During 1991-92, 15 local Migrant Education projects served 2,063 migrant students in 751 Colorado schools. This report characterizes the population served, describes the services provided, and presents program evaluation data. Although the programs serve students aged 0-21, the majority of children were of elementary school age in regular-year and summer programs. Most children were from migratory families that traveled between Colorado and at least one other state. Reading, English for limited English speakers, language arts, and mathematics were the primary areas of instruction. The summer program offered expanded instructional areas and support services. Regular and summer programs coordinated with other agencies to assure a broad range of services to migrant students and their families. Migrant program personnel overwhelmingly rated the Migrant Student Record Transfer System (MSRTS) and the summer migrant health program as useful. Personnel offered suggestions for improvement in such areas as secondary credit exchange, parent involvement, and student progress measurement. Based on norm-referenced and criterion-referenced test results, reading and mathematics programs were effective in improving the achievement of participants. The regular year program met 5 of 9 measured objectives, and the summer program realized 7 of 11 measured objectives. This report also contains goals for 1992-93 and recommendations for future migrant programs. Tables and figures detail data concerning enrollment, expenditures, services provided, test scores, and achievement gains.
ON THE MOVE: MIGRANT EDUCATION 1991-92

Prepared By:

Janice Rose Petro
Migrant Evaluator
Planning and Evaluation Unit

In Cooperation With:

David C. Pimentel
Migrant Education Supervisor
Special Projects Unit

Betty Hinkle
Executive Director
Office of Federal and State Program Services

Judy Burnes
Executive Director
Planning and Evaluation Unit

Dan Stewart
Assistant Commissioner
Office of Management Services

William T. Randall
Commissioner of Education
State of Colorado

August 1993
WHAT IS THE MIGRANT EDUCATION PROGRAM?

A program of educational services for the children of migratory agricultural workers including migratory agricultural dairy workers and migratory fishermen was authorized by an amendment to Title I of the federal Elementary and Secondary Education Act (ESEA) in November of 1966. Funds to offer projects and programs to meet the special educational needs of migratory children and to coordinate these programs with projects in other states, including transmitting pertinent school record data, are provided to state education agencies. Reauthorization of the Migrant Program occurred within the Augustus F. Hawkins-Robert T. Stafford Elementary and Secondary School Improvement Amendments of 1988.

Migrant students receive assistance to help them succeed in regular education programs, attain grade-level proficiency, and improve their achievement in basic skills. Legislation directs that current migratory children, ages three to 21, should be served first. Second priority is day care for their siblings up to three years of age in order that current migratory students ages three to 21 can be served. The last priority is former migratory children who have needs demonstrated to be greater than current migrant students.

Federal funds come directly to the state migrant education office, and the state contracts with local education agencies to provide services. Thus, the migrant program is a state program. State-level administration develops a state plan, approves local program funding, reviews migrant programs, provides technical assistance and coordinates support services to local programs. The state is also responsible for identifying and recruiting migrant children for entrance into local programs and updating information on the Migrant Student Record Transfer System (MSRTS).

Local migrant programs are funded to:

- assist in recruiting migrant children for school,
- solicit referrals of eligible children for supplemental instructional services,
- provide support services which a school district can’t supply but are needed by the children, and
- identify and enroll eligible migrant children onto the MSRTS.

Programs may be offered during the regular school year, during the summer, or both.
WHAT IS THE INVOLVEMENT IN COLORADO MIGRANT EDUCATION?

During the 1991-92 school year, 15 local Migrant Education projects, conducted by seven Colorado school districts and eight Boards of Cooperative Educational Services (BOCES), served 2,063 migrant students in 751 schools. In the summer of 1992, 13 Migrant Education projects were conducted: five by local school districts and eight by BOCES. Summer programs were administered in 17 schools and served 2,453 students.

<table>
<thead>
<tr>
<th>Figure 1: Districts and BOCES Which Provide Migrant Education Programs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adams County School District 14</td>
</tr>
<tr>
<td>* Boulder Valley School District Re-2</td>
</tr>
<tr>
<td>Brighton School District 27J</td>
</tr>
<tr>
<td>Mesa County Valley School District 51</td>
</tr>
<tr>
<td>Poudre School District R-1</td>
</tr>
<tr>
<td>St. Vrain Valley School District Re-1J</td>
</tr>
<tr>
<td>* Weld County School District #6</td>
</tr>
<tr>
<td>Arkansas Valley BOCES</td>
</tr>
<tr>
<td>East Central BOCES</td>
</tr>
<tr>
<td>San Luis Valley BOCES</td>
</tr>
<tr>
<td>South Central BOCES</td>
</tr>
<tr>
<td>South Platte Valley BOCES</td>
</tr>
<tr>
<td>Southeastern BOCES</td>
</tr>
<tr>
<td>Weld BOCES</td>
</tr>
<tr>
<td>West Central BOCES</td>
</tr>
</tbody>
</table>

* Regular year program only

Local projects are assisted by the Migrant Student Record Transfer System (MSRTS), a computerized network headquartered in Little Rock, Arkansas, which maintains records for individual migrant students. When migrant students register for school, academic and health records are forwarded by MSRTS to local projects. If necessary, information is requested over the phone.

During the summer, a contractual arrangement between two Departments, Health and Education, allows the provision of comprehensive health screenings to all migrant school enrollees, treatment and follow-up for identified health problems, preventive dental services, and health education. A summary report detailing screening outcomes, diagnostic data, the health education curriculum and activities, and financial resources may be obtained from the Colorado Department of Health, Migrant Health Program, by calling (303) 692-2430.
WHO DOES MIGRANT EDUCATION SERVE DURING THE REGULAR YEAR?

Migrant student classification is determined by the migratory status of students. Children of active migratory families are classified as either intrastate or interstate. Intrastate students move with their families from one school district to another school district within Colorado. Interstate children move with their families between Colorado and at least one other state. Former migrants are those children whose families have settled out of the migrant stream and who have resided in a school district for a period of 12 months or more. Students who have been identified as former migrant students are no longer considered migrant after six years of continual residence in one school district. They may, however, become reinstated as current if travel for seasonal work is resumed.

