portuguese-speaking children a good deal of the time. It is important to note, however, that nearly one-fifth of the Anglo parents' children never play with Portuguese speaking children while the opposite is not true.

Residence. Table 39 shows the number of years the parent groups lived in the Fall River area. Table 40 displays the percentage of Portuguese and Anglo parents by city or town of origin.

Table 37

Frequencies and Percentages of Children of Portuguese and Anglo Parents

	Number of Children								
	0 - 3		4 - 6		7 - 10		10+		$\bar{X}$
	N	%	N	%	N	%	N	%	
Portuguese (N=65)	14	22	33	50	17	26	1	2	5.2
Anglo (N=19)	5	27	11	57	2	11	1	5	4.7

Table 38

Extent To Which Children of Parent Groups Play With Other Portuguese Speaking Children

	Portuguese (N=71)	Anglo (N=21)
All of the Time	25*	29
Most of the Time	37	29
Some of the Time	37	23
Never	1	19

*Table values are percentages

Inspection of Table 39 reveals little or no differences between husbands and wives within both groups in terms of the length of time they have lived in the Fall River area. Differences between the Portuguese and Anglo groups, however, were large. For example, about one fourth of the Portuguese husbands and almost one third of the Portuguese wives lived in the Fall River area for less than one year. In contrast, only 6% and 11% of the Anglo husbands and wives could be included in this category. Moreover, only 13% of the Portuguese husbands and 7% of the wives resided 5 years or longer in the Fall River area. Again, in sharp contrast, 35% and 44% of the Anglo husbands and wives respectively lived in the area five or more years.

Table 39

Number of Years Parent Groups Lived in Fall River

	Portuguese		Anglo	
	Husband (N=67)	Wife (N=66)	Husband (N=17)	Wife (N=18)
0 < 1	25*	30	6	11
1 < 5	62	63	59	45
5 < 10	11	7	6	11
10 +	2	-	29	33

*Table values are percentages

Analyses of Table 40 indicates quite clearly that the vast majority of both parent groups emigrated from San Miguel. The issue of which native countries the group has emigrated from is important to the Portuguese community because of the influence of different cultural modes and traditions. Such factors are important to consider in establishing proper relationships with the parents.

Table 40

Native Cities of Parent Groups

	Portuguese		Anglo	
	Husband (N=67)	Wife (N=68)	Husband (N=8)	Wife (N=9)
S. Miguel	93*	91	75	78
Other**	7	9	25	22

* Table values are percentages

** Other includes: Almada (2), Angola (2), Lisbon (2), Arcos de Valderez (1), San Paulo (4), Cape Verde (1), Praira Victoria Teaceira (2)

Education. Table 41 reports the amount of schooling completed by the husbands and wives of each group. None of the Portuguese husbands or wives had any schooling in the United States. Further, the education received by these parents outside of the United States was, for the most part, limited to the elementary years 1a - 6a. Indeed, 70% of the Portuguese wives and nearly one-half (46%) of their husbands accrued less than four years of schooling in the Portuguese system.

Analysis of the Anglo parents schooling reported in Table 41 reveals that more than one-half of the Anglo husbands and two thirds of the Anglo wives received some schooling in the United States. Indeed, one half of the wives had attended American schools for at least 10 years, as compared to only 6% of the husbands. Also, 6% of the Anglo husbands had some college training. Interestingly, 38% and 33% of the Anglo husbands and wives respectively attended elementary school (1a and 6a) in Portugal. Thus, it appears that the Anglo parents had, in general, a more formal education than the Portuguese parents.

Table 41

Educational Levels of Parent Groups

	Portuguese		Anglo	
	Husband (N=39)	Wife (N=47)	Husband (N=16)	Wife (N=18)
USA Schools				
4 - 6	-	-	31*	6
7 - 9	-	-	13	11
10 - 12	-	-	6	50
College	-	-	6	-
Portuguese Schools				
1a - 3a	46	70	25	16
4a - 6a	48	28	13	17
7a - 8a	-	-	-	-
1o - 3o	6	-	-	-
4o - 7o	-	2	6	-
University	-	-	-	-

*Table Values are Percentages

Language Dominance

This section of the report presents information concerning: 1) the extent of bilingualism of the Portuguese and Anglo parents, and 2) the language preferences of these parents and their families.

Extent of Bilingualism. Table 42 displays the extent of bilingualism of the Portuguese and Anglo husbands and wives.

Table 42

Extent of Bilingualism of Parent Groups

	Portuguese		Anglo	
	Husband (N=68)	Wife (N=69)	Husband (N=17)	Wife (N=20)
Portuguese				
My native language	77*	80	29	30
Speak it well	18	16	24	25
Do not speak it well	4	1	-	5
Cannot speak it at all	1	3	47	40
English	(N=69)	(N=70)	(N=17)	(N=18)
My native language	-	-	35	39
Speak it well	1	-	18	17
Do not speak it well	16	4	35	11
Cannot speak it at all	83	96	12	33

*Table values are percentages.

As expected, all but 5% and 4% of the Portuguese husbands and wives respectively claim that Portuguese is either their native language or that they speak it well. (One must question the responses of those Portuguese parents who indicated they cannot speak Portuguese at all, and attribute the response to error in either understanding the question or classification of the parent into that group.) Again, as might be expected, all of the Portuguese wives and all but 1% of their husbands either do not speak English well or cannot speak it at all. Clearly, the Portuguese parents are not bilingual.

