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ABSTRACT This is an evaluation of the Trilingual Education  
 Learning Environment Program (TELE) which provided training to  
 teacher interns in New York City. The program sought to improve the  
 linguistic performance of limited English proficient students by  
 training Spanish/English and Italian/English teachers in Title I  
 designated schools, and to serve as a link between the elementary  
 (feeder) schools and the Junior High Schools. Information on the  
 program's goals, organization, and target population is provided.  
 Activities of the program discussed include: (1) recruitment  
 procedures; (2) log books; (3) teacher intern self-evaluation; (4)  
 teacher training; (5) teacher program evaluation; and (6)  
 supplementary training activities. Tables show students' achievement  
 in English, native language reading and mathematics. Student  
 attendance rates are also given. Conclusions and recommendations are  
 offered. (APM)

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FINAL EVALUATION REPORT

ESEA Title VII

Grant Number: G007804190

Project Number: 5001-42-07607

TRILINGUAL EDUCATION LEARNING  
ENVIRONMENT (TELE)

Director: Rosa Escoto-Haughom

1979-1980

Prepared By The

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WDO 21451

## TABLE OF CONTENTS

	<u>PAGE</u>
I. Introduction	1
II. Program Goals and Objectives	2
A. Pupil Instructional Component	3
B. Teacher Training Component	3
III. Sites	4
IV. Population	8
V. Program Organization	9
A. Personnel	9
B. Interorganizational Articulation	10
VI. Activities	12
A. Recruitment and Orientation Procedures	12
B. Logs	12
C. Bilingual Teacher Intern Self-Evaluation	14
D. Teacher Training	23
E. Questionnaire and Analysis	28
F. Field Observation/On-Site Training	34
G. Graduate Teacher Education Program	35
H. Mini Courses at City College	36
I. Activities in Support of Instruction	40
J. Teacher Advisory Council	42
VII. Findings	43
VIII. Summary and Recommendations	56
IX.. Appendices	59

## LISTS OF TABLES

	<u>PAGE</u>
Table I Teachers' Self-Evaluation: Knowledge of Classroom Management	15
Table II Teachers' Self-Evaluation: Knowledge of Classroom Routines	17
Table III Teachers' Self-Evaluation: Knowledge of Classroom Organization	18
Table IV Teachers' Self-Evaluation: Knowledge of Instructional Grouping	19
Table V Teachers' Self-Evaluation: Knowledge of Lesson Planning	21
Table VI Trilingual Education Learning Environment Workshops for Bilingual Teachers	25
Table VII TELE Workshops Attended by Each Group	27
Table VIII Workshops Ranked for Each Group by Mean of Item #10	31
Table IX Areas of Needed Assistance	34
Table X Teacher Interns' Responses to Mini Courses in Teaching Science and Mathematics in Bilingual Education	38
Table XI English Reading Achievement (Spanish Speaking Students)	45
Table XII Native Language Reading Achievement (Spanish Speaking Students)	48
Table XIII English Reading Achievement (Italian Speaking Students)	51
Table XIV English Reading Achievement (Italian Speaking Students)	52
Table XV Mathematics Achievement (Italian Speaking Students)	53
Table XVI Attendance Rates (Spanish Speaking Students)	54
Table XVII Attendance Rates (Italian Speaking Students)	55

## TRILINGUAL EDUCATION LEARNING ENVIRONMENT

Administrative Office: 131 Livingston Street, Room 510  
Brooklyn, New York 11201

Year of Operation: 1979-1980, Second Year of a Four Year Cycle

Target Languages: Spanish, Italian

Number of Participants: 900 Hispanic and 300 Italian  
Students in Grades 4 to 9

Project Director: Rosa Escoto-Haughom

### PROJECT DESCRIPTION

#### I. Introduction

The Trilingual Education Learning Environment Program (TELE) was re-funded for a second year for operation during fiscal year 1979 - 1980 under the provisions of ESEA Title VII. The program was centrally based, operating as a unit under the Office of Bilingual Education, as a basic bilingual program providing training to teacher interns (beginning teachers) in New York City public elementary and intermediate schools.

The program was originally administered from offices at 347 Baltic Street, Brooklyn, New York 11201. However, due to space reorganization at the central Board of Education, these administrative offices relocated in June 1980 to 131 Livingston Street, Rm. 510, Brooklyn, New York 11201. The daily hours of operation are from 9AM - 5PM, with the exception of Thursdays, when hours are extended until 6:30 PM or the end of training activities.

The program represented a collaborative effort between the central Office of Bilingual Education and five decentralized Community School

Districts (CSDs): Districts 3 and 6 Manhattan, 12 Bronx, 24 Queens, and 32 Brooklyn.

It should be noted that District 24 Queens was included during the operating year. The research and planning phase for implementation of the program in CSD 24Q began during the 1978-79 program year. The new CSD district expands the Italian component of the program. Implementation of the program there differed from the already established Hispanic component, and will be more fully discussed in a subsequent section.

Eighteen sites were served in the five districts. The program had as a target population approximately 900 Hispanic and 300 Italian pupils of limited English proficiency (LEP), ranging from grades 4 to 9.

## II. Program Goals and Objectives

This program was designed to improve the linguistic performance in Spanish/English or Italian/English of 1200 limited English proficient students. Since the program has addressed this goal through teacher training under the given guidelines, its instrumental goal may be stated as follows: To improve the performance of 40 (30 Spanish/English and 10 Italian/English) bilingual teachers employed in Title I designated schools. Another goal of the project was to serve as a link for articulation between the elementary (feeder schools) and the junior high schools.

#### A. Pupil Instructional Component

The broad goals of this component were to provide the following:

- a. instruction in all academic subjects in pupil's dominant language;
- b. instructional activities and skill development in the pupil's dominant language;
- c. instruction in American history and culture;
- d. instruction and activities in Hispanic and Italian history and culture;
- e. instruction in English as a Second Language;
- f. the development of activities for the awareness of career education goals.

The following specific objectives were addressed by this component:

- a. to measure reading achievement in English by pre- and post-tests using the Cooperative Inter-American Test Series, Test of Reading, levels R-1 to RN-3;
- b. to measure reading achievement in Spanish by pre- and post-tests using the Cooperative Inter-American Test Series, Test of Reading, levels HG-1 to LN-3;
- c. to measure student growth in reading in Italian and the Italian culture by staff developed pre- and post-tests (in Districts 32 and 24K).

#### B. Teacher Training Component

This evaluation component was designed to:

- a. measure outcomes of training by using a Bilingual Teacher Self-Evaluation Questionnaire;

- b. Measure effectiveness of teacher training on the basis of scores of "average" and above as indicated by teacher self-evaluations and Resource Teachers' evaluations of teacher performance.

(see logs)

### III. Sites

The TELE Program functions at the following districts and schools:

<u>District 3</u>			<u>District 6</u>		<u>District 24</u>
PS 9	PS 145	IS 44	PS 128	PS 189	PS 81
PS 84	PS 163		PS 132	PS 192	
PS 166	PS 165				
<u>District 12</u>			<u>District 32</u>		
PS 47	PS 67	PS 211	PS 123	PS 299	

All eighteen sites were selected in previous years according to recommendations made by the CSD and the Parent Advisory Committee. The following selection criteria were employed:

- a. student needs: the number of LEP students, as designated by performance on the LAB (at or above the 20 percentile);
- b. Title I eligibility;
- c. openings for teachers in school and district;
- d. cooperativeness of decentralized district personnel with centralized training program.

The districts included in the program were somewhat similar in racial composition and social-economic status, although as noted earlier, in district 24 there was a large Italian population. The population of the general area



is reflected in the school and target population for this project. This area, on the border of Brooklyn and Queens, has received a large number of Italian immigrants.

### Community School District 3

Community School District 3 consists of a multi-cultural and multi-ethnic population, with a mixture of White, Black, Haitian French and Spanish-speaking residents. The Black and Spanish-speaking families predominate. The Hispanic population also has its diversity of population, including students from Puerto Rico, the Dominican Republic, and South America (in that order). The quality of education varies from country to country, and students may come with little or no formal education, or educational experiences superior to those found in this country. All, however, may have difficulties adjusting to an all-English school environment.

According to the School Profiles of 1976-77, the district's population was 48% Black, 22% Puerto Rican, 10% other Spanish-surnamed, 13% Other, and 7% Oriental.

### Community School District 6

This district also contains a varied, multi-cultural and multi-ethnic population. While Spanish-speaking and Black residents predominate, there are also numbers of Greeks, Orientals, and recent Russian immigrants, as well as numbers of White families of other backgrounds. CSD 6 also has a diversity of Spanish-speaking students, coming from the Dominican Republic, Puerto Rico and Cuba, in that order. Again, the quality of their educational experiences prior to coming to the United States may vary widely.

The School Profiles indicate that a total of 64% of the students are of Hispanic origin, and 25% are Black. A total of 11% are Oriental or Other.

#### Community School District 12

CSD 12, located in the Bronx, is an area primarily of low-income Black and Hispanic families, most of whom were Puerto Rican during the 1976-77 school year. According to the Annual School Census of October 1978, the population of the district was almost 63% Hispanic and 35% Black.

#### Community School District 32

This district consists of a complex population, with a mixture of White, Black, Haitian, Italian and Hispanic families. The Spanish-speaking population is also diverse, although the large majority of the students are from Puerto Rican backgrounds. The Italian students make up a fair percentage of the district's population as well. Within the district, the quality of education for the newly-arrived non-English-speaking students varies from minimal to extensive educational experiences.

The Ethnic Data Report of the district indicates that 28% of the students are Black, 10% are Italian, 60% are Hispanic (almost all Puerto Rican) and 2% are Other.

#### Community School District 24

CSD 24 has experienced a rapid growth of population in recent years. In addition to numbers of Hispanics, the area has seen a steady influx of Italian immigrant families. In addition, the district has small numbers of Oriental, European and Indian students who are limited English proficient, but whose numbers are too small to make feasible offering a program of

instruction in the native language for them.

The School Profiles indicates that the population of the district is about 11% Black, 30% Hispanic, 7% Oriental, and 52% Other (which includes the Italians).

#### IV. Target Population

The project was designed to affect two diverse populations:

Students. Approximately 900 Hispanic students and 300 Italian students of limited English proficiency in grades 4 through 9 received direct instructional services. All of the students met the basic criteria established by Title I of the ESEA, which focuses upon the needs of students of low socio-economic status and academic achievement.

Teachers. The 30 Spanish/English bilingual teachers who participated in the project were new to the New York City school system. For the most part they were recent recipients of bachelor's degrees and New York City teaching licenses, and generally had little or no professional teaching experience. This project addressed many of the informational needs of these new teachers. In contrast, the 10 Italian/English teachers were individuals who were currently teaching in the New York City school system and in many cases had engaged in graduate study and had received their masters degrees. This contrast is a salient one and resulted in the project having to adapt its goals and activities to address the very different needs presented. It was necessary for the project to provide special activities on-site and modifications in the budget and training schedule were imperative to provide quality services for these markedly different groups.

Many Italian/English teachers were licensed as Italian teachers at the secondary school level. These teachers became recertified as Bilingual Common Branch Teachers. Therefore, although they hold master's degrees, they are still in need of specific training in Bilingual Education and in Common Branch areas.

Because the Hispanics were new teachers, and lacked student teaching experience, they required assistance in classroom management and planning and techniques of delivering a lesson.

## V. Program Organization

### A. Personnel

The basic staffing structure remains as it was reported in last year's final evaluation report. The following are the full-time staff positions provided under this grant and the responsibilities of each:

The project director has responsibility for overall administration and supervision, including instructional, training and fiscal matters.

The assistant project director aids the director in the coordination of pupil services, teacher training (and education), and parent/community activities with participating CSD's and colleges. Assisting with the orientation and supervision of the field staff is another function of the assistant project director.

Although the structure remains, there has been a change in the personnel who hold the above-mentioned positions. The assistant director became project director when last year's director was promoted to a position within the Office of Bilingual Education. The project operated without an assistant director for an interim period until March of 1980.

Both the current director and assistant director hold New York City Teacher Licenses and New York State Certification in Educational Administration and Supervision. The director has eight (8) years of experience in teaching and administration in the New York City school system. She is currently enrolled in a doctoral program in Education. The assistant director,

who filled this position in March 1980, has been a teacher in bilingual classes in New York City schools for eight (8) years.

The following positions have been held by the same individuals since the first year of operation. The information reported in last year's final evaluation report remains basically the same.

Four bilingual resource specialists provide training to and supervision of bilingual teacher participants through weekly workshops and frequent classroom visits. They serve as resources to teaching in curriculum and instruction in both English and the target language. All hold New York City Teaching Licenses, have a minimum of 4-6 years teaching experience in New York City, and have earned at least one master's degree in bilingual and/or other specialized areas of education. They are currently enrolled in graduate programs in education for further professional development. All resource specialists are fully bilingual.

A senior clerk is responsible for office management and bookkeeping.

A typist is responsible for secretarial and clerical functions.

Consultants provide services in specialized areas necessary for staff training and test development.

Teachers are contracted on an hourly basis to conduct in-service workshops for parents, teachers and paraprofessionals.

The program also hired hourly teacher/artists to provide services to children and teachers in the Italian Component by aiding in curriculum development and supplementing the curriculum guide.

#### B. Interorganizational Articulation

The central office personnel maintain very close and ongoing communication with each CSD administration. The project director visits all sites

by December and revisits them in the spring. It is estimated that twenty-five percent of her time is spent on-site in an effort to maintain communication with district superintendents, bilingual education project directors, coordinators, assistant principals in charge of bilingual education, teacher trainers, school principals and curriculum specialists. Since the main training activities take place at the central program site, she sees and communicates with participating teachers on a weekly basis. In addition, there is ongoing and close communication with the director of bilingual education at the City College of New York. The TELE Program assesses teacher needs and recommends course content, college and adjunct faculty for courses designed for and limited to the TELE program participants.

The resource specialists visit each participating teacher a minimum of twice a month; however, they provide a more intensive training program through additional visitations where the need exists. They make specific recommendation, working jointly with each teacher to improve performance. They coordinate their training activities with the school districts' training personnel and the schools' designated supervisory staff. Finally, the resource specialists visit college classes that are related to their assigned area of training in order to coordinate and complement teacher training and education activities.

As stated in last year's final evaluation report, the program staff continues to collaborate with other resource and training units of the Office of Bilingual Education, New York City Board of Education and with the local Bureau of Bilingual Education, New York State Education Department in training workshops and conferences.

