The Texas/Montana Distance Learning Project was a summer (1992) pilot program administered by the Texas Education Agency in collaboration with the Montana Office of Public Instruction. Targeted participants were children of migratory workers who attended Texas schools, but were living temporarily in Montana during the early summer. The goals of the project were: (1) to improve the success rate of migrant students who were in Montana during the summer and had not passed the Texas Assessment of Academic Skills (TAAS), a requirement for high school graduation; and (2) to demonstrate the feasibility of using distance learning as a viable instructional system for migrant students. Students at six Montana sites were instructed in reading, writing, and math by Texas teachers for 4 weeks through live, interactive television broadcast via satellite. Teacher-partners at the six sites were responsible for keeping students on task, helping the television teacher determine viability of activities, and implementing warm-up and follow-up activities before and after broadcasts. Sample TAAS tests were administered at the beginning and conclusion of the project. Staff evaluations and student test results indicate the project was successful in delivering relevant instruction and increasing test scores of the 92 elementary and 66 secondary Texas migrant students who participated. This report contains pre- and posttest scores, samples of students' work, TAAS instructional objectives, and contact lists for the project. (LP)
Migrant Education: Distance Learning

Montana

Texas

TEXAS MIGRANT EDUCATION SUMMER 1992
Texas/Montana Summer Distance Learning Pilot Project

"From the Lone Star to the Big Sky"

August 1992

by

Frank Contreras, Director
Migrant Division of the
Texas Education Agency
# Table of Contents

I. Introduction .................................................................................................................. 1.1

II. Texas: Region XX ESC Summary Report
   A. Project Abstract ........................................................................................................... 2.1
   B. Project Rationale ........................................................................................................ 2.3
   C. Background Information of TI-IN Network .................................................................. 2.4
   D. Project Goals .............................................................................................................. 2.4
   E. Target Audience ......................................................................................................... 2.5
   F. Student Data ............................................................................................................... 2.6
   G. Schedule of Classes .................................................................................................... 2.6
   H. Teacher Partner Training ............................................................................................ 2.7
   I. Staff ............................................................................................................................. 2.7
   J. Instructional Office Hours ........................................................................................... 2.7
   K. Technical Considerations ............................................................................................ 2.8
   L. Instructional Materials ................................................................................................. 2.8
   M. Project Evaluation and Recommendations from TI-IN Distance Learning Teachers ........................................................................................................................................................................... 2.9
   N. Project Evaluation and Recommendations from Montana Teacher Partners ........... 2.10
   O. Final Thoughts ............................................................................................................ 2.11
   P. Other ......................................................................................................................... 2.11

III. Montana: Data Analysis of Project by Rural Technical Assistance Center
   A. Survey Results .............................................................................................................. 3.1
   B. Distance Learning Pre/Post Test Score Reports ......................................................... 3.4
IV. Students: Sample Work

A. Joan Carmina Torres ........................................... 4.1
B. Rosie Pacheco .................................................. 4.3
C. Holly Pacheco ................................................... 4.4
D. Sandra Rodriguez ............................................... 4.5
E. Raquel Bacca .................................................... 4.6
F. Irene Bacca ....................................................... 4.7
G. Anonymous ...................................................... 4.8
H. Anonymous ...................................................... 4.10

V. Appendixes

Appendix A TAAS Instructional Targets (Grade 5) ................................................. 5.1
Appendix B TAAS Instructional Targets (Exit Level) ............................................... 5.5
Appendix C Contact List - Texas Distance Learning Project ................................ 5.11
Appendix D Contact List - Montana Migrant Program ...................................... 5.13
Appendix E Project Sites and Number of Students ........................................... 5.16
Appendix F Editorial - "Migrant Children Use Distance Learning" ....................... 5.18
I. Introduction
Introduction

The Texas Migrant Education Division of the Texas Education Agency, in its quest to maintain a high level of continuity in the education of Texas migrant students, embarked in the Texas/Montana Distance Learning Project as a pilot project. Ninety percent of the summer migrants who work the fields of Montana come from Texas. The Texas Education Agency felt that a Texas Assessment of Academic Skills (TAAS) Test preparation project was essential, since all Texas students must pass this test before receiving a high school diploma.

The Texas Migrant Division in coordination with the Central Stream Program Coordination Center, the Western Stream Program Coordination Center, and the Texas Migrant Interstate Program provided TAAS preparation material for Texas students while they worked in Montana. The Region XX Education Service Center and the Texas TI-IN Telecommunication Center provided the telecommunications technology, equipment, and the teachers. Montana telecommunication experts prepared the centers to receive the transmission.