Analysis of the Anglo parents' responses reveals that nearly one-third of both the husbands and wives claim that Portuguese is their native language and slightly more than one third of each of these groups say English is their native language. Less than one-half of the Anglo husbands and 40% of their wives cannot speak Portuguese at all. Only 12% and 33% of these groups respectively cannot speak English at all. It appears that the Anglo parents are substantially more bilingual than the Portuguese parents. Additional evidence to support the conclusion is provided in Table 43. Nearly two thirds of both the Anglo husbands and wives never use their children or other people as interpreters as opposed to 10% and 5% of the Portuguese husbands and wives respectively. Indeed, while more than three-fourths of the Portuguese parents "frequently" or "sometimes" use interpreters, only 33% and 42% of the Anglo husbands and wives respectively do likewise.

Table 43

Extent to Which Parent Groups Use Their Children or Other People as Interpreters

	Portuguese		Anglo	
	Husband (N=68)	Wife (N=70)	Husband (N=18)	Wife (N=20)
Frequently	53*	56	22	26
Sometimes	30	32	11	16
Rarely	7	7	6	-
Never	10	5	61	58

*Table values are percentages

Language Preferences. Table 44 displays the language preferences of the parent groups at home, with their children, and with other adults. Analysis of the percentages displayed in Table 44 indicated quite convincingly that the Portuguese parents use mostly Portuguese or only Portuguese at home, with their children, and with other adults. This is especially true for the Portuguese wives. A small percentage of the Portuguese husbands, however, do use some English when dealing with other adults.

The pattern of language preference of the Anglo parents is markedly different from that of the Portuguese parents. Surprisingly, however, the use of Portuguese by these "Anglo" parents is not as limited as might be expected. Approximately one-third of both the Anglo husbands and wives speak only Portuguese at home, with their children, and with other adults. In addition, another 10% to 17% of these parents use half Portuguese and half English in these situations. Only about one half of the Anglo parents speak "English only" at home, with their children and others.

It seems clear that Portuguese is the language most often used by the Portuguese parents at home, with their children, and with other adults. The Anglo parents appear to split into at least two and possibly three groups in terms of language usage. About half speak English only; another third speaks Portuguese only, and the rest prefer a blend of mostly Portuguese to half Portuguese-half English in these situations.

When asked, "What language do you need most in your daily life?," 90% of the Portuguese husbands and 80% of the wives agreed that English was the language they needed most. (Table 45 displays this information.) It appears that in spite of the almost exclusive use of the Portuguese language by the Portuguese parents at home, with their children, and with other adults, these parents perceive the English language as the language they need most in their daily lives. This conclusion is supported by the percentages presented in Table 46. Nearly three fourths of the Portuguese husbands and two thirds of their wives said they would be interested in attending classes to learn the English language and American culture.

The perceptions of the Anglo parents concerning their ability to speak Portuguese, however, are somewhat opposed to those of the Portuguese parents concern for English. Examination of Table 47 shows that nearly two thirds of the Anglo husbands and one half of the Anglo wives agreed that it would be useful for them to speak Portuguese. Eighty-nine percent and 78% of the Anglo husbands and wives respectively, however, said they would not be interested in taking a course in Portuguese language and culture.

Table 44

Language Preferences of Parent Groups*
At Home, With Their Children, and With Other Adults

	At Home				With Their Children				With Other Adults			
	Portuguese		Anglo		Portuguese		Anglo		Portuguese		Anglo	
	Husband	Wife	Husband	Wife	Husband	Wife	Husband	Wife	Husband	Wife	Husband	Wife
Portuguese Only	96**	98	33	35	99	99	28	35	91	99	28	35
Mostly Portuguese	3	1	6	-	1	1	5	-	5	1	6	-
Half Portuguese and Half English	1	1	11	10	-	-	17	10	3	-	16	10
Mostly English	-	-	6	5	-	-	-	-	1	-	-	-
English Only	-	-	44	50	-	-	50	55	-	-	50	55

*Portuguese
Husbands (N=69)
Wife (N=70)

Anglo
Husband (N=18)
Wife (N=20)

** Table Values Are Percentages

Table 45

Language Preference of Portuguese
Parents to Meet Daily Needs

	Husband (N=68)	Wife (N=69)
Portuguese	10*	16
English	90	84

*Table values are percentages.

Table 46

Percentages of Portuguese Parents Desiring to
Learn the English Language and American Culture

	Husband (N=66)		Wife (N=69	
	YES	NO	YES	NO
Would you be interested in going to classes to learn the English language and American Culture?	73%	22%	64%	36%

Table 47

Perceptions of Anglo Parents Concerning Ability
To Speak Portuguese

	Husband			Wife		
	N	YES	NO	N	YES	NO
Would it be useful for you to speak Portuguese?	8	63%	37%	10	50%	50%
Would you be interested in taking a course in Portuguese language and culture?	9	11%	89%	9	22%	78%

Perceptions Concerning Education

This section contains data concerning: 1) parents' perceptions of the value of schooling for their children, and 2) parents' perceptions of the benefits their children receive as participants in the Bilingual Program.

Value of Schooling. In discussing the value of schooling to the Fall River parents, it seems important to first consider how these parents defined "the good life" and then relate the expected benefits of attending school to these "definitions." Table 48 presents frequency distribution of each parent sub-group's perceptions of "the good life" for their children. Table 49 displays the expected benefits of schooling as defined by the parents, and percentages of the parent groups choosing each benefit.

Analysis of Table 48 shows that the parents perceived "the good life" in several different ways. For the majority of both the Portuguese and Anglo parents, "the good life" is a "good job" or "a better life than at present." This is true for their daughters as well as their sons. Other parents equate "education" with "the good life." This was especially true of the Anglo parents. Still others saw "the good life" in terms of "a good marriage," "an honest life," "good manners," and "social acceptance."

