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BSTRACT

During the 1983-1984 school year, I4 local migrant education projects conducted by Colorado school districts and Boards of Cooperative Services (BOCES) provided educational services to 1,151 migrant students, with 51% formerly migrant and 49% currently migrants. The number of eligible migrant children registered in school increased by 4%; the number of students receiving services dropped 23% due to improved coordination between the Migrant Program and other state and federal programs. Fifty-three percent of the students were from 5 to 9 years old. Approximately 40% of students served received instruction in a language other than English. Migrant projects provided/coordinated educational, health and social services for students; inservice training for staff; and activities to encourage parent involve ent. Former students gained an average 3.8 Normal Curve Equivalents (NCEs) in reading and 5.4 NCEs in math. Fifteen migrant summer programs served 2,055 students. Recommendations included continued efforts to register all eligible migrant children; continued efforts to coordinate migrant programs and services with other programs, district staff and parents; improved technical support particularly in information gathering and record keeping; and continued assistance in reading. Figures displaying statistical information are included within narration. Appendix provides excerpts from the 1984 Migrant Health Report, Colorado Department of Health. (PM)



COLORADO MIGRANT EDUCATION

Summary and Evaluation Report

1983 - 1984

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COLORADO MIGRANT EDUCATION PROGRAM

1983-4 Evaluation Report

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PREFACE

This report is a summary of the evaluation information submitted by the Colorado Department' of Education Migrant Education staff and Colorado's fourteen regular year programs and fifteen summer programs administered during 1983-84.

Local project directors and their staffs were extremely helpful in providing information to assist in the preparation of this report and their time commitment is appreciated.

In addition, Betty Hinkle, Executive Director of the Special Projects Unit, Ernest Maestas, Supervisor of the Migrant Program, Richard Rangel, Migrant Education Program Senior Consultant and Peggy M. Lesher, Migrant Education Program Consultant are to be commended for their support, cooperation and assistance in preparing this report. Charles Abernathy, developed the computer program for the data analysis and supervised data entry. Angela Coffield typed and prepared the manuscript with assistance from Syliva Sablan.



TABLE OF CONTENTS

	Page
PREFACE	i
EXECUTIVE STRARY	•
CONCLUSIONS AND RECOMMENDATIONS	
INTRODUCTION	1
PART I. STATE PROGRAM ACTIVITIES AND ACCOMPLISHMENTS	5
State-Level Administration State Plan Chjectives	5
PART II. LOCAL PROGRAM OPERATIONS: RECULAR YEAR 1983-4	10
1983-4 Regular Year Migrant Education Programs	10
Number of Students Served	11
Services Provided to Migrant Students Staffing Patterns	18 20
Program Volunteers	20 21
Local Program Accomplishments	22
Achievement Results in Regular Year Programs	26
Services Available to Local Programs	31
PART III. LOCAL PROGRAM OPERATIONS: SUMMER 1984	3,2
1984 Summer Migrant Education Programs	32
Number of Students Served	33
Migrant Summer Program Activities and Services Provided	36
Local Program Accomplishments	43
Summer Porgram Student Progress	46
Services Available to Local Programs	50

Appendix A. Excerpts from 1984 Migrant Health Report, Colorado Department of Health



List of Figures

1.	Schools Serving Migrant Students, 1983-4	10
2.	1983-4 Eligible Children by Migrant Status	11
3.	Migrant Children Identified But Not Registered in School	12
4.	Unserved Migrant Students by Migrant Status	15
5.	Unserved Migrant Students by Age Range	15
6.	Migrant Program Participants by Migrant Status	16
7.	Migrant Program Participants by Age Range	17
8.	Migrant Program Participants' Language of Instruction	18
9.	Trends in Migrant Program Support Services	19
0.	1983-4 Percent of Migrant Funded Staff by Category	20
1.	Trends in Migrant Program Volunteers	21
2.	Ratings of Instructional Objectives	24
3.	Ratings of Support Service Objectives	25
4.	NCE Gains for Former Migrants: Reading	27



15.	Trends in Migrant Reading Gains	27
16.	NCE Gains for Former Migrants: Math	28
17.	Trends in Math Gains	28
18.	Summer Programs by Type of School	32
19.	1984 Eligible Migrant Children by Status	33
20.	Summer Participants by Migrant Status	34
21.	Summer Participants by Age Range	35
22.	Migrant Summer Participants' Language of Instruction	36
23.	Support Services Provided to Summer Participants	36
24.	Number of Students Attempting and Receiving Secondary Program Credit	
	in the Summer of 1984	38
25.	1984 Summer Migrant - Funded Staff by Category	41
26.	Trends in Summer Program Volunteers	42
27.	Ratings of Support Services Chiectives	45
28.	Ratings of Management Objectives	46





List of Tables

	•	Page
1.	1983-4 Regular Year Migrant Programs	10
2.	Children Eligible for Migrant Services	12
3.	Percent of All Eligible Migrants Not Registered in School	13
4.	Migrant Students Served by Other Programs But Not Receiving Migrant Education Services	14
5.	1983-4 Number of Registered Migrant Students Receiving Migrant Education Services	16
6.	Regular Year Program Volunteers, 1983-4	21
7.	Rating of Success of Staff Development Program Components	22
8.	1983-4 Parental Involvement Activities	23
9.	Ratings of Management Objectives, 1983-4	25
10.	Number of Projects Providing Test Data for Regular Year Migrant Students	26
11.	Criterion - Referenced Testing Results for Active Migrants: Reading	29
12.	Criterion - Referenced Testing Results for Active Migrants: Math	30
13.	Usefulness of MSRTS Services	31
14.	1984 Summer Migrant Prorams	32



15.	Migrant Program, Program Participants, 1984	34
16.	Number of Participants Receiving other Program Services	37
17.	Participation in Summer Secondary Programs	37
18.	Secondary Program Ratings	39
19.	Number of Projects Reporting Coordination With Other Agencies	40
20.	Dissemination Techniques	41
21.	Ratings of Summer Staff Development Activities	43
22.	Parent Involvement Activities	44
23.	Ratings of Instructional Objectives	45
24.	Number of Projects Providing Test Data for Summer Projects	47
25.	Criterion - Referenced Test Results for Summer Migrants: Peading	48
26.	Criterion - Referenced Results for Summer Migrants: Math	49
27.	Usefulness of MSRTS Services	50
28.	Usefulness of Summer Health Program	50



EXECUTIVE SIMMARY

Migrant Program Administration

The Colorado Migrant Education Program was administered by the Special Projects Unit of the Colorado Department of Education. State-level administration of the program included responsibility for the development of a State Plan, approval of local program funding, review of local programs, provision of technical assistance and coordination of support services to local programs.

Local districts were assisted in the implementation of migrant education programs by the Department of Education; by the Colorado Department of Health, which provided comprehensive medical and dental services; and by the Migrant Student Record Transfer System, a computerized network which maintains academic and health records for individual migrant students.

Regular Year Programs

During the 1983-4 school year fourteen local migrant education projects conducted by Colorado school districts and Boards of Cooperative Services (BOCES) provided educational services to 1,151 migrant students. Of the students served, 51 percent were formerly migratory, i.e., children whose families have settled out of the migrant stream and who have resided in the school district for a period of 12 months without moving. The other 49 percent were students of currently active migrant families. Forty percent (40%) were interstate migrants whose families move annually from one state to another. The remaining nine percent (9%) were children of migrant families who move from district to district within Colorado.

The number of eligible migrant children who were registered in school in 1983-4 increased by four percent over the number registered in 1982-3. However, the number of students who received migrant program services decreased (by 23 percent). This decrease reflects improved coordination between the Migrant Program and other state and federal programs such as Chapter 1 and the English Language Proficiency Act. The number of migrant students served by other programs increased by 33 percent between 1982-3 and 1983-4.

Migrant program participants tended to be younger children: 53 percent of them were from five to nine years old. Approximately 40 percent of the students served in the program received instruction in a language other than English.

Migrant projects either provided or coordinated educational, health and social services for students; inservice training for staff who work with migrant students; and a variety of activities to encourage parent involvement. Staff members funded by the Migrant Program included instructional aides (31 percent), certified instructional personnel (24 percent), and recruiters (16 percent). Services were also provided by program volunteers, including parents of migrant students, youths and other adults. The number of volunteers in migrant programs has declined by 23 percent since 1980.



vii 11

In self-ratings of the effectiveness of their programs, migrant program directors gave high ratings to the following areas: improvement in specific skills such as oral language skills, identification and recruitment of migrant students, and directing, planning and monitoring the program. Areas identified as needing improvement were communication and math skills, record keeping, and cooperation and support from parents and district staff.

In 1983-4, Colorado former migrant students gained an average of 3.8 NCEs in reading and 5.4 NCEs in math. In general, students in the lower grades gained more, and students in the upper grades gained less, as a result of the program. The progress of active migrants in reading and math was assessed by the use of criterion-referenced tests. The results of these tests indicated that active migrant students mastered new objectives and learned new skills during their participation in the program.

Summer Programs

Fifteen migrant education programs were conducted in Colorado during the summer of 1984, serving a total of 2055 migrant students. All summer participants received educational and support services as a result of their participation. At the secondary level, a total of 99 students attempted to earn credit for summer courses and 82 (or 83 percent) of them actually received credit. The percent of students attempting credit who actually received it nearly doubled between 1983 and 1984.

Assessing their summer programs, migrant project directors rated the following program components as most successful: improvement in communication and English skills, provision of dental and medical services and communication and coordination with other programs. The program components rated least successful were improvement in vocational skills, food and other support services, and gathering information for the evaluation report. At the secondary level, ratings were lowest for the availability and usefulness of the Texas counselor. Criterion-referenced tests administered during the summer indicated that migrant students made progress in both reading and math as a result of their participation in the program.

Conclusions

The findings from this evaluation lead to the following conclusions regarding Colorado Migrant Programs in 1983-4.

- 1. Colorado Migrant Programs are registering in school the majority of eligible migrant students in the state. There were, however, 390 eligible migrant children between the ages of 5 and 17 who were not registered in school during 1983-4. Nearly 40 percent of these were interstate migrants.
- 2. Colorado Migrant Programs have improved the coordination of services for migrant children. In 1983-4, the percent of migrant students served by other programs increased by 33 percent.

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- 3. There has been a substantial improvement in the effectiveness of program efforts to help summer migrant secondary students to obtain credit for summer courses. The percent of secondary students who successfully obtained credit for summer courses nearly doubled between 1983 and 1984.
- 4. For both regular year and summer programs, improvement in English, language and other communication skills were rated as the most successful aspects of the program. Regular year project staff also gave high ratings to the identification and recruitment of students and directing and managing the program. Summer program staff gave high ratings to the provision of dental and medical services and coordinating with other programs.
- 5. Information gathering and record keeping were identified as the areas most in need of improvement. Regular year staff also felt that obtaining cooperation and support from parents and district staff required improvement, and summer program staff felt that improvement in vocational skills was also needed.
- 6. In both the regular year and summer programs, students who received migrant program educational services showed evidence of achievement gains in reading and mathematics.

Recommendations

The following recommendations and suggestions are offered for consideration by the Colorado Department of Education and district staff who administer migrant programs.

- 1. Continue program efforts to register and serve all migrant children eligible for services. Although most eligible students were registered in school, there were 390 eligible students between the ages of 5 and 17 who were not registered in school in 1983-4.
- 2. Continue to encourage and support efforts to coordinate migrant programs and services with other programs, district staff and parents. Although there was improvement in this area in 1983-4, it is still mentioned as an area of needed improvement by local migrant staff.
- 3. Provide support and technical assistance to migrant programs in their areas of identified need, particularly in information gathering and record keeping, which nearly all migrant project directors indicated was an area of needed improvement.
- 4. Continue to emphasize and provide assistance in the area of reading. Although migrant students showed considerable reading gains as a result of their participation in migrant programs, the amount of gain in reading has declined somewhat in the last two years. Continued emphasis on this important area is needed.



INTRODUCTION

Program Description

The 1983-4 Colorado Migrant Education Program was federally funded through Chapter 1 Migrant Education funds allocated through the Education Consolidation and Improvement Act of 1981. The Colorado program was funded at a level of \$2,705,972 of which 5 percent was allocated for administration by the Colorado Department of Education (CDE), 8 percent was allocated for contracted support services, and 87 percent was allocated for local program operations.