Figure 2: Eligible Migrant Children by Status

<table>
<thead>
<tr>
<th>Status</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interstate</td>
<td>53.5%</td>
</tr>
<tr>
<td>Intrastate</td>
<td>5.0%</td>
</tr>
<tr>
<td>Former</td>
<td>41.5%</td>
</tr>
</tbody>
</table>

In the 1991-92 school year, a total of 6,021 Colorado children were identified as eligible migrants and were entered on the MSRTS. The total number of eligible migrant students from birth to 21 years of age for the 1991-92 regular school year in Colorado increased 7.4 percent from the 1990-91 figure of 5,607 eligible students. An increased effort to recruit and identify migrant students explains the growth in eligible migrants.

There were 1,541 eligible children not registered in Colorado schools during the regular school year. Migrant children who were not registered in school may have chosen to work instead of attending school or may have been in the state for such a short period of time they failed to enroll. The majority, 66.4 percent, were interstate migrants. Intrastate migrants accounted for 5.6 percent of the eligible group not registered in school. Former migrants accounted for the remaining 26.0 percent. Sixty-one percent of the eligible children not registered in school were in the birth to age four range. There were limited migrant-funded preschool programs during the regular school year.
Eighty-seven (87.4) percent, or 4,173 of the 4,774 eligible school-aged (5-21) migrant students in Colorado, were registered in school for the 1991-92 school year. This percentage decreased from 89.0 percent in 1990-91.

However, a total of 2,417 eligible migrant students were registered in Colorado schools but did not receive migrant services. Since priority is given to current migratory students, the majority or 57.8 percent of those not receiving migrant services were former migrants. The largest age group of eligible registered students who did not receive migrant education services were in the five to 12 year old age range (64.4 percent). This was the age group most likely to be served by other supplementary programs such as Chapter 1 and the Colorado English Language Proficiency Act.

There were 1,861 migrant students who were served by other educational programs than Migrant Education. Chapter 1 served 459 students, the Colorado English Language Proficiency Act served 1,124, Title VII (Bilingual) served 175 and Special Education served 103 eligible migrant students.

A total of 2,063 eligible students were participants in migrant education programs for 1991-92, an increase of 6.3 percent from the 1990-91 school year. The increase in participants was due to increased recruitment and identification efforts.

<table>
<thead>
<tr>
<th>Figure 3: Migrant Regular Year Program Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Migrant Status</td>
</tr>
<tr>
<td>Age Range</td>
</tr>
<tr>
<td>0-2</td>
</tr>
<tr>
<td>3-4</td>
</tr>
<tr>
<td>5-12</td>
</tr>
<tr>
<td>13-17</td>
</tr>
<tr>
<td>18-21</td>
</tr>
<tr>
<td>Total</td>
</tr>
</tbody>
</table>

Former migrants comprised 34.2 percent of those receiving migrant services, 58.5 percent were interstate migrant children, and 7.3 percent were children of intrastate migrant families. Sixty-six (65.8) percent of students served were currently migrant. The majority of program participants (70.0 percent) was in the five to 12-year-old age range.
WHO DOES MIGRANT EDUCATION SERVE DURING THE SUMMER?

In the summer of 1992, 4,502 migrant children were identified in Colorado as eligible for services. This represents a 10.2 percent increase from the 1991 summer figure of 4,086. Interstate migratory children accounted for 56.2 percent of all those eligible, 5.9 percent were intrastate and 37.9 percent were categorized as former migrants.

There were 2,049 students, or 45.5 percent of all those eligible, who were identified as eligible but who did not register in summer school. Migrant children may not have registered because they chose to work, were not referred to the program or were not in the priority service categories. Thirty-three (32.9) percent of the non-registered eligible students were within the birth to four-year-old age group. Limited services for the summer were available to preschool children.

Sixty-three (62.8) percent of the 3,673 school-aged (5-21) migrant students did register in school during the 1992 summer program. This was a decrease from 69.5 percent in 1991. This decrease may be explained by the reasons listed previously.

A total of 2,453 eligible students were migrant education program participants in the summer of 1992. This figure was an increase of 4.7 percent from the summer of 1991.

<table>
<thead>
<tr>
<th>Figure 4: Migrant Summer Program Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Migrant Status</td>
</tr>
<tr>
<td>Age Range</td>
</tr>
<tr>
<td>-----------</td>
</tr>
<tr>
<td>0-2</td>
</tr>
<tr>
<td>3-4</td>
</tr>
<tr>
<td>5-12</td>
</tr>
<tr>
<td>13-17</td>
</tr>
<tr>
<td>18-21</td>
</tr>
<tr>
<td>Total</td>
</tr>
</tbody>
</table>

In the summer of 1992, former migrants comprised 28.4 percent of those receiving migrant services, 64.0 percent were interstate migrant children, and 7.6 percent were children of intrastate migrant families. Seventy-five (75.0) percent of summer program participants were in the five to 12-year-old age range.
WHAT DOES MIGRANT EDUCATION ENCOMPASS?

**Funding**

During 1991-92, federal funds in the amount of $2,472,095 was expended by the Colorado Migrant Education Program. Of the total expenditures, 84.8 percent was spent on local program operations, 2.1 percent was spent on administration, 4.6 percent was spent on the summer health service program, and 5.9 percent was spent on state and 2.6 percent was spent on local education agency operation of the Migrant Student Record Transfer System. The Colorado Department of Health was contracted to provide summer health services.

<table>
<thead>
<tr>
<th></th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local Education Agency Operation</td>
<td>$2,097,630</td>
</tr>
<tr>
<td>State Administration</td>
<td>51,039</td>
</tr>
<tr>
<td>Summer Health Service Program</td>
<td>115,000</td>
</tr>
<tr>
<td>Migrant Student Record Transfer System State Education Agency</td>
<td>145,265</td>
</tr>
<tr>
<td>Migrant Student Record Transfer System Local Education Agency</td>
<td>63,161</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$2,472,095</strong></td>
</tr>
</tbody>
</table>

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 maintained on migrant children.