Table 48

Parent Groups' Reactions* of "The Good Life for Their Children"

Definitions of "the Good Life"	Portuguese (N=70) Sons	Portuguese (N=70) Daughters	Anglo (N=21) Sons	Anglo (N=21) Daughters
Good Job	32 **	29	14	10
Better Life Than at Present	18	17	2	3
Education	9	10	7	5
Good Marriage and Health	4	8	2	2
Honest Life	4	2	3	4
Good Manners	3	4	-	-
Social Acceptance	-	-	1	1

* A small number of Anglo parents chose more than one category
** Table values are frequencies

Inspection of Table 49 reveals that the largest percentages of the Portuguese and Anglo groups, 30% and 56% respectively, see "good education" as the major benefit of attending school. It is important to note, however that only about 30% of the Anglo parents and 15% of the Portuguese parents define "the good life" as "good education". Concerning the ways in which the majority of both sets of parents define "the good life"--a good job or a better life than at present--less than one third of the Portuguese parents and less than one fourth of the Anglo parents expect either of these outcomes as a result of attending school. This result may partially explain the percentages displayed in Table 50.

Table 49

Expected Benefits of Attending School As Perceived by Parent Groups

Benefits	Portuguese (N=64)	Anglo (N=21)
Better Life Than At Present	17*	14
Good Education	30	56
Good Job	11	10
Good Adults	11	10
Learn Both Languages	14	5
Good Manners	17	-
Working With And Understanding Others	-	5

*Table values are percentages

Inspection of Table 50 shows that 38% of the Portuguese parents believe their sons should leave school at age 16. Moreover, 30% of these parents reported that their daughters should also leave school at age 16. Only one-third of these parents indicated a desire to see their sons and daughters obtain a college education. About one-fifth said that a high school education or at least some high school training was adequate for their sons, and 29% felt their level was adequate for their daughters.

In contrast, all but 14% of the Anglo parents felt that a high school education was the minimum amount of education required of their children. Indeed, more

than one-half of the Anglo parents reported that a college education was necessary for their sons and daughters.

Table 50

Perception of Parent Groups Concerning Amount of Schooling Needed By Male and Female Students

	Portuguese		Anglo	
	Male Students (N=55)	Female Students (N=53)	Male Students (N=21)	Female Students (N=21)
AT LEAST:				
Some High School	4*	6	-	-
High School Education	13	23	24	19
High School Plus Techinical School	7	7	5	14
College Education	3o	34	57	52
Leave School At 16	38	30	14	14

*Table values are percentages

In interpreting these findings, it might be worthwhile to bear in mind the possibility of the Anglo parents responding in what they perceived as "a socially desirable" or expected fashion. Since the majority culture places such high value on higher education, it is not inconceivable that the Anglo parents, perhaps some recently "Americanized," would accept this as part of the American culture. However, if this value conflicted with a more basic belief such as their idea of "the good life" (cf. Table 48), then the results displayed in the aforementioned tables are more readily understandable.

Bilingual Program. Parent perceptions concerning the value of the Bilingual Program are summarized in the percentages displayed in Tables 51 and 52. There was near unanimous agreement among the Portuguese and Anglo parents, 94% and 80% respectively, that bilingual education is good or very good for their children. Similarly, as shown in Table 52, the majority of both parent groups agreed that the bilingual program enriches their children's lives. It is interesting to note, however, that 30% of the Anglo parents were undecided on whether the Bilingual program enriches their children's lives, and 15% rated bilingual education as only fair or poor for their children.

Table 51

Extent to Which Parent Groups Perceive Bilingual Education as "Good" For Their Children

	Portuguese (N=71)	Anglo (N=21)
Very Good	51*	48%
Good	43%	32%
No Opinion	-	5%
Fair	3%	10%
Poor	3%	5%

*Table values are percentages

Table 52

Extent to Which Parent Groups Think the Bilingual Program Enriches Their Children's Lives

	Portuguese (N=70)	Anglo (N=20)
YES	81*	65
NO	2	5
UNDECIDED	13	30
NO OPINION	4	-

*Table values are percentages

In terms of the usefulness and worth of learning Portuguese in school, there was, again, near unanimity among both sets of parents that this activity was useful and good for their children. (Table 53 displays this information.) When asked however, "Do you think it is good for your child to study his school subjects (like math, science, etc.) in Portuguese" there was substantial disagreement between Portuguese and Anglo parents. Table 54 presents the percentages of the parent groups responding to this question. As might be expected, a large majority of the Portuguese parents responded "yes" to this question. Nearly one-half of the Anglo parents, however, said "no," and another 19% were undecided. Only 38% of the Anglo parents thought that the use of Portuguese in the instruction of school subjects was good for their children. It seems that a large minority of Anglo parents prefers that their children not be instructed in Portuguese.

Additional evidence to support the above conclusion is provided in Table 55. One fourth of the Anglo parents agreed with the statement that the English-speaking students in the Bilingual Program will be unable to keep up with their non-bilingual Program English-speaking classmates. Another 10% of these parents were undecided, and less than one-half disagreed with this statement.

Table 53

Extent to Which Parent Groups Perceive the Learning of Portuguese in School as "Useful" and "Good" for Their Children

	Portuguese (N=71)		Anglo (N=21)	
	Useful	Good	Useful	Good
YES	96*	99	81	95
NO	1	1	5	-
UNDECIDED	3	-	9	5
NO OPINION	-	-	5	-

*Table values are percentages

Table 54

Extent to Which Parent Groups Perceive the Study of School Subjects in Portuguese as "Good" For Their Children

	Portuguese (N=71)	Anglo (N=21)
YES	90*	38
NO	4	43
UNDECIDED	3	19
NO OPINION	3	-

*Table values are percentages

Table 55

Extent to Which Parent Groups Think the Bilingual Program English Speaking Students Will Be Unable to Keep Up With Their Non-Bilingual Program English Speaking Classmates

	Portuguese (N=69)	Anglo (N=20)
YES	29*	25
NO	42	45
UNDECIDED	19	10
NO OPINION	10	20

* Table values are percentages

When asked, however, "What do you expect your child to gain from this program," more than one-half of the Anglo parents and 44% of the Portuguese parents said "bilingual skills." Another one-fifth of each group noted "a good education." A significant proportion of the Anglo parents (24%) expected that their children would gain an increased understanding of immigrant families and the ability to communicate with others. (See Table 56.)