## VI. Activities

The major areas of activity within the scope of the TELE program include the identification, selection, and training of teacher interns and the provision of services in support of the instructional process.

### A. Recruitment and Orientation Procedures, Teacher Interns

When a potential intern applies to the program, he or she receives an extensive evaluation by program staff. Student educational characteristics are carefully assessed in an effort to better identify each applicant's strengths and areas of need, and to give an estimate of the his or her potential for success in teaching. As part of the intake procedure, each candidate is asked to complete an interview form and a writing sample. An oral interview is given and a summary becomes part of the candidate's record. Grammar tests are given in English and the target language and each candidate is asked to write a composition in both languages. Background information is collected on the educational history of each applicant, and a resume and college transcripts also form part of the applicant's record. All of the above materials are gathered upon application to the program and act as a need assessment for future training activities.

The TELE staff members work with the new teachers towards getting the intern license when they are accepted into the program.

### B. Logs (Supervision)

The TELE program keeps extensive log books, documenting the background and history of each trainee, as well as all TELE activities at every site at which the program functions. The logs not only provide documentation of all program activities at each site. They also provide the basis and de-



scription of all individualized teacher training that goes on at the sites, as extensive information is kept on each intern and all training activities involving him or her.

Kept by the four teachers trainers, each log is organized by district, site, and individual teacher intern. All students who are eligible to receive bilingual education under the consent decree are also listed for each school site. The logs contain basic data on the school and the intern, as well as other data relevant to the implementation of the program. Pertinent school data include the total school population, the number of bilingual classes and teachers, and the availability of paraprofessionals. Information on the trainee includes background data, educational history, and other data (see Intake Procedures). Also included are any observations on the school situation which have implications for the functioning of the intern, including school support for bilingual education, the presence or absence of other bilingual teachers and paraprofessionals.

The logs also contain, on an ongoing basis, all contacts between the resource teacher and the site, including interviews, observations, entries describing the classrooms and every visit made. Records are kept of lessons given, resources distributed, and materials created. In sum, the logs give a detailed description of the activities of the program in the schools and make recommendations where needed.

In the Italian component, the logs note the background of the district, and record meetings with coordinators and district supervisors, as well as observations of teachers and the other types of information mentioned above.

### C. Bilingual Teacher Intern Self-Evaluation

In the fall of 1979, the participating interns were asked to complete a self-evaluation questionnaire which functioned as a needs assessment. The information obtained was combined with a review of the participants' records and any logs of classroom performance in order to help design the training program for the year. A copy of the instrument is included as Appendix A.

The following tables (I - V) present the outcomes of the self evaluation, which was completed by 28 of the participating teachers. It was administered and collected by program staff. The questionnaire was designed to tap the teachers' opinions of their knowledge in five key areas: classroom management, class routines, class organization, group instruction, and lesson planning. Each area was in turn divided into subcategories which were rated individually. The ratings were scaled, from 1 ("not at all") and 2 ("poor") to 5 ("excellent"). Frequencies of responses were tabulated, as were the percentages of the group rating themselves in each category. Means and standard deviations were calculated for each subcategory of each of the five areas. When a total mean rating was calculated for each of the five more global areas, there was little variability in the outcomes. Therefore, reported strengths and weaknesses were examined within each area only. That is, in no one area did teacher interns feel particularly weak overall, although within each area the interns did exhibit patterns of strengths and weaknesses.

Tables I - V present the results of the teacher intern self-evaluation for each of the five areas.

TABLE I

## Teachers' Self-Evaluation: Knowledge of Classroom Management

VARIABLE	NO. OF RESP.	Response frequencies: Number and Percentages					RANGE	MEAN	STAND. DEV.
		1 none	2 poor	3 fair	4 good	5 excell.			
Teacher's knowledge of:									
Taking attendance	28			4 (14%)	11 (39%)	13 (46%)	3-5	4.32	.72
Maintenance of permanent records	28			9 (32%)	14 (50%)	5 (18%)	3-5	3.86	.71
Preparation of monthly reports	28			7 (25%)	15 (54%)	5 (18%)	3-5	3.93	.68
Keeping diagnostic files for reading and mathematics	28		2 (7%)	8 (29%)	17 (61%)	1 (4%)	2-5	3.61	.69
Keeping logs on student information	28		1 (4%)	6 (21%)	16 (57%)	5 (18%)	2-5	3.89	.74
Avg. Classroom Management			1 (4%)	7 (25%)	14 (50%)	6 (21%)	2-5	3.92	

### Discussion: Teachers' Knowledge of Classroom Management

Seventy-one percent of the teachers rated themselves "good" or "excellent" in classroom management. They rated highest in taking attendance and in preparation of monthly reports. Their knowledge was reported to be weaker in keeping logs of student information, in the maintenance of permanent records and in keeping diagnostic files for reading and mathematics. In the latter three variables, 25%, 32% and 36% respectively rated themselves below "good."

TABLE II

## Teachers' Self-Evaluation: Knowledge of Classroom Routines

VARIABLE	NO. OF RESP.	Response frequencies: Number and Percentages					RANGE	MEAN	STAND. DEV.
		1 none	2 poor	3 fair	4 good	5 excell.			
Teacher's knowledge of:									
Methods for discipline	28		1 (4%)		19 (68%)	8 (29%)	2-5	4.21	.63
Entrance/Exits procedure	28	1 (4%)		11 (39%)	13 (46%)	3 (11%)	1-5	3.61	.83
Lesson Schedule	28		1 (4%)	7 (25%)	16 (57%)	4 (14%)	2-5	3.82	.72
Checking homework	28		1 (4%)	8 (29%)	13 (46%)	6 (21%)	2-5	3.86	.80
Avg.- Classroom Routines			1 (4%)	7 (25%)	15 (54%)	5 (18%)	1-5	3.87	

On the average, teachers rated themselves "good" in their ability to perform classroom routines. They rated highest in the knowledge of discipline methods (97% consider themselves "good" or "excellent" in that area). They felt weaker in checking homework, in scheduling the lessons and in controlling entrance/exit procedures. In the latter three variables, 33%, 29% and 43% respectively rated themselves below "good."

TABLE III

## Teachers' Self-Evaluation: Knowledge of Classroom Organization

VARIABLE	NO. OF RESP.	Response frequencies: Number and Percentages					RANGE	MEAN	STAND. DEV.
		1 none	2 poor	3 fair	4 good	5 excell.			
Teacher's knowledge of:									
Desk arrangement	28		1 (4%)	1 (4%)	21 (75%)	5 (18%)	2-5	4.07	.60
Bulletin board use	28		1 (4%)	6 (21%)	18 (64%)	3 (11%)	2-5	3.82	.67
Timely classroom decorations	28		1 (4%)	14 (50%)	11 (39%)	2 (7%)	2-5	3.50	.69
Color coding of Spanish & Eng.	28		1 (4%)	8 (29%)	18 (64%)	1 (4%)	2-5	3.68	.51
Avg. - Classroom Organization			1 (4%)	7 (25%)	17 (61%)	3 (11%)	2-5	3.76	

Seventy-two percent of the teachers rated their ability in classroom organization as "good" or "excellent." They felt weaker in the use of the bulletin board, in the color coding of English and Spanish and in the arranging of timely classroom decorations. In the latter three skills, 25%, 33% and 54% respectively rated themselves below "good." With an overall mean rating of 3.77, this was the lowest-rated area.

TABLE IV

## Teachers' Self-Evaluation: Knowledge of Instructional Grouping

VARIABLE	NO. OF RESP.	Response frequencies: Number and Percentages					RANGE	MEAN	STAND. DEV.
		1 none	2 poor	3 fair	4 good	5 excell.			
Teacher's knowledge of:									
Assessment- Reading	28		1 (4%)	1 (4%)	14 (50%)	12 (43%)	2-5	4.32	.72
Assessment- Mathematics	28		1 (4%)	5 (18%)	19 (68%)	3 (11%)	2-5	3.86	.65
Grouping Reading	27		1 (4%)	4 (15%)	15 (56%)	7 (26%)	2-5	4.04	.76
Grouping Math	26			10 (38%)	12 (46%)	5 (15%)	3-5	3.77	.71
Grouping ESL	28			6 (21%)	17 (61%)	5 (18%)	3-5	3.96	.64
Avg. - Grouping Instruction			1 (4%)	5 (7%)	15 (56%)	6 (22%)	2-5	3.99	

### Discussion: Teachers' Knowledge of Instructional Grouping

On the average, teachers rated their ability to assess students in reading and to group them for reading instruction superior to their ability to group students for instruction in ESL, to assess students in mathematics, and to group instruction in mathematics. While assessment and grouping for reading instruction had mean responses of 4.32 and 4.04, for the latter three variables the means were 3.96, 3.86 and 3.77 respectively. Twenty-one percent rated themselves only "fair" in grouping for ESL; 22% felt they were "fair" or "poor" in the assessment of mathematics, and 38% rated themselves "fair" in grouping for mathematics instruction.

On the whole, however, 78% of the respondents rated themselves "good" or "excellent" in this area, making it the strongest overall of the five areas reported (an average rating of 3.99 overall).



TABLE V

## Teachers' Self-Evaluation: Knowledge of Lesson Planning

VARIABLE	NO. OF RESP.	Response frequencies: Number and Percentages					RANGE	MEAN	STAND. DEV.
		1 none	2 poor	3 fair	4 good	5 excell.			
Teacher's knowledge of:									
Unit planning	28			3 (11%)	15 (54%)	10 (36%)	3-5	4.25	.65
Weekly planning	28			9 (32%)	15 (54%)	4 (14%)	3-5	3.82	.67
Daily planning	28			9 (32%)	13 (46%)	6 (18%)	3-5	3.89	.74
Timing lesson	28			10 (36%)	13 (46%)	5 (18%)	3-5	3.82	.72
Overall flow of lesson	27		1 (4%)	9 (32%)	13 (46%)	4 (14%)	2-5	3.74	.76
Holding assignments	28			10 (36%)	16 (57%)	2 (7%)	3-5	3.71	.60
Avg. Lesson Planning				9 (32%)	14 (50%)	5 (18%)	2-5	3.87	

### Discussion: Teachers' Knowledge of Lesson Planning

On the average, teachers rated their ability in lesson planning "good". Their strongest skills were reported to be unit planning (with 90% of the teachers rating themselves "good" or "excellent" in that area). That skill was followed, in order, by daily planning, weekly planning, timing lessons, overall flow of lessons, and holding assignments. For the latter five variables, 87%, 68%, 64%, 60% and 64% respectively rated themselves as "good" or excellent."

-22-

Summary, Outcomes of Teachers' Self-Evaluation. On the whole, around 70% of the respondents felt they had "good" or better knowledge of each area. About 29-32% rated themselves as "fair" or "poor" in each of the key areas. There were, as has been previously noted, no large differences in the patterns of the interns' overall ratings of their knowledge of the five areas assessed. The distribution of responses ranging from "fair" to "excellent" was similar over all areas.

For recommendations based on these outcomes, see the conclusions and recommendations at the end of this report.

#### D. Teacher Training

Teacher training was comprised of a number of important activities, including pre-service and in-service workshops, college courses and mini-courses, and on-site training given on an individual basis.

1. Pre- and In-Service Workshops. The training workshops offered were divided into pre-service and in-service workshops. The pre-service workshops were designed to cover administrative matters and to orient the participants to basic program philosophy, goals, and objectives. These sessions focused on classroom management and assessment of students' developmental levels, topics thought to be necessary for setting up a classroom for the first time.

The Pre-Service Workshops held during fall 1979 were:

<u>Dates</u>	<u>Topics</u>
September 13, 1979	Interviewing for Jobs (Coaching Participants)
September 20, 1979	Survival Kit for First Week of Teaching

For training purposes, the participants were divided into two groups (Group I and Group II). The rationale for this grouping was twofold. Through attrition, a group of new teachers emerged who needed the basic training which had been given during the first year of the program. This group made up the nucleus of Group I. The remainder, the more advanced trainees, formed Group II. There was further assignment into these groups based upon the differences in the educational needs of the participants.

The basic format for the In-Service Training Workshops is as follows:

- |             |   |
|-------------|---|
| 4:30 - 5:30 | Homeroom. Each resource specialist has responsibility for one district. Each workshop may: <ul style="list-style-type: none"><li>-cover administrative matters</li><li>-announce changes within the districts</li><li>-include mini lessons (a teacher from that district shares techniques and strategies that have been successful)</li></ul> |
| 5:00 - 6:30 | -Group I and Group II meet separately for appropriate training activities.  |

For Group I, thirty-two workshops were conducted during the program year, fifteen in the Fall 1979 semester and seventeen in the Spring 1980 semester. Group II participated in a total of thirty-one workshops, fifteen in the Fall 1979 semester and sixteen in the Spring 1980 semester. The major goal of these workshops was to meet the pedagogical needs of the participants. The workshops focused on unit/lesson planning, classroom management and discipline, with reading, mathematics and English as a Second Language (ESL) making up the the core of the training.

The sessions were also designed to meet contractual agreements between the Board of Education and the United Federation of Teachers stating that all new teachers attend "First-Year Teacher Workshops". It is mandated

that every new teacher attend thirty sessions of this in-service training within the district. However, through agreement with the superintendents of each district, the training provided by TELE fulfills this requirement for its participants.

The ESL sessions were designed both to train the participants in ESL techniques and strategies, as well as to sensitize the participants to student reactions to learning a new language in a classroom setting. This was done by presentation of material in Italian to Spanish speaking participants using only visual aids. The reverse language situation was used in training Italian participants.

Specific workshop topics for each group are listed as Tables VI and VII which follow.