**Services**

Instruction was provided to migrant students according to their individual needs. Primary areas of instruction were reading, English for limited English speakers, language arts and mathematics. In the summer the major instruction areas were expanded to include vocational/career education, dental instruction, physical education, health education and safety, arts and crafts, swimming, social studies, music and science.

Students in the Migrant Education Program have a variety of language backgrounds; instruction must be tailored to meet the students' needs. Language abilities are determined through a variety of methods including Language Assessment Scales, Idea Language Proficiency Test, teacher observation, informal oral assessments and other academic assessments. During the regular year, 64.3 percent of the 3,072 students who were assessed were bilingual, 5.2 percent were monolingual English, 30.0 percent were monolingual Spanish and 0.5 percent spoke Cora Indian dialect. Of the 2,222 students who were assessed for their language ability in the summer of 1992, 5.7 percent were monolingual English, 25.2 percent were monolingual Spanish, 68.6 percent were bilingual in English and Spanish, 0.4 percent spoke Konjoval, and 0.1 percent spoke Cora Indian.
An essential part of the 1991-92 Migrant Education Program was the provision of support services to those students who were in need. During the regular year most of the support was given through social work, outreach or advocacy. Limited transportation and nutrition assistance was provided. During the summer program, such support services were greatly increased. In addition, medical and dental care were provided to most migrant children. Other support services provided by local programs included home visits, referrals for emergency housing assistance, food stamps, clothing and eye glasses.

Secondary instruction was an important element of the 1992 summer Migrant Education Program, especially in meeting the challenge of improving educational opportunities, helping students attain grade-level proficiency and increasing the basic skills of older migrant students. The ten programs offering secondary instruction utilized a variety of services. Portable Assisted Study Sequence (PASS) are mobile curricular units for ninth- through twelfth-grade migrant students to complete in order to receive high school credit at their home base. Mini-PASS is a similar program but is targeted to middle school students. The other services utilized included University of Texas curriculum or TAAS testing, Aims Community College, Mini-PASS, teacher-made instructional materials and local and home base texts.

**Figure 6: Services Utilized in Secondary Programs**

<table>
<thead>
<tr>
<th>Service</th>
<th>Number of Programs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tutoring at the school site</td>
<td>9</td>
</tr>
<tr>
<td>Tutoring at the home/camp site</td>
<td>2</td>
</tr>
<tr>
<td>Instruction during the day</td>
<td>9</td>
</tr>
<tr>
<td>Instruction at night</td>
<td>4</td>
</tr>
<tr>
<td>Tuition program</td>
<td>1</td>
</tr>
<tr>
<td>PASS</td>
<td>5</td>
</tr>
<tr>
<td>Other</td>
<td>3</td>
</tr>
</tbody>
</table>
Staff
Migrant programs are staffed by instructional (certificated and non-certificated), administrative, clerical and support personnel. A total of 70.93 full-time equivalent (FTE) employees were funded for the regular year and 229.64 FTE were funded for the expanded summer program.

In addition to staff funded directly through migrant programs, personnel supported by other funding sources, particularly the Job Training Partnership Act (JTPA) and Head Start, supplied services to migrant students during the summer program. Serving primarily as aides in classrooms, 70.4 (FTE) staff were provided through other programs, with 71.0 percent of them funded by the JTPA. Workers also served as aides in other capacities such as in the office, the kitchen/cafeteria or on the health team.

During the regular year, classroom assistance, book distribution, special activities, field trips, translation support and a wide variety of other services were provided through parent, adult and youth volunteers. Seventy migrant parents, 27 other adults and 36 youth served as volunteers.

Twenty-eight migrant parents, 51 youth and 90 other adults served as 1992 summer program volunteers. They came from all walks of life including business leaders, college students, storytellers, scouts, spouses of program personnel, and other district and retired teachers. There were 169 unpaid workers assisting with classroom activities, field trips, guest lectures, family nights, clothing banks and swimming instruction.
**Parent Involvement**

Increasing parental involvement is a major focus for local programs. This is achieved through family nights, carnivals and potluck dinners. Parent involvement includes parent input into design and implementation of the program, volunteer or paid participation by parents in school activities, parent training and materials that build parents' capacity to improve their children's learning in the home and school. Some projects are coordinating parent involvement workshops with Chapter 1, English Language Proficiency Act (ELPA), Adult Education and Bilingual Education.

**Coordination With Other Agencies**

Regular and 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. Local projects coordinate with the JTPA and Community Block Grants. Many services involved coordinating referrals of families for assistance, providing transportation in order to obtain services, and obtaining assistance from agencies in identifying newly arrived families. Common sources for assistance include: municipal entities such as public libraries and swimming pools, immigration and naturalization agencies, local businesses, and community service agencies such as Caring Ministries, Boy Scouts and Girl Scouts, Rocky Mountain Service Employment Redevelopment (SER) and Foster Grandparent Program.

<table>
<thead>
<tr>
<th>Agency</th>
<th>Number of Projects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Department of Health</td>
<td></td>
</tr>
<tr>
<td>Department of Social Services</td>
<td></td>
</tr>
<tr>
<td>Employment Services</td>
<td></td>
</tr>
<tr>
<td>Job Training Partnership Act (JTPA)</td>
<td></td>
</tr>
<tr>
<td>Community Block Grants</td>
<td></td>
</tr>
<tr>
<td>Legal Aid</td>
<td></td>
</tr>
<tr>
<td>Salvation Army</td>
<td></td>
</tr>
<tr>
<td>Churches</td>
<td></td>
</tr>
<tr>
<td>Hospitals or clinics</td>
<td></td>
</tr>
<tr>
<td>Day care centers</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
</tr>
</tbody>
</table>