Table 57 displays the percentages of parents responses to the item, "Do you think that Bilingual education shows down the "Americanization" process for immigrant children?" Seventy-five percent and 42% of the Portuguese and Anglo parents respectively responded "No" to this question. Only 10% and 11% of these groups viewed the Bilingual program as an impediment to the "Americanization" process of immigrant children. Interestingly, 26% of the Anglo parents were undecided on this issue, while 21% of this group held no opinions concerning this issue.

Table 56

Expected Benefits of Participation in the Bilingual Program
As Perceived by Parent Groups

	Portuguese (N=59)	Anglo (N=17)
Bilingual Skills	44*	53
Good Life	24	-
Good Education	20	18
Good Job	9	6
Good Manners	3	-
Increased Understanding of Immigrant Families	-	12
Communication With Others	-	12

*Table values are percentages

Perceptions Concerning the Community

The discussion contained in this section of the report focuses on: 1) the perception of the parent groups concerning a wide variety of community problems in the Fall River area, and 2) parents' perceptions of the success of the Fall River Public School system.

Problems of the Community at Large. To determine the impact of various community problems, services, events, and activities on the lives of the Portuguese and Anglo parents, the parents were asked to rank eleven potential community problems from the "biggest problem" to the "smallest problem." Table 58 displays the results of these rankings.

Table 57

Extent to Which Parent Groups Think Bilingual Education Retards the "Americanization" Process of Immigrant Children

	Portuguese (N=71)	Anglo (N=19)
YES	10*	.
NO	75	42
UNDECIDED	11	26
NO OPINION	4	21

*Table values are percentages

Clearly, the over-riding problem in the Fall River area, as perceived by both sets of parents, is drugs. Both groups ranked this problem first. By comparison, all other aspects of the community environment seem small. For example, although "housing" was given a priority rank of 2 by the Portuguese parents, this represents only 7% of the respondents (5 people). It is important to note also the large percentages of "don't know" responses of these parents--Portuguese - 38%, Anglo 23%. The apathy that is represented by these percentages could be an area the Bilingual Project might wish to attack.

The Public Schools. As shown in Table 59, 79% and 65% of the Portuguese and Anglo parents respectively rated the Fall River public schools as either excellent or good. None of the Portuguese parents and only 5% of the Anglo parents rated the school system as poor.

Table 58

Rank Order of Community Problems in Fall River as Perceived by Parent Groups

	Portuguese (N=68)		Anglo (N=21)	
	%	Rank	%	Rank
Drugs	32	1	32	1
Housing	7	2	5	3
Public Education	6	3	10	2
Job Opportunities	6	3	10	2
Alcoholism	6	3	5	3
Transportation	3	4	10	2
Unemployment	1	5	-	-
Medical Services	1	5	-	-
Community Spirit and Friendliness	-	-	-	-
Child Care Centers	-	-	-	-
Judiciary System	-	-	5	3
Don't Know	38	-	23	-

Table 59

Parent Groups' Perceptions of the Fall River Public School System

	Portuguese (N=71)	Anglo (N=20)
Excellent	34*	25
Good	49	40
Fair	11	20
Poor	-	5
Don't Know	6	10

*Table Values Are Percentages

Summary

Sociological Background. Anglo parents were, on the average 5 years younger than Portuguese parents. The variability of ages between groups was quite similar, with the majority of both groups between 31 - 45 years old.

For the most part the Anglo parents enjoyed higher level occupations than the Portuguese parents.

There was no major difference between the number of children of Portuguse and Anglo parents. The majority of both sets of children play with Portuguese speaking children. One-fifth of the Anglo children never play with Portuguese-speaking children.

A significant percentage of the Portuguese husbands and wives have resided in the Fall River area less than one year. Few of the Anglo parents had lived less than a year in the Fall River Area.

Only a small percentage of Portuguese parents have lived more than 5 years in the Fall River area. A larger percentage of Anglo parents, however, were in this category.

Most parents emigrated from San Miguel.

No Portuguese parents were educated in American schools. The majority of these parents had less than four years of schooling in the Portuguese system. A majority of the Anglo parents had been enrolled in United States schools. For the most part, it appears that the Anglo parents were somewhat better educated than the Portuguese parents.

Language Dominance. Anglo parents were substantially more bilingual than Portuguese parents. All of the Portuguese wives and all but 1% of their husbands cannot speak English at all, or do not speak it well.

Portuguese is the language used by all but a few of the Portuguese parents at home, with their children, and with other adults. Portuguese is also the daily language of about one-third of the Anglo parents. Approximately one-half of the Anglo parents speak English only, and another 10% - 15% prefer to speak mostly Portuguese or half-Portuguese-half English in these situations. The majority of Portuguese parents believe the English language would help them most in meeting their daily needs, and would like to attend classes to learn the language and about American culture.

The majority of Anglo parents agree that Portuguese speaking skills would be useful to them but an even larger majority expressed disinterest in studying Portuguese language and culture.