TABLE VI

Trilingual Education Learning Environment  
Workshops for Bilingual Teachers

Group I - Fall 1979

Sept.	20	Administrative Session
	27	Diagnostic Testing
	11	Introduction to Curriculum Center
	18	Distribution of Test Material
	25	Classroom Management
Nov.	1	Collection of Test Materials
	8	Classroom Management
	15	Classroom Management
	29	Classroom Management
Dec.	6	Discipline in the Classroom
	10	Discipline in the Classroom
	13	Discipline in the Classroom
Jan.	17	Daily Lesson Planning
	24	Daily Lesson Planning
	31	Daily Lesson Planning

TABLE VI  
(continued)

Exploration and Assessment of Bilingual Resource Materials

Group I - Spring 1980

Feb 14	General Session:	
Feb 21	General Session:	
Feb 28	ESL	
Mar 6	ESL	
Mar 13	ESL	
Mar 20	MATH	
Mar 27	MATH	
Apr 10	General Session	
Apr 17	ESL	
Apr 24	MATH	
May 1	MATH	5:15 - 6:30
May 8	Reading	
May 15	Reading	
May 22	Contract Workshop U.F.T.	
May 29	Reading Material Dem.	
June 5	Reading Material Dem.	
June 12	Test collection	

Trilingual Education Learning Environment  
Workshops for Bilingual Teachers

Sept. 20	Administrative Session
27	Diagnostic Tests
Oct. 11	Discipline in the Classroom
18	Distribution of Test Material
25	Discipline in the Classroom
Nov. 1	Collection of Test Materials
8	Discipline in the Classroom
15	Unit Lesson Planning
29	Unit Lesson Planning
Dec. 6	Unit Lesson Planning
13	Unit Lesson Planning
Jan. 10	Methodology for Teaching Reading
17	Methodology for Teaching Reading
24	Methodology for Teaching Reading
Jan. 31	Reading Activities

Group II - Spring 1980

Feb. 14	General Session
Feb. 21	General Session
Feb. 28	NYC Resources
Mar. 6	NYC Resources
Mar. 13	NYC Resources
Mar. 20	ESL

Group II - Spring 1980  
(continued)

Mar.	27	ESL
Apr.	10	Audio Visual Workshop
Apr.	17	Audio Visual Workshop
Apr.	24	ESL
May	1	General Session
May	8	Science
May	15	Science
May	22	Contract Workshop U.F.T.
May	29	Culture material
June	5	Culture

Table VII presents eleven (11) workshops attended by teachers in each group, broken down by workshops which were the same for each group and those which differed for the groups.

TABLE VII  
TELE Workshops Attended by Each Group

	<u>Group I Workshops</u>	<u>Group II Workshops</u>
W	-----Administrative Orientation-----	-----
S O	-----Diagnostic Testing-----	-----
A R	-----Contract Workshop-----	-----
M K	-----ESL-----	-----
E S	-----Discipline in the Classroom-----	-----
H	-----City College Session-----	-----
O		
P		
S		

---

TABLE VII  
(continued)

D W	Introduction to the Curriculum	Materials Development in
I O	Center	Culture
F R	Classroom Management	NYC Resource
F K	Daily Lesson Planning	Unit Lesson Planning
E S	Mathematics	Science
R H	Reading Materials Demonstration	Reading Methodology
E O		
N P		
T S		

#### E. Questionnaire and Analysis

At the end of the program, teachers in each group were administered a questionnaire to assess their opinions on a number of issues relating to the workshops in which they had participated. (See sample Group I questionnaire attached as appendix B.) Each teacher was requested to respond to a set of ten items in a multi-level response option format: 1) strongly disagree, 2) disagree, 3) agree, 4) strongly agree. The ten questionnaire items attempted to assess whether:

1. the objectives of the workshop were clear;
2. the workshop was well organized;
3. the instructor was able to get the materials across;
4. reference information and resource materials were provided and made available;
5. the presented material was useful in the classroom;
6. the instructor stimulated thinking;
7. a sequential order was followed in the presentation of the materials;
8. sufficient time was allowed for the workshop topic;
9. the teacher would recommend the workshop to another beginning teacher;
10. overall, the teacher would rate the workshop highly.



Methodology. Quantitative and qualitative analyses were performed on teacher responses. Quantitative analyses included calculating weighted means and standard deviations from tabulations of the responses to each of the 10 items reacted to by participants in each of 11 workshops; results were retained for the separate teacher groups (group I and II). In addition, individual workshops were rank ordered for each group on overall average satisfaction with the form and content of the workshops. This analysis was based on the assumption that item #10 (see above) was a valid and reliable measure of the level of overall satisfaction with individual workshops. Thus, weighted means of item #10 were rank ordered from highest to lowest for each of the 11 workshops in each of the teacher groups. The workshop receiving the highest average rating on item #10 was listed as the workshop with which teachers felt the most satisfied. In this way, each of the 11 workshops rated could be ranked from the one with which participants in each group expressed the most satisfaction to the one with which they felt the least relative satisfaction.

Qualitative analyses were performed on participants' responses to three open-ended exercises:

1. written comments or general reactions to workshops;
2. the curricular areas in which participants desired assistance, such as field or in-service training;
3. the topics or areas which participants desired to be covered in a human relations workshop scheduled in the Fall of 1980.

Written comments or general reactions were read carefully and then classified into general categories. The results are presented in narrative form.

The second area of analysis--desired areas of assistance--involved tabulating the areas indicated as those in which assistance was requested

and a frequency count and tabulation of the number of participants who indicated such a desire for assistance. The topics that participants desired to have covered in the human relations workshop were listed along with the number of participants indicating that topic as being of interest.

Results. Appendix C contains the outcomes from which the quantitative analyses were derived. In that appendix will be found frequency tabulations, weighted means and standard deviations for individual items based on participant responses for each group of teachers to the 11 workshops attended.

Table VIII reports a ranking of the 11 workshops by participants in each group based on the observed means of item #10.

TABLE VIII

Workshops Ranked for Each Group by Mean of Item #10

Group I (Inexperienced Teachers) <u>Workshops</u>			Group II (Experienced Teachers) <u>Workshops</u>		
	<u>Mean</u>	<u>S.D.</u>		<u>Mean</u>	<u>S.D.</u>
1) Diagnostic Testing	3.17	.30	1) Material Development	3.47	.64
2) Contract Workshop	3.08	.28	2) Reading Methodology	3.47	.52
3) Introduction to Curriculum Center	3.09	.47	3) Science	3.36	.50
4) Administrative Orientation	3.00	.68	4) Diagnostic Testing	3.20	.56
5) Classroom Management	3.00	.55	5) Unit Lesson Planning	3.20	.56
6) Mathematics	3.00	.39	6) Contract Workshop	3.07	.80
7) E.S.L.	2.93	.27	7) Administrative Orientation	3.00	.65
8) Daily Lesson Planning	2.93	.27	8) City College Session	2.93	.80
9) Discipline in the Classroom	2.85	.38	9) Discipline in the Classroom	2.87	.83
10) City College Session	2.50	.85	10) E.S.L.	2.87	.64
11) Reading Material Demonstration	2.50	.85	11) N.Y.C. Resources	2.60	.74

-31-

Two general conclusions can be drawn from the data in Table VIII. First, Group II teachers tended to report more positive evaluations of the workshops they attended. Second, for workshops common to each group (see Table VIII), teachers in both groups ranked those workshops in roughly the same relative order and with approximately the same level (i.e., mean rating) of overall satisfaction. Only the workshops on City College Session and ESL were ranked differently by the groups. However, while the groups tended to rank workshops common to each group in a similar order, an examination of the standard deviations will reveal that Group II teachers tended to agree less among themselves as compared to Group I teachers. That is to say, standard deviation values tend to be higher among Group II teachers, indicating more response dispersion or less agreement in perceptions of overall level of satisfaction with the form and content of the workshops attended. Larger standard deviations are also found among Group II teachers for workshops attended only by them. The greater range of opinions held by the experienced teachers (Group II) may be due to the fact that, having already dealt with those issues they had formed attitudes which varied according to their experience. The experienced teachers, as noted previously, tended to agree and disagree more strongly with the questionnaire items than the inexperienced teachers. This strong commitment to certain opinions may also be due to having had previous experience in those subjects.

For Group I, the most highly rated workshops were the ones on diagnostic testing, the UFT contract, use of the curriculum center, administrative orientation, classroom management and mathematics. For Group II, the most highly rated workshops were the ones on materials development, reading methodology, science, diagnostic testing, and unit lesson planning.

Thus, the group of inexperienced teachers (Group I) seemed more interested in those areas that had to do with organizational and administrative subjects. The group of experienced teachers (Group II), on the other hand, showed a higher interest in those workshops that had to do with methods and materials employed in the classroom.

The workshop teachers in Group I felt least satisfied with Reading Materials Demonstration. The responses to items for this workshop had the lowest mean on item #10 and the largest standard deviation. Appendix B results for this workshop show that with the exception of objectives of the workshop, workshop organization and ability of instructor to get subject matter across, teachers were rather dissatisfied with their experiences in this workshop.

Teachers in Group II felt least satisfied with the workshop on New York City Resources. Expressed opinions appeared to be most divided on the instructor's ability to stimulate thinking.

Both groups of teachers were also asked to write comments and to state the areas in which they felt they needed assistance. The most recurrent comment was that the workshops were very good or useful (seven times). Three teachers suggested the necessity for more time devoted to English as a Second Language. Two teachers suggested the need for more involvement on the part of the teacher interns.

The following table presents the subject areas in which teachers requested more assistance and the number of teachers mentioning that topic.

TABLE IX

## Areas of Needed Assistance

<u>Area of Assistance</u>	<u>Number of Teachers Requesting Assistance</u>
material development	5
curriculum centers	5
teaching reading	4
Spanish language arts	2
science	2
mathematics	2
classroom routines	2
teaching history and culture	1
discipline	1
individualized instruction	1
grouping	1

Teacher-suggested topics for future workshops included the following (the number of teachers listing the topic appears in parentheses):

sensitivity (6)  
 group dynamics (5)  
 ethnicity (3)  
 reproduction (1)

Please see the Recommendations section for further discussion of the questionnaire.

#### F. Field Observation/On-Site Training

The major role of the resource specialists remains as it was reported in last year's final evaluation report. They visit classrooms, observe lessons and activities, act as models in classroom situations and give immediate feedback to participants by making specific recommendations. Each

resource specialist is responsible for the participating teachers in a given district. Along with supervision and training activities, the resource specialist maintains a log, documenting teacher progress and performance. (see logs). Each classroom teacher is visited at least twice a month, and more often if he or she is experiencing difficulties.

During the initial visit, the resource specialists meet with the principals and together they establish the protocol of subsequent visits. These visits then serve as an exchange between TELE staff and the school district personnel, parents and community groups. In this way, the program has attempted to impact on and coordinate activities with the entire school community.

#### G. Graduate Teacher Education Program

All participants in the Spanish-English component have been enrolled for master's degrees in a graduate Bilingual Elementary Education Program at the City College of New York. Each teacher participant earned six credits during fall 1979 and spring 1980. The TELE program paid for three of the credits. The courses offered were:

Fall 1979 Teaching Reading in English to Bilingual/Bicultural Children

Spring 1980 Teaching English as a Second Language  
Workshop for Bilingual Education  
The Vernacular Language of Puerto Rico

There was close coordination between project staff (director and resource specialists) and the director of the program at City College. There was closed registration for teacher participants facilitating the registration procedure for the teacher interns. Through project recommendations, adaptations in the curriculum were made, although each course adhered to its basic college syllabus.

Almost twenty-five percent of the participants work in junior high school and intermediate school programs. Until now, there had been no offering of master's degrees in bilingual education at City College above the elementary school level. This led to the discrepant situation of all Spanish-English participants pursuing master's degrees at the elementary level despite the fact that a good number worked in secondary schools.

Due to the combined efforts of this project and the City University, a Secondary Bilingual Education master's degree program was designed in 1979-80, to be offered in 1980-81. It is anticipated that those program participants who are at the beginning stages of their master's studies and all incoming participants for whom it is appropriate will be enrolled in this new degree program. This is the first secondary bilingual education program in the city and represents a needed response to the problem of qualifying staff at the secondary level.

#### H. Mini Courses at City College

In response to the outcomes of the needs assessment and a review of the records and logs of the participating teachers, graduate level mini-courses in bilingual education were developed to meet teacher needs for strengthening skills in the areas of teaching science, native language arts, and math. The courses, offered at City College for one credit apiece, met once a week (for a total of 20 hours per semester), and were reserved for TELE students. All participating teachers were enrolled.

Although not a mandated activity, the instructor who conducted the mini courses in mathematics and science requested that the participants evaluate them. A copy of the evaluation questionnaire is included in as Appendix D. As may be seen from the questionnaire, the teacher interns were asked to respond



to four questions with the responses ranging from poor to excellent. These questions included "How do you assess the topics selected for the mathematics course?" and "How do you assess the instructor's preparation?" Two additional questions could be answered yes, no, no opinion, or not applicable. These asked if the participant would be able to implement any of the lessons taught in class, and if the respondent would have preferred to have had the course taught in Spanish. Additional space was provided for comments and suggestions.

Questionnaire Analysis. For the questions which could be answered along a continuum or scale of responses ("poor" to "excellent"), "poor" was assigned a value of 1 and "excellent" a value of 4. Means and standard deviations were calculated for each response. As the questionnaires were not differentiated between beginning and continuing teachers, the totals represent both groups combined. Questions answerable by "yes" or "no" were simply tabulated. Finally, the comments were listed and grouped by category and frequency of occurrence. The interns' responses are presented in Table X.

TABLE X

Teacher Interns' Responses to Mini Courses in Teaching Science  
And Mathematics in Bilingual Education

	N	EXCELLENT 4	GOOD 3	FAIR 2	POOR 1	MEAN	ST. DEV.
How did the course fulfill the title?							
Mathematics	17	5	9	2		3.15	.66
Science	17	5	7	5		3.00	.79
How do you assess the topics selected for the Mathematics course?	17	4	9	3		3.03	0.67
How do you assess the instructor's preparation?	17	4	8	4		2.97	0.72
What is your opinion of:							
a-the handouts	17	7	10			3.41	0.51
b-games/activities	18	3	12	2	1	2.94	0.73
c-format of the lesson	16	1	12	2		2.91	0.46
d-mathematics assignments	18	1	10	6	1	2.61	0.70
e-science assignments	15	1	10	3	1	2.73	0.70
f-extra paper (if applicable)	6		3		3	2.00	1.10
	N	YES	NO	NO OPINION	NOT APPLICABLE		
If you are teaching, will you be able to implement any lessons that have been taught in class?	16	15		1			
Would you have preferred to have the course taught in Spanish?	16	3	6	5	2		

On the whole, the participants expressed satisfaction with the courses they attended. Thirteen out of 17 respondents rated the math topic as "good" or "excellent". Fifteen out of 16 respondents maintained that what they had learned would be useful in their classrooms. The instructor's preparation was judged good or excellent in 12 of 17 cases (although there was more divergence of opinion in regard to this question).