**Figure B: Project Coordination With Other Agencies**

<table>
<thead>
<tr>
<th>Agency</th>
<th>Number of Projects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Department of Health</td>
<td>13</td>
</tr>
<tr>
<td>Department of Social Services</td>
<td>12</td>
</tr>
<tr>
<td>Employment Services</td>
<td>11</td>
</tr>
<tr>
<td>Job Training Partnership Act (JTPA)</td>
<td>6</td>
</tr>
<tr>
<td>Community Block Grants</td>
<td>5</td>
</tr>
<tr>
<td>Legal Aid</td>
<td>8</td>
</tr>
<tr>
<td>Salvation Army</td>
<td>6</td>
</tr>
<tr>
<td>Churches</td>
<td>13</td>
</tr>
<tr>
<td>Hospitals or clinics</td>
<td>12</td>
</tr>
<tr>
<td>Day care centers</td>
<td>8</td>
</tr>
<tr>
<td>Other</td>
<td>5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Agency</th>
<th>Number of Projects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Department of Health</td>
<td>13</td>
</tr>
<tr>
<td>Department of Social Services</td>
<td>12</td>
</tr>
<tr>
<td>Employment Services</td>
<td>11</td>
</tr>
<tr>
<td>Job Training Partnership Act (JTPA)</td>
<td>10</td>
</tr>
<tr>
<td>Community Block Grants</td>
<td>3</td>
</tr>
<tr>
<td>Legal Aid</td>
<td>9</td>
</tr>
<tr>
<td>Salvation Army</td>
<td>4</td>
</tr>
<tr>
<td>Churches</td>
<td>12</td>
</tr>
<tr>
<td>Hospitals or clinics</td>
<td>12</td>
</tr>
<tr>
<td>Day care centers</td>
<td>8</td>
</tr>
<tr>
<td>Other</td>
<td>6</td>
</tr>
</tbody>
</table>
Dissemination

It is important that migrant families and the community be aware of the educational and support services that local migrant projects offer. Migrant program personnel use a variety of techniques to disperse information to the public including direct mail, home visits, parent-teacher conferences, notes home, community presentations, public hearings, personal contact, parent advisory councils and accountability committees.

<table>
<thead>
<tr>
<th>Methods of Dissemination</th>
<th>Number of Projects</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Regular Year</td>
</tr>
<tr>
<td>Newsletters</td>
<td>11</td>
</tr>
<tr>
<td>Local newspaper</td>
<td>12</td>
</tr>
<tr>
<td>School newspaper</td>
<td>8</td>
</tr>
<tr>
<td>Brochures, leaflets, posters</td>
<td>7</td>
</tr>
<tr>
<td>Radio</td>
<td>7</td>
</tr>
<tr>
<td>Television</td>
<td>2</td>
</tr>
<tr>
<td>Other</td>
<td>6</td>
</tr>
</tbody>
</table>
HOW SUCCESSFUL WERE PROGRAM COMPONENTS?

Secondary Programs
Local projects were asked to rate various aspects of their secondary programs using a scale of poor (1) to excellent (4). Availability of referral information on secondary students and training/assistance from the Colorado Department of Education in secondary credit exchange/accrual received the highest ratings (3.3). The lowest rating (3.0) was given to coordination with other local districts regarding secondary education. Coordination with other states regarding secondary education and usefulness of referral information on secondary students received 3.2 ratings.

Suggestions for improving secondary programs and credit exchange included promoting cooperation through home-base school visitations, providing PASS materials in Spanish, cooperating with other states to make sure a uniform credit exchange system is in place, and providing mandatory credit exchange training to all migrant staff.

Migrant Student Record Transfer System (MSRTS)
Migrant program personnel were asked if the MSRTS services available to them to support their efforts were useful. Eighty percent of local projects providing regular year programs indicated that the educational records, including the skills information system, were useful to the migrant staff. Ninety-three (93.3) percent of regular year programs believed the health records were useful. Ninety-two (92.3) percent of the summer projects responding indicated that the educational record and the health record were useful. In addition, project personnel were asked if the health records were useful to the medical staff. Ninety-two (92.3) percent of the responding projects stated that they were.

Recommendations for improvement included enhancing the timeliness of receiving the records, making records easier to manage because as it is now an informal assessment is more telling, and requiring all schools to complete records by tying to funding because some students have no records and for others the data is not current or accurate.

MSRTS support services’ strengths were that they contain valuable and detailed academic data for student placement. The teacher can review past performances to determine where to focus special attention. They provided useful data including family history and health information. MSRTS support personnel at the state and in Little Rock were cooperative and helpful.

Summer Migrant Health Program
Migrant program staff overwhelmingly declared that the health program was useful and 84.6 percent of the projects felt it was available. The program offers comprehensive professional health services and health education opportunities to students who might not receive them otherwise. Caring and committed health teams related positively and communicated well with the students. There was excellent cooperation among nursing, dental and educational teams to meet each student’s individual needs. Two programs were disappointed with the health services because teams were not available on a full-time basis.
Regular Year Program Components
Continued emphasis on involving parents in their children's educations needs to be a top priority. Suggested improvements would be a statewide newsletter with input from across Colorado and a short description of the migrant program with its goals and objectives in flier or brochure form.

Use of a criterion-referenced test, the Brigance Inventories, was questioned as an appropriate measure of student progress. It was suggested that mastery of skills would be a better indicator. Because of absenteeism and frequent moves, many children do not receive both pre- and post-tests.

Access to quality education materials and staff resources were appreciated. Recruiters were praised for their effort in recruiting and enrolling students. Coordination with other personnel, services and programs made the education piece progress smoothly. Health services were highly praised. A clothing bank was a service which worked particularly well within one program.

Summer Program Components
Some of the services that were praised were health, nutrition, transportation, instruction, the academic/social mix, and recruitment. More specifically, tutoring by college students and a Learning For Life program with the Boy Scouts of America were successful.

The needs that were mentioned for summer programs included reduced class size, capturing more students with both pre- and post-test data, and providing more structure for a Summer Youth Program. The inclusion of topped-out students in the Brigance criterion-referenced test score averages was a concern for one program.
HOW IS PROGRESS MEASURED?

The progress of students in Migrant Education programs is measured in a variety of ways. Assessments for such a population are often difficult to obtain due to migrant families’ transient lifestyles.