Parent Perceptions Concerning Education

The majority of both the Portuguese and Anglo parents perceived "the good life" for their children in terms of "a good job," or "a better life than at present." Less than one-third of the Portuguese parents and less than one-fourth of the Anglo parents, however, see "the good life," as they defined it, as an expected outcome of schooling.

Approximately one-third of the Portuguese parents felt their children should quit school at 16. Another one-third would like to see their children obtain a college education. In contrast, more than half of the Anglo parents expressed a desire for their children, daughters as well as sons, to receive a college education.

There is near unanimous agreement among Portuguese and Anglo parents that bilingual education is good, useful, and an enriching experience for their children.

The Portuguese parents, for the most part, are satisfied with the practice of teaching their children the academic subjects in Portuguese. Only 38% of the Anglo parents agreed with the Portuguese parents on this issue.

Bilingual skills for their children was the most expected outcome of more than one half of the Portuguese parents and almost half of the Anglo parents. Almost one-fourth of the Anglo parents expected their children to acquire increased communication skills as well.

Most of the Portuguese parents did not perceive bilingual programs as a hindrance to the "Americanization" of their children. Eleven percent of the Anglo group, however, said that it was, while 26% of this group was undecided.

Perceptions Concerning the Community

Both the Portuguese and Anglo parents ranked drugs as the major problem in the Fall River community.

More than three fourths of the Portuguese parents and two thirds of the Anglo parents rated the Fall River public school system favorably.

MATERIALS DEVELOPMENT COMPONENT

Introduction

The five-year goal of the Materials Development Component is to provide an individualized instructional curriculum for students in grades five through eight. The first year goal of the component was to provide such a curriculum for students in grade 5. This curriculum was to include extensive use of audio-visual materials, as well as the formulation or adaptation of individualized instructional packages, each including a pre-test and post-test, written narrative, practice exercises, audio-visual materials, and other project-developed materials. Four curriculum specialists prepared materials in Portuguese Language Arts, Mathematics, Science, and Social Studies for the Portuguese dominant students in the fifth grade. In addition, they prepared mini-lessons for PSL in aural and oral language, science, mathematics, and social studies. The curriculum was to parallel as closely as possible the Fall River curricula in the fifth grade subject areas. Language laboratories were installed in project schools and an audio-visual center was constructed in the Hartwell Street School.

Evaluation of Objectives

Objective MD-1.0:

The curriculum specialist will prepare fifth grade Portuguese curriculum materials as needed by the teachers. The curriculum will include:

1. Outline of topical areas,
2. Written materials for each area of the outline,
3. Major objectives of each area,
4. Catalog of materials: audio-visual textbooks, workbooks, library books.

The following subject areas will be included:

Social Studies - American History, Portuguese History and Culture (In English also);

Language Arts - Portuguese as a Second Language, (oral), Reading, and Writing for dominant language;

Science - dominant language and Portuguese as a Second Language;

Mathematics - dominant language and Portuguese as a second language.

Evidence of attainment of the objectives will be a file of materials accompanied by the evaluations recorded on specially prepared materials evaluation questionnaires.

Evaluation:

A review of the project files and analysis of the completed Materials Usage Forms--the specially prepared materials evaluation questionnaire--indicate that Objective MD-1.0 was accomplished. The following discussion first describes the degree of accomplishment of the objectives for each of the four subject areas. It also includes, by subject area, an assessment of the materials used from March, 1973 through May, 1973, based on an analysis of the completed Materials Usage Forms.

Social Studies:

An outline of topical areas and major objectives for each were formulated for American history. The following curriculum packets were prepared:

Background History of America before the Europeans,
Exploration and Settlement of America,
Spanish, French, and English Claims in America,
The English Settlements I,
The English Settlements II,
The French and Indian War,
The War for Independence,
The New Nation,
The Northwest Territory and the War of 1812,
The Louisiana and Oregon Territories,
The Republic of Texas and the War with Mexico,
The Civil War,
The Industrial Revolution.

Curriculum packets included a pre-test, post-test, written materials for use in teaching each of the objectives, audio-visual materials to accompany the lessons, and practice exercises. Mini-lessons were also available for Portuguese history, culture, and geography--the former in both Portuguese and English. Topics of these lessons included descriptions of Portuguese life, biographical information about important figures in Portuguese history, geography of New England, the United States, and Portugal, and such aspects of Portuguese culture as clothing, food language, and education. These lessons were used to supplement the instruction of American History, which was the primary focus of the Fall River fifth grade social studies curriculum.

A catalog of materials was prepared for social studies. This catalog included a systematic listing of books, audio-visual materials and other instructional materials identified by topical area and/or for packet.

The Materials Usage Forms completed for social studies materials indicated that the teachers were, in general, very satisfied with them. They were rated as having clear and complete directions for both teachers and students, clear illustrations, an appropriate level of sophistication, appropriate cultural content, and a sufficient number of sample exercises and evaluation activities. The social studies materials were frequently used in large group and small group, and less often for individualized instruction. The social studies materials were considered to be appropriate for both the average and fast students; however, some materials were too difficult for the slow student in their printed form and required the teacher to adapt them. The most frequent criticism was that the materials required too little participation from the teacher; this comment does not suggest a problem with the materials, but the need to train the teachers about the techniques of individualized instruction, where teacher participation can frequently be minimal. Objective MD-1.0 was accomplished for social studies.

Language Arts

Portuguese Language Arts included both reading and language instruction. Portuguese reading was taught with materials published in Portugal. No materials, except those of a supplementary nature, were formulated for instruction in reading since satisfactory published text books were available.

An outline of topical areas of accompanying objectives was formulated for language arts. Topics specified in the outline included:

oral language,
nouns and pronouns,
verbs,
adverbs,
adjectives,
punctuation and capitalization,
vocabulary,
written composition.