Asked to rate specific aspects of the course, the respondents showed the greatest satisfaction with the handout materials, games and activities. Of 17 respondents, all rated the handouts as "good" or "excellent". Wider diversity of opinion characterized the responses to other aspects of the course. Games/activities and handouts were the most highly regarded, while satisfaction with the format of the lesson fell slightly below "good". The mathematics and science assignments were ranked lower, and the additional paper received the lowest overall rating and the most divergent opinions. These results confirm the opinions expressed in the section of the questionnaire devoted to comments and suggestions that the participants would have preferred fewer assignments and more time to develop plans and materials, and to share ideas among themselves.

The participants also responded to an open question, asking that they add any comments or suggestions. Their responses are listed as follows:

- "very good course." (three responses)
- "It would have been better to do one lesson plan in class under teacher guidance and then do others at home."
- "The copies of the science lesson plans should have been distributed to all the students."

- "The lesson plan should have been done in the classroom."
- "If we had had more time and less assignments we would have done more creative things."
- "We need more than just information."
- "The class should be divided into groups so that we can better share ideas."
- "Too many assignments instead of developing aspects that we need in our classroom."
- "We need more handout material."

A primary area of concern was that the courses provide lessons, plans and materials for classroom use, or more time to develop them in class. This reflects a desire for training applicable to classroom teaching, a theme which was also expressed in the responses to the workshops.

As an additional outcome, the success of the mini courses with TELE students led to their being offered on a regular basis to other students at City College during 1980-81.

#### J. Activities in Support of Instruction

The TELE program also creates supplementary curriculum guides for distribution of the districts and implements special high interest curricular activities at the participating school sites, concentrating on culture and ESL through creative activities. For the Italian component, curriculum guides were developed in language arts, integrating language arts activities with the arts and with both Italian and American culture. Thematically, the activities focus on the home culture of the students, and integrate it with cultural experiences in the United States. This is reflective of the experiences of the students, most of whom have recently come as immigrants and, according to the project director, probably will not return to Italy.

During 1979-80, one theme of the activities was transportation, with students tracing the voyage of immigrants to this country. The TELE program hires teachers who are artists to go into the schools on an hourly basis and work with students on special projects, assisting and complementing the work of the resource teachers at the sites. The outcome of the transportation unit was a large mural depicting the trip to America. Posters were also created. A second theme was that of wine and the harvest, depicted in posters and murals, and accompanied by reading materials and other activities (see Appendix E for a sample). All the participating Italian teachers were served by the artists and resource personnel in implementing these special activities, which were shared with the entire schools in which they took place. The transportation mural is currently on display at 131 Livingston Street, at the offices of the New York City Public Schools.

The Spanish component was served in a similar way, with high interest projects offered to students in District 6. This was a joint project, with financial support from the district. Offered to TELE interns who had already mastered classroom management and the basics of discipline and planning, the theme of the project was Don Quixote. The activities were also introduced as a means of developing participating teachers' skills in unit planning. Three classrooms participated in the creation of large felt banners, murals and compositions, while the teacher interns developed unit plans for future use. Coordinated reading and writing activities accompanied the art work.

It should be noted that the TELE program shares and distributes materials whenever the districts request them.

## I. Teacher Advisory Council

In order to improve communication within the project, a Teacher Advisory Council was established. This Council consists of two elected representatives (teacher/participants) from each district. If the number of participants from a given district was very small, only one representative was elected.

Monthly meetings were held from 4:15 to 5:00 pm. Their main purpose was to exchange and report internal information. This body was able to make recommendations for change within the program as long as such changes did not violate program policy based on the proposal and/or Board of Education policy.

## VII. Findings

The following section presents the assessment instruments and procedures, and the results of the testing.

Students were assessed in English language development, growth in their mastery of their native language, and mathematics. The following are the areas assessed and the instruments used:

Reading in English	--	<u>CIA Interamerican Test of Reading, Levels: R-1, R-2, R-3, RN-3, HG-2</u>
Reading in Spanish	--	<u>CIA Prueba de Lectura, Level III</u>
English Auditory Comprehension	--	<u>CIA Interamerican Test of Reading, Level R-2</u>
Mathematics Achievement	--	<u>CIA Test of General Ability, Number Subtest</u>
Attendance	--	School and Program records

The following analyses were performed:

On pre/post standardized tests of English, Spanish reading achievement and auditory comprehension, and mathematics achievement statistical and educational significance are reported:

- 1) Statistical Significance was determined through the application of the correlated t-test model. This statistical analysis demonstrates whether the difference between pre-test and post-test mean scores is larger than would be expected by chance variation alone; i.e. is statistically significant.

This analysis does not represent an estimate of how students would have performed in the absence of the program. No such

estimate could be made because of the inapplicability of test norms for this population, and the unavailability of an appropriate comparison group.

- 2) Educational Significance was determined for each grade level by calculating an "effect size" based on observed summary statistics using the procedure recommended by Cohen.<sup>1</sup>

An effect size for the correlated t-test model is an estimate of the difference between pre-test and post-test means expressed in standard deviation units freed of the influence of sample size. It became desirable to establish such an estimate because substantial differences that do exist frequently fail to reach statistical significance if the number of observations for each unit of statistical analysis is small. Similarly, statistically significant differences often are not educationally meaningful.

Thus, statistical and educational significance permit a more meaningful appraisal of project outcomes. As a rule of thumb, the following effect size indices are recommended by Cohen as guides to interpreting educational significance (ES):

a difference of  $1/5 = .20 =$  small ES

a difference of  $1/2 = .50 =$  medium ES

a difference of  $4/5 = .80 =$  large ES

Information is provided on the attendance rate of students participating in the bilingual program. The following pages present student achievement in tabular form.

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<sup>1</sup>Jacob Cohen. Statistical Power Analysis for the Behavioral Sciences (Revised Edition). New York: Academic Press, 1977 Chapter 2.



TABLE XI

## English Reading Achievement

## Spanish Speaking Students

Significance of Mean Total Raw Score Differences Between Initial and Final Test Scores in English Reading Achievement of Students with Full Instructional Treatment on the Cooperative Interamerican Test of Reading by Grade and Subtest

Grade	Subtest	N	Pre-test		Post-test		Mean Difference	Corr. Pre/post	t	P	ES
			Mean	Standard Deviation	Mean	Standard Deviation					
3	R-1	12	47.8	16.9	63.8	9.5	16.0	.54	3.92	.001	1.13
	R-2	50	35.7	10.9	51.3	17.0	12.6	.75	9.64	.001	1.36
	HG-2	31	26.6	4.6	30.3	13.5	3.7	.19	1.53	NS	.27
4	R-1	17	44.3	16.9	55.6	15.1	1.13	.91	6.71	.001	1.63
	R-2	116	48.9	20.7	63.3	21.5	14.4	.86	13.8	.001	1.28
	R-3	11	33.9	16.0	47.4	18.4	13.5	.94	7.12	.001	2.15
	RN-3	39	26.3	17.4	31.8	10.2	5.5	.19	1.87	.05	.30
	HG-2	45	25.0	16.3	32.4	9.4	7.4	.79	7.04	.001	1.05
5	R-1	28	43.2	16.3	64.6	13.3	21.4	.36	6.70	.001	1.27
	R-2	22	67.2	16.1	82.7	20.3	15.5	.50	3.90	.001	.83
	R-3	30	40.1	20.7	60.9	20.1	20.8	.63	6.51	.001	1.19
	RN-3	55	38.3	10.8	44.1	7.3	5.8	.34	4.03	.001	.54
	HG-2	8	26.1	14.3	37.4	19.2	11.1	.79	2.71	.05	.96
6	R-1	17	47.2	24.0	65.3	16.2	18.1	.63	4.01	.001	.97
	R-2	39	64.5	18.1	75.6	22.1	11.1	.67	4.12	.001	.66
	R-3	51	52.2	21.6	90.1	28.6	37.9	.16	8.21	.001	1.15
	RN-3	47	37.9	9.1	44.4	4.4	6.5	.31	5.14	.001	.75
	HG-2	42	28.4	6.0	37.8	6.9	9.4	.83	15.71	.001	2.42
9	R-1	34	22.7	9.6	34.8	12.3	12.1	.68	7.69	.001	1.32

TABLE XI  
(continued)

Table XI presents the results of the CIA Interamerican (Reading) by grade and test level for Spanish speaking students. Results will be interpreted for grades separately.

Third grade students failed to show statistically significant growth on sub-test HG-2, but the gain of 3.7 raw score points was .27 standard deviation units or of small educational significance. However, the lack of linear relationships between pre- and post-test scores ( $r=.19$ ) suggests low stability in the function tested (see Recommendations). Students tested with subtests R-1 and R-2 demonstrated raw score growth that was very highly significant statistically; post-test achievement exceeding pre-test achievement by greater than 1 full standard deviation. Thus, growth for these pupils was highly significant in statistical and educational analyses.

Fourth graders tested on subtests R-1, R-2, R-3, RN-3 and HG-2 demonstrated growth that was significant beyond the 5% level (RN-3) and the .001 level (R-1, R-2, R-3 and HG-2). Educationally, students tested on subtest RN-3 made small gains. Students tested with other subtests showed achievement gains which exceeded one common standard deviation. Pupil performance on subtest R-3 was especially noteworthy; their growth exceeded 2 standard deviations. The low pre-post correlation observed for students tested on subtest RN-3 suggests a lack of stability in the function tested (see Recommendations).

Fifth graders showed statistically significant and moderate to very large educationally significant growth in English reading achievement.

TABLE XI  
(continued)

Sixth grade pupils showed gains that were highly significant statistically. Educationally, the reading achievement gains ranged from moderate on R-2 (ES=.66) to very large on HG-2 (ES=2.42). The low correlations observed for subtests R-3 and RN-3 is suggestive of low stability in the function measured (see Recommendations).

Ninth grade students tested with subtest R-1 demonstrated growth that was highly significant statistically and educationally.

Thus, students throughout the grade levels made gains in English language reading achievement that were statistically significant (except for HG-3, grade 3). All comparisons revealed educationally significant growth.

TABLE XII

## Native Language Reading Achievement

## Spanish Speaking Students

Significance of Mean Total Raw Score Differences Between Initial and Final Test Scores in Native Language Reading Achievement of Students with Full Instructional Treatment on the CIA Prueba de Lectura (Total Score, Level I, Total Reading, Level II, Total Score, Level III, and Total Score, Level LN 3

Grade	Test level	N	Pre-test		Post-test		Mean Difference	Corr. Pre/post	t	P	ES
			Mean	Standard Deviation	Mean	Standard Deviation					
3	L-I	13	52.0	17.7	70.8	10.5	18.8	.33	3.19	.001	1.08
	L-II	60	36.3	16.5	51.4	24.3	15.1	.79	8.93	.001	1.15
4	L-I	32	26.8	14.9	50.7	18.7	23.9	.45	7.55	.001	1.33
	L-II	101	52.1	23.1	69.3	29.5	17.2	.79	9.65	.001	.96
	LN-3	83	27.4	11.7	37.1	10.1	9.7	.75	11.24	.001	1.23
5	L-I	17	57.4	8.6	63.2	16.2	5.8	-.19	1.22	NS	.30
	L-II	17	54.2	26.2	78.6	20.7	24.5	.64	4.88	.001	1.18
	L-III	35	38.6	15.8	49.8	20.8	11.2	.62	4.03	.001	.68
	LN-3	58	37.3	14.4	46.4	11.0	9.1	.57	5.71	.001	.75
6	L-I	20	54.5	13.6	62.9	14.5	8.4	.35	2.35	.05	.53
	L-II	30	45.0	21.6	74.0	27.5	29.0	.39	5.74	.001	1.05
	L-III	83	48.1	22.2	81.0	26.7	32.9	.54	12.58	.001	1.38
	LN-3	56	31.9	9.6	42.6	7.2	10.7	.49	9.21	.001	1.23
9	L-III	14	39.1	15.0	64.6	17.7	25.5	.89	11.79	.001	3.15
	LN-3	6	25.8	4.6	46.7	15.1	20.9	.93	4.67	.01	1.91

TABLE XII  
(continued)

Table XII presents Spanish reading achievement results for Spanish speaking students on the CIA Prueba de Lectura (levels I, II and III).

Third graders showed highly significant growth in statistical and educational analyses. The low pre/post correlation for students tested on L-I ( $r=.33$ ) suggests lower than expected test-retest stability.

Fourth graders showed statistically and educationally significant growth at very high levels. The pre/post correlation for students tested on L-I ( $r=.45$ ) is low and suggests lack of stability in the function tested.

Fifth grade students tested on L-I failed to show statistically significant growth. However, the gain made on L-I was of small educational significance. The negative pre/post correlation ( $r=-.19$ ) suggests the possibility of a regression effect due in part perhaps by the relative score range restriction at pre-test ( $sd=8.6$ ).

Fifth grade students tested with levels L-II, L-III and LN-3 demonstrated highly significant growth in statistical terms. Students tested with levels L-II and LN-3 made highly significant growth educationally, and students tested with L-III made moderately significant growth.

Sixth grade students made significant growth on each level tested. Educationally, the gains made were from moderate (L-I) to very large (L-II, L-III and LN-3). However, the pre/post correlations are low, most especially for performance on L-I and L-II and LN-3, suggesting low stability in the function tested.

TABLE XII  
(continued)

For a discussion of the implications of the L-I outcomes, see Recommendations.

Ninth grade students tested on L-III showed highly significant achievement gains in statistical terms, and very unusual growth when ascertained by the ES index (ES=3.15). Students tested on Level LN-3 demonstrated statistically significant growth (p. less than .01) and large educationally significant growth from pre to post-test.

Overall, the overwhelming majority of pre/post comparisons revealed significant raw score gains in statistical and educational units for Spanish speaking students in reading achievement in their native language.

TABLE XIII

## English Reading Achievement

## Italian Speaking Students

Significance of Mean Total Raw Score Differences Between Initial and Final Test Scores in English Reading Achievement of Students with Full Instructional Treatment on the CIA Test of Reading, Level R-II

<u>Grade</u>	<u>N</u>	<u>Mean</u>	<u>Pre-test Standard Deviation</u>	<u>Mean</u>	<u>Post-test Standard Deviation</u>	<u>Mean Difference</u>	<u>Corr. Pre/post</u>	<u>t</u>	<u>P</u>	<u>ES</u>
3	55	41.7	16.8	55.0	14.4	13.3	.83	10.39	.001	1.40
4	57	47.0	23.7	55.6	21.2	8.6	.94	8.13	.001	1.08

Table XIII presents achievement data for Italian speaking students on the CIA Test of Reading, Level R-II. Students in grade 3 showed a raw score gain of 13 raw score points while 4th grade students showed a gain of 9 raw score points. The gains for students in both grades were statistically significant at the .001 significance level, and when expressed in standard deviation units, were judged to be of large educational significance.