Achievement for migrant students who have settled out of the migrant stream is measured with norm-referenced tests. Results are reported in Normal Curve Equivalents (NCEs) which range from 1 to 99. NCE scores allow results of different tests to be combined on a common scale. Without benefit of supplementary services, a student is expected to have zero NCE growth during the year or to stay at the same percentile rank. Any increase in percentile rank or any NCE growth greater than zero is assumed to be the result of the extra services provided and represents more than a year’s gain in achievement. Migrant Education achievement gains are based on former migrant students who were tested on an annual basis consisting of a fall-to-fall or a spring-to-spring test cycle.

Criterion-referenced tests are used to measure the progress of active migrant students. This type of assessment indicates whether or not a student has achieved mastery or proficiency in specific elements of certain subject areas. Criterion-referenced test results for the regular year and summer migrant programs are reported by Brigance average grade level equivalent gains for second through twelfth grade students. Aggregated results give a general picture of the progress obtained by the Colorado Migrant Education Program.

Another indication of program success is the number of migrant students accruing secondary credit through use of the PASS (Portable Assisted Study Sequence)/Mini-PASS curriculum. This is a vehicle through which Colorado programs can assist migrant students to complete coursework in which they were enrolled at their home base school. Migrant secondary students can earn high school credit by completing curricular units during the summer and having the credit transferred to any district that participates in the migrant program through the Credit Exchange Program.
WHAT WERE THE RESULTS?

Reading and mathematics programs were effective in improving the achievement level of participants. Aggregated average Normal Curve Equivalent (NCE) gains were positive in reading and math for settled-out migrant students. Criterion-referenced test results for migrants across both regular year and summer programs indicate that these students were successful in mastering objectives.

Figure 10: Achievement of Migrant Students

**Former Migrants: Regular Year Program**

<table>
<thead>
<tr>
<th>Subject</th>
<th>NCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reading</td>
<td>1.95</td>
</tr>
<tr>
<td>Math</td>
<td>4.58</td>
</tr>
</tbody>
</table>

**Active Migrants: Regular Year Program**

<table>
<thead>
<tr>
<th>Subject</th>
<th>N</th>
<th>Hours</th>
<th>Grade Level Equivalents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reading</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Word Recognition</td>
<td>384</td>
<td>4.5</td>
<td>1.28</td>
</tr>
<tr>
<td>Oral Reading</td>
<td>419</td>
<td></td>
<td>1.04</td>
</tr>
<tr>
<td>Reading Comprehension</td>
<td>419</td>
<td></td>
<td>0.96</td>
</tr>
<tr>
<td>Math</td>
<td>274</td>
<td>3.5</td>
<td>1.09</td>
</tr>
</tbody>
</table>

**All Migrants: Summer Program**

<table>
<thead>
<tr>
<th>Subject</th>
<th>N</th>
<th>Hours</th>
<th>Grade Level Equivalents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reading</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Word Recognition</td>
<td>978</td>
<td>9.5</td>
<td>0.39</td>
</tr>
<tr>
<td>Oral Reading</td>
<td>971</td>
<td></td>
<td>0.43</td>
</tr>
<tr>
<td>Reading Comprehension</td>
<td>977</td>
<td></td>
<td>0.25</td>
</tr>
<tr>
<td>Math</td>
<td>1,006</td>
<td>5.5</td>
<td>0.54</td>
</tr>
</tbody>
</table>

**Secondary Credit Accrual: Summer Program**

<table>
<thead>
<tr>
<th>Curriculum</th>
<th>N</th>
<th>Units</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>PASS</td>
<td>235</td>
<td>343</td>
<td>65</td>
</tr>
<tr>
<td>Mini-PASS</td>
<td>207</td>
<td>199</td>
<td>37</td>
</tr>
</tbody>
</table>

N = Number of students tested  
NCE = Average weighted Normal Curve Equivalent gain  
Hours = Average instruction hours per week per student  
Units = Number of units completed  
Credits = Number of semester credits granted
The number of 1992 summer migrants participating in the secondary credit accrual program (PASS) increased 35 percent from the previous summer. The number of semester credits granted dropped to 65 from 88 the previous year. The secondary credit reporting process changed in 1991 and confusion in reporting still exists. Training has been scheduled to ensure that results will be consistently reported in the future. There were 235 ninth through twelfth graders who received PASS credit. Two hundred and seven students in grades five through nine received Mini-PASS credit.

**Norm-Referenced Test Results**

More detailed results of norm-referenced achievement gains are reported by grade level.

<table>
<thead>
<tr>
<th>Grade</th>
<th>Reading</th>
<th>Mathematics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>NCE Gain</td>
</tr>
<tr>
<td>2</td>
<td>46</td>
<td>1.15</td>
</tr>
<tr>
<td>3</td>
<td>47</td>
<td>2.89</td>
</tr>
<tr>
<td>4</td>
<td>35</td>
<td>0.35</td>
</tr>
<tr>
<td>5</td>
<td>37</td>
<td>2.21</td>
</tr>
<tr>
<td>6</td>
<td>25</td>
<td>2.36</td>
</tr>
<tr>
<td>7</td>
<td>32</td>
<td>3.38</td>
</tr>
<tr>
<td>8</td>
<td>15</td>
<td>0.03</td>
</tr>
<tr>
<td>9</td>
<td>13</td>
<td>2.81</td>
</tr>
<tr>
<td>10</td>
<td>8</td>
<td>2.29</td>
</tr>
<tr>
<td>11</td>
<td>5</td>
<td>1.52</td>
</tr>
<tr>
<td>12</td>
<td>3</td>
<td>1.87</td>
</tr>
<tr>
<td>Total/Average</td>
<td>266</td>
<td>1.95</td>
</tr>
</tbody>
</table>

Results for annual testing in reading encompass nine of the 14 participating reading projects. Annual math test results include six of the 11 project participants teaching mathematics. Scores for small numbers of students should be interpreted with caution. Aggregated scores for small groups are likely to be affected by the extreme scores of one or two students.