The collaboration and coordination between the Texas Education Agency and the Montana Office of Public Instruction was successful in reaching 92 elementary and 66 secondary Texas migrant students in Montana this summer.
II. Texas: Region XX ESC Summary Report
Project Abstract

The Texas/Montana distance learning project was conceptualized in order to meet two identified goals. The first project goal was to improve the success rate of migrant students who are in Montana during the summer and who have not passed the Texas Assessment of Academic Skills (TAAS) test. Secondly, this project was undertaken to demonstrate the feasibility of using distance learning as a viable instruction system for migrant students.

Both goals were met through the implementation of project activities. Ninety-two elementary students and sixty-six secondary students were taught reading comprehension, written communication and math skills identified from objectives of the Texas Assessment of Academic Skills (TAAS) test (See Appendixes A-C). Targeted elementary students were fifth graders. The secondary target group was at the exit level. Project students attended Texas schools and are children of migratory workers living temporarily in Montana during the early summer. All of these students were recruited and enrolled in six existing summer programs for migrant students in Montana. The Montana programs were funded and staffed by the Montana Office of Public Instruction. At the end of the project, exit level students were given the opportunity to take the portions of the TAAS not mastered previously. The tests were administered in Billings, Montana, by a certified Texas Test Administrator.

TI-IN Network, an experienced and established provider of distance learning, developed and delivered all instruction through contractual arrangement with Education Service Center, Region XX. TI-IN also provided television technology, signal transmission via satellite and complete technical support for the project.

The instructional design was developed on the philosophy that learner oriented activities should be relevant to the targeted students' experiences. Lessons were framed in meaningful contexts. Extensive drill and practice were given low priorities, and conceptual teaching for understanding was the guiding factor for instructional development. Since the length of time for the project prohibited addressing all TAAS objectives, areas of relative strength and weakness in reading, writing and math were addressed in equal amounts of teaching time. Teaching based solely on deficits was deemed inappropriate to the instructional design. Statewide TAAS results and Eagle Pass ISD TAAS results for migrant students were used to select targeted skill areas and specific TAAS objectives. Sample TAAS tests, administered both at the beginning and conclusion of the project, were used to gather student data and to help determine gains.
During the month of June, lessons were taught Monday through Thursday for four weeks. Elementary students were instructed in morning sessions and secondary students in the evenings. The instructional design included sixteen lessons, taught by Texas teachers in the live, interactive television environment and broadcast via satellite. Student-teacher interactions, available via a two way audio connection, drove the lessons and were integral to the instructional design.

Teacher partners in the six Montana sites were also integral parts of the classes. Special teleconferencing sessions for information exchange between the television teachers and the teacher partners were provided. Teacher partner responsibilities included keeping students on task, helping the television teacher determine viability of activities, interacting with students on a personal basis, and implementing warm-up and follow-up activities before and after broadcasts. By creating a team composed of teacher partners, television instructors, migrant directors, the instructional manager and TI-IN technical staff, students benefited from a coordinated effort of support and sound instruction.
Project Rationale

It is generally recognized that one of the chief detriments to student success among the children of migrant workers in the United States is the lack of instructional continuity. Moving from state to state and changing schools frequently results in mixed and confusing curriculum requirements. The resulting pattern is one of poorly coordinated educational opportunities for this population. Nationally available distance learning offers tremendous potential in meeting this educational dilemma. Students can move from school to school and still take the same class from the same teacher. This pilot project proved the viability of distance learning for the Texas students who were temporarily in Montana.
Background information: TI-IN Network and Education Service Center, Region XX

TI-IN Network, a leader in distance education in the United States, currently provides over two hundred hours of staff development, twenty-one direct student instructional credit courses, and a wide variety of student enrichment programs to subscribing school districts. In addition, TI-IN produces and broadcasts state agency programming, school board training, and other quality educational programming. Since 1990, TI-IN has successfully produced and broadcast several series of Scholastic Aptitude Test, American College Test, and TAAS review courses.

Over 1,200 schools in 42 states are TI-IN subscribers. During the 1991-92 school year, more than 5,700 students were enrolled in 22 high school credit courses. At the elementary level, TI-IN offers Elementary Spanish and an extensive schedule of student enrichment programs.

Since the founding of TI-IN in 1985, Education Service Center, Region XX has played a major role in the development and implementation of its televised instruction. Based on needs identified within the TI-IN educational market, Region XX develops distance learning curriculum, plans its instructional design and implements all phases of student based instruction. Region XX has strong expertise and deeply rooted experience in teaching high school students over live, interactive instructional television.