Thus, students in grades 3 and 4 showed statistically and educationally significant gains in English reading achievement.

TABLE XIV  
English Reading Achievement  
Italian Speaking Students

Significance of Mean Total Raw Score Differences Between Initial and Final Test Scores in English Reading Achievement of Students with Full Instructional Treatment on the CIA Test of Reading, Level R-III

<u>Grade</u>	<u>N</u>	<u>Mean</u>	<u>Pre-test Standard Deviation</u>	<u>Mean</u>	<u>Post-test Standard Deviation</u>	<u>Mean Difference</u>	<u>Corr. Pre/post</u>	<u>t</u>	<u>P</u>	<u>ES</u>
5	50	48.6	21.6	57.8	18.7	9.2	.94	8.79	.001	1.24
6	49	52.0	23.2	60.6	20.7	8.6	.95	8.16	.001	1.17

Table XIV presents achievement data for Italian speaking students on the CIA Test of Reading, level R-III. Students in grades 5 and 6 showed a raw score gain of 9 raw score points. The gains for students were statistically significant at the .001 significance level, and when expressed in standard deviation units, were judged to be of large educational significance.

Thus, students in grades 5 and 6 showed statistically and educationally significant gains in English reading achievement.



TABLE XV

## Mathematics Achievement

## Italian Speaking Students

Significance of Mean Total Raw Score Differences Between Initial and Final Test Score in Mathematics Achievement of Students with Full Instructional Treatment on the CIA Test of General Ability (Number) by Subtest

Grade	Subtest	N	Pre-test		Post-test		Mean Difference	Corr. Pre/post	t	P	ES
			Mean	Standard Deviation	Mean	Standard Deviation					
3	GA-4	2	16.5	.7	25.5	2.1	9.0	1.0	*	*	*
4	GA-4	58	21.9	6.6	27.4	6.7	5.5	.89	13.08	.001	1.72
5	RN-3	49	18.6	6.8	26.9	5.2	8.3	.90	19.10	.001	2.73
6	RN-3	50	22.1	7.6	28.9	5.6	6.8	.85	11.75	.001	1.66

\* Insufficient Data

Table XV presents achievement data for Italian speaking students on the CIA Test of General Ability (Number Subtest). Students tested on subtest GA-4 (grade 4) demonstrated highly significant growth in mathematics achievement; the gains, when expressed in standard deviation units, were judged to be of large educational significance.

Fifth and 6th grade students tested with subtest RN-3 showed gains that were highly significant statistically and educationally.

Thus, Italian speaking students demonstrated unambiguously significant growth of very high levels in statistical and practical terms.

TABLE XVI  
 Attendance Rates  
 Spanish Speaking Students  
 Program Attendance Rate and Standard Deviation

<u>Grade</u>	<u>Students</u>	<u>Average Attendance</u>	<u>Standard Deviation</u>
3	110	87.1	10.9
4	268	84.5	17.4
5	170	86.2	17.9
6	229	88.4	13.3
9	32	93.5	3.4

The attendance rates for Spanish speaking students ranged from 85% (grade 4) to 94% (grade 9). The observed rates for students are high throughout the grades and suggests high levels of student motivation and attitude as measured by attendance data.

72

TABLE XVII  
 Attendance Rates  
 Italian Speaking Students  
 Program Attendance Rate and Standard Deviation

<u>Grade</u>	<u>Students</u>	<u>Average Attendance</u>	<u>Standard Deviation</u>
3	62	93.5	3.4
4	67	93.2	5.6
5	59	91.6	3.5
6	61	92.6	7.8

The attendance rates for Italian speaking students were in excess of 90% for each grade. Little variability in attendance rates is evident. The attendance rates of students are exceptionally high in each grade, indicating that motivation and school attitudes were uniformly high as measured by attendance.

### VIII. Summary and Recommendations

This program reflects the maturity that comes with functioning fully in the second year of a 3-year cycle. Despite a change in personnel, the continuity of the program has been preserved. Modifications and adaptations have been well thought out, with the major focus on providing quality education to New York City's bilingual population.

- Specifically, the adaptations involved in developing and implementing the Italian component of the program have been effective in addressing site specific needs.
- Through collaborative work with the Graduate Teacher Education Program at City College, an additional offering of a Secondary Bilingual master's degree will more effectively serve all program participants, and contribute a needed graduate degree to area teachers seeking professional specialization in Bilingual Education.
- The establishment of a Teacher Advisory Council enhanced general communication within the program.

Based upon in-depth interviews with program staff and observations of the on-site training, the following recommendations are made for program improvement:

1. The rationale used for forming the second group of program participants would seem to indicate that further assessment of participants' needs is necessary. Such exploration might result in the formation of a third group in order to continue to address each participant's needs more effectively.

2. It is recommended that the teacher training workshops be evaluated individually, with administration of the questionnaire immediately following each workshop. This might provide more accurate and differentiated responses. To assess the effectiveness of the workshops as applied to actual classroom teaching, it is suggested that the questionnaire be administered again one term following the workshop.

3. Certain revisions in the questionnaire are recommended as well, including the following:

- a) A provision for noting absences should be made on the sheet.
- b) "Material" could be differentiated into actual materials used and the subject or content of the workshop (see items 3 and 4, for example).
- c) As implied above, the questions asked should pertain to each workshop individually rather than one aspect of all of the workshops.
- d) The scale ranging from "strongly disagree" to "strongly agree" constrains the teachers' responses and allows for example, no neutral ones such as "neither agree nor disagree", "no opinion", or "not applicable". Rather than having the respondents agree or disagree with a valuing statement it might be better to allow the respondents to assign values to particular aspects of the workshop, along such continua as "liked a lot-not liked", "very useful-not useful", "most relevant-not relevant".

4. It is recommended that the questionnaire items be analyzed to determine which factor(s) contribute most to the overall rating, and that these be examined for use in the design of future questionnaires.

5. In the evaluation of the mini-courses, questions about science and mathematics were combined in such a way as to make it difficult to respond to them individually. Any differences in the intern's opinions of the two would thereby tend to be obscured. It would be clearer if the two were presented individually, even if a single sheet format is maintained. Finally, item 7, "Did the course fulfill the title?", might be revised to be more interpretable (see Appendix O for a copy of the questionnaire).

6. The student outcomes in English reading achievement for Spanish speaking students indicate that subtest HG 2 of the Cooperative Interamerican Test of Reading was unreliable for 3rd grade students. The appropriateness of this test should be reconsidered for this group. On subtest RN-3, the gains achieved by students in grades 3 to 6 were of statistical significance, but the low correlations observed suggest that the test is also unreliable for at least a subgroup of these students. In other words, Level RN-3 may be too difficult for some of the students tested.

7. The outcomes of Hispanic students in the area of native language reading show another picture, however. Students in grades 3 through 9 scored gains on the Interamerican series, Prueba de Lectura, which were statistically significant in all cases but one. Nevertheless, the low (or negative) pre-post correlations and generally high pre-test scores suggest that the test is not differentiating among these students, who may be performing at the top of the test. The reliability of level I for these students should be examined in the light of the above outcomes.

APPENDIX A

Bilingual Teacher Intern Self Evaluation

V

CITY SCHOOL DISTRICT OF NEW YORK  
OFFICE OF BILINGUAL EDUCATION  
TRILINGUAL EDUCATION LEARNING ENVIRONMENT PROGRAM

131 Livingston Street  
Room 510  
Brooklyn, NY 11211

AWILDA ORTA  
DIRECTOR

Angelo Gimondo  
Deputy Director

Angela R. Bazley  
Center Director

Rosa Escoto-Haughom  
Project Director

Bilingual Teacher Intern

Self Evaluation Basic Skills and Needs Assessment  
1979-80

We are developing our training goals for field training and for the in-service workshops for the academic year 1979-80. We would appreciate your input to make sure that our training focus is reflective of your needs, and that in the first year of the program you did have the opportunity to master the basic skills of teaching.

Indicate the degree of development by circling one of the numbers 1 through 5.

(5) excellent (4) good (3) fair (2) poor (1) not at all

I. Your knowledge of classroom management

- |   |           |
|---|-----------|
| 1. Taking of attendance                                       | 5 4 3 2 1 |
| 2. Maintenance of student permanent records                   | 5 4 3 2 1 |
| 3. End of the month attendance report                         | 5 4 3 2 1 |
| 4. Students diagnostic files for reading and mathematics      | 5 4 3 2 1 |
| 5. Student logs - (behavior, talents, lunch information etc.) | 5 4 3 2 1 |

II. Class routines

- |  |           |
|--|-----------|
| 1. Methods for discipline                            | 5 4 3 2 1 |
| 2. Procedures for entrance and exiting the classroom | 5 4 3 2 1 |
| 3. Lesson schedule                                   | 5 4 3 2 1 |
| 4. Checking of homework assignments and student work | 5 4 3 2 1 |

III. Class organization

- |                                       |           |
|---------------------------------------|-----------|
| 1. Appropriate desk arrangements      | 5 4 3 2 1 |
| 2. Appropriate use of bulletin boards | 5 4 3 2 1 |
| 3. Timely classroom decorations       | 5 4 3 2 1 |
| 4. Color coding of Spanish & English  | 5 4 3 2 1 |



IV. Group instruction

- |   |   |   |   |   |   |
|---|---|---|---|---|---|
| 1. Student's reading assessment was     | 5 | 4 | 3 | 2 | 1 |
| 2. Student's mathematics assessment was | 5 | 4 | 3 | 2 | 1 |
| 3. Reading group(s) functioned          | 5 | 4 | 3 | 2 | 1 |
| 4. Mathematics group(s) functioned      | 5 | 4 | 3 | 2 | 1 |
| 5. E.S.L. group(s) functioned           | 5 | 4 | 3 | 2 | 1 |

Comments: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

V. Your knowledge of lesson planning

- |                               |   |   |   |   |   |
|-------------------------------|---|---|---|---|---|
| 1. Unit plans                 | 5 | 4 | 3 | 2 | 1 |
| 2. Weekly plans               | 5 | 4 | 3 | 2 | 1 |
| 3. Daily plans                | 5 | 4 | 3 | 2 | 1 |
| 4. Timing of lessons          | 5 | 4 | 3 | 2 | 1 |
| 5. Overall flow of lessons    | 5 | 4 | 3 | 2 | 1 |
| 6. Use of holding assignments | 5 | 4 | 3 | 2 | 1 |

Comments: I felt more English & Spanish  
materials should be available.  
\_\_\_\_\_  
\_\_\_\_\_

General Comments: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Projected Needs for 1979-80: \_\_\_\_\_  
\_\_\_\_\_

APPENDIX B

Sample Group I Questionnaire

THE CITY SCHOOL DISTRICT OF NEW YORK  
 131 Livingston Street, Brooklyn, N.Y. 11201  
 Center for Bilingual Education  
 TRILINGUAL EDUCATION LEARNING ENVIRONMENT PROGRAM

QUESTIONNAIRE ON FALL 79- SPRING 80 IN SERVICE PROGRAM

The following questionnaire items are related to specific workshops given. For each statement indicate the response closest to your opinion by circling appropriate number.

GROUP 1

1. THE OBJECTIVES OF THE WORKSHOP WERE CLEAR.

		STRONGLY DISAGREE	DISAGREE	AGREE	STRONGLY AGREE
- Administrative session	(Ms. Escoto)	1	2	3	4
- Diagnostic testing	(Resource Specialists)	1	2	3	4
- Introduction to curriculum center	(Ms. Fuentes)	1	2	3	4
- Classroom management	(Ms. Ortega)	1	2	3	4
- Discipline in the classroom	(Ms. Belli)	1	2	3	4
- Daily lesson plan	(Ms. Ortega)	1	2	3	4
- English as a Second Language	(Ms. Ortega) Incomplete	1	2	3	4
- Mathematics	(Mr. Najera) Incomplete	1	2	3	4
- Contracts workshops (U.F.T.)		1	2	3	4
- City College session	(Prof. Otheguy)	1	2	3	4
- Reading Material Demonstration	(Mr. M. Claman)	1	2	3	4

2. THE WORKSHOP WAS WELL ORGANIZED.

		STRONGLY DISAGREE	DISAGREE	AGREE	STRONGLY AGREE
- Administrative session	(Ms. Escoto)	1	2	3	4
- Diagnostic testing	(Resource Specialists)	1	2	3	4
- Introduction to curriculum center	(Ms. Fuentes)	1	2	3	4
- Classroom management	(Ms. Ortega)	1	2	3	4
- Discipline in the classroom	(Ms. Belli)	1	2	3	4
- Daily lesson plan	(Ms. Ortega)	1	2	3	4
- English as a Second Language	(Ms. Ortega) Incomplete	1	2	3	4
- Mathematics	(Mr. Najera) Incomplete	1	2	3	4
- Contracts workshops (U.F.T.)		1	2	3	4
- City College session	(Prof. Otheguy)	1	2	3	4
- Reading Material Demonstration	(Mr. M. Claman)	1	2	3	4

3. THE INSTRUCTOR(S) WERE ABLE TO GET THE MATERIAL ACROSS TO PARTICIPANTS.

		STRONGLY DISAGREE	DISAGREE	AGREE	STRONGLY AGREE
- Administrative session	(Ms. Escoto)	1	2	3	4
- Diagnostic testing	(Resource Specialists)	1	2	3	4
- Introduction to curriculum center	(Ms. Fuentes)	1	2	3	4
- Classroom management	(Ms. Ortega)	1	2	3	4
- Discipline in the classroom	(Ms. Belli)	1	2	3	4
- Daily lesson plan	(Ms. Ortega)	1	2	3	4
- English as a Second Language	(Ms. Ortega) Incomplete	1	2	3	4
- Mathematics	(Mr. Najera) Incomplete	1	2	3	4
- Contracts workshops (U.F.T.)		1	2	3	4
- City College session	(Prof. Otheguy)	1	2	3	4
- Reading Material Demonstration	(Mr. M. Claman)	1	2	3	4