**Regular Year Criterion-Referenced Test Results**

Results of criterion-referenced achievement gains are reported by grade level. Thirteen projects provided instruction in reading and 10 local programs provided instruction in mathematics during the regular year to active migrant students. Two districts did not test students using the Brigance Inventories. A total of 419 second through twelfth-grade migrant students received an average of 4.5 hours per week and obtained an average grade level equivalent gain of 1.09 in reading. In math 274 students received an average of 3.5 hours per week and had an average grade level equivalent gain of 1.09. Average grade levels are
limited indicators of progress because many students already perform at the highest level and have no opportunities for advancing. Monolingual Spanish speaking students especially tend to encounter this "topping-out" phenomenon.

**Figure 12: 1991-92 Regular Year**
**Current Migrant Criterion-Referenced Test Results**
Brigance Average Grade Level Equivalent (GLE) Gains

<table>
<thead>
<tr>
<th>Grade</th>
<th>Reading</th>
<th>Mathematics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Word Recog.</td>
<td>Oral Reading</td>
</tr>
<tr>
<td>2</td>
<td>69</td>
<td>1.41</td>
</tr>
<tr>
<td>3</td>
<td>50</td>
<td>1.17</td>
</tr>
<tr>
<td>4</td>
<td>66</td>
<td>1.30</td>
</tr>
<tr>
<td>5</td>
<td>48</td>
<td>0.99</td>
</tr>
<tr>
<td>6</td>
<td>43</td>
<td>0.95</td>
</tr>
<tr>
<td>7</td>
<td>41</td>
<td>1.62</td>
</tr>
<tr>
<td>8</td>
<td>32</td>
<td>1.62</td>
</tr>
<tr>
<td>9</td>
<td>14</td>
<td>1.70</td>
</tr>
<tr>
<td>10</td>
<td>14</td>
<td>1.19</td>
</tr>
<tr>
<td>11</td>
<td>3</td>
<td>-0.63</td>
</tr>
<tr>
<td>12</td>
<td>4</td>
<td>1.23</td>
</tr>
<tr>
<td>Total/Average</td>
<td>384</td>
<td>1.28</td>
</tr>
</tbody>
</table>

**Summer Criterion-Referenced Test Results**
In the summer program, all 13 local projects provided instruction to migratory students in both subject areas. A total of 978 second- through twelfth-grade migrant students received an average of 9.5 instruction hours per week and gained 0.36 average grade level equivalents in reading. In math 1,006 students received an average of 5.5 instruction hours per week and their average grade level equivalent gain was 0.54. Again, this progress indicator is limited because many monolingual students top-out (no gain is possible).
WERE THE GOALS MET FOR 1991-92?

The Colorado Migrant Education regular year program met five of the nine measured objectives (see Figure 14). The limited English objective was not measured, but will be in future years. Former migrant students exceeded the 3 NCE goal in math. Preschool children demonstrated both academic and personal growth. Migrant students were in attendance and promoted at levels higher than the stated goals. The subject area objectives for current migrant students were not realized and former migrants did not meet them in reading. Results for regular year program participants on both norm- and criterion-referenced tests have been erratic from year to year.

The 1992 summer program in Colorado realized seven of the eleven measured objectives (see Figure 15). Three objectives that were not measured were: increasing English language proficiency, credit accrual of secondary migrant students to permit graduation in four years, and promotion of students from one grade level to next. The percentage of students receiving career awareness instruction was lower than the stated goal. The percentage receiving cultural awareness missed the objective by only one percentage point. The percentage of students placed in the appropriate grades for their ages needs to be strengthened. Attendance during summer school is significantly lower than during the regular year. The following two figures display each objective and the degree to which each was met or not met.
<table>
<thead>
<tr>
<th>Met</th>
<th>Result</th>
<th>Category – Objective</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>1.95</td>
<td>Reading (Former) – Given supplemental instruction in reading, stressing listening, spelling and writing, formerly migratory children will gain 3 NCEs in reading during the regular school year as measured by norm-referenced tests.</td>
</tr>
<tr>
<td>No</td>
<td>1.09</td>
<td>Reading (Current) – Given supplemental instruction in reading, stressing listening, spelling and writing, currently migratory children will gain 1.5 grade level equivalents in reading during the regular year as measured by the Brigance Inventory.</td>
</tr>
<tr>
<td>Yes</td>
<td>4.58</td>
<td>Math (Former) – Given supplemental instruction, formerly migratory students will gain 3 NCEs in mathematics during the regular year as measured by norm-referenced tests.</td>
</tr>
<tr>
<td>No</td>
<td>1.09</td>
<td>Math (Current) – Given supplemental instruction, currently migratory students will master 1.5 grade level equivalents in mathematics as measured by the Brigance Inventory.</td>
</tr>
<tr>
<td>Not Measured</td>
<td></td>
<td>Limited English – Given supplemental English language instruction, 70 percent of non-English speaking students will increase their English language proficiency as measured by English language proficiency tests.</td>
</tr>
<tr>
<td>Yes</td>
<td>91.1 (Acad)</td>
<td>Preschool – Given appropriate learning experiences, 75 percent of migratory preschool children will show (1) academic and (2) personal growth as measured by teacher observation.</td>
</tr>
<tr>
<td>Yes</td>
<td>100.0 (Pars)</td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>38.5</td>
<td>Age/Grade – Sixty percent of all migratory students will be placed in the grade which is appropriate for his or her age.</td>
</tr>
<tr>
<td>Yes</td>
<td>79.7</td>
<td>Attendance (90% or better) – Seventy-five percent of all migratory students will obtain an attendance rate of 80 percent or better.</td>
</tr>
<tr>
<td>Yes</td>
<td>92.1</td>
<td>Promotion – Seventy percent of migratory students will be moved ahead at least one grade level above his or her placement from the previous year.</td>
</tr>
<tr>
<td>Met</td>
<td>Result</td>
<td>Category - Objective</td>
</tr>
<tr>
<td>-----</td>
<td>--------</td>
<td>----------------------</td>
</tr>
<tr>
<td>Yes</td>
<td>0.36</td>
<td>Reading - Given instruction in reading, stressing listening, spelling and writing, currently and formerly migrant children will gain 2 months grade equivalent (0.20) during the summer term as measured by the Brigance Inventory.</td>
</tr>
<tr>
<td>Yes</td>
<td>0.54</td>
<td>Math - Given instruction, formerly and currently migratory students will master 2 months grade equivalent in mathematics during the summer term as measured by the Brigance Inventory.</td>
</tr>
<tr>
<td>Not Measured</td>
<td></td>
<td>Limited English - Given supplemental English language instruction, 85 percent of non-English speaking students will increase their English language proficiency as measured by English language proficiency tests.</td>
</tr>
<tr>
<td>No</td>
<td>63.4</td>
<td>Career Awareness - Eighty-five percent of migratory students will demonstrate knowledge of career options as measured by teacher observation.</td>
</tr>
<tr>
<td>No</td>
<td>89.0</td>
<td>Cultural Awareness - Given cultural awareness activities, 90 percent of the students will receive instruction about their culture and other cultures.</td>
</tr>
<tr>
<td>Yes</td>
<td>89.4</td>
<td>Self-Expression - Given opportunities in creative expression, 85 percent of migratory students will receive opportunities in creative expression.</td>
</tr>
<tr>
<td>Yes</td>
<td>86.4</td>
<td>Physical Education - Given physical education activities, 85 percent of the migratory students will improve in physical coordination and demonstrate an appreciation for health and safety as measured by teacher observation and tests.</td>
</tr>
<tr>
<td>Not Measured</td>
<td></td>
<td>Secondary Program - Given quality instruction and guidance, 70 percent of secondary migrant students will accrue high school credits at a rate which will permit graduation in four years.</td>
</tr>
<tr>
<td>Yes</td>
<td>89.6 (Acad) 92.1 (Pers)</td>
<td>Preschool - Given appropriate learning experiences, 75 percent of migratory preschool children will show (1) academic and (2) personal growth as measured by teacher observation.</td>
</tr>
<tr>
<td>Yes</td>
<td>318</td>
<td>Support Services - Given summer support services, 100 percent of the migratory students will receive routine medical and dental screening and other appropriate health services.</td>
</tr>
<tr>
<td>No</td>
<td>27.4</td>
<td>Age/Grade - Sixty percent of all migratory students will be placed in the grade which is appropriate for his or her age.</td>
</tr>
<tr>
<td>No</td>
<td>55.7</td>
<td>Attendance (90% or Better) - Seventy-five percent of migratory students will obtain an attendance rate of 80 percent or better.</td>
</tr>
<tr>
<td>Not Measured</td>
<td></td>
<td>Promotion - Seventy percent of migratory students will be moved ahead at least one grade level above his or her placement from the previous year.</td>
</tr>
</tbody>
</table>
WHAT ARE THE GOALS FOR 1992-93?