Project Goals

The goals and expectations of this project were:

- to improve the success rate of migrant students who are in Montana during the summer and who have not passed the Texas Assessment of Academic Skills (TAAS), and
- to demonstrate the feasibility of using distance learning as a viable instructional system for migrant students.
Target Audience

This project targeted two groups of migrant students enrolled in the Montana Summer School Program. Targeted were students who had not mastered TAAS skills at the fifth grade and exit levels. All students indicated that they will return to Texas schools in the fall. Descriptions of participating students are shown below.

### TABLE 1
Projected Number of Targeted Groups per Site

<table>
<thead>
<tr>
<th></th>
<th>Billings</th>
<th>Fromberg</th>
<th>Glendive</th>
<th>Hardin</th>
<th>Hysham</th>
<th>Sydney</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elementary</td>
<td>16</td>
<td>13</td>
<td>11</td>
<td>12</td>
<td>19</td>
<td>15</td>
</tr>
<tr>
<td>Secondary</td>
<td>14</td>
<td>8</td>
<td>3</td>
<td>11</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>30</td>
<td>21</td>
<td>19</td>
<td>15</td>
<td>30</td>
<td>27</td>
</tr>
</tbody>
</table>
**Student Data**

Because of the short duration of the project, addressing all TAAS objectives was not feasible. Using statewide TAAS results and Eagle Pass ISD TAAS results, both areas of relative strength and weakness were addressed. Sample TAAS tests, developed by Education Service Center Region XIII, were abbreviated to accommodate student schedules. They were administered both at the beginning and conclusion of the project. Problems in the amount of time available to students to complete the tests were quickly evident. Problems in length of participation also created problems in the pre and post testing. Because of the unforeseen time constraints and variable participation, last minute adjustments to the administration of the test were necessary.

**Schedule of Classes**

The broadcast schedule for TAAS skill building classes for migrant students is shown below. Each of these classes was taught live and interactively. Montana students and teachers communicated with the Texas TAAS teachers during each class via two way audio.

---

<table>
<thead>
<tr>
<th>DATES</th>
<th>TIME ZONE</th>
<th>CLASS</th>
</tr>
</thead>
<tbody>
<tr>
<td>June 8 - 11</td>
<td>Mountain 10:00-11:00 am</td>
<td>Elementary TAAS Skill Building (The first 28 minutes were devoted to math and the last 28 minutes to writing/reading. The four minutes in between provided stretch time for students and a transition time for our TV teachers.)</td>
</tr>
<tr>
<td>June 15 - 18</td>
<td>Mountain 11:00-Noon</td>
<td></td>
</tr>
<tr>
<td>June 22 - 25</td>
<td>Central 7:30-8:30 am</td>
<td>Secondary TAAS Skill Building (The first 28 minutes were devoted to writing/reading and last 28 minutes to math. The four minutes in between provided a stretch time for students and a transition time for our TV teachers.)</td>
</tr>
<tr>
<td>June 29 - July 2</td>
<td>Central 8:30-9:30 pm</td>
<td></td>
</tr>
</tbody>
</table>

---
Teacher Partner Training

The following times were scheduled for live interactive broadcasts between teaching partners in the Montana sites and in Texas. These sessions provided opportunities to practice use of the equipment and to communicate about the instructional design.

<table>
<thead>
<tr>
<th>DATE</th>
<th>TIME ZONE</th>
<th>CLASS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mountain</td>
<td>Central</td>
<td></td>
</tr>
<tr>
<td>June 4,</td>
<td>Thursday</td>
<td>8-9 am</td>
</tr>
<tr>
<td>June 18,</td>
<td>Thursday</td>
<td>8-8:55 am</td>
</tr>
<tr>
<td>June 18,</td>
<td>Thursday</td>
<td>6-7 pm</td>
</tr>
</tbody>
</table>

Staff

Teachers providing the televised instruction were selected based on their knowledge of the content, experiences and their expertise as distance learning television instructors. All three of the teachers were ESC XX/TI-IN teachers during the regular school year. An instructional manager also supported the administration of the project at the delivery location in San Antonio, Texas.

Other staff important in the implementation of the project were:

- directors and teachers in each of the migrant programs in the six Montana schools.
- State Director for Migrant Education-Texas.
- State Director for Migrant Education-Montana.
- TI-IN technical and programming staff

Instructional Office Hours

The TI-IN teaching staff and the instructional manager were available via a toll free telephone number at scheduled times during the days and evenings. Teaching partners and students interacted with staff on a one-to-one basis. Using this strategy, close personal relationships were fostered among all participants.
Technical Considerations

Ti-IN Network loaned one Subscriber Interface Device (SID) to each participating site to facilitate the student talk back function. Each one the six sites furnished a standard telephone line into the receiving classroom. All calls to the instructional staff were made over toll free (1-800) telephone lines provided by TI-IN.