Chapter 1 Migrant Education funds are allocated to the State based on the number of migrant children (on a full-time equivalent basis) enrolled from Colorado on the Migrant Student Record Transfer System (MSRTS), a national computerized system of records maintenance for migrant children. Loc i Migrant Programs were funded to identify and enroll eligible migrant children onto MSRTS, to assist the school districts in recruiting migrant children to attend school, to solicit referrals of eligible children for instructional services to supplement services received in the regular classroom, and to provide support services as needed by the children that could not be provided through the district. In the summer a full range of instructional and support services are provided which address the particular needs of migrant students who require supplementary assistance beyond the regular year program.

Purpose of Evaluation

The purpose of this evaluation is threefold:

- 1. To document the performance of the SFA, LFA and contracted support service components of the Colorado Migrant Education Program for SFA, LFA and federal use.
- 2. To provide information which may assist in determining the effectiveness of the statewide program in achieving the principal objectives of the 1983-4 State Plan.
- 3. To document the performance of local program operations, including:
 - a) children served,
 - b) staffing patterns
 - c) staff inservice training,
 - d) parent involvement activities
 - e) coordination with other educational programs,
 - f) coordination wih other agencies,
 - g) dissemination, and
 - h) program's strengths and weaknesses



Methods of Evaluation

Information for this report was obtained from the Evaluation Report forms submitted by local program directors.

The 1983-4 State Plan for Migrant Education described the needs of migrant students in Colorado. This description included an estimate of the number of eligible migrant children, their general characteristics (including language, culture, economic status, academic experience, etc.) and needs for special services. To address these needs, the State Plan included a number of objectives. Those listed as Instructional and Supportive Objectives were to be accomplished by local programs, with technical assistance from the Colorado Department of Education (CDE). Those listed as Management Objectives were Administrative Objectives of the Migrant Education Programs.

Instructional Objectives

- 1. To develop and improve the migrant child's communication and reading skills by providing a language arts program stressing listening, speaking, reading, spelling and writing, using the child's dominant language as appropriate to the child's needs, but stressing the need to master English.
- 2. To develop and improve the migrant child's mathematical skills by providing a math program based on individual needs and the opportunity to obtain functional math skills, basic computational skills and mathematical concepts.
- 3. To develop the migrant child's skills in vocational areas, understanding and awareness of careers by providing him/her with opportunities to identify aptitudes, explore interests, explore career options, and on-the-job work experiences.
- 4. To advance the educational development of non-English-speaking and limited-English-speaking migrant children by instructing them in their dominant language and providing English language instruction.
- 5. To enrich the migrant student's understanding and knowledge of cultural differences and enhance his/her ethnic culture by providing activities that include his/her history and culture in learning activities.
- 6. To enrich the migrant child's personal growth by providing opportunities for creative expression through music, art and crafts.
- 7. To provide specially designed activities which will increase the migrant child's social growth, positive self-concept and group interaction skills.
- 8. To provide the migrant child with the opportunity to develop and improve muscular coordination and healthy body through activities in physical education.



9. To develop and improve the migrant child's capabilities in other academic areas such as natural science and social studies.

Support Objectives

- 10. To identify and enroll all migrant children who are eligible for inclusion in the Migrant Education Program.
- 11. To provide nutritional, dental and medical services to migrant children to enhance their wellbeing and to assure treatment of any health problems before they become threatening or detrimental to a productive life.
- 12. To provide other support services such as clothing, psychological services and speech therapy to migrant children who demonstrate a need for these services.
- 13. To obtain parent and teacher input in designing and implementation, plus encouraging parent participation in educational activities.

Management Objectives

- 1. To direct the Migrant Education Program of Colorado.
- 2. To plan, develop and implement regular term and summer migrant projects.
- 3. To review and provide technical assistance to LEA regular term and summer migrant projects d ring FY 1984.
- 4. To provide inservice training through the Colorado Migrant Education Resource Center, consultants and State Migrant consultants to LEA administrators, teachers, teacher aides and other Migrant Program staff.
- 5. To disseminate booklets and brochures statewide and nationwide on current educational services in Migrant Education in Colorado during FY 1984.
- 6. To develop and compile an evaluation which will include 100% of all projects for FY 1984.
- 7. To plan, develop and implement a State Plan for FY 1984 as required by federal guide ines.
- 8. To develop and implement a program of communication and coordination with other agencies to avoid duplication of services and assure comprehensive services to migrant children.
- 9. To provide for program countinuity through interstate cooperation in the Migrant Student Record Transfer System and Western States Coordinating Council for Migrant Education and cooperative funding of interstate projects.

3



10. To obtain parent and teacher input in the Migrant Education Program design, implementation and evaluation, plus encouraging parent participation in educational activities.

Report Format

The format for this report includes three major sections. The first is a documentation of the Colorado Department of Education (CDE) Migrant Education Program's activities and accomplishments, the second section presents the performance and effectiveness of local 1983-4 regular year Migrant Education Programs, and the third presents the performance and effectiveness of local 1984 summer Migrant Education Programs.

PART I. STATE PROGRAM ACTIVITIES AND ACCUMPLISHMENTS

State-Level Administration

The Colorado Migrant Education Program was operated from the Special Projects Unit of the Office of Federal Relations and Instructional Services of the Colorado Department of Education (CDE). The professional staff for the 1983-84 program consisted of one program supervisor and two consultants. The staff was responsible for administering migrant funds to assure that all eligible migrant students were served. These responsibilities included development of the State Plan, approval of local program funding, review of local programs, and provision of technical assistance and coordination of support services to local programs.

The State Plan of operational objectives was developed by the State staff through input obtained from local program directors, migrant teaching staff, and migrant parents regarding program directives and priorities in relation to national program goals and objectives. (The State Plan objectives were listed earlier in the introduction.)

State Plan Objectives Relevant to the State Department of Education Migrant Office

The management objectives of the State Plan outline the basic functions of the colorado Department of Education Migrant Education Program. In order to more fully understand how these objectives were met, each one is addressed.

Management Objective 1. To direct the Migrant Education Program of Colorado.

This objective's achievement included accomplishment of all phases of state level administration: development of the State Plan, identification and recruitment, review and approval of local applications, review of and technical assistance to local programs, coordination of support services, coordination of evaluation, and coordination with the national office and other states.

Management Objective 2. To plan, develop and implement regular year and summer migrant projects.

The state migrant staff reviewed and approved fourteen regular year and fifteen summer migrant projects. The State migrant staff worked closely with local districts and BOCES in the development of local projects and provided technical assistance. The CDE Migrant Program staff convened three meetings with local program directors to provide program information, provide information on Rules and Regulations, establish program priorities, coordinate evaluation efforts, and to discuss program issues.



Five State meetings were held with migrant parents during 1983-84. Three of these meetings were held for the purpose of developing the Migrant State Plan. Migrant parents reviewed the previous year's application, previous year's evaluation report, and needs assessment data. Parents assisted in the State Plan development. Migrant parents were encouraged to visit local projects and were provided inservice training.

Management Objective 3. To review and provide technical assistance to LEA regular year and summer migrant projects during FY 1984.

The State migrant staff reviewed eight regular and nine summer migrant projects. The purpose of the program reviews were:

- to determine compliance with legal requirements;

- to determine fidelity of program implementation to program application;

- to provide technical assistance.

Management Objective 4. To provide inservice training through ODE migrant consultants, other consultants, and local human resources to LEA administrators, teachers, teacher aides, and other migrant staff.

The State migrant staff held three workshops for directors, three workshops for recruiters and record clerks; twenty one Migrant Student Record Transfer System (MSRTS) inservice sessions for local program staff; two training sessions for summer migrant school nurses on the MSRTS health records. One session on the Health Education Units was presented to the summer migrant health teams providing services in the migrant education summer schools and six sessions to summer migrant staff.

Local migrant program directors formed committees and with the assistance of the CDE migrant program staff, planned and provided two regional workshops for summer migrant school staff and one computer technology workshop for local migrant staff.

State migrant program staff provided four regional Parent Trainers workshops for LEA parent trainers.

Management Objective 5. To disseminate booklets and brochures statewide and nationwide on current educational activities in migrant education in Colorado during FY 1984.

The FY 1983 Migrant Education Evaluation Report was disseminated state and nationwide. The FY 1985 Migrant Education State Plan was disseminated statewide. Migrant program information was disseminated to local school districts. The Migrant Health Education Curriculum Units were disseminated statewide.



Management Objective 6. To develop and compile an evaluation which will include 100% of all projects for FY 1984.

The current evaluation report of the FY 1984 regular year and summer programs is evidence of evaluation compliance. The same evaluation format as FY 1983, was utilized for FY 1984 since the continuity of design should enhance the probability of receiving more complete student achievement data and serve to stabilize the information asked of local projects directors.

Management Objective 7. To plan and implement a State Plan for FY 1984 as required by federal guidelines.

The FY 1984 State Plan was developed as reflected in the objectives found in the Introduction. The FY 1985 State Plan was developed with input from migrant parents, local migrant program directors and staff, and other agency personnel. The State Plan was submitted to the U.S. Department of Education, Office of Migrant Programs, and received approval.

Management Objective 8. To develop and implement a program of communication and coordination with other agencies to avoid duplication of services and to assure comprehensive services to migrant children.

Inter-agency and intra-agency coordination at the state level was a vear-round, ongoing, integral component of the migrant education program conducted by the Colorado migrant state staff. Intra-agency coordination took place with the following educational programs within the Colorado Department of Education: Chapter 1, English Language Proficiency Act (ELPA), Child Nutrition, School Finance and Data Services (Transportation), Special Education, Conservation Education, Planning and Evaluation Unit, Career Education.

The CDE migrant education staff also coordinated with the High School Equivalency Program (HEP) at the University of Southern Colorado and the Migrant Action Program (MAP) at the University of Colorado.

The Colorado Migrant and Rural Coalition composed of agencies serving migrant families convened monthly in Denver. The Coalition's purpose is to share and coordinate activities and services to avoid duplication of effort in serving migrant families.

The Coalition conducted a special tour of migrant schools and other services during the 1984 summer season. Participants represented twenty or more agencies, church groups, and other organizations. The ODE Migrant Education Program is a charter member and current participant of the Colorado Migrant and Rural Coalition.



Program planning in preparation for summer occurred throughout the year for the special summer services to be provided at migrant summer schools, day care centers, and migrant clinics. Program guidelines were disseminated to the local agencies. In addition to summer health services, Health Education Classroom Curriculum Units were provided through inservice training to LEA summer staffs.

The community services were tapped by the LEA program directors and recruiters all year. Later in this report, there is an account of the number and kind of services and agencies utilized by local migrant staff for assistance to migrant families.

Management Objective 9. To provide for program continuity through interstate cooperation, participation in the Migrant Student Record Transfer system, Western State Coordinating Council for Migrant Education, and cooperative funding of interstate projects.

The Colorado Migrant program cooperated and coordinated with Texas in their Migrant Teacher Exchange Project. One counselor from Texas spent the summer of 1984 in Colorado visiting local migrant programs, providing inservice training and exchanging information with local migrant program staff specifically related to the Secondary Credit Exchange Program.

All of Colorado's local migrant programs participated in the Migrant Student Record Transfer System (MSRTS). This system is designed to provide academic and health information on all migrant children who are enrolled in the computer in Little Rock, Arkansas, and attend school in the United States and Puerto Rico. The system provides an educational and medical record; it also contains the Skills Information System which includes reading, math, oral language, and early childhood skills.

Colorado State Migrant Program staff coordinated with the New York Credit Exchange, Section 143 Project, and with Texas in their Secondary Credit Exchange Program to obtain information on high school policies and graduation requirements. Local migrant program directors traveled to Texas to visit with Texas school administrators and counselors.



Colorado has coordinated with other states by providing and exchanging program information an provided information about the Colorado Recruitment Project and Health Services.

Colorado is a participating state in the following Section 143 Projects:

-Indianapolis, Indiana Migrant Education Recruitment Identification Task (MERIT), Implementing the System;
-Harrisburg, Pennsylvania Migrant Education Resources List and Information Network (MERLIN):
- Gulfport, Mississippi National Migrant Materials and Resource Center.

Management Objective 10. To obtain parent and teacher input in the Migrant Education Program design, implementation and evaluation, plus encouraging parent participation in educational activities.

The Colorado State Plan was made available to all local migrant programs. Local migrant program directors were requested to conduct meetings with teaching staff, parents and local Parent Advisory Councils to review and discuss the State Plan and provide the state migrant staff with recommendations.

Three meetings were held with the state Migrant Parent Advisory Council to discuss and plan the FY 1985 State Plan.

Parents and state PAC members visited the local migrant programs and were involved in the evaluation of programs.

Migrant Parents, LEA PAC members and state PAC members had the opportunity to participate in a statewide Parent Involvement Conference sponsored by CDE Chapter 1 Migrant Education.