**Regular Year Program**

<table>
<thead>
<tr>
<th>Subject</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Reading (Former)</strong></td>
<td>Given supplemental instruction in reading, stressing listening, spelling and writing, formerly migratory children will gain 1 NCE in reading as measured by a norm-referenced test.</td>
</tr>
<tr>
<td><strong>Reading (Current)</strong></td>
<td>Given supplemental instruction in reading, stressing listening, spelling and writing, currently migratory children will gain 1.5 grade level equivalents in reading during the regular year as measured by the Brigance Inventory.</td>
</tr>
<tr>
<td><strong>Math (Former)</strong></td>
<td>Given supplemental instruction in mathematics, formerly migratory students will gain 1 NCE in mathematics as measured by a norm-referenced test.</td>
</tr>
<tr>
<td><strong>Math (Current)</strong></td>
<td>Given supplemental instruction in mathematics, currently migratory students will master 1.5 grade level equivalents in mathematics as measured by the Brigance Inventory.</td>
</tr>
<tr>
<td><strong>Limited English</strong></td>
<td>Given supplemental English language instruction, 70 percent of non-English speaking migratory students will increase their English language proficiency as measured by the Functional Language Survey (FLS).</td>
</tr>
<tr>
<td><strong>Preschool</strong></td>
<td>Given appropriate learning experiences, 75 percent of migratory preschool children will show (1) academic and (2) personal growth as measured by teacher observation.</td>
</tr>
<tr>
<td><strong>Age/Grade</strong></td>
<td>Ninety percent of all migratory students will be placed in the grade which is appropriate for his or her age.</td>
</tr>
<tr>
<td><strong>Attendance</strong></td>
<td>Ninety percent of migratory students will obtain an attendance rate of 90 percent or better.</td>
</tr>
<tr>
<td><strong>Promotion</strong></td>
<td>Ninety percent of migratory students will be moved ahead at least one grade level above his or her placement from the previous year.</td>
</tr>
<tr>
<td>Summer Program</td>
<td>Description</td>
</tr>
<tr>
<td>----------------------</td>
<td>-------------</td>
</tr>
<tr>
<td><strong>Reading</strong></td>
<td>Given instruction in reading, stressing listening, spelling and writing, currently and formerly migrant children will gain 1 month grade equivalent as measured by the Brigance Inventory.</td>
</tr>
<tr>
<td><strong>Math</strong></td>
<td>Given instruction in mathematics, formerly and currently migratory students will master 1 month grade equivalent in mathematics as measured by the Brigance Inventory.</td>
</tr>
<tr>
<td><strong>Limited English</strong></td>
<td>Given supplemental English language instruction, 70 percent of non-English speaking migratory students will increase their English language proficiency as measured by the Functional Language Survey (FLS).</td>
</tr>
<tr>
<td><strong>Career Awareness</strong></td>
<td>Eighty-five percent of migratory students will receive instruction in career awareness.</td>
</tr>
<tr>
<td><strong>Cultural Awareness</strong></td>
<td>Ninety percent of the students will receive instruction about their culture and other cultures.</td>
</tr>
<tr>
<td><strong>Self-Expression</strong></td>
<td>Eighty-five percent of migratory students will receive opportunities in creative expression.</td>
</tr>
<tr>
<td><strong>Physical Education</strong></td>
<td>Given physical education activities, 85 percent of the migratory students will improve in physical coordination and demonstrate an appreciation for health and safety as measured by teacher observation.</td>
</tr>
<tr>
<td><strong>Secondary Program</strong></td>
<td>Ninety percent of secondary migratory students will accrue high school credits at a rate which will permit graduation in four years.</td>
</tr>
<tr>
<td><strong>Support Services</strong></td>
<td>Given summer support services, 100 percent of the migratory students will receive routine medical and dental screening and other appropriate health services.</td>
</tr>
<tr>
<td><strong>Preschool</strong></td>
<td>Given appropriate learning experiences, 75 percent of migratory preschool children will show (1) academic and (2) personal growth as measured by teacher observation.</td>
</tr>
<tr>
<td><strong>Age/Grade</strong></td>
<td>Ninety percent of all migratory students will be placed in the grade which is appropriate for his or her age.</td>
</tr>
<tr>
<td>Attendance</td>
<td>Ninety percent of migratory students will obtain an attendance rate of 90 percent or better.</td>
</tr>
<tr>
<td>-----------------</td>
<td>-------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Promotion</td>
<td>Ninety percent of migratory students will be moved ahead at least one grade level above his or her placement from the previous year.</td>
</tr>
</tbody>
</table>
WHAT ARE RECOMMENDATIONS FOR FUTURE MIGRANT PROGRAMS?