Using satellite time leased by Ti-IN Network, the Ku-Band signal on which the classes were broadcast was transmitted over Spacenet II. Satellite dishes at two of the sites did not have the capability to receive the Ku-Band signal, so the project leased and installed appropriate dishes.

Instructional Materials

Lesson plans and student materials were sent directly to each of the Montana site directors on June 1, 1992. The materials sent included the following:

- One per student
  - lesson plans which the television teachers followed, including suggestions for teacher partners
  - instructional handouts to accompany the lesson plans
  - pre test and post tests with answer keys for teacher partners (developed by Region XIII Education Service Center)

- Student Strategy Guide for the Exit Level TAAS: Written Communication, 1992
  University of Texas at Austin
  Extension Instruction and Materials Center
  Austin, Texas
  One per site (Copies for students of selected pages were made as needed.)

- Step Up to the TAAS: Writing for Fifth Grade, 1990
- Step Up to the TAAS: Reading for Fifth Grade, 1990
- Step Up to the TAAS: Math for Fifth Grade, 1990
- Step Up to the TAAS: Exit Writing, 1990
Project Evaluation and Recommendations From TI-IN Distance Learning Teachers

The TI-IN/ESC XX distance learning staff developed suggestions for future considerations. The consensus of the instructional group is that this was a highly successful project. Students were extremely enthusiastic and very responsive to the instruction. The technology and live interactions seemed especially attractive as motivators. Feedback from the Montana teacher partners was also supportive and helpful. The interactions during class and some limited written communications with students during the four weeks indicated that concepts were being mastered.

The suggestions below relate specifically to improvement and expansion of the migrant distance learning model established by this project.

- Continue to use TAAS objectives and TAAS instructional targets as the framework for instructional design and development.
- Continue to emphasize and seek relevant activities, based on student’s life experiences.
- Design instruction so that it represents unique and fairly discreet learning. This will help accommodate a constantly shifting student population. Publish a project calendar showing when certain concepts and skills will be taught.
• Initiate student recruitment before students leave Texas schools. Involve parents in the recruitment process. Use distance learning teachers to visit the Texas sites most heavily involved, so that they can meet students before the broadcasting begins.

• Re-evaluate the need for pre and post testing. If necessary, design the testing so that it more accurately reflects the instructional needs of the students and time constraints.

• Once the project is underway, conduct a televised "Open House" for parents of participating students and other interested community members. This would be an excellent opportunity for parents to interact with the television teaching staff.

• Based on surveys - teachers agreed that 30 minutes was sufficient.

• Extend instructional television item for the elementary students to at least 45 minutes for math and 45 minutes for written communications/reading comprehension with a 15 minute break between lessons.

• Schedule the high school classes two or three times weekly, instead of nightly. Schedule a 50 minute block of time for math and 50 for written communications/reading comprehension.

• Extend the length of the project by at least one week.

• If possible, obtain a roster of students, including biographical data, the Texas schools students are leaving and where they plan to return.

• Receive and critique more samples of student work and progress.

• Require interaction and communication between the TI-IN teacher and the teacher partner at least once a week.

• Consider the possibility of paying a stipend to exit level students who pass the TAAS upon completion of the instruction.

Project Evaluation and Recommendations
From Montana Teacher Partners

The Montana Evaluation Form: TAAS Remediation Telecommunications - Survey Results (see Chapter III) was compiled by RMC Research, Portland, Oregon. The survey results are divided into 3 major categories: Format, Class Schedule, and Follow-up. The Format Survey results combines both the elementary and secondary levels while the class schedule and follow-up survey results are further subdivided into elementary and secondary levels. Comments teachers made were also compiled after each category.


Final Thoughts

This pilot clearly proves that live interactive instructional television, broadcast nationally to a variety of locations, is a highly effective way of delivering relevant instruction to the migrant population of the United States. High student enthusiasm, learner outcomes and curriculum continuity were major benefits.

Extending post-project reflections to their logical conclusions, the question becomes... what next? The thoughts and caveats below represent ideas to be considered.

- Determining nationally recognized courses, skills and curriculum opportunities to form the core of programming is prerequisite to all other planning. Without a common framework from which to proceed, the continuity problems inherent in migrant education will not truly be addressed and alleviated.