PART II. LOCAL PROGRAM OPERATIONS: REGULAR YEAR 1983-4

1983-4 Regular Year Migrant Education Programs

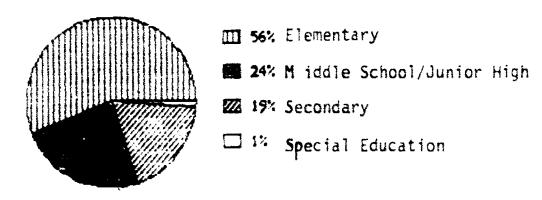
Fourteen local Migrant Education Programs were conducted in Colorado during the 1983-4 regular school year. Eight were administered by BOCES (service centers supported by and serving a group of school districts). Table 1 lists the agencies administering 1983-4 Regular Year Migrant Education Programs.

Table 1. 1983-4 Regular Year Migrant Programs

Adams County School District 27J
Boulder Valley School District Re-2
Montrose County School Districts RE-1J
Poudre School District R-1
St. Vrain Valley School District Re-1J
Weld County School District #6
Arkansas valley ROCES
East Central BOCES
Northern Colorado BOCES
San Luis Valley ROCES
South Central BOCES
South Platte Valley BOCES
Southeastern BOCES
Weld County BOCES

Services were provided in 339 Colorado schools, of which more than half were elementary schools.

Figure 1. Schools Serving Migrant Students, 1983-4

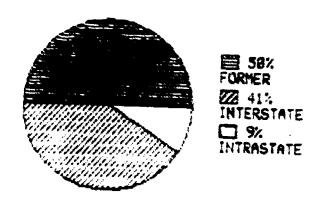




Number of Students Served

Eligible Migrant Children. In 1983-4, 4,334 children were identified as eligible migrants and were enrolled on the Migrant Student Record Transfer System (MSRTS). Of these, 50 percent were former migrants, i.e., children whose families have settled out of the migrant stream and who have resided in the school district for a period of 12 months without moving. (Students are no longer considered migrant after six years of continual residence in one school district.) An additional 41 percent of the eligible students were classified as interstate migrants, or children of active migratory families who move between Colorado and one or more other states during the school year. The remaining children were intrastate migrants, whose families move from one school district to another within Colorado.

Figure 2. 1983-4 Eligible Children by Migrant Status



The total number of eligible students identified in 1983-4 increased by three percent (3%) over the number identified in the 1982-3 school year. The percent of children classified as interstate, intrastate and formerly migrant was similar both years.

Not all children who were eligible for migrant services and enrolled on the MSRTS were actually served by the Migrant Program. Table 2 shows the number of students who were eligible but not registered in school, registered in school but not receiving services, and receiving migrant education services, for the last two years.

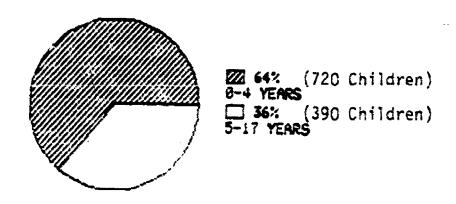


Table 2. Children Eligible for Migrant Services

<u>Year</u>	Not Registered in School	Registered Not Receiving Migrant Services	in School Receiving Migrant Services	Total
82-3	1115	1598	1494	4207
83-4	1110	2073	1151	4334
% Change, 82-3 to			~	
83-4	48	+29.7%	-23.0%	+38

(1) Eligible Students Not Registered in School. The number of eligible students who were not registered in school in 1983-4 was 1,110, slightly lower than last year. Figure 3 shows the number of migrant children by grade range who were identified and enrolled in the MSRTS but were not registered in school (K-12) in 1983-4.

Figure 3. Migrant Children Identified But Not Registered in School



Most (64%) of the students identified but not enrolled were in the age range from birth to age four, and were not eligible for enrollment as there are very few preschool programs in Colorado. There were, however, 390 migrant children, ages 5 through 17, who were identified but not registered in school during 1983-4.

The likelihood of being registered in school was greatest for children who were former migrants, and least for children who were interstate migrants.

Table 3. Percent of All Eligible Migrants Not Registered in School

Migrant Status	Percent not Registered
Former migrants	16%
Intrastate migrants	26%
Interstate "	37%

Increasing the number of migrant children enrolled in school is a priority of the Department of Education for the 1984-5 school year.



Registered Eligible Students Not Receiving Migrant Education In 1983-4, a total of 3,224 eligible migrant children were registered in schools in Colorado, an increase of 132 (or 4 percent) over the number registered in the 1982-3 school year. However, as shown in Table 2, the number who were registered but did not receive migrant education services increased by 29 percent over 1982-3. There are two reasons for the increase in the number of registered students not receiving migrant education services. First, regular year migrant program services are intended to be supplementary, i.e., to meet student needs that cannot be met by the regular program or by other state or federal programs operating in the district. Some eligible migrant students do not need such supplementary services. Second, an objective of the Migrant Program as been to increase coordination with other programs (such as Chapter 1, the bilingual Program, the English Language Proficiency Act Program (ELPA), or Special education) to avoid duplication of services to migrant students. As indicated in Table 4, the number of migrant students served by these programs increased by 33 percent between 1982-3 and 1983-4.

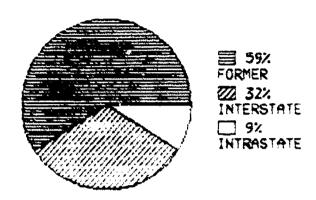
Table 4. Migrant Students Served By Other Programs
But Not Receiving Migrant Education Services

Program	1982-3	1983-4
Chapter 1	261	284
FLPA	342	454
Title VII (Bilinguai)	118	112
Special Education	141	109
Total	721	959
Percent Increase		33%



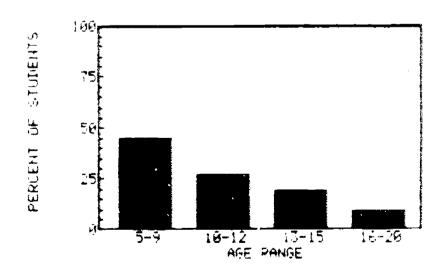
Most (59%) of the registered migrants who were not receiving migrant education services were former migrants, who may have been previously served by either the Migrant Program or another supplementary program, and who may no longer be in need of special services.

Figure 4. Unserved Migrant Students by Migrant Status.



Of those eligible registered students who did not receive migrant education services, nearly half (45%) were in the age range from 5 to 9 years old. This means that they are in the grade range most likely to be served by other programs, as the majority of Chapter 1 and ELPA students are in the early elementary grades.

Figure 5. Unserved Migrant Students by Age Range



(3) Students Receiving Migrant Education Services. In 1983-4, 1,151 students received migrant education services, a decrease of 23 percent wer the number served in 1982-3.

Table 5. 1983-4 Number of Registered Migrant Students
Receiving Migrant Education Services

Age Range	Interstate	Migrant Status Intrastate	Former	Total
0 - 4	0	1	1	2
5 - 9	246	60	299	605
10 - 12	119	26	152	297
13 - 15	81	14	101	196
16 - 20	11	5	35	51
Total	457	106	588	1151

The majority (51%) of those receiving migrant services were former migrants, 40 percent were interstate migrant children, and nine percent were children of intrastate migrant families.

Figure 6. Migrant Program Participants by Migrant Status.

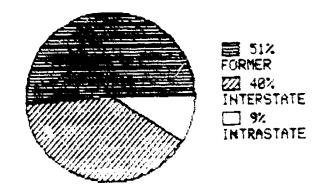
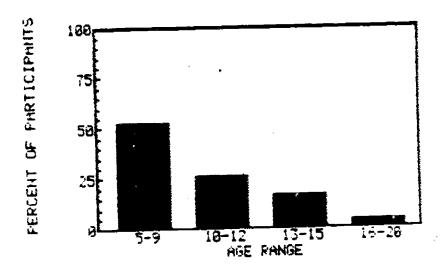




Figure 7 shows the age distribution of students who received migrant education services during 1983-4. The majority (53 percent) of program participants were in the age range from age 5 to age 9.

Figure 7. Migrant Program Participants by Age Range



The distribution of migrant students by age and by migrant status has changed very little over the last three years.

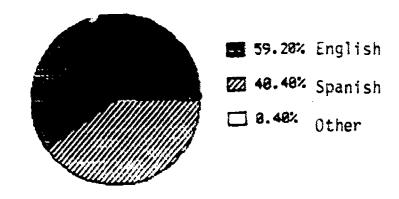


Services Provided to Migrant Students

Extent of Services. A total of 1,151 students received educational services in 1983-4 regular year migrant education programs. Programs participants received an average of 93.8 sessions during the year, each lasting approximately one-half hour.

Language of Instruction. More than half (59.2 percent) of migrant program participants received instruction in English, and 40.4 percent were instructed in Spanish.

Figure 8. Migrant Program Participants' Language of Instruction.

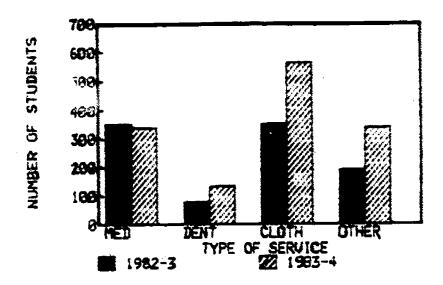


Migrant program staff used a language proficiency test or tests combined with teacher and parent judgments to assess the language proficiency of their students. Test used included: LAST, HOLT, BSM, Idea Language Proficiency Kit, Boehm Test.

Support Services. In addition to educational services, many migrant students received support services funded in whole or in part by the Migrant Program. In 1983-4, 343 students received medical services, 138 dental services, 566 clothing, and 340 received other services (such as legal, social service and immigration assistance, household items, from other sources). The amount of support services provided to migrant students increased in 1983-4 over that provided in 1982-3 except for medical services, which decreased slightly. (Note that students may have received more than one type of service.)



Figure 9. Trends in Migrant Program Support Services

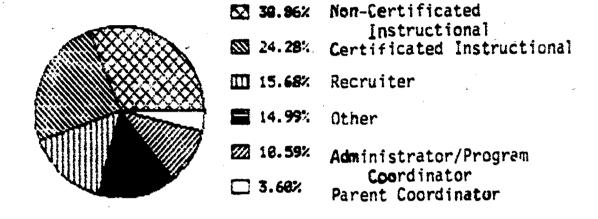




Staffing Patterns

The percent of staff funded by the Migrant Program is shown in Figure 10. Over half of the migrant-funded staff were instructional, with 31 percent being non-certificated aides, and 24 percent certificated personnel. Fifteen (15) percent of the staff were recruiters, and 11 percent were administrators and program coordinators. The type of staff funded by the Migrant Program has changed very little over the last five years.

Figure 10. 1983-4 Percent of Migrant Funded Staff by Category





Program Volunteers

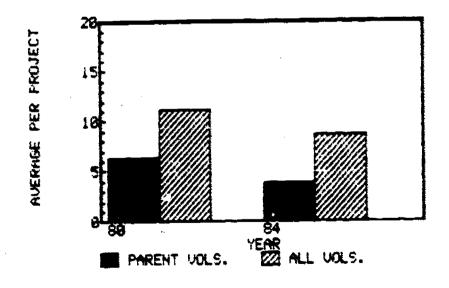
In addition to migrant-funded staff, many volunteers provided services to migrant students, including transportation services, classroom assistance, and other activities. In 1983-4, a total of 120 persons provided volunteer services in regular-year migrant programs.

Table 6. Regular Year Program Volunteers, 1983-4

Type of Volunteer	Number
Parents of migrant students	55
Other adults	53
Youth	12
Total	120

The number of volunteers serving migrant programs has declined over the last five years from an average of 11.2 per project in 1979-80 to an average of 8.6 per project in 1983-4. A similar decline in the number of volunteers has occurred in the regular Chapter 1 program.

Figure 11. Trends in Migrant Program Volunteers.





The decline in the number of volunteers serving migrant students may in part reflect a growing societal trend of increasing numbers of working parents and single parent families. Whatever the reason, the decreasing number of parent volunteers suggests that ways need to be found to develop and increase parental involvement in migrant education, particularly for students whose educational needs are very great.

Local Program Accomplishments

Staff Development and Professional Growth. Local migrant programs were asked to rate the effectiveness of their efforts to meet the professional growth and training needs of their staffs. Overall, staff development was rated 3.85 on a scale ranging from one (very unsuccessful) to five (successful).