4. REFERENCE INFORMATION AND RESOURCE MATERIALS WERE PROVIDED OR MADE AVAILABLE TO PARTICIPANTS.		STRONGLY DISAGREE	DISAGREE	AGREE	STRONGLY AGREE
- Administrative session	(Ms. Escoto)	1	2	3	4
- Diagnostic testing	(Resource Specialists)	1	2	3	4
- Introduction to curriculum center	(Ms. Fuentes)	1	2	3	4
- Classroom management	(Ms. Ortega)	1	2	3	4
- Discipline in the classroom	(Ms. Belli)	1	2	3	4
- Daily lesson plan	(Ms. Ortega)	1	2	3	4
- English as a Second Language	(Ms. Ortega) Incomplete	1	2	3	4
- Mathematics	(Mr. Najera) Incomplete	1	2	3	4
- Contracts workshops (U.F.T.)		1	2	3	4
- City College session	(Prof. Otheguy)	1	2	3	4
- Reading Material Demonstration	(Mr. H. Claman)	1	2	3	4
5. THE MATERIAL PRESENTED WAS USEFUL IN YOUR CLASSROOM SITUATION.		STRONGLY DISAGREE	DISAGREE	AGREE	STRONGLY AGREE
- Administrative session	(Ms. Escoto)	1	2	3	4
- Diagnostic testing	(Resource Specialists)	1	2	3	4
- Introduction to curriculum center	(Ms. Fuentes)	1	2	3	4
- Classroom management	(Ms. Ortega)	1	2	3	4
- Discipline in the classroom	(Ms. Belli)	1	2	3	4
- Daily lesson plan	(Ms. Ortega)	1	2	3	4
- English as a Second Language	(Ms. Ortega) Incomplete	1	2	3	4
- Mathematics	(Mr. Najera) Incomplete	1	2	3	4
- Contracts workshops (U.F.T.)		1	2	3	4
- City College session	(Prof. Otheguy)	1	2	3	4
- Reading Material Demonstration	(Mr. H. Claman)	1	2	3	4

6. THE INSTRUCTOR(S) STIMULATED THINKING		STRONGLY DISAGREE	DISAGREE	AGREE	STRONGLY AGREE
- Administrative session	(Ms. Escoto)	1	2	3	4
- Diagnostic testing	(Resource Specialists)	1	2	3	4
- Introduction to curriculum center	(Ms. Fuentes)	1	2	3	4
- Classroom management	(Ms. Ortega)	1	2	3	4
- Discipline in the classroom	(Ms. Belli)	1	2	3	4
- Daily lesson plan	(Ms. Ortega)	1	2	3	4
- English as a Second Language	(Ms. Ortega) Incomplete	1	2	3	4
- Mathematics	(Mr. Najera) Incomplete	1	2	3	4
- Contracts workshops (U.F.T.)		1	2	3	4
- City College session	(Prof. Otheguy)	1	2	3	4
- Reading Material Demonstration	(Mr. M. Claman)	1	2	3	4
7. A SEQUENTIAL ORDER WAS FOLLOWED IN THE PRESENTATION OF THE SUBJECT MATTER.		STRONGLY DISAGREE	DISAGREE	AGREE	STRONGLY AGREE
- Administrative session	(Ms. Escoto)	1	2	3	4
- Diagnostic testing	(Resource Specialists)	1	2	3	4
- Introduction to curriculum center	(Ms. Fuentes)	1	2	3	4
- Classroom management	(Ms. Ortega)	1	2	3	4
- Discipline in the classroom	(Ms. Belli)	1	2	3	4
- Daily lesson plan	(Ms. Ortega)	1	2	3	4
- English as a Second Language	(Ms. Ortega) Incomplete	1	2	3	4
- Mathematics	(Mr. Najera) Incomplete	1	2	3	4
- Contracts workshops (U.F.T.)		1	2	3	4
- City College session	(Prof. Otheguy)	1	2	3	4
- Reading Material Demonstration	(Mr. M. Claman)	1	2	3	4

B. SUFFICIENT TIME WAS ALLOWED FOR THIS SUBJECT AREA.

		STRONGLY DISAGREE	DISAGREE	AGREE	STRONGLY AGREE
- Administrative session	(Ms. Escoto)	1	2	3	4
- Diagnostic testing	(Resource Specialists)	1	2	3	4
- Introduction to curriculum center	(Ms. Fuentes)	1	2	3	4
- Classroom management	(Ms. Ortega)	1	2	3	4
- Discipline in the classroom	(Ms. Belli)	1	2	3	4
- Daily lesson plan	(Ms. Ortega)	1	2	3	4
- English as a Second Language	(Ms. Ortega) Incomplete	1	2	3	4
- Mathematics	(Mr. Najera) Incomplete	1	2	3	4
- Contracts workshops (U.F.T.)		1	2	3	4
- City College session	(Prof. Otheguy)	1	2	3	4
- Reading Material Demonstration	(Mr. M. Claman)	1	2	3	4

9. I WOULD RECOMMEND THIS WORKSHOP TO ANOTHER BEGINNING BILINGUAL TEACHER

		STRONGLY DISAGREE	DISAGREE	AGREE	STRONGLY AGREE
- Administrative session	(Ms. Escoto)	1	2	3	4
- Diagnostic testing	(Resource Specialists)	1	2	3	4
- Introduction to curriculum center	(Ms. Fuentes)	1	2	3	4
- Classroom management	(Ms. Ortega)	1	2	3	4
- Discipline in the classroom	(Ms. Belli)	1	2	3	4
- Daily lesson plan	(Ms. Ortega)	1	2	3	4
- English as a Second Language	(Ms. Ortega) Incomplete	1	2	3	4
- Mathematics	(Mr. Najera) Incomplete	1	2	3	4
- Contracts workshops (U.F.T.)		1	2	3	4
- City College session	(Prof. Otheguy)	1	2	3	4
- Reading Material Demonstration	(Mr. M. Claman)	1	2	3	4

10. OVERALL, WOULD YOU RATE THE WORKSHOPS HIGHLY?

		STRONGLY DISAGREE	DISAGREE	AGREE	STRONGLY AGREE
- Administrative session	(Ms. Escoto)	1	2	3	4
- Diagnostic testing	(Resource Specialists)	1	2	3	4
- Introduction to curriculum center	(Ms. Fuentes)	1	2	3	4
- Classroom management	(Ms. Ortega)	1	2	3	4
- Discipline in the classroom	(Ms. Belli)	1	2	3	4
- Daily lesson plan	(Ms. Ortega)	1	2	3	4
- English as a Second Language	(Ms. Ortega) Incomplete	1	2	3	4
- Mathematics	(Mr. Najera) Incomplete	1	2	3	4
- Contracts workshops (U.F.T.)		1	2	3	4
- City College session	(Prof. Otheguy)	1	2	3	4
- Reading Material Demonstration	(Mr. M. Claman)	1	2	3	4



Please feel free to write any additional comments on any of the workshops.

What areas of the curriculum would you like assistance in ? (field, in-service)

During the Fall of 1980 we will be offering a human relations workshop. What area would you like to see covered? (ethnicity, group dynamics, sensitivity etc.)

Please feel free to write any additional comments on any of the workshops.

What areas of the curriculum would you like assistance in ? (field, in-service)

During the Fall of 1980 we will be offering a human relations workshop. What area would you like to see covered?  
(ethnicity, group dynamics, sensitivity etc.)

APPENDIX C

Descriptive Statistics of Teacher Ratings of Workshops  
Group I and Group II Participants

Group I  
 Workshop ADMINISTRATIVE ORIENTATION

Response frequencies: number

	N	STRONGLY DISAGREE 1	DISAGREE 2	AGREE 3	STRONGLY AGREE 4	MEAN	ST. DEV.
1-The objectives of the workshop were clear.	13			11	2	3.15	.38
2-The workshop was well organized.	12			9	3	3.25	.45
3-The instructor(s) were able to get the material across to the participants.	13			12	1	3.08	.28
4-Reference information and source material were provided and made avail.	13		1	9	3	3.15	.55
5-The material presented was useful in, the classroom.	13	1		11	1	2.92	.64
6-The instructor(s) stimulated thinking.	15		1	12	2	2.93	.88
7-A sequential order was followed in the presentat.	14		1	9	4	3.21	.58
8-Sufficient time was allowed for this subject area.	14			13	1	3.07	.27
9-I would recommend this workshop to another beginning bilingual teacher.	13		1	11	1	3.00	.41
10-Overall, would you rate this workshop highly?	14	1		11	2	3.00	.68

Group I

Workshop DIAGNOSTIC TESTING

Response frequencies: number

	N	STRONGLY DISAGREE 1	DISAGREE 2	AGREE 3	STRONGLY AGREE 4	MEAN	ST. DEV.
1-The objectives of the workshop were clear.	13			12	1	3.08	.28
2-The workshop was well organized.	12			10	2	3.17	.39
3-The instructor(s) were able to get the material across to the participants.	13			13		3.00	-
4-Reference information and source material were provided and made avail.	12		1	9	2	3.08	.51
5-The material presented was useful in the classroom.	12			10	2	3.17	.39
6-The instructor(s) stimulated thinking.	14		2	10	2	3.00	.55
7-A sequential order was followed in the presentat.	15			13	2	3.13	.35
8-Sufficient time was allowed for this subject area.	14			13	1	3.07	.27
9-I would recommend this workshop to another beginning bilingual teacher.	13		1	11	1	3.00	.41
10-Overall, would you rate this workshop highly?	14			12	2	3.17	.30

Group I

Workshop CONTRACT WORKSHOP U.F.T.

Response frequencies: number

	N	STRONGLY DISAGREE 1	DISAGREE 2	AGREE 3	STRONGLY AGREE 4	MEAN	ST. DEV.
1-The objectives of the workshop were clear.	13			11	2	3.15	.38
2-The workshop was well organized.	12			11	1	3.08	.29
3-The instructor(s) were able to get the material across to the participants.	12			10	2	3.17	.39
4-Reference information and source material were provided and made avail.	12			10	2	3.17	.39
5-The material presented was useful in the classroom.	12		1	10	1	3.00	.43
6-The instructor(s) stimulated thinking.	14			13	1	3.07	.27
7-A sequential order was followed in the presentat.	14			14		3.00	-
8-Sufficient time was allowed for this subject area.	13			13		3.00	-
9- would recommend this workshop to another beginning bilingual teacher.	12		1	9	2	3.08	.51
10-Overall, would you rate this workshop highly?	13			12	1	3.08	.28

Group I  
 Workshop E.S.L.

Response frequencies: number

	N	STRONGLY DISAGREE 1	DISAGREE 2	AGREE 3	STRONGLY AGREE 4	MEAN	ST. DEV.
1-The objectives of the workshop were clear.	14			13	1	3.07	.27
2-The workshop was well organized.	13			11	1	3.08	.38
3-The instructor(s) were able to get the material across to the participants.	13			12	1	3.08	.28
4-Reference information and source material were provided and made avail.	13			12	1	3.08	.28
5-The material presented was useful in the classroom.	13			13		3.00	-
6-The instructor(s) stimulated thinking.	14	1		12	1	2.93	.62
7-A sequential order was followed in the presentat.	14			13	1	3.07	.27
8-Sufficient time was allowed for this subject area.	14	1		13		2.86	.53
9-I would recommend this workshop to another beginning bilingual teacher.	13		2	11		2.85	.38
10-Overall, would you rate this workshop highly?	14		1	13		2.93	.27

Group I

Workshop DISCIPLINE IN THE CLASSROOM

Response frequencies: number

	N	STRONGLY DISAGREE 1	DISAGREE 2	AGREE 3	STRONGLY AGREE 4	MEAN	ST. DEV.
1-The objectives of the workshop were clear.	12			11	1	3.08	.29
2-The workshop was well organized.	12			10	2	3.17	.39
3-The instructor(s) were able to get the material across to the participants.	14			13	1	3.07	.27
4-Reference information and source material were provided and made avail.	13			12	1	3.08	.28
5-The material presented was useful in the classroom.	13	2		10	1	2.77	.83
6-The instructor(s) stimulated thinking.	13	1	1	11		2.77	.60
7-A sequential order was followed in the presentat.	14			14		3.00	-
8-Sufficient time was allowed for this subject area.	13			12	1	3.08	.28
9-I would recommend this workshop to another beginning bilingual teacher.	12		2	10		2.83	.39
10-Overall, would you rate this workshop highly?	13		2	11		2.85	.38



Group I

Workshop CITY COLLEGE WORKSHOP

Response frequencies: number

	N	STRONGLY DISAGREE 1	DISAGREE 2	AGREE 3	STRONGLY AGREE 4	MEAN	ST. DEV.
1-The objectives of the workshop were clear.	14		1	9	4	3.21	.58
2-The workshop was well organized.	13		1	11	1	3.00	.41
3-The instructor(s) were able to get the material across to the participants.	15			13	2	3.13	.35
4-Reference information and source material were provided and made avail.	14	1		12	1	2.93	.62
5-The material presented was useful in the classroom.	14	2	1	11		2.64	.74
6-The instructor(s) stimulated thinking.	13	2		11		2.69	.75
7-A sequential order was followed in the Presentat.	14	1		13		2.86	.53
8-Sufficient time was allowed for this subject area.	14			13	1	3.07	.27
9-I would recommend this workshop to another beginning bilingual teacher.	13	2		10	1	2.77	.83
10-Overall, would you rate this workshop highly?	14	3	1	10		2.50	.85

Group IWorkshop INTRODUCTION TO CURRICULUM CENTER

Response frequencies: number

	N	STRONGLY DISAGREE 1	DISAGREE 2	AGREE 3	STRONGLY AGREE 4	MEAN	ST. DEV.
1-The objectives of the workshop were clear.	12			10	2	3.17	.39
2-The workshop was well organized.	13			11	2	3.23	.44
3-The instructor(s) were able to get the material across to the participants.	13			11	2	3.15	.38
4-Reference information and source material were provided and made avail.	14			13	1	3.07	.27
5-The material presented was useful in the classroom.	13			12	1	3.08	.28
6-The instructor(s) stimulated thinking.	14			12	2	3.14	.36
7-A sequential order was followed in the presentat.	14		1	11	2	3.07	.47
8-Sufficient time was allowed for this subject area.	14			13	1	3.07	.27
9-I would recommend this workshop to another beginning bilingual teacher.	13		1	10	2	3.08	.49
10-Overall, would you rate this workshop highly?	14		1	11	2	3.07	.47