For all but punctuation and capitalization, vocabulary, and written composition, curriculum units (including a pre-test, a post-test, written narrative materials, exercises, and audio-visual materials) were prepared. A series of mini-lessons were prepared about vocabulary and written composition.

Portuguese as a Second Language instruction used an adaptation of the English Through Pictures Series; some lessons related to the Let's Speak Spanish materials were also incorporated into the Portuguese as a Second Language Instruction. Some PSL lessons were formulated in other subject areas as described in the assessment of objective MD-1.0 for the other content areas.

Analysis of the Materials Usage Forms showed that all materials were rated as being adequate, good, or excellent. As with the social studies materials, the language arts materials were most frequently used for small group instruction. They were considered to be appropriate for fast and average students, and sometimes for slow students, although about one-half of the materials rated were considered to be too hard for the slow students. Again, directions, level of sophitication, availability of sample exercises, cultural and subject matter content, clarity of illustrations, and availability of evaluation instruments were judged to be satisfactory. The degree of participation required by the teacher was more frequently rated as appropriate for the language arts materials than for the social studies materials.

Objective MD-1.0 was accomplished for language arts.

Science

A topical outline with objectives was formulated in science to include the following topics:

Sense organs of the human body,
The human organs,
Plant Roots, Stems, Leaves, Flowers, and Seeds,
The Animal kingdon: Invertebrate,
The Animal Kingdom: Vertebrates,
Seasons and Climate,
The Weather forcast,
The Earth's Atmosphere,
The Earth's Structure.

At least one curriculum packet, which emphasized individualized instruction and included a pre-test, post-test, written narrative, audio-visual materials, and practice exercises, was formulated for each topic.

Science materials were prepared in Portuguese as a Second Language and English as a Second Language; examples of such lessons are those about parts of the body and geology. Some of the audio-visual materials prepared for science included a barometer, thermometer, and science games. A catalog of science materials was also prepared. The listing included audio-visual aides, texts, and other instructional materials listed by packet.

A review of the responses on the Materials Usage Forms suggests the high quality of the science materials, as all materials were rated as being good or excellent. The following qualities were judged to be appropriate for the science materials; clarity and completeness of directions, clarity of illustrations, subject matter content, cultural content, number of sample exercises, and availability of evaluation instruments. Some materials were cited as requiring too little participation from the teacher, but again, the evaluators feel that this may be more due to the lack of training of the staff in how to implement individualized instruction, than to limitations of the materials, especially since only one material was used for individualized, rather than large or small group instruction. The science materials, like the social studies and language arts materials, were judged to be appropriate for the fast and average students, but frequently too difficult for the slow students. Discussions with all the curriculum specialists indicated that they recognized this problem and had prepared additional materials especially appropriate for slow students. It should be noted, however, that their primary responsibility was the preparation of curriculum packets, which were the materials generally rated by the teachers.

Mathematics

Objectives and a topical outline exist for mathematics. Topics included number sentences, roman numerals, basic operations, equivalent fractions, fractions and decimals, and measurement. Curriculum packets were prepared for each area of the outline and were titled:

Numbers and Numerals,
Operations: Addition, Subtraction, Multiplication, Division,
Fractions,
Addition and Subtraction of Fractions,
Multiplication and Division of Fractions,
Fractions and Decimals,
Measurements.

Each curriculum packet included a pre-test, post-test, written narrative, audio-visual materials, and practice exercises. Some mini-lessons in mathematics were prepared for use with PSL and ESL instruction on such topics as the calendar numbers names, and the system of measurement. In addition, materials were catalogued by topical area.

The mathematics materials were also used more frequently for small or large group instruction, than for individualized instruction. Yet, in almost all ratings, the mathematics materials were considered to require an appropriate amount of participation from the teacher. As with the materials in the other subject areas, the mathematics materials were sometimes rated as being too difficult for the slow

learners, although always appropriate for the fast and average students. The technical soundness of the materials was suggested by the teachers' rating of the following qualities as satisfactory: clarity and completeness of directions, clarity of illustrations, cultural content, subject matter content, number of sample exercises, and availability of evaluation instruments.

Objective MD-1.1:

> The curriculum specialists will meet monthly with the program teachers on the regularly scheduled meeting dates specified by the administrators to review the project objectives and curriculum materials. A log recording the results of these meetings will be kept.

Evaluation

The curriculum specialists, for the most part, did not meet with the teachers monthly on regularly scheduled meeting dates. Instead, when they observed the classrooms weekly they discussed with the teachers any problems that were occurring in the use of materials or any materials needed by the teacher. The staff development specialist served as a link between program teachers and curriculum specialists in discussing the appropriateness of project objectives and curriculum materials. Therefore, a substitute activity for Objective MD-1.1 was performed. The accomplishment of the corresponding product objective suggests that this substitute activity was sufficient. However, the evaluators recommend that during 1973-1974 Objective MD-1.1 be implemented as stated, since it is quite important that teachers in different schools meet to discuss the appropriateness of program objectives and curriculum materials as a way of sharing ideas.

Objective MD-1.2:

> The curriculum specialists will visit at least one school (two classes) per week. Records of their observation and discussions with teachers and students will be kept on specially prepared observation logs.

Evaluation

The curriculum specialists visited at least one school each week. Records of their observation were maintained on the Curriculum and Materials Observation Forms.

An analysis of these records indicated that for all subject areas, the materials were rated as being used appropriately. In almost all cases, the teachers used the materials for the purpose the specialists intended them. They implemented them correctly to teach appropriate skills and in sequence in the curriculum. The teachers encountered only few problems in using the materials, according to the specialists. Therefore, the specialists judged, on the basis of their observation of the use of the materials, that the materials in general, did not require modifications.