On individual program components, districts gave the highest ratings to coordinating with other special programs, district activities and community resources. Identifying ongoing staff needs and meeting the individual professional growth needs of staff were also highly rated. Lowest ratings were given to coordinating with institutions of higher education for purposes of providing credit, assistance in-certification, recertification, degree programs, etc. Forty percent (40%) of the districts indicated that they had accomplished very little in this area.

Table 7. Rating of Success of Staff Development Program Components

	Rating of Project success				
Program Component Co	mpletely	Considerably	Same	Very Little	
Meeting individual professional growth needs of staff	15%	62%	88	15%	
Coordinating with other special programs, district activities, and community resources	17%	83%	0	0	
Identifying ongoing staff needs	88	77%	15%	0	
Coordinating with higher education for credit, certification assistance, degree programs	10%	2 ₹	30%	40%	

Parental Involvement Activities. Overall, local migrant programs gave a rating of 3.5 (on a scale from 1 to 5) to the success of their parental involvement activities. Table 8 provides a summary of the various types of parental involvement activities and the average number of these events per migrant program for 1382-3 and 1983-4. The number of parental involvement activities increased in 1983-4 over the number occurring in 1982-3. The total number of participants in these activities (duplicated count) also increased from 780 to 1,956 between 1982-3 and 1983-4.

Table 8. 1983-4 Parental Involvement Activities

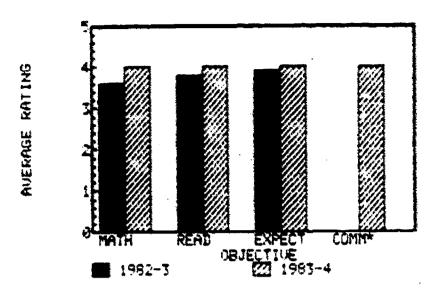
Activity	No. 01	83-4	Average No. of 82-3	Events/Program 83-4
Program planning	28	40	2.0	2.9
Program operation	34	49	2.4	3.5
Program Eval- uation	22	31	1.6	2.2
Increase involvement	30	56	2.1	4.0
Parent training	NA	50	NA NA	3.6

Progress Toward Objectives. Migrant programs were asked to rate their success in meeting their objectives in three areas: instruction, support services and program management.

In 1983-4, instructional objectives were given a successful rating (i.e., a rating of 4 on a scale from 1--very unsuccessful-to 5--very successful) by migrant programs. Ratings of instructional objectives were slightly higher than in 1982-3.



Figure 12. Ratings of Instructional Objectives



Math = math skills
Read = readingskills
Expect = Expectations
of success
Comm = Communication
skills

*Not available in 1982-3.

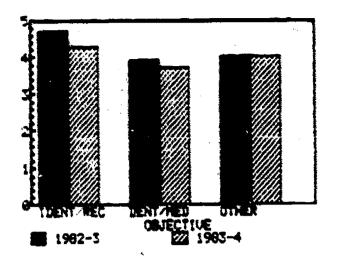
**Ratings were on a scale of 1 (very unsuccessful)
5 (very successful)

In describing their outstanding successes, migrant programs most frequently mentioned improvement in specific skills, such as oral language skills, and improvement in self concept. Also frequently mentioned was improvement in a child's language so that they were able to function in the regular classroom. One project director offered this example: "One first grader was extremely withdrawn. He is now talkative and participates in single and class discussions."

Wost frequently mentioned as instructional areas needing improvement were listening, and writing and math skills. Some projects also expressed a need for improved counseling services.

The provision of support services to migrant students was also highly rated by migrant programs in 1983-4. In two areas, student identification and recruitment and provision of dental and medical services, ratings were slightly lower than those in 1982-3, but nevertheless rated a 4.3 and 3.7, respectively. Ratings of other support services were similar to last year.

Figure 13. Ratings of Support Service Objectives



Ident/Rec = Identif ication and recruit ment

Dent/Med = Provision
 of dental and
 medical services

Nearly all projects mentioned the provision of specific services, such as glasses and hearing aids, as examples of success in the support services area. Also frequently mentioned were cooperation among staff and organizations providing the services, and the positive attitudes of parents. Better record keeping, particularly regarding health was the area most often mentioned as needing improvement. Several projects also mentioned inadequate funds to supply all needed services.

Migrant program directors also gave high ratings to the achievement of management objectives for the program. Highest ratings were given to directing the program, planning and implementing it, assisting staff and monitoring program activities. Slightly lower ratings were given to information dissemination, communication and coordination with other agencies, and gathering documentation for the evaluation report.

Table 9. Ratings of Management Objectives, 1983-4

Management Objective	Average Rating
Directing the program	4.1
Planning/implementing the program	4.1
Assisting staff/monitoring program	4.1
Disseminating information Communication & coordination	3.8
with others	3.9
Documenting information for evaluation	3.7

Cooperation and support from parents, other organizations and district staff was most frequently mentioned as successes in program management. The need for more time and for even greater cooperation and coordination was most often listed as the management area needing improvement.



Achievement Results in Regular Year Programs

The achievement gains of active and former migrants were assessed through the use of a two-part evaluation design.

progress of Former Migrants. For former migrant students, who are in the district year-round, a pre-post test design was used. Each project administered a standardized test (of their choice) in reading and math, using either a fall-to-spring, a spring-to-spring or a fall-to-fall pre-post test schedule. The results were then converted to a common standardized scale, Normal Curve Equivalents (NCES) for reporting and summarizing at the state level.

Progress of Active Migrants. A pre-post test design was not considered feasible for assessing the progress of active migrants because of their mobility. Projects were asked to use a criterion-referenced test which closely matched their curriculum to monitor the progress of active migrants. Such tests indicate the progress made by individual students in the program, but it is not possible to compare results across students or projects, because different tests (or even different portions of the same test) are not equated for difficulty. In other words, the amount of time required for a student to master different objectives within the test will vary, depending on the particular objective involved.

The quality of the data available about the progress of migrant students has improved substantially during the last four years, as the number of projects reporting data has increased.

Table 10. Number of Projects Providing Test Data for Regular Year Migrant Students.

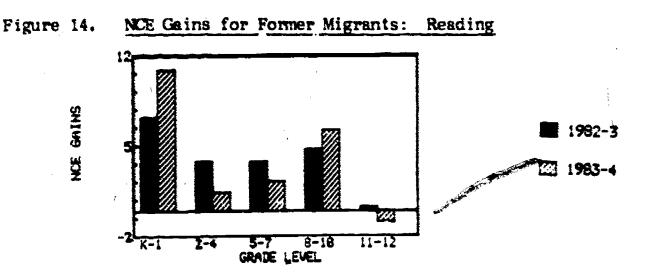
Fiscal Year	No. of Projects	Former Migrant Results	Active Migrant Results
1981	16	69%	31%
1982	16	94%	50%
1983	14	100%	100%
1984	14	100%	1 10%

The increased reporting of evaluation results means that the accuracy of the statewide summary has increased substantially during the four year period. It also indicates that migrant projects have increased their efforts to obtain and keep records of the progress of migrant students.



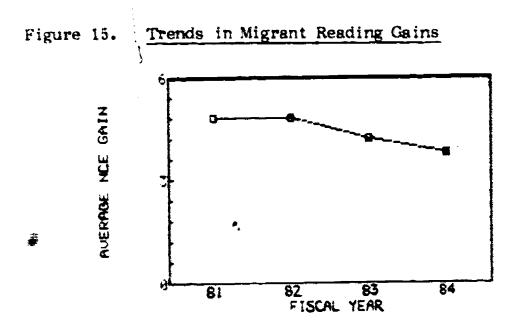
Progress of Former Migrants

Reading. In 1983-4, Colorado former migrant students gained an average of 3.8 NCE's in reading. Students in the grade spans K-1 and 8-10 showed the greatest gains, and those in grades 11-12 showed the least. However, less than one percent of the students tested were in grades 11-12, and the results for those grades are not very reliable.



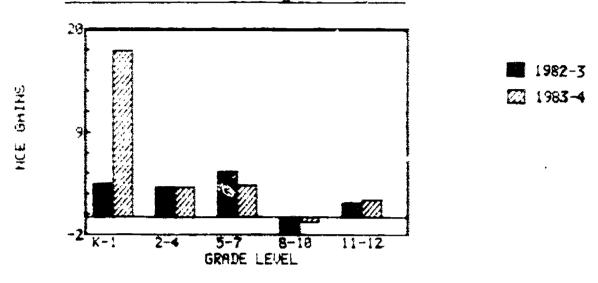
In interpreting these results, it is important to remember that without the benefits of extra services, such as provided by the Migrant Program, a student is expected to show zero NCE growth during the year. Any NCE gain greater than zero is assumed to be the result of the extra services provided by the program.

The reading gains in 1983-4 were slightly smaller than those obtained in the previous three years. However, students in the grade spans K-1 and 8-10 showed gains greater than the previous year, whereas s'udents at other grade levels showed smaller gains.



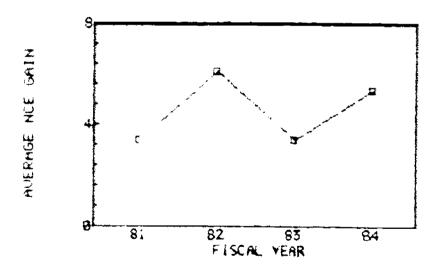
Math. In 1983-4, Colorado former migrant students gained an average of 5.4 NCEs in math, an increase of 2 NCEs from the previous year. Students in grades K-1 and 5-7 showed the greatest gains, and students in grades 8-10 showed the smallest.

Figure 16. MCE Gains for Former Migrants: Meth



The math gains in 1983-4 were larger than those obtained in 1982-3, but not quite as large as those obtained in 1981-2. Students in 1983-4 showed greater gains than in 1982-3 for every grade level except grades 5-7.

Figure 17. Trends in Migrant Math Gains.



Progress of Active Migrants

The criterion-referenced results in reading and math for active migrant students in regular year programs are presented in Tables 11 and 12. These tables show the progress of active migrant students whose gains were monitored through the use of criterion-referenced tests. The tables provide a rough indication of the progress of active migrants in mastering skills or objectives introduced to them during their participation in the Migrant Program.

The results of criterion-referenced tests cannot be compared across tests, across projects, or even within tests (because some objectives are more difficult to master than others). Therefore, it is not possible to present statewide average gains for active migrants, although the tables provide evidence of their progress.

Table 11 Criterion Referenced Testing Results for Active Migrants:
Reading

97 2.2
ο ς ο
21 5.0
52 20.1
60 4-4
21 6.0
.13 4.8
40 26 - 7
.04 14.2
15 18.2
89 8.5
26 3.8
35 4-1
72 15.0
1



Table 12. Criterion-Referenced Testing Results for Active Migrants:

Math

Project	Test Used	No. Students Tested	Average No. Session	Average No. Objectives Mastered Per Child
•	Key Math	42	16	4.5
2	Piramid	3	78	29.7
3	Brigance	15	28	12.0
4	Brigance	42	35	4.7
5	Heath	2	48	6.5
6	CIBS	33	25	5.0
7	Local	10	72	12.0
8	Brigance	6	26	5.3
9	Local	6	10	3.8
10	Brigance	11	15	18.2
11	Brigance	17	15	2.1
12	Local	27	209	7.0

Services Available to Local Programs

Local migrant programs receive information about migrant students from the Migrant Student Record Transfer System (MSRTS). The MSRTS is a national computerized network headquartered in Little Rock, Arkansas. Academic and health records are maintained for individual migrant students and are provided to schools when migrant students register. This system has been operating since 1970.

Migrant programs were asked to rate the usefulness of the MSRTS services available to them to support their efforts to provide educational and other services to migrant children.

Table 13. Usefulness of MSRTS Services.

Type of Record	Rating o	f Usefulness Teachers
Educational	2.4	1.7
Health	2.2	2.5

Note: Usefulness rated on a scale from 1(Low) to 3 (High).

The educational record (including the Skills Information System) was considered useful by migrant staff, but was not rated highly by classroom teachers. The health record was rated medium-to-high by both groups. Several programs commented that the records arrive too late to be useful to them.



PART III. LOCAL PROGRAM OPERATIONS: SUMMER 1984

1984 Summer Migrant Education Programs

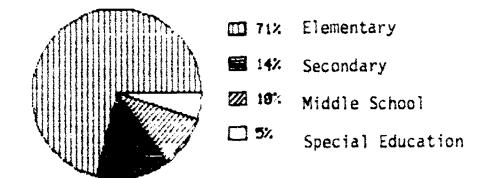
Fifteen local Migrant Education Programs were conducted in Colorado during the summer of 1984. Seven were administered by school districts and eight by BOCES.