1. Preschool and Day Care. The Migrant Education Program has always focused on keeping students in school. Services that help to ensure continued educational participation of school-aged children and youth are day care and preschool. This target is reflected in the regulations.

   The first priority for serving migrant students directs service to current migrant children ages three to 21, and in order to serve these students, the second priority emphasizes day care for younger siblings from birth to three years of age. Colorado projects need to increase the amount of services to migrant children from birth to five years of age in order to keep older siblings in school. Coordination with state programs or community resources will decrease the drain on migrant funds.

   In May 1993, a Child Care Symposium was held for staff from Migrant Education, Head Start and the Department of Social Services' Child Care Unit and Resource and Referral Network to coordinate information, resources and services. Such coordination efforts need to continue as directed in recommendation #4.

2. Linguistic Diversity. The diversity of languages beyond English and Spanish is a reality of the migrant population. Linguistic differences must be recognized and training must be provided on how to assess and educate these students.

3. Training. Teachers in the Migrant Education Program continuously express interest in training for the many aspects of the program and services. All local projects need to be responsive and provide opportunities for inservice in the areas of expressed need. The services of the Chapter 1 Technical Assistance Center (TAC), Rural Technical Assistance Center (RTAC), Program Coordination Center (PCC), State Migrant Education Program staff, MSRTS staff and CDE consultants should be employed in meeting expressed needs.

   The number of PASS credits accrued during the summer program has been decreasing the past two years. The PASS coordinator insists the decrease is due to a change in the reporting system. In response to this training need, a PASS credit accrual workshop has been arranged for August 1993.

4. Coordination Efforts. As budgets become tighter, an increase in coordinated efforts within and beyond federal programs is essential. Ideas for coordination include but are not limited to day care, preschool, instruction, and support services, such as social work, health and transportation.

5. Administrative Coordination. Specifically, the integration of administration across federal programs should continue to be a priority. Again, as fiscal restraints become greater, a reduction of administrative costs across federal programs could be realized leading to improved instructional services to students. State administrators have asked local
administrators to participate in training, technical assistance, onsite reviews and instructional services.

6. **Timeliness of Records.** Most summer school staff continuously express the need for educational records to be delivered at the beginning of the session. Local programs should submit withdrawals at least two weeks before regular school is out. Otherwise summer school records on these students will be late because the backlog of withdrawals creates a delay in re-enrollments.

7. **Students on Grade Level.** The mobile nature of migrant students' lifestyles, puts them at risk of being behind in school. Migrant students usually are not placed in the grade which is appropriate for their age. An increased effort is needed to keep greater percentages of students on grade level.
1991-92 Colorado State Migrant Parent Advisory Council Members

Benjamin "Hugo" Guerra ...................... Chairman, Weld BOCES ...................... Parent
Hope Ventura .................................... Adams 14 .................................. Parent
Luz Rodriguez ................................... Adams 27J .................................. Parent
Hope Montoya ................................... Arkansas Valley BOCES .................. Records Clerk
Kathy Pedilla .................................. Boulder 1/Longmont ......................... Parent
Julie Avalos .................................. Boulder 2/Boulder .......................... Rec Clk/Recruiter
Ofelia Estrada ................................. East Central BOCES ......................... Parent
Manuela Saenz ................................. Larimer RE1 .................................. Parent
Loudres Giner .................................. Mesa 51 .......................................... Parent
Pedro Sebastian ............................... San Luis Valley BOCES .................... Parent
Maria Flores .................................. South Central BOCES ....................... Parent
Virginia Navarrette .......................... Southeastern BOCES ....................... Parent
Mary Michael Montgomery ............... South Platte Valley BOCES ................. Coordinator
Isabel Rodriguez ................................ Weld 6 .......................................... Recruiter
Magda Ulibarri ................................ West Central BOCES ......................... Rec Clk/Recruiter

Acknowledgements

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

David C. Pimentel, Supervisor of the Migrant Program, and Bea Torres, Data Entry Specialist, are to be commended for their support, cooperation and assistance in preparing this report. Also, credit must be given to Charlotte Baker who gathered pertinent program data on request. Appreciation is expressed to Martina Wamboldt for her efforts in preparing the manuscript for publication.

Colorado State Board of Education

Sybil S. Downing, Chairman ...................... Boulder
Patricia M. Hayes, Vice Chairman ............ Englewood
Gladys S. Eddy .................................. Fort Collins
Royce D. Forsyth ................................ Denver
Thomas M. Howerton .......................... Colorado Springs
Ed Lyell ........................................ Broomfield
Hazel F. Petrocco ................................ Pueblo

Federal funds from Migrant Education ESEA/CFDA 84.011 are financing 100 percent of the costs of this publication from an approximate project amount of $350.