Group I CLASSROOM MANAGEMENT  
 Workshop \_\_\_\_\_

Response frequencies: number

	N	STRONGLY DISAGREE 1	DISAGREE 2	AGREE 3	STRONGLY AGREE 4	MEAN	ST. DEV.
1-The objectives of the workshop were clear.	12			11	1	3.08	.29
2-The workshop was well organized.	13			11	2	3.15	.38
3-The instructor(s) were able to get the material across to the participants.	13			13		3.00	-
4-Reference information and source material were provided and made avail.	12			11	2	3.08	.29
5-The material presented was useful in the classroom.	13	1		11	1	2.92	.64
6-The instructor(s) stimulated thinking.	15	1	1	12	1	2.87	.64
7-A sequential order was followed in the presentat.	13			12	1	3.08	.28
8-Sufficient time was allowed for this subject area.	14		1	12	1	3.00	.39
9-I would recommend this workshop to another beginning bilingual teacher.	13		2	9	2	3.00	.58
10-Overall, would you rate this workshop highly?	14		2	10	2	3.00	.55

Group I  
Workshop DAILY LESSON PLAN

Response frequencies: number

	N	STRONGLY DISAGREE 1	DISAGREE 2	AGREE 3	STRONGLY AGREE 4	MEAN	ST. DEV.
1-The objectives of the workshop were clear.	14			10	4	3.29	.47
2-The workshop was well organized.	14			11	3	3.21	.43
3-The instructor(s) were able to get the material across to the participants.	14			14		3.00	-
4-Reference information and source material were provided and made avail.	13			12	1	3.08	.28
5-The material presented was useful in the classroom.	13		1	12		2.92	.28
6-The instructor(s) stimulated thinking.	14	1	1	12		2.64	.93
7-A sequential order was followed in the Presentat.	13			13		3.00	-
8-Sufficient time was allowed for this subject area.	14			14		3.00	-
9-I would recommend this workshop to another beginning bilingual teacher.	13		2	11		2.85	.38
10-Overall, would you rate this workshop highly?	14		1	13		2.93	.27

Group I

Workshop MATHEMATICS

Response frequencies: number

	N	STRONGLY DISAGREE 1	DISAGREE 2	AGREE 3	STRONGLY AGREE 4	MEAN	ST. DEV.
1-The objectives of the workshop were clear.	14			11	3	3.21	.43
2-The workshop was well organized.	14			13	1	3.07	.27
3-The instructor(s) were able to get the material across to the participants.	13			12	1	3.08	.28
4-Reference information and source material were provided and made avail.	13			12	1	3.08	.28
5-The material presented was useful in the classroom.	13			13		3.00	-
6-The instructor(s) stimulated thinking.	14	1		12	1	2.93	.62
7-A sequential order was followed in the presentat.	14			13	1	3.07	.27
8-Sufficient time was allowed for this subject area.	14	1		13		2.86	.53
9-I would recommend this workshop to another beginning bilingual teacher.	13		2	10	1	2.92	.49
10-Overall, would you rate this workshop highly?	14		1	12	1	3.00	.39

Group I

Workshop MATERIALS DEMONSTRATION

Response frequencies: number

	N	STRONGLY DISAGREE 1	DISAGREE 2	AGREE 3	STRONGLY AGREE 4	MEAN	ST. DEV.
1-The objectives of the workshop were clear.	14	1	1	10	2	2.93	.73
2-The workshop was well organized.	13	1	1	9	2	2.85	.76
3-The instructor(s) were able to get the material across to the participants.	13	1	1	10	1	2.85	.69
4-Reference information and source material were provided and made avail.	13	2	3	7	1	2.54	.88
5-The material presented was useful in the classroom.	14	2	3	9		2.50	.76
6-The instructor(s) stimulated thinking.	13	3		10		2.54	.88
7-A sequential order was followed in the presentat.	15	2	2	11		2.60	.74
8-Sufficient time was allowed for this subject area.	12	2		9	1	2.75	.87
9-I would recommend this workshop to another beginning bilingual teacher.	13	3	1	9		2.46	.88
10-Overall, would you rate this workshop highly?	14	3	1	10		2.50	.85

Group II  
 Workshop ADMINISTRATIVE ORIENTATION

Response frequencies: number

	N	STRONGLY DISAGREE 1	DISAGREE 2	AGREE 3	STRONGLY AGREE 4	MEAN	ST. DEV.
1-The objectives of the workshop were clear.	15		2	9	4	3.13	.64
2-The workshop was well organized.	15		2	9	4	3.13	.64
3-The instructor(s) were able to get the material across to the participants.	15		3	8	4	3.07	.70
4-Reference information and source material were provided and made avail.	15		3	9	3	3.00	.65
5-The material presented was useful in the classroom.	15	3	4	7	1	2.40	.91
6-The instructor(s) stimulated thinking.	15		3	10	2	2.93	.59
7-A sequential order was followed in the presentat.	15	1	2	7	5	3.07	.88
8-Sufficient time was allowed for this subject area.	15	1	2	6	6	3.13	.92
9-I would recommend this workshop to another beginning bilingual teacher.	15		1	8	6	3.33	.62
10-Overall, would you rate this workshop highly?	15		3	9	3	3.00	.65

Group II  
Workshop DIAGNOSTIC TESTING

Response frequencies: number

	N	STRONGLY DISAGREE 1	DISAGREE 2	AGREE 3	STRONGLY AGREE 4	MEAN	ST. DEV.
1-The objectives of the workshop were clear.	15		1	8	6	3.33	.62
2-The workshop was well organized.	15		1	10	4	3.20	.56
3-The instructor(s) were able to get the material across to the participants.	15		3	8	4	3.07	.70
4-Reference information and source material were provided and made avail.	15		1	11	3	3.13	.52
5-The material presented was useful in the classroom.	15	1	1	9	4	3.07	.80
6-The instructor(s) stimulated thinking.	15	1	4	7	3	2.80	.86
7-A sequential order was followed in the presentat.	15		1	9	5	3.27	.59
8-Sufficient time was allowed for this subject area.	15		1	9	5	3.27	.59
9-I would recommend this workshop to another beginning bilingual teacher.	15		1	10	4	3.20	.56
10-Overall, would you rate this workshop highly?	15		1	10	4	3.20	.56



Group II

Workshop CONTRACT WORKSHOP U.F.T.

Response frequencies: number

	N	STRONGLY DISAGREE 1	DISAGREE 2	AGREE 3	STRONGLY AGREE 4	MEAN	ST. DEV.
1-The objectives of the workshop were clear.	15			6	9	3.60	.51
2-The workshop was well organized.	15			8	7	3.47	.52
3-The instructor(s) were able to get the material across to the participants.	15			7	8	3.53	.52
4-Reference information and source material were provided and made avail.	15			10	5	3.33	.49
5-The material presented was useful in the classroom.	15	2	2	9	2	2.73	.80
6-The instructor(s) stimulated thinking.	15	1	1	9	4	3.07	.30
7-A sequential order was followed in the presentat.	15	1		9	5	3.20	.77
8-Sufficient time was allowed for this subject area.	15		4	4	7	3.20	.86
9-I would recommend this workshop to another beginning bilingual teacher.	14			7	7	3.40	.51
10-Overall, would you rate this workshop highly?	15	1	1	9	4	3.07	.80

Group IIWorkshop E.S.L.

Response frequencies: number

	N	STRONGLY DISAGREE 1	DISAGREE 2	AGREE 3	STRONGLY AGREE 4	MEAN	ST. DEV.
1-The objectives of the workshop were clear.	15		1	11	3	3.13	.52
2-The workshop was well organized.	15	1	3	9	2	2.80	.77
3-The instructor(s) were able to get the material across to the participants.	15	1	3	10	1	2.53	.99
4-Reference information and source material were provided and made avail.	15	1	2	9	3	2.93	.80
5-The material presented was useful in the classroom.	14		2	10	2	3.00	.55
6-The instructor(s) stimulated thinking.	15	1	2	10	2	2.87	.74
7-A sequential order was followed in the presentat.	15		4	8	3	2.93	.70
8-Sufficient time was allowed for this subject area.	15		2	9	4	3.13	.64
9-I would recommend this workshop to another beginning bilingual teacher.	15		1	10	4	3.20	.56
10-Overall, would you rate this workshop highly?	15		4	9	2	2.87	.64

Group II

Workshop

## DISCIPLINE IN THE CLASSROOM

Response frequencies: number

	N	STRONGLY DISAGREE 1	DISAGREE 2	AGREE 3	STRONGLY AGREE 4	MEAN	ST. DEV.
1-The objectives of the workshop were clear.	15	1	3	9	2	2.80	.77
2-The workshop was well organized.	15	1	3	8	3	2.93	.70
3-The instructor(s) were able to get the material across to the participants.	15		3	11	1	2.87	.52
4-Reference information and source material were provided and made avail.	15		1	11	3	3.13	.52
5-The material presented was useful in the classroom.	15	1	3	9	2	2.80	.77
6-The instructor(s) stimulated thinking.	15	2	2	9	2	2.73	.88
7-A sequential order was followed in the presentat.	15		2	9	4	3.13	.64
8-Sufficient time was allowed for this subject area.	15		2	7	6	3.27	.70
9-I would recommend this workshop to another beginning bilingual teacher.	15	1		9	5	3.20	.77
10-Overall, would you rate this workshop highly?	15	1	3	8	3	2.87	.83

Group II

Workshop

## CITY COLLEGE PROGRAM WORKSHOP

Response frequencies: number

	N	STRONGLY DISAGREE 1	DISAGREE 2	AGREE 3	STRONGLY AGREE 4	MEAN	ST. DEV.
1-The objectives of the workshop were clear.	15		1	8	6	3.33	.62
2-The workshop was well organized.	15		1	9	5	3.27	.59
3-The instructor(s) were able to get the material across to the participants.	15		1	9	5	3.27	.59
4-Reference information and source material were provided and made avail.	15	2	2	7	4	2.87	.99
5-The material presented was useful in the classroom.	14	2	1	9	2	2.79	.89
6-The instructor(s) stimulated thinking.	15	3		9	3	2.80	1.01
7-A sequential order was followed in the presentat.	15	1	1	6	5	3.13	.83
8-Sufficient time was allowed for this subject area.	15	1	3	6	5	3.00	.93
9-I would recommend this workshop to another beginning bilingual teacher.	15			9	6	3.40	.51
10-Overall, would you rate this workshop highly?	15	1	2	9	3	2.93	.80

Group IIWorkshop MATERIALS DEVELOPMENT

Response frequencies: number

	N	STRONGLY DISAGREE 1	DISAGREE 2	AGREE 3	STRONGLY AGREE 4	MEAN	ST. DEV.
1-The objectives of the workshop were clear.	15		1	4	10	3.60	.63
2-The workshop was well organized.	15		1	5	9	3.53	.64
3-The instructor(s) were able to get the material across to the participants.	15		1	5	9	3.53	.64
4-Reference information and source material were provided and made avail.	15		1	7	7	3.40	.63
5-The material presented was useful in the classroom.	15		1	8	6	3.33	.62
6-The instructor(s) stimulated thinking.	15		1	8	6	3.33	.62
7-A sequential order was followed in the presentat.	15		1	8	6	3.33	.62
8-Sufficient time was allowed for this subject area.	15	2	2	5	6	3.00	1.07
9-I would recommend this workshop to another beginning bilingual teacher.	15			8	7	3.47	.52
10-Overall, would you rate this workshop highly?	15		1	6	8	3.47	.64

Group IIWorkshop NEW YORK CITY RESOURCESResponse frequencies: number

	N	STRONGLY DISAGREE 1	DISAGREE 2	AGREE 3	STRONGLY AGREE 4	MEAN	ST. DEV.
1-The objectives of the workshop were clear.	15	1	2	9	3	2.93	.80
2-The workshop was well organized.	15	1	3	8	3	2.87	.83
3-The instructor(s) were able to get the material across to the participants.	15		5	9	1	2.73	.59
4-Reference information and source material were provided and made avail.	15		2	9	4	3.13	.64
5-The material presented was useful in the classroom.	15		3	10	2	3.00	.55
6-The instructor(s) stimulated thinking.	15	2	3	8	2	2.67	.90
7-A sequential order was followed in the presentat.	15		3	9	3	3.00	.65
8-Sufficient time was allowed for this subject area.	14		2	7	5	3.21	.70
9-I would recommend this workshop to another beginning bilingual teacher.	15	1	1	9	4	3.07	.80
10-Overall, would you rate this workshop highly?	15	1	5	8	1	2.60	.74

Group II

Workshop

UNIT LESSON PLANNING

Response frequencies: number

	N	STRONGLY DISAGREE 1	DISAGREE 2	AGREE 3	STRONGLY AGREE 4	MEAN	ST. DEV.
1-The objectives of the workshop were clear.	15			11	4	3.27	.46
2-The workshop was well organized.	15			10	5	3.33	.49
3-The instructor(s) were able to get the material across to the participants.	15		1	11	3	3.13	.52
4-Reference information and source material were provided and made avail.	15			11	4	3.27	.46
5-The material presented was useful in the classroom.	15		1	11	3	3.13	.52
6-The instructor(s) stimulated thinking.	15		1	10	4	3.20	.56
7-A sequential order was followed in the presentat.	15			10	5	3.33	.49
8-Sufficient time was allowed for this subject area.	15		1	9	5	3.27	.59
9-I would recommend this workshop to another beginning bilingual teacher.	15	1		10	4	3.13	.74
10-Overall, would you rate this workshop highly?	15		1	10	4	3.20	.56

Group II  
Workshop SCIENCE

Response frequencies: number

	N	STRONGLY DISAGREE 1	DISAGREE 2	AGREE 3	STRONGLY AGREE 4	MEAN	ST. DEV.
1-The objectives of the workshop were clear.	14			8	6	3.43	.51
2-The workshop was well organized.	14			10	4	3.29	.47
3-The instructor(s) were able to get the material across to the participants.	14			10	4	3.29	.47
4-Reference information and source material were provided and made avail.	14			10	4	3.29	.47
5-The material presented was useful in the classroom.	14	1		9	4	3.14	.77
6-The instructor(s) stimulated thinking.	14			9	5	3.36	.50
7-A sequential order was followed in the presentat.	14			8	6	3.43	.51
8-Sufficient time was allowed for this subject area.	15		2	6	7	3.33	.72
9-I would recommend this workshop to another beginning bilingual teacher.	15		1	9	5	3.27	.59
10-Overall, would you rate this workshop highly?	14			9	5	3.36	.50



Group IIWorkshop READING METHODOLOGY

Response frequencies: number

	N	STRONGLY DISAGREE 1	DISAGREE 2	AGREE 3	STRONGLY AGREE 4	MEAN	ST. DEV.
1-The objectives of the workshop were clear.	15			8	7	3.47	.52
2-The workshop was well organized.	15			9	6	3.40	.51
3-The instructor(s) were able to get the material across to the participants.	15			10	5	3.33	.49
4-Reference information and source material were provided and made avail.	14			9	5	3.36	.50
5-The material presented was useful in the classroom.	15			8	7	3.47	.52
6-The instructor(s) stimulated thinking.	15			9	6	3.40	.51
7-A sequential order was followed in the presentat.	14			7	7	3.50	.52
8-Sufficient time was allowed for this subject area.	15		1	7	7	3.40	.63
9-I would recommend this workshop to another beginning bilingual teacher.	15			10	5	3.33	.49
10-Overall, would you rate this workshop highly?	15			8	7	3.47	.52

APPENDIX D  
Mini-Course Evaluation

# Final Results

For your information  
C. Ostrowski

## EVALUATION QUESTIONNAIRE

This questionnaire for students has been prepared in order to assess your evaluation of the mathematics and science courses given this summer.