Table 14. 1984 Summer Migrant Programs

Adams County School District 27-J
Boulder Valley School District 1
Boulder Valley School District 2
Larimer School District 1
Logan County School District 1
Mesa School District 51
Montrose School District 1
Arkansas Valley BOCES
East Central BOCES
Northern Colorado BOCES
San Luis Valley BOCES
South Central BOCES
South Platte BOCES
Weld BOCES

Migrant services were provided in 21 Colorado schools, 71 percent of which were elementary schools.

Figure 18. Summer Programs by Type of School

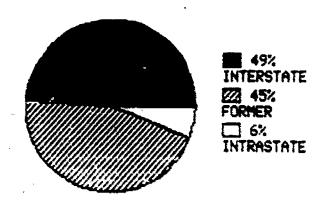




Number of Students Served

Eligible Migrant Children. In the summer of 1984, there were 3,544 eligible migrant children identified in Colorado. Of these 49 percent were interstate migrants, 45 percent former migrants, and 6 percent intrastate migrants.

Figure 19. 1984 Eligible Migrant Children by Status



The total number of eligible children decreased by three percent (3%) over the 1983 summer figures.

As with the regular year program, not all eligible students were actually registered and receiving services in the summer. Of those not registered and receiving services, one-third were in the age range from 0 to 4 years old, and would not have been able to receive services due to their age. There were, however, 454 students between the ages of 5 and 17 who were eligible for services in the summer of 1984 and did not receive them.

Students Receiving Migrant Education Services. In the summer of 1984, 2.055 students received Migrant Program services. The percent of eligible migrant students who were served by summer programs increased by one percent between 1983 and 1984.



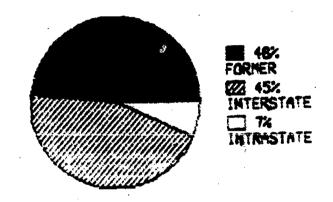
Table 15. Migrant Program Participants, 1984

Migrant Status

Age Range	Interstate	Intrastate	Former	Total
0-4	21	1	43	65
5-9	473	74	553	1100
10-12	214	39	245	498
13-15	144	18	114	276
16-20	75	6	35	116
TOTAL	927	138	990	2055

Almost half of those receiving services in the summer were former migrants, and 45 percent were interstate migrants.

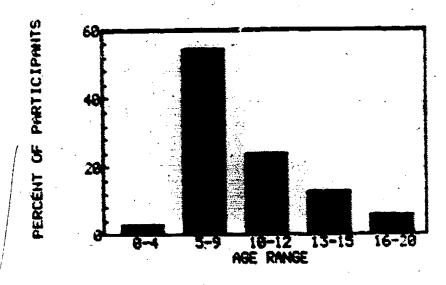
Figure 20. Summer Participants by Migrant Status





The majority of summer program participants were in the age range 5 to 9 years old, with an additional one-fourth being in the 10-12 year age range.

Figure 21. Summer Participants by Age Range



The distribution of migrant participants by age and migrant status has changed very little over the last two years.

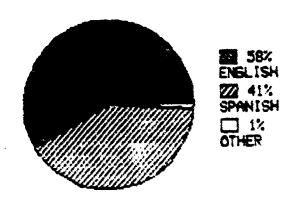
Ninety-seven percent (97%) of the migrants served in summer programs were Hispanic; approximately half male and half female.



Migrant Summer Program Activities and Services Provided

Language of Instruction. More than half (58 percent) of the summer migrant participants received instruction in English; 41 percent received instruction in Spanish.

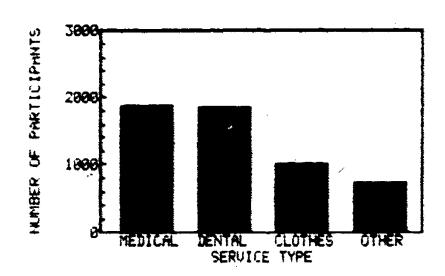
Figure 22. Migrant Summer Participants Language of Instruction



Migrant program staff used a language proficiency test or tests combined with teacher and parent judgments to assess the language proficiency of their students.

Support Services. A. total of 1,901 migrant summer participants received support services as part of their summer program. Participants most frequently received medical and dental services, but food and clothing were also provided.

Figure 23. Support Services Provided to Summer Participants





49

Services Provided by Other Programs. A total of 57 migrant summer participants also received services from other educational programs. These included Special Education, ELPA, and the Bilingual Program.

Table 16. Number of Participants Receiving Other Program Services.

Program	Number Receiving Services
Special Education	30
ELPA	15
Bilingual Education	57

Secondary Program Efforts. Migrant secondary students can earn high school credit during the summer and have the credit transferred to any district that participates in the Migrant Program through the Credit Exchange Program. Nine of the fifteen summer migrant projects participated in the secondary program in at least one area. The highest level of participation was in academic courses (English, math, science and social studies), followed by programs in English as a Second Language (143 students).

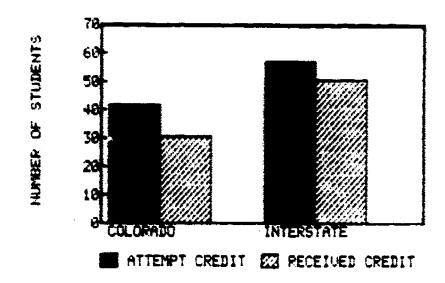
Table 17. Participation in Summer Secondary Programs

		Participants
Program	1983	1984
Academic (English, math,		
science, social studies)	326	261
English as second language	63	143
Supplementary tutoring	27	83
Vocational training	28	4
Work-study program	2	0
Other	76	55

Compared to 1983, there was a decrease (20 percent) in the number of students taking academic courses, an increase in the number receiving English as a second language instruction (127 percent), and an increase in the number receiving supplementary tutoring (207 percent). In addition, the number of students taking vocational courses decreased, reflecting the Migrant Program's increased emphasis in acadmic and other credit courses.

Secondary Credit Received. A total of 99 students attempted to received credit in secondary program courses in 1984, and 82 (or 83 percent) of them actually received such credit.

Figure 24. Number of Students Attempting and Receiving Secondary
Program Credit in the Summer of 1984



The number of students attempting credit was slightly less in 1984 than in 1983 (down from 102 to 99), but the percent of those attempting credit who actually received it nearly doubled. In 1983, 45 percent of those attempting credit received it, compared to 83 percent in 1984.

Districts were asked to rate various aspects of their secondary programs and of the assistance they received from other sources. They gave the highest ratings to coordination with local districts on secondary education and lowest ratings to the usefulness of the Texas counselors.

Table 18. Secondary Program Ratings

Program Component	Average Rating*	
Coordination with local districts on		
secondary education	3.3	
Availability of referral information on		
secondary students	3.1	
Usefulness of referral information	3.0	
Training/assistance from CDE	3.0	
Availability of Texas counselors	2.8	
Usefulness of Texas counselors	2.7	

*Scale from 1 (poor) to 5 (excellent).

Coordination With Other Agencies. In addition to providing services to migrant students, local summer programs coordinated with a variety of state and local agencies in order to assure that a broad range of services were available to migrant students and their families. Many of the services involved coordinating referrals of families for assistance, providing transportation in order to obtain services, and assistance from agencies in identifying newly arrived families.

Table 19. Number of Projects Reporting Coordination With Other Agencies

State Agencies	Number of Projects		
Department of Health	13		
Department of Social services	13		
Employment Services	12		
Other	2		
Local Organizations			
Churches	11		
Hospitals/Clinics	13		
Day Care Centers	4		
Other	1		
Other Agencies			
Colorado Migrant Council	11		
Legal Aid	5		
Salvation Army	3		
Head Start	8		
Other	4		

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Dissemination Techniques. Migrant summer programs used a variety of techniques to provide information about their programs. Brochures, leaflets, posters and the local newspaper were the most common dissemination vehicles.

Table 20. Dissemination Techniques

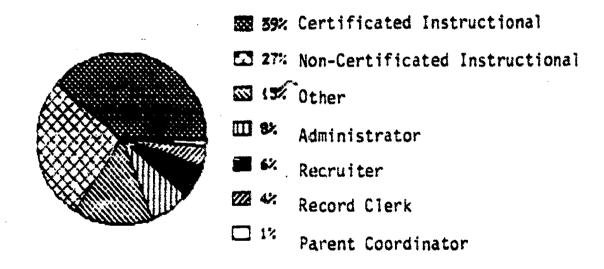
Dissemination Methods	Number of Projects
Newsletters	10
Local newspaper	11
School newspaper	5
Brochures, leaflets, posters	12
Radio	8
Local TV	4
Other	4

Summer Program Staffing and Volunteers

In the summer of 1984, a total of 271.93 (full-time equivalent) staff were funded to provide services to migrant students. Figure 25 shows the percent of staff by category. The type of staff funded by summer migrant programs

has changed very little over the last five years.

Figure 25. 1984 Summer Migrant-Funded Staff by Category

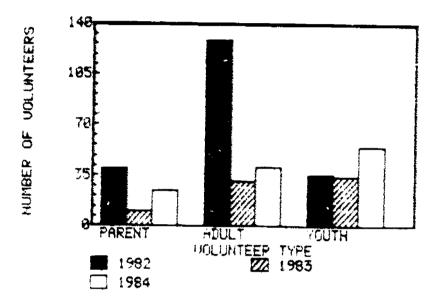


Migrant summer programs were also served by personnel funded by other programs, primarily the Job Partnership Training Act (JTPA). A total of 75.5 (FTE) staff were provided through other programs, with 55 percent of them funded by the JPTA. They served primarily as aides in migrant program classrooms.

In the summer of 1984, a total of 121 persons served as volunteers in migrant programs; providing transportation assistance, classroom assistance and other services. As in regular year programs, the number of summer program volunteers declined between 1982 and 1984, although there were more volunteers in 1984 than in 1983.



Figure 26. Trends in Summer Frogram Volunteers



Local Program Accomplishments

Staff Development and Professional Growth. Overall, migrant summer programs rated the effectiveness of their staff development activities as 4 on a scale ranging from one (very unsuccessful) to 5 (successful).

On individual program components, districts gave the highest ratings to coordinating with other programs, the district and the community, and to identifying ongoing staff needs. Lowest ratings were given to coordinating with institutions of higher education for purposes of providing credit, assistance in certification, recertification, degree programs, ect.

Rating of Project Component

Ratings of Summer Staff Development Activities Table 21.

				
Program Component	Completely	Considerably	Some	Very Little
Meeting individual professional growth needs of staff	88	69%	23%	0
Coordinating with oth special programs, disactivities and commun	strict nity	5.20	0	a
resources	42%	58%	0	0
Identifying ongoing staff needs	178	75%	8%	n
Coordinating with his education for credit certification assists degree programs	•	22%	22%	33%





Parent Involvement Activities. Overall, migrant programs gave a rating of 3.9 (on a scale from 1 to 5) to the success of their parental involvement activities. Table 22 summarizes the parental involvement activities for 1983 and 1984. The number of parent activities increased in 1984 (108 events) over the number held in 1983 (87 events). However, the total number of participants in these activities (duplicated count) decreased slightly from 3724 in 1983 to 3256 in 1984. In 1984, local migrant programs were required by law to have Parent Advisory Committees (PACs) to provide advice and consultation concerning their programs. Changes in the pattern of parental involvement between 1983 and 1984 probably reflect the operation of PACs, which sponsored more activities for parents, although the total number of participants was slightly less.

Table 22. Parental Involvement Activities

	Number of	fevents
Activity	1983	1984
Program planning		
consultation	14	22
Program operations		
consultation	18	21
Program evaluation	16	16
consultation		
Increase involvement	32	30
Parent training	7	19
TOTAL.	87	108

<u>Progress Toward Objectives.</u> Migrant summer programs were asked to rate their success in meeting their objectives in three areas: instruction, support services and program management.

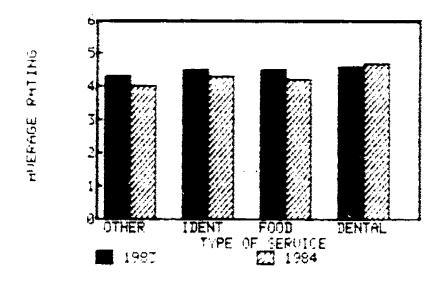
Instructional objectives were given ratings ranging from 3.3 to 4.5 (on a scale from 1 - very unsuccessful - to 5 - very successful). Highest ratings were given to communication skills and English skills. Lowest ratings were given to vocational skills and career awareness. Instructional ratings were slightly lower in 1984 than in the summer of 1983.