Objective MD-1.2 was accomplished.

Objective MD-1.3:

> The curriculum specialists will identify ability levels using teacher checklists and informal tests. Records of test results and copies of tests and checklists will be filed in the project files.

Evaluation

The curriculum specialists identified student ability levels by administering a pre-test, intermediate test, and mastery test in each subject area. In addition, an analysis of the students' performance on the test accompanying each curricular unit was performed by the appropriate specialist. Records of teacher-made test results and copies of the tests were included in the guidance files for each class. Test results were used in revising the materials so that their level of difficulty was appropriate for the students. Objective MD-1.3 was accomplished.

MANAGEMENT COMPONENT

Introduction

Management objectives were specified in the form of activity sheets by each non-instructional staff member in January, 1973; the staff listed all activities whose performance was prerequisite to accomplishing the objectives not yet accomplished; deadline dates for the activities were also cited. During the weekly meeting of the non-instructional staff, the director determined which activities had been accomplished by each staff member. Monitoring of a sample of these staff meetings was done by the evaluators who verified the accuracy of the management monitoring by the project director.

Evaluation of Objectives

Table 60 describes the accomplishment of activities from January to May. A large percentage (82%) were accomplished as scheduled, suggesting that the project management was successful. The accomplishment of the majority of program objectives by the project also indicates that management of the program was effective. The evaluators do recommend, however, that activity charts be formulated in August, 1973 for the 1973-1974 program year, and that the weekly staff meetings be continued both for the purposes of discussion of problems and for the monitoring of program activities.

Table 60

Performance of Activities by Component

Component	Number Of Activities	Accomplished As Scheduled		Accomplished Later Than Scheduled		Not Accomplished	
		N	%	N	%	N	%
Staff Development	27	26	96	0	0	1	4
Guidance	36	23	64	12	33	1	3
Parent-Community	22	11	50	7	32	4	18
Materials Development	236	202	86	22	9	12	5

SUMMARY AND RECOMMENDATIONS

The Fall River Title VII Project operated very smoothly especially considering it was a first year program. A review of Table 61, which summarizes their accomplishment of project objectives, indicates that a substantial percentage of objectives (69%) were accomplished as stated. An additional 23% were partially accomplished or a substitute product or process was accomplished. Only 4% of the objectives were judged to be not accomplished, and 4% of the objectives were not assessed. The following narrative presents, by component, a summary of the program's accomplishments.

Instructional

Instructional product objectives were defined for selected subject areas: mathematics, science, English as a Second Language, Portuguese as a Second Language, oral Portuguese as a first language, and social interaction. The Metropolitan Achievement Test was administered as a pre and post-test in the students' native language--English or Portuguese--to assess mathematics and science skill acquisition. Portuguese dominant students demonstrated statistically significant gains in mathematics and science. Portuguese speaking children, identified as having average or above average language competencies, achieved the criterion of an average raw score equivalent to the fiftieth percentile in mathematics and science (I-1). In fact, these students scored well above the criterion level. Portuguese speaking children identified as having below average language competencies, however, did not achieve the criterion of an average raw score equivalent to the thirty-fifth percentile (I-2). However, these students did make substantial gains in achievement.

The English dominant students made statistically significant gains in mathematics, but not in science. Furthermore, they did not achieve the criterion of an average percentile rank equivalent to fifth grade students who did not participate in the program (I-5).

The Portuguese Oral Production Test was administered to assess the skill acquisition of the Portuguese as a Second Language students. They demonstrated statistically significant gains and earned an average score greater than 50% correct on this test (I-6). The English as a Second Language students also demonstrated statistically significant gains on the English Through Pictures Test, but did not earn an average score of 50% correct (I-4) which was the criterion established.

No assessment of the acquisition of oral Portuguese as a first language skills (I-3) of the social interaction (I-7) gains of the program students was made.

Staff Development

The staff development training was characterized by its diversity. Various program staff members participated in the Brown Bilingual Institute, attended workshops sponsored by Project Spoke, participated in sessions at the Southeastern Massachusetts Portuguese Curriculum Center, and attended in-service meetings in the Fall River Public Schools (SD-1.1). The second major activity of the staff development component was the training of the staff by the staff development specialist. Through her regular observation of program classes she assisted both teachers and aides in improving their instruction (SD-6.1). She also served as a link between the curriculum specialists and the teaching staff to insure the appropriate utilization of the project developed materials (SD-2.1)

The outcomes of these process activities were the increased knowledge of bilingual materials by the teachers (SD-1.0), their use of project developed curricula and materials (SD-2.0), their demonstration of empathy toward the problems of the children in the bilingual program (SD-5.0), and the improved methodology of both teachers and aides (SD-6.0).

The major limitation to the Staff Development Component was the lack of regular meetings of the bilingual teaching staff. The absence of such sessions prevented the discussion of evaluation techniques (SD-3.1), and resulted in the lack of improvement in the teachers' knowledge of the rationale of testing and evaluation as related to the bilingual program (SD-3.0). Although the teachers evaluated the new curriculum materials (SD-4.0), the lack of regular in-service sessions prevented a discussion of their results (SD-4.1). Also, because regular in-service meetings were not held, discussions of problems encountered in the program, as a way of encouraging the teachers' empathy for the program children's problems, were held more informally than originally planned (SD-5.1).