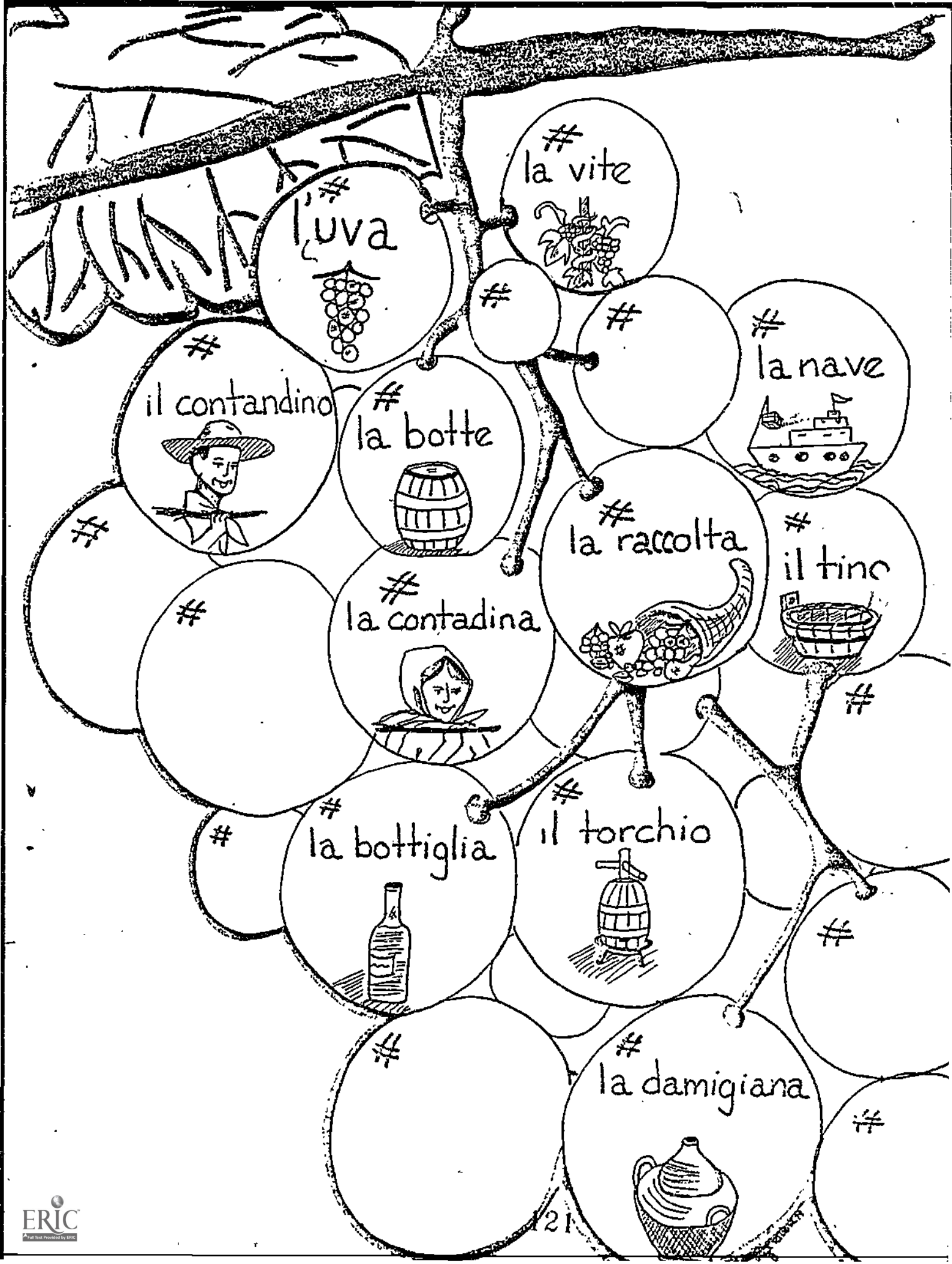
Please answer the questions and place it on the side counter before you leave. Thank you for your cooperation.

Clara E. Ostrowski

The titles of these courses are: Teaching Science in Bilingual Education and Teaching Mathematics in Bilingual Education, A review of techniques for teaching mathematics/science in bilingual classrooms.

	N	EXCELLENT <sup>4</sup>	GOOD <sup>3</sup>	FAIR <sup>2</sup>	POOR <sup>1</sup>	
1. How did the course fulfill the title?						M ST
mathematics	17	5	4	2		3 15 66
science	17	5	7	5		3 00 74
2. How do you assess the topics selected for the mathematics course?		4	9	3		
3. How do you assess the instructor's preparation?		4	8	4		
4. What is your opinion of:						
a. the handouts	7		10			
b. games/activities	3		12	2	1	
c. format of the lesson	1		12	2		
d. mathematics assignments	1		10	6	1	
e. science assignment	1		10	3	1	
f. extra paper (if applicable)			3		3	
		YES	NO	NO OPINION	NOT APPLICABLE	
If you are teaching, will you be able to implement any lessons that have been taught in class?		15		1		
Would you have preferred to have the course taught in Spanish?	<sup>both</sup> 1	3	6	5	1	
COMMENTS/SUGGESTIONS:						

APPENDIX E  
Sample Materials in Italian



#  
la vite



#  
uva



#  
il contadino



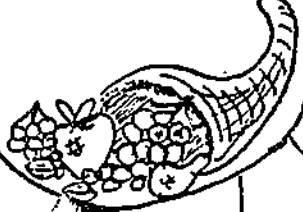
#  
la botte



#  
la nave



#  
la raccolta



#  
il tino



#  
la contadina



#  
la bottiglia

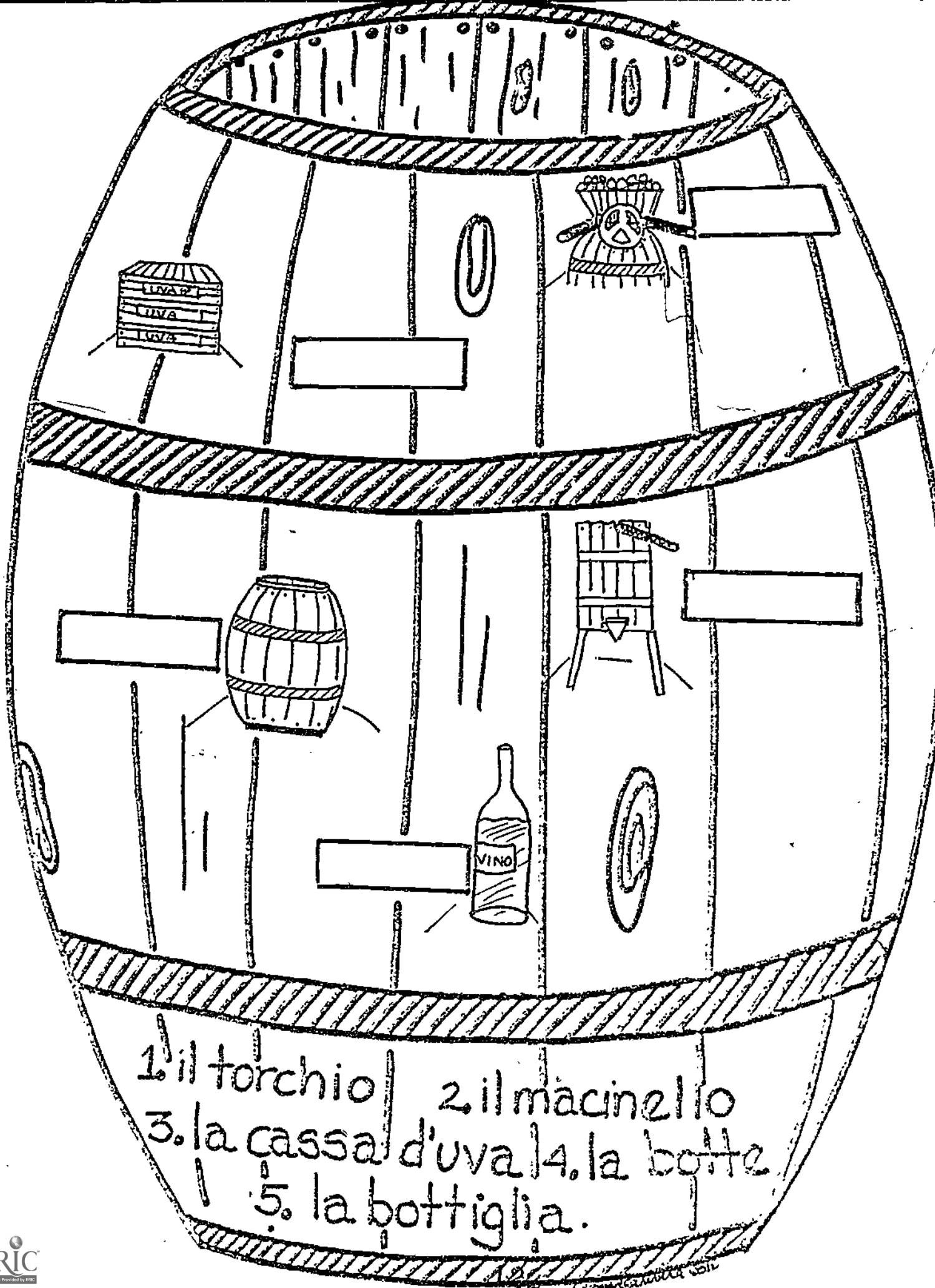


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il torchio

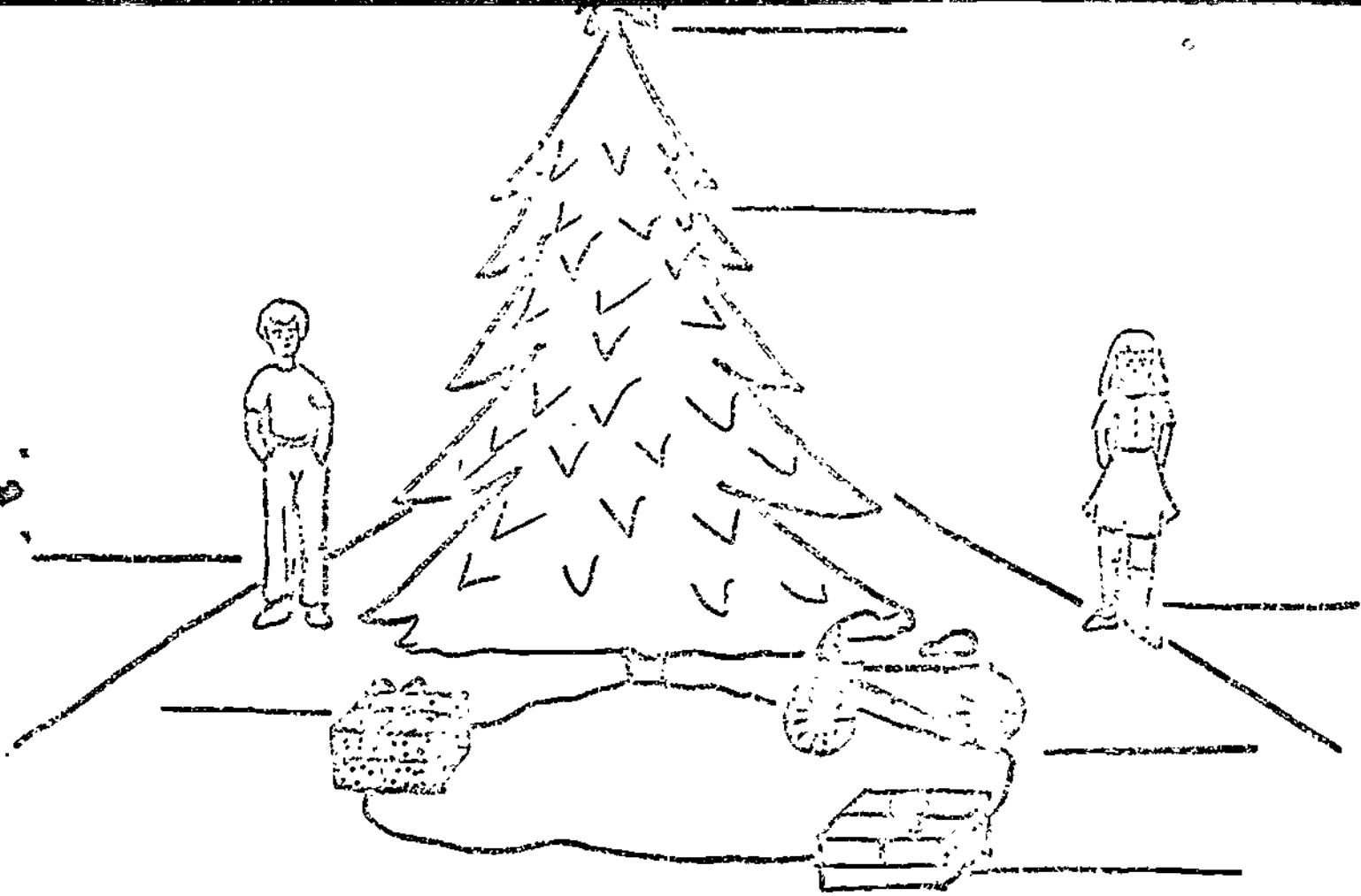


#  
la damigiana





1. il torchio | 2. il macinello  
3. la cassa d'uva | 4. la botte  
5. la bottiglia.



1. la bicicletta

4. il ragazzo

2. il regalo

5. la stella

3. l'albero di Natale

7. il regalo