Table 23. Ratings of Instructional Objectives

Objective	1983 Rating	1984 Rating
Communication skills	4.5	4.5
Math skills	4.5	4.2
English skills	4.0	4.3
Cultural awareness	4.2	4. i
Expectations for success	4.3	4.2
Career awareness	3.8	3.7
Vocational skills	3.5	3.3
Creative expression	4.1	3.9
Physical education	4.5	4.0
Achievement in science/		
social science/academics	3.9	3.9

Ratings for support services objectives were also slightly lower in 1984 than in 1983. Highest ratings were for dental and medical services.

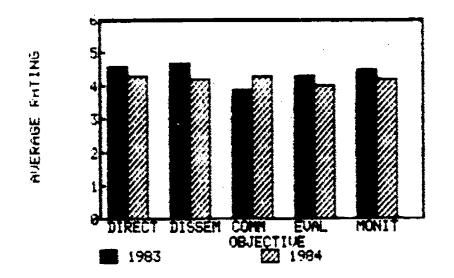
Figure 27. Ratings of Support Services Objectives





Ratings of management objectives also went down slightly in 1984 with one exception: ratings of communication and coordination with other local, state and federal programs that serve migrant families improved over the 1983 level.

Figure 28. Ratings of Management Objectives



Direct = Direct the Program

Dissem = Disseminate Program Information

Comm = Communicate and Coordinate With Other Agencies

Eval = Gather Evaluation Information

Monit = Monitor the Program

Summer Program Student Progress

Evaluation Design. Student progress in summer migrant projects was assessed through the use of a locally chosen criterion-referenced test selected to match the local curriculum. This design was selected because of the short time for summer programs. Criterion-referenced tests indicate the progress of individual students in summer programs, but it is not possible to compare results across students or projects, because the amount of time required to master different objectives is not the same.



Quality of Data. The number of migrant projects which have provided evaluation data for summer participants has increased from 86 percent in 1982 to 100 percent in 1983 and 1984, as indicated by Table 24.

Table 24. Number of Projects Providing Test Data for Summer Projects

Fiscal Year	Number of Projects	Percent Reporting Data
81	14	88%
82	14	86%
83	14	100%
84	14	100%

Progress of Migrant Students in Summer Programs. The criterion-referenced results in reading and math for active migrant students in summer programs are presented in Tables 25 and 26. These tables show the progress of active migrant students whose gains were monitored through the use of criterion-referenced tests. The tables provide a rough indication of the progress of active migrants in mastering skills or objectives introduced to them during their participation in the summer migrant program.

The results of criterion-referenced tests cannot be compared across tests, across projects, or even within tests (because some objectives are more difficult to master than others). Therefore, it is not possible to present statewide average gains for active migrants, although the tables provide evidence of their progress.

Table 25. Criterion Referenced Test Results for Summer Migrants:
Reading

Project		o. Students	Average No. Sessions	Average No. Objectives Mastered Per Child
Project	Test Used	Tested	Sess Ious	Fer Office
1	Brigance	149	33	Not Available
2	Stanford	80	68	2.5
3	Pakersfield	70 -	23	3.7
4	Brigance	63	56	6.6
5	Brigance	219	35	•3
5 6	Bakersfield	30	62	1.6
7	PRI/RS Reading			•
-	System	181	37	2.4
8	Brigance	40	35	3.0
9	Test of Basic			·
· ·	Reading Skills	58	28	2.4
10	Brigance	· 52	22	 5
11	Brigance/Teache	r		
	Test	105	36	3.8
12	Brigance	32	20	1.0
13	Prescription			
-	Learning/Brigar	ice 127	24	6.0
14	BRISC Skills	101	162	. 3



Table 26 Criterion referenced Test Results for Summer Migrants:

Math

	· - ·	Va Sandana	A No.	Average
Project	Test Used	No. Students Tested	Session	Objectives Mastered Per Child
1	Brigance	122	33	Not available
2	Stanford	80	68	2.5
3	Piramid	71	23	4.1
4	Brigance	73	40	8.7
5	Brigance	219	35	•4
6	BIP	38	61	1.7
7	DMI Math System	181	37	3.0
8	Brigance	40	35	2.2
9	Computational			
	Skills Test	58	28	3.4
10	Brigance	52	22	•3
11	Brigance/Teacher			
	Test	96	36	3.2
12	Brigance	32	20	1.1
13	Prescription			
	Learning/Briganc	e 127	24	7.0
14	Local	121	168	• 4



Services Available to Local Programs

In addition to the MSRTS, migrant summer programs were supported by the Summer Migrant Health Program. The Colorado Department of Health was contracted to provide comprehensive medical and dental health services to migrant children. These services have been provided since 1972. A summary of the Health Program's evaluation report is provided in Appendix A.

Migrant program staff were asked to rate the usefulness of information provided to them by the MSRTS.

Table 27. <u>Usefulness of MSRTS Services</u>

Type of Record	Rating of Migrant Staff	of Usefulness Medical Personnel
Educational record Health record	2.1 2.1	Not Applicable 2.6

Rating scale ranged from 1 (low) to 3 (high).

Program staff gave somewhat higher ratings to the availability and usefulness of services provided by the Summer Health Program.

Table 28. Usefulness of Summer Health Program

	Rating of Service
Availability of service	2.9
Usefulness of service	2.9



Appendix A.

EXCERPTS FROM FINAL REPORT

MIGRANT EDUCATION HEALTH PROGRAM

COLORADO DEPARIMENT OF EDUCATION MIGRANT EDUCATION PROGRAM 1984

Terri Swanson, Dental Consultant Margaret Hargleroad, Nutrition Consultant Harriet Palmer-Willis, Nursing Consultant Chuck Stout, Director

COLORADO DEPARIMENT OF HEALTH MICRANT HEALTH PROTRAM

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January, 1985



TABLE OF CONTENTS

		Page
INTROXX	CTION	. 1-3
SECTION	I - HEALTH PROCRAM OVERVIEW	
	A. Service population Profile	4-7
	B. Service Providers	7-8
	C. Health Encounters	9-13
SECTION	11 - HEALTH STATUS OF MIGRANT EDUCATION STUDENT	.S
	A. Health Screening Procedures	.14-16
	B. Health Screening Outcomes	.16-19
	C. Most Frequent Diagnosis	. 20
SECTION	III - HEALTH EDUCATION	
	A. Health Education Activities - 1984	.21
	B. Health Education Activities	. 22-27
SECTION	IV - FINANCIAL RESOURCES	. 24-27



INTRODUCTION

September 30, 1984 marked the completion of the twelfth consecutive year that the Colorado Migrant Education Program and the Colorado Migrant Health Program have collaborated in the planning and implementation of a comprehensive health program for Migrant Summer School students. This collaboration has continually increased over the past several years as both programs have grown to appreciate that regardless of administrative affiliation, funding resources or individual organizational objectives - both programs share a common mission: to participate in enhancing the physical, mental, social and economic well-being of migrant farmworkers. Both programs acknowledge that this mission requires a major focus on migrant children.

Not only do children of migrant farmworkers face the typical diseases and health problems of childhood but, in addition, they confront numerous health problems and risks associated with their migratory lifestyle and the environmental hazards associated with agricultural work. They also confront numerous social, cultural and language barriers which often preclude their ability to access regular, comprehensive health care. It is clear that maximum educational achievement may be hindered by undiagnosed and untreated health problems - the young migrant child with undiagnosed hearing or vision problems will obviously experience difficulty in learning - regardless of the quality of the educational program presented. Other less obvious but equally significant undetected health conditions such as anemia, respiratory infections, otitis media and dental disease also contribute to listlessness and distraction due to pain which may inhibit the education process. In addition, although it is axiomatic that children in poor health will not achieve their full educational potential, it is also critically important to view the development of healthful lifestyles and health practices as essential elements of each child's educational experience.

Mutually supportive goals and the acknowledgement of the relationship between good health and the migrant child's ability to fully participate in the educational process set the stage of the 1984 Migrant Education Health Program.



Although we may all take pride in the quality of our efforts over the past years, by most objective measurements, 1984 was one of our most successful to date. Some examples:

- In 1983 a total of 1,724 migrant summer school students received health services; In 1984, 1,901 students received services a 9% increase:
- In 1983, health team staff and local health providers generated 10,815 patient encounters; In 1984, 14,112 patient encounters were generated a 23% increased;

	1983	1984	* Increase
Medical encounters	5,200	6,846	24%
Dental encounters	4,981	6,236	20%
Nutrition encounters	634	1,080	59%

The transfer of the second of

- In 1983, 140 children received a total of 493 individual dental sealants; In 1984, 627 children received 2,304 sealants a 44.8% increase in children receiving this service.
- In 1983, 1,300 children received dental prophylaxis and topical fluoride applications; In 1984, 1,461 children received these services an increase of 118.

A number of factors contributed to this year's success. Among these reasons were the following:

- Most school sites were operational one to two weeks longer than in 1983;
- 2. The participation of three Migrant Education Directors in the planning process prior to the beginning of the school term provided an opportunity to identify creative, mutually agreeable solutions to long-standing problems;
- 3. At the sites where the program ran most smoothly some of the reasons were:
 - Health records of students enrolled in previous year were given to the health team with this year's Health Data Entry Forms and Parent Authorizations in them;
 - Health information forms; (e.g. patient history indicating such things as medication allergies, 'eart problems, seizures and complete immunization records) were far more accurate than in previous years.
 - Health Data Forms and Parent Authorization Forms were available when children entered school:

- "White Shadows" were provided within the first weeks of school for inclusion in the health record;
- Medical and immunization consent forms were provided at the time of enrollment;

- Reliable health aides were provided to assist in the clerical work:
- Transportation for medical and derital appointments was assigned a high priority;
- Health Education modules were utilized by teachers thus freeing health team members to concentrate on health problems.

The following sections detail the specific activities of the 1984 Migrant Education Health Program. This report is intended to meet the following general objectives:

- 1. To provide accountability to Migrant Education Program that the health services provided were within the scope and financial estimates of the 1984 contractual agranment;
- To share with Migrant Education staff and parents information gained about the relative health status and needs of migrant children in Colorado;
- 3. To provide an information base which will initiate planning efforts directed toward the 1985 Migrant Education Health Program.



SECTION I HEALTH PROGRAM OVERVIEW

A. Service Population Profile:

A total of 1,901 migrant children identified as Chapter I enrollees received one or more services from the Colorado Migrant Health Program during the summer months of 1984. The students ranged in age from less than 1 through age 21, with the majority (63.9%) between the ages of 5 and 10. The next largest group (30.1%) were between the ages of 11 and 16. 50.1% were female and 49.9% were male. With regard to migrant status, 45% were interstate migrants, 8% were intrastate migrants and 47% were into their third, fourth or fifth year of "settling out". 97.7% were Hispanic, 1.2% were Anglo and 1.1% were Native Americans.

The following tables reflect the demographic statistics of this population:

TABLE I

AGE DISTRIBUTION OF MIGRANT EDUCATION

SUMMER ENROLLEES

- 1984 -

AGE	FREQUENCY	PERCENT	CUMULATIVE PERCENTAGE
1	6	0.3%	0.1%
1	9	0.5	0.8
2	14	0.7	1.5
3	11	0.6	2.1
4	13	0.7	2.8
5	121	6.4	9.2
6	209	11.0	20.2
7	234	12.3	32.5
8	2.25	11.8	44.3
ø	211	11.1	55.4
10	215	11.3	66.7
11	152	8.0	7:.7
12	160	8.4	33.1
13	99	5.2	88.3
14	5.9	3	91.4
A -	59	3.1	94.5
lő	44	2.3	96.8
· ¬	17	0.3	97.7
18	22	1.2	98.9
19	13	2.7	99.6
20	4	6.2	98.8
21	4	0,2	1008
TAL:	1,901	1008 7()	

TABLE II SEX OF MIGRANT EDUCATION ENROLLEES - 1984

SEX	FREQUENCY	PERCENT	
FEMALE	953	50.1%	
MALE	948	49.9	
TOTAL	1,901	100 %	

TABLE III MIGRANT STATUS OF MIGRANT EDUCATION ENROLLEES - 1984

MIGRANT STATUS	FREQUENCY	PERCENT
NTERSTATE	354	44.9%
NTRASTATE	150	7.9
ETTING-OUT	897	47.2
TOTAL	1,901	100 %

DEFINITIONS: Interstate Migrants are children of migratory farmworkers who come to Colorado from outside the state (e.g. Texas) for the express purpose of working in agriculture.