Guidance

All objectives in the Guidance Component were accomplished or partially accomplished. The lack of complete accomplishment of objective G-2.1, which required biweekly counseling of any child in the program who has been identified as having socio-emotional problems, did not limit the accomplishment of any other objective. Through individual meetings with all program students at least once during the year, the counselor organized a file of information for each child (G-1.1 and G-4.2), and subsequently prepared a report which identified the needs, interests, and abilities of the program students (G-1.0 and G-4.1). The counseling of high priority students (G-2.1) seemed to result in improvement of their behavior as measured by the Pupil Behavior Inventory (G-2.0). The counselor also succeeded in informing the teachers about the nature of their students' problems (G-3.0) as a result of

informal and formal meetings with them (G-3.1). The major outcome of the Guidance Component was the production of a guidance curriculum (G-4.0); the curriculum included instructional packets on the following topics: Social Interaction, Health and Hygiene, and Vocations.

Parent and Community Involvement

The objectives of the Parent Component focused on encouraging parent participation in the Title VII program, disseminating information about the program to the parents and the community-at-large, and developing a positive attitude toward the program. The Parent-Community Coordinator was responsible for insuring the accomplishment of the component's objectives.

Parents became involved in the Bilingual Program through their participation in the parent-community advisory group, which included representatives of both Portuguese and English parents (P-1.0), and in second language classes (P-5.0 and P-5.1). However, only a limited number of parents were involved in the program in either of these two ways. Opportunities for more extensive participation are planned for 1973-1974.

Parent attitudes toward the program were positive. Most evidenced a positive attitude toward bilingual and bicultural education during a specially prepared structured interview conducted by the Parent-Community Coordinator (P-2.0). Similarly, the bilingual program became more valued by the community during the year as reflected in the number of invitations to speak about the program received by staff members (P-4.0).

These reactions may be attributed to the extensive dissemination of information about the program. Many newspaper articles appeared in Fall River newspapers during the year (P-3.0 and P-3.1). In addition, parents and the community were encouraged to become involved in the activities of the program by letters from, personal contact with, and individual meetings with members of the project staff, and by attending group meetings where project staff members spoke (P-1.1, P-2.1, P-4.1).

Materials Development

Four curriculum specialists prepared fifth grade curricula for social studies Portuguese language arts, science, and mathematics during 1972-1973 (MD-1.0). In each subject area the curricula included, generally in the form of curriculum packets, a topical outline, list of objectives, written materials, audio-visual materials, and pre and post-tests. In addition, second language materials were also prepared in each subject area. A catalog of materials, which listed published, project developed

and audio-visual materials, was formulated. The high quality of the project-developed materials was verified in teachers' responses on the Materials Usage Forms. Although the curriculum specialsits visited the program clsses regularly (MD-1.2) and identified the ability levels of the students as a means of determining their skill level (MD-1.3), the specialists did not meet formally with the teachers to review the program objectives and curriculum materials (MD-1.1).

Management

The accomplishment of the majority of program objectives attests to the high caliber of program management. Regular monitoring of the activities requisite to accomplishing program objectives was conducted from January to May; 82% of the activities were accomplished as scheduled.

Table 61

Summary of Degree of Accomplishment of Program Objectives

Accomplished	Partially Accomplished	Substitute Product or Process Accomplished	Not Accomplished	Not Assessed
I - 1				
	I - 2			
				I - 3
	I - 4			
	I - 5			
I - 6				
				I - 7
I - 1P				
I - 2P				
I - 3P				
I - 4P				
I - 5P				

Table 61 (cont.)

Accomplished	Partially Accomplished	Substitute Product or Process Accomplished	Not Accomplished	Not Assessed
SD - 1.0				
SD - 1.1				
SD - 2.0				
SD - 2.1				
			SD - 3.0	
	SD - 3.1			
SD - 4.0				
	SD - 4.1			
SD - 5.0				
		SD - 5.1		
SD - 6.0				
SD - 6.1				
G - 1.0				
G - 1.1				
G - 2.0	G - 2.0			
	G - 2.1			
G - 3.0				
G - 3.1				
	G - 4.0			
G - 4.1				
G - 4.2				
P - 1.0				
P - 1.1				
	P - 2.0			
P - 2.1				
P - 3.0				
P - 3.1				
P - 4.0				

Table 61 (cont.)

Accomplished	Partially Accomplished	Substitute Product or Process Accomplished	Not Accomplished	Not Assessed
P - 4.1				
			P - 5.0	
P - 5.1				
MD - 1.0				
		MD - 1.1		
MD - 1.2				
MD - 1.3				

Recommendations

The evaluators offer the following recommendations for improving program operation during 1973-1974:

1. In-service meetings in Fall River should be instituted at least monthly for all project staff. Weekly meetings of the non-instructional staff should be maintained. Some topics which should be considered are:

   a. training teachers on the use of aides in the classroom,
   b. training specifically for aides,
   c. training about small group and individualized instruction,
   d. training concerning traditional and progressive educational practices.

2. Bi-weekly counseling of program students identified as having social-emotional problems should be conducted during the entire program year.

3. Testing in reading in first language and social studies should be added to the program evaluation.

4. Additional audio-visual materials should be prepared to accompany all curriculum units.

5. Activity charts should be formulated in August, 1973 for the 1973-1974 program year, monitoring of the accomplishment of activities should be on-going.

6. A filing system should be implemented and maintained for the Parent Community Component.

7. Publication of a program newsletter and Family Book should be pursued.

8. Methods of increasing parental involvement (e.g., attracting them to the second language courses) should be pursued.

9. Additional emphasis should be directed toward the curriculum for English dominant students.

10. Additional emphasis should be directed toward coordinating the ESL-PSL activities.

11. Hiring of a person to coordinate the curriculum for ESL and English dominant classes should be considered.

12. Methods of increasing the social interaction between Portuguese and English dominant students should be pursued.

13. Liaison activities by the staff development specialist between the teachers and curriculum specialists should be continued.

14. Procedure of evaluating curriculum materials by the teachers should be continued.