> Intrastate Migrants are children of migratory farmworkers who live year-round in Colorado and move within the state for the express purpose of working in agriculture (e.g. from Trinidad to Fort Lupton).

Settling-out Migrants are children of migratory farm workers who have remained in the school district for more than two years, but less than five years.

TABLE IV ETHNIC STATUS OF MIGRANT EDUCATION ENROLLEES - 1984

ETHNICITY	FREQUENCY	PERCENT
HISPANIC	1,858	97.7
ANGLO	22	1.2
NATIVE AMERICAN TOTAL	1,901	1.1

B. Service Providers:

The purpose of the contractual relationship between the Colorado Migrant Education Program and the Colorado Migrant Health Program is to assure that students enrolled in Migrant Summer Schools will have available to them a continuum of care which includes: screening and physical assessment for detection of existing and potential health problems, referral for diagnosis and treatment of identified abnormalities, case management/follow-up, and preventive and health promotion/health maintenance services. It was invended that health services be closely coordinated with day-to-day educational activities and involve, to the extent possible, parents and other family members.

In order to provide this full continuum of care, two categories of health providers are required: 1) hearly two-hundred (200) local providers (e.g. physicians, dentists, pharmacist, allied health providers) either in private practice or working with community-based care organizations, and 2) seasonal-hire staff who are recruited nation-wide for the duration of the Migrant Education Summer Schools. During 1984, a number of health providers were employed on this basis. This number included:

- 16.5 nurses (3 were shared with C.M.C.)
- 19 dental hygienists
- 14 nutritionists
- 29 dental students or recent graduates
- 6 nursing students

These health providers were placed in multidisciplinary teams and replayed in close proximity to all fifteen (15) Migrant Education Summer School rites. This deployment is displayed in the following table:



DEPLOYMENT OF SEASONAL HEALTH PROVIDERS
- 1984 -

Site	Nurses	Nutritionists	Dental Hygienists	Dental Students	Nursing Students
Ft. Lupton	- 1	1	1	4	1
Brighton	1	1	2	4	o
Longmont	1.5	1	2.5	3	1
Boulder	.5	1	1	0	0
Ft. Collins	.5	1	1.5	2	ı
Greeley	2	1	2	3	2
Sterling	1	1	1	1	0
Ft. Morgan	.5	1	1	1	1
Lamar	1	1	1	1	0
B urlington	1	0	0	0	0
La Junta	2	1	1.5	3	0
Pueblo	1	1	.5	1	0
Alamosa	2	1	2	3	1
Olathe	.5	1	1	2	0
Grand Jct.	1	1	1	. 1	O
TOTAL	16.5	14	19	29	6

73



C. Health Encounters:

During the summer of 1984, 1,901 Migrant Education enrolles had a total of 14,163 encounters with health personner from the Colorado Migrant Health Program. This represents an average of 7.4 encounters per student.

A health encounter is defined as a face-to-face interaction between a health provider and a student (or the student's parent (s)) which requires independent judgement based upon the health provider's training and is of sufficient importance to be recorded in the patient chart. Health care encounters are divided into the following categories:

- 1. New and rapeat medical encounters
- 2. New and repelt dental encounters
- 3. New and repeat nutrition encounters

"New" medical, dental and nutrition encounters are those that happen during the first interaction with the patient. "Repeat" encounters are those that happen subsequent to the initial (new) contact and are either follow-up to the condition identified during the initial contact, or new health conditions which have arisen after the first contact.

The following table presents the number of encounters by service category:





TABLE VI

NUMBER OF PATIENT ENCOUNTERS

- 1984 -

SERVICE CATEGORY	Category Frequency	PERCENT OF TOTAL	TOTAL
MEDICAL		6,847	48.3%
New	1,872	·	
Repeat	4,975		
DENTAL		6,236	44.1
Xew	1,849		
Repeat	4,387		
UTRITION		1,080	7.6
New	724		
Repeat TOTAL	356 14,163	14,163	100%

48.3% of all encounters were for medical reasons, and 44.1% were for dental. It is significant to note that nutritionists play an integral role in performing many medical-screening activities which are not reflected in the above table.

It is also of interest to note the sites at which these services were delivered to migrant children. The following table reflects this information:



TABLE VII

PATIENT ENCOUNTERS BY SITE OF SERVICE - 1984 -

SERVICE SITE	FREQUENCY	PERCENT
MIGRANT EDUCATION SCHOOLS	9,744	68.8
MIGRANT EDUCATION NIGHT SCHOOL	OLS 232	1.6
DENTAL OFFICE	2,451	17.3
PHYSICIAN OFFICE	592	4.2
STUDENT'S HOMES	801	5.7
CMHP CLINIC	241	1.7
HOSPITAL	30	0.2
HEALTH DEPARTMENT	72	0.5
TOTAL	14,163	100%

As is evident from the preceding table, seventy percent (70.4%) of all patients were offered services at a school site. Offices of medical and dental practitioners were the second most frequent sites of services (21.5%) followed by services delivered in the home (5.7%).

It is of additional interest to examine where services were delivered by individual health practitioners. The following tables reflect the sites of service delivery by nursing, dental hygiene and nutrition personnel:



TABLE VIII

NURSING* ENCOUNTERS BY SERVICE DELIVERY SITES - 1984 -

SERVICE SITE	FREQUENCY	PERCENT
MIGRANT EDUCATION SCHOOLS	5,655	93.5%
MIGRANT EDUCATION NIGHT SCHOOLS	102	1.7
HOME	174	2.9
CMHP CLINIC	31	0.5
OTHER**	83	1.4
TOTAL	6,045	100%

NOTES: *Includes Migrant Education nurses, CMHP nurses and nursing students.

**Includes physician's office, local health departments, dental offices, hospital.

TABLE IX

DENTAL HYGIENE ENCOUNTERS BY SERVICE DELIVERY SITES - 1984 -

FREQUENCY	PERCENT
3,440	93.0%
105	2.8
11	0.3
73	2.0
68	1.9
3,697	100%
	3,440 105 11 73 68

NOTE: This table does not reflect the encounters by dentists and dental students.





TABLE X

NUTRITION ENCOUNTERS BY SERVICE DELIVERY SITE - 1984 -

SERVICE SITE	FREQUENCY	PERCENT
MIGRANT EDUCATION SCHOOLS	440	40.5%
MIGRANT EDUCATION NIGHT SCHOOLS	21	1.9
HOME	603	55.6
CMHP CLINIC	22	2.0
TOTAL	1,086	100%
•		

It is significant to note that approximately ninety-five percent (95%) of all nursing and dental hygiene encounters took place at a Migrant Education school site. This contrasts with the nutrition encounters where only forty-one percent (41%) took place in school sites and more than fifty-five percent (55%) in the students' homes. This is reflective of the high priority placed by the nutrition component on engaging the whole family in nutrition services. Additionally, the nutritionists frequently address other health concerns with the family, after consultation with the nursing and dental components, during home visits.

HEALTH STATUS OF MIGRANT EDUCATION STUDENTS - 1984 -

A. Health Screening:

Over the past several years of close interaction with the migrant child, the Colorado Migrant Health Program has come to anticipate which health problems are most prevalent within this population. These conditions are as follows:

- Abnormal growth (e.g. overweight, underweight)
- 2. Iron deficiency anemia
- 3. Elevated blood pressure
- 4. Diminished hearing
- 5. Diminished vision
- 6. Scoliosis
- 7. Dental disease

In order to identify the presence of these conditions as soon as possible (so that intervention may be offered while the children are available for services), all health team members participate in screening clinics conducted during the first week that children attend migrant summer schools. Screening is offered thereafter on a weekly basis to identify health problems in students who begin attending at a later date. The following is a brief summary of the screening procedures offered:

Height and weight measurements are taken on all Chapter I children. Results are plotted on a National Center for Health Statistics (NCHS) growth chart. "Abnormals" result in a diagnosis of underweight, overweight or short stature. Underweight is defined as being at the 10th percentile or below, weight for height, on the growth chart. Overweight is defined as at the 90th percentile or above, weight for height. Short stature is defined as height for age at the 10th percentile or below. The latter diagnosis is controversal since it is not known with reliability if relative "short stature" is determined primarily by genetic or environmental factors.



The reason that short stature is included in these protocols is that it is used as an indicator of abnormal nutritional status in other programs, such as the Women, Infants and Children (WIC) Supplemental Food Program. And, since it may be indicative of a nutrition problem, it does warrant follow-up. Follow-up for all nutritional problems, consists of diet assessment, assessment of the child's medical history and individual counseling with the child and the child's family.

Hematocrits are done to assess the possibility of iron deficiency anemia. Children having borderline anemia (38-31%) are followed-up by the nutritionist. Children with clinical anemia (31%) are referred to a physician, and may also be followed-up by the nutritionist. Follow-up consists of diet assessment, assessment of the child's medical history and individual counseling with the child and the child's family. Children with abnormal hematocrits are rescreened at intervals during the summer to assess whether or not the anemia has been resolved or improved.

Blood pressures are taken for two reasons. The first reason is that elevated blood pressure may indicate serious disorders such as kidney disease or cardiovascular disease. The second reason is that blood pressure measurements serve as baseline data on a child, so that the child's "normal" can be established for future reference. Abnormal blood pressure is followed-up by the Migrant Education nurse. The nurse rescreens the child several times and if the blood pressure remains elevated, refers the child to a physician. The nutritionist may do diet counseling, if it is determined that the elevated blood pressure is complicated by the child's nutritional status (e.g. opesity).

Hearing screening is usually conducted by the nurse on selected students. When a child fails a nearing screening, the child is rescreened on another day unless there is evidence to indicate the possible presence of otitis media. (If there is such evidence, the nurse will immediately refer the child to a physician, and rescreen the child's hearing after resolution of the infection.) Children who fail screening twice are referred to a local audiologist for further diagnostic evaluation.

Scoliosis screening is done on all 11 year old children by the Migrant Education nurse. This screening procedure is done to assure that the child's spine is growing straight. Abnormals are rescreened, and if still abnormal, are referred for X-ray. If the X-ray indicates the need for immediate intervention, the shild is then referred to the Handicapped Children's Program.

Vision screening is done using a Snellen chart. Abnormal screenings are referred to local providers if rescreening indicates the need.

Dental Screening consists of an examination of the teeth and oral structures. The purpose of this screening is to identify those children in need of professional dental treatment.



- 15 - 80

Dental screening is done by one of the dental providers, most often the dental hygienist. At the time of screening, the children are prioritized according to the severity of need. Children with the most serious treatment needs are referred first for care, with less serious conditions being referred as time and financial resources allow. Because dental problems are related in part to poor nutrition and oral hygiene practices, referrals to the dental hygienist and/or nutritionist for counseling and education are also made at the time of screening.

PPD (Purified Protein Deriviative) is a skin test which determines exposure to the tuberculosis bacillus. This screening procedure is performed by the Migrant Education nurse on all kindergarteners and 7th graders who have not been tested within the past three years. The skin test is read 48 and 72 hours later. Children with positive tests are referred for X-rays.

Fhysical Exams are no longer routinely done on all children every year. Only interstate children who have never had a physical examination, or children with symptoms which indicate the need, are referred for a physical.

N. Screening Outcomes:

During the 1984 Migrant Education Summer School sessions, a total of 1,721 children received most screening services and 1,849 students received dental screening. It should be noted, that the limited purpose of screening these children is to identify which children have health conditions which require follow-up intervention. Unfortunately, at this time there is no comparable baseline data which may be utilized to describe the health status of this population vis-a-vis a non-migratory Hispanic student population.

The following table reflects the "abnormal" findings identified through the screening process in 1984:

TABLE XI
MIGRANT EDUCATION
SCREENING OUTCOMES
- 1984 -

	NUMBER	NUMBER	PERCENT
SCREENING PROCEDURE	SCREENED	ABNORMALS	ABNORMAL
HEIGHT/WEIGHT:			
Overweight	1,721	222	12.9%
Underweight	1,721	62	3.6
Short Stature	1,721	31.2	18.1
HEMATOCRIT	1,721	423	24.6
BLOOD PRESSURE	1,787	7	0.4
HEARING	1,755	117	6.7
scoliosis	161	7	4.3
VISION	1,783	147	8.2
DENTAL	1,849	1,244	67.3%



As is readily apparent from the preceding tible, dental disease is the major health problem for migrant children with 1,244 students (or 67%) having identifiable dental problems. 194 (10.5%) were identified as requiring immediate referral for relief of pain and/or treatment of g dental infection.

The following preliminary statements may be offered:

- 66.2% of students with identified dental problems received complete treatment;
- 8.4% of students with identified dental problems received partial treatment;
- there were a total of 2,451 visits to dental offices, an average of 2.6 visits per child receiving treatment;
- 12.1% of students with identified dental problems were not referred for treatment because their dental problems were low priority;
- 1.8% of students with identified dental problems were not referred because parents did not sign parent consent form;
- 8.4% of students with identified dental problems were referred but moved before dental treatment sould be initiated;
- 3.1% of the students were referred under medicaid.

In addition to treatment offered for adute and directed dental problems, substantial emphasis is placed on preventive dental services. Curing the 1984 summer school session, a total of 1,461 students received dental prophylaxis and fluoride application treatments. This represents the of the children receiving dental screenings. Portable dental equipment made it possible for the dental hygienist to provide the majority of this treatment within the school setting. Dental hygienists also finitiated twice-weekly fluoride rinse programs in the glassroom.

Pit and fissure dertal sealants were provided again this year. A pilot project in 1983 in Longmont, Brighton and Fort Lupton proved an overwhelming success. Retention rate of sealants was 94% at the end of the summer.

Sealants are a clear resin material that is placed on soid etched chewing surfaces of teeth. The material flows into the deep pits and fissures and hardens. Sealants are effective in preventing decay in these surfaces up to five years. (Fluorial protect the smooth surfaces of the teeth from decay. Therefore, they will also be continued.)



National statistics indicate more than 84% of dental caries in 5-17 year old children occur in pits and fissures of the tooth's chewing surfaces. An initial survey of teeth filled this past summer indicates 76% were occlusal surface fillings. If these teeth had been sealed in previous years and the sealants retained, these fillings would not have been necessary.

Based upon the 1983 results, a comprehensive sealant initiative was implemented in 1984. Portable equipment was bought and borrowed. Additional hygienists and preceptors were included. A mobile dental van was borrowed from Denver Health and Hospitals. It was placed next to the Longmont migrant school. The program was limited only by lack of dental student manpower in some areas.

Initial statistics depict the following:

- 1,6cl sealants were placed by dental students and hygienists in clinics and dental offices.
- 703 sealants were placed by hygienists in other setting including schools, mobile van and local health departments.

The continued success of the program and implications for future programs are exciting. The future direction of the dental program will enhance the preventive focus, in addition, to operative repair of dental disease.

Please refer to appendix item $\underline{\underline{A}}$ for reference on the sealant problem.

In order of significance, the second most prevalent abnormalities were related to nutritional problems. Screening results coupled with physical examinations, health histories, diet assessments and until parent complaints identified 842 nutritional problems requiring follow-up. 746 (8%) of these problems were provided follow-up services by nutritionists.

The rank of prevalence of nutrition problems within the Migrant Eturation summer school population is as follows:

- Anemia (borserline and clinical)
- 2. Short stature
- .3. Overweight
- 4. Underweight
- 5. Other nutrition problems

The category "other nutrition problems" includes: food allergies, chronic diarrhea, diabetes, hypertension, dental problems and improper eating behavior (such as high intake of refined carbohydrates).



C. Most Frequent Diagnosis:

Analysis of the diagnostic codes placed on authorizations and encounter forms validates the findings identified during the screening process.

The following table reflects the rank order of incidence of health problems identified in 1984:

TABLE XII

RANK ORDER OF MOST FREQUENT HEALTH PROBLEMS - 1984 -

RANK	DIAGNOSTIC CATEGORY	EXAMPLES
1	Dental Proplems	see narrative above.
2	Nutrition Problems	(see narrative above
3	Injury/Accidents	abraisons/open wounds fractures, sprains
7	Ear, Nose Throat	otitis media, otitis externa, abnormal hearing, ear disease- unspecified
	Skin/Subcutaneous	rashrunspecified, shin eruption, other abnormal skin tondi-tions
٠.	£ye	failed vision test, soute conjunctivitis refractive error, eye lid infection
7	Infectious Disease	pediculesis, typer- culcais, strept throat, cnicken pox
3	Respirator System	tonsilitis, adeno:- ditis, common cold, acute URI

SECTION

III

HEALTH EDUCATION

As noted in the introduction of this report, in order to enhance the general health status of the migrant farmworker population it is necessary to place a high priority on assisting migrant children to develop healthful lifestyles and health practices.

A. Health Education Curriculum:

The major effort in 1984 was again directed toward the incorporation and integration of health education units on selected health education topic areas into the migrant school curriculum. The topic areas selected are Dental Health, Nutrition and Safety Education.

The units were developed for Level I (lower elementary) and Level II (upper Elementary) and Level III (grades 6-8). Each topic area and level have two to four classroom lessons developed around specific, measurable learning objectives. Each lesson contains:

- A concept sheet for the teacher with basic background information on the subject matter;
- 2.) Learning objectives and related bilingual activities:
- Supplemental materials which includ hand-out pamphlets, student worksheets, and related activities in other classes.
- 4.) Evaluation instruments:

The health education units were utilized in every summer school except Burlingtion. The statistics on the following page do not include health education sessions conducted by migrant school staff. This accounts for the apparent reduced number of group classroom sessions in 1984. Initial examination of the data indicates that the units were well received by teachers and health team members alike. All units and levels will be completed by January 1, 1985 by Mrs. Segura-Harmon. It is anticipated that the continued utilization of the units will lower the level of involvement of health team members in classroom education.



B. Health Education Activities - 1984

All health team members were charged with the responsibility of engaging in a number of health promotion activities. These activities involved participation in classroom education, discussion groups, staff in service training and presentations at "family nights".

During the summer of 1984, classroom education and small group sessions involved participation of 5,500 attendees, or an average of 2.9 health promotion encounters per child. 31 staff in-service training sessions involved 481 attendees. In addition, 15 family night presentations were offered involving a total estimated audience of 886.

Staff inservice training sessions were designed to provide teachers and other education staff members with sufficient skills to deal with minor health problems and to recognized signs and symptoms of health problems in children so that early intervention is possible. Family night presentations included discussions of screening procedures and explanation of why screening is conducted, pesticide safety and high blood pressure. In many sites, the health team offered select screening procedures for parents.

Group sessions conducted by nursing personnel included classroom teaching directed toward specific health problems as well as broader topics related to health promotion and safety. Included topics were high blood pressure, the Heimlich Maneuver, function of the human heart, pesticides, safety and first aid.

Classroom sessions developed by the dental hygiene staff covered the following topics: proper brushing and flossing, dental nutrition, what happens in visits to dental offices, the etiology of dental disease and the structure and function of teeth.

Staff inservice training by dental hygiene personnel included: the relationship between dental disease and good health, proper brushing and flossing, the ethology of dental disease, bottlemouth carries and the incorporation of dental health education into academic curriculum. In addition, dental hygienists participated in five (5) dental health promotion sessions during family hights.

Group sessions developed by nutritionists included both classroom teaching and discussion groups for children with specific nutrition problems. Specific copics included: healthy snacking, balanced diets, the relationship between nutrition and health, high iron foods and anemia.

The nutritionist provided a half hour presentation at each school preservice. The presentation focused on the nutrition related problems seen in the migrant children and the nutritionists' role in the intervention of these problems. It is well that this inservice helped eliminate many of the problems which previously existed by clarifying the nutritionist's role.

Family night presentations included: how to identify nutrition related health problems, the relationship between nutrition and health, and how to diet using culturally acceptable foods. Several nutrition education plays for parents were presented.



VALUE OF STREET

HEALTH EDUCATION/PROMOTION ACTIVITIES - 1984 -

1	GROUP/CLASS- ROOM SESSIONS		STAFF IN- SERVICES		FAMILY NIGHT PRESENTATIONS	* PERSONS ATTENDING
Nursing	66	1,199	11	134	4	233
Dental (62	1,200	6	85	5	150
Nutrition	151	3,101	14	262	6	503
тот	ALS 279	5,500	31	481	15	886



FINANCIAL RESOURCES

The financial resources provided by the Colorado Department of Education Migrant Education Program in support of the 1984 health program were deployed in the following cost categories:

TABLE XIV

BUDGET ALLOCATION BY SERVICE CATEGORY

COST CATEGORY	AMOUNT ALLOCATED	PERCENT OF BUDGET	
Medical Care	\$ 19,300	14.8%	
Nursing Services	59,789	46.0	
Dental Care	21,500	16.5	
Dental Hygiene Services	20,102	15.5	
Nutrition Services	<u> </u>	7.2	
TOTAL	\$ 130,000	100%	

NOTES:

- "Medical Care" includes medical treatment provided by local physicians, clinics, laboratories and hospitals as well as costs of medications.
- 2. "Nursing Services" includes nurse's salaries, travel, supplies and costs associated with orientation.
- 3. "Dental care" includes dental treatment provided by local dentists, as well as stipends paid to dental students.
- 4. "Dental Hygiene Services" includes salaries, travel, dental supplies and costs associated with orientation.
- 5. "Nutrition services" includes salaries, travel, supplies and costs associated with orientation.
- 6. Indirect costs are prorated into each category.



As is evident from the proceeding table, 60.8% of the CDE total budget was allocated for Medical Services, 32.0% for Dental Services and 7.2% for Nutrition Services. Based upon the enrollment figure of 1,901 students, the average cost per student for the full range of services offered was \$68.40.

It is significant to note that although services were offered to Migrant Education Students at a cost to the Department of Education of \$130,000.00, the total value of services offered far exceeded this amount. This is due to contributions from other sources of revenue and the cost-effective mechanisms which have been developed over the past several years. The dental program offers a number of tangible examples of this cost-effectiveness:

- When dental services are provided by a dental student under the direct supervision of local dentists, the cost to the program is only one-third (1/3) to one-half (1/2) the usual and customary charge;
- 2. When dental services are provided at the Mesa County Health Department, there is no charge beyond the monthly stipend paid to the dental graduate who staffs the clinic.
- 3. Both Plan de Salud del Valle and Sunrise Community Health Center-provide comprehensive dental services to migrant students in Weld and Boulder Counties in return for minimal payments.

(As a result of the three examples presented above, for an investment of \$39,670, in 1984, migrane students received dental treatment valued at 5.35,788 - a net savings of \$96,118 or 70.8%.)

4. Dental prophylaxis (cleaning) and topical fluoride , applications are provided by dental hygienists in the migrant school with portable equipment. A total of 1,461 prophylaxis and fluoride applications were provided in 1984. In the private sector these services would cost \$30.00 per patient or a total of \$43,800. The total cost to CDE for dental hygienists in 1984 was \$9,500 -- 21.7% of the value of just these services alone -- and this does not account for more than one-half (1/2) of the services provided by hygienists (other duties include dental screening, case management, patient/parent education, class-room education, staff in-service training, etc.)

The following table provides supportive documentation to the statements above:



TABLE XV

OENTAL TREATMENT COSTS

VALUE OF TREATMENT, EXPENDITURE BY SOURCE

- 1984 -

SITE	ACTUAL VALUE OF TREATMENT PROVIDED		AMOUNT PAID BY TITLE I FUNDS	AMOUNT PAID CMHP FUNDS
Brighton	\$ 15,000	\$ 2,250	\$ 1,000	\$ 1,250
Fort Lupton	16,000	2,250	1,000	1,250
Longmont	16,531	765	765	0
Greeley	14,705	2,872	326	2,547
Fort Collins	5,932	2,966	84	2,882
Fort Morgan	3,551	1,923	406	1,517
Sterling	1,100	545	5 45 '	.0
Burlington	990	990	740	250
Lamar	12,079	6,290	2,483	3,807
La Junta	8,443	4,628	731	3,897
Pueblo	5,635	2,736	204	2,532
Alamosa	9,108	5,793	1,980	3,813
Grand Junction	16,304	0	0	0
Olathe	7,708	2,959	0	2,959
Boulder	2,702	2,702	0	2,702
TOTAL:	\$ 135,788	\$ 39,670	\$ 10,264	\$29,406

Mericaid funds are not included.



Major savings are also realized in the Medical Cost category. For example:

- Several private physicians and local medical practices offer reduced rates for migrant children enrolled in Migrant Education (range from 15% 30%);
- Again, Plan de Salud del Valle and Sunrise Community
 Health Center offer medical services to migrant children
 at minimal cost per patient visit (average \$5.00);
- Local hospitals have agreed to accept minimal payments in return for both out-patient as in-patient hospital services:
- Local pharmacists have agreed to offer services in accordance with MAC (maximum allowable costs) guidelines:
- Local health departments offer a multitude of services at minimal or no cost (e.g. immunizations).