- The development, production, and administration of quality distance learning programs is extremely complicated and time intensive. Effective television instruction demands adaptation of teaching techniques and strategies as well as administrative support, flexibility and sensitivity. Technical expertise and access to technical support are of paramount importance. Great care and caution are advised in the selection of providers.

- In the distance learning arena, developing and maintaining a team mentality and approach is critical. When reaching across hundreds and often thousands of miles faulty communication will be damaging. Instructional, administrative, engineering, technical and television staff at both the sending and receiving locations must work cooperatively in order for distance education to produce successful students. If designed, managed, and executed well, the degree of planning and teamwork required is transparent to the learner.

Other

Please note other pertinent information regarding the Distance Learning Project:

Appendix D: Contact List - Montana Migrant Program
Appendix F: Editorial - "Migrant children use Distance Learning"
III. Montana: Data Analysis of Project by Rural Technical Assistance Center
Montana Evaluation Form:
TAAS Remediation/Distance Learning Pilot Project

Survey Results

(Note: Montana teacher partners were surveyed at the close of the pilot project regarding the format and composition of the lessons. The following data reflects the number of teachers responding yes or no to each question. Thirteen surveys were tabulated. Not all questions were answered on every survey.)

<table>
<thead>
<tr>
<th>Format — Elementary and Secondary Combined</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. The 30-minute segments were long enough to teach the objective?</td>
<td>10</td>
<td>2</td>
</tr>
<tr>
<td>2. The format of 30-minute math/30-minute reading and writing was effective?</td>
<td>11</td>
<td>1</td>
</tr>
<tr>
<td>3. The students were able to communicate effectively with the Texas teachers using the phone modems?</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>4. The students could reach the Texas teachers when they had questions?</td>
<td>8</td>
<td>4</td>
</tr>
<tr>
<td>5. The Texas teachers seemed enthusiastic and related well with the students?</td>
<td>12</td>
<td>0</td>
</tr>
<tr>
<td>6. The pretest and posttest were successful in evaluating the success of the students?</td>
<td>0</td>
<td>12</td>
</tr>
<tr>
<td>7. I consider this program to be a success and feel that it should be used in the future to assist Texas students?</td>
<td>12</td>
<td>0</td>
</tr>
</tbody>
</table>

Some teacher partners felt that for some objectives, more time was needed others felt that there was not enough time in the program to effectively test. Some felt that Language Arts should come first, then math. Many teachers felt that more phone lines are needed!

Teacher: reported that students had some problems getting in touch with the teachers during scheduled times. The phones malfunctioned a few times and students had problems with sharing the phones lines with the other sites. The pretest was not given before TI-IN sessions started, therefore not a true pretest (idea — start class with students before TV sessions begin).

Several teachers responded that the instructional values gained from using the telecommunications were outstanding. Although there were a few flaws that needed to be worked out, the overall program was very educational and quite successful.

One teacher stated that the pretest questions need to be directly related to the lesson plans so that the posttest would show a growth based on the TI-IN program. English lessons need to be tied more directly to TAAS test so students understand the information being learned ties into their TAAS test. For my students, the pace was slow, most of them had an understanding of the objectives ahead of time. The students would stay more on task if a speaker phone was used so that all students could interact. Students loved reinforcers, especially Einstein and mad scientists; they also appreciated Mrs. Moody's creativity in costumes. Being on the phone — on line — was exciting for everyone.

Regarding the scheduling of lessons, the teachers who responded to the survey overwhelmingly approved the present schedule.
Secondary teachers were divided in their responses regarding class scheduling. The following table demonstrates that:

### Class Schedule — Elementary

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. The present schedule worked well for my program?</td>
<td>6</td>
<td>1</td>
</tr>
<tr>
<td>2. The program should be two days per week for two hours?</td>
<td>0</td>
<td>7</td>
</tr>
</tbody>
</table>

**Comments?**

### Class Schedule — Secondary

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. The present schedule worked well for my program?</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>2. The program should be two days per week for two hours?</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>3. The program should be two days per week for exit level and two days for ninth grade?</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>4. Present student travel arrangements were acceptable?</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>5. Other student travel arrangements need to be made?</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>6. Meals were acceptable?</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>7. Students ate the meals that were prepared?</td>
<td>3</td>
<td>3</td>
</tr>
</tbody>
</table>

Teachers had many suggestions regarding follow-up:

### Follow up — Elementary

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Students should take the TAAS test immediately after the classes end?</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>2. Longitudinal data should be kept on student who take the TAAS test after attending TI-IN classes?</td>
<td>6</td>
<td>1</td>
</tr>
<tr>
<td>3. More study materials should be used to assist the students in understanding the lessons?</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>4. More concern needs to be take for LEP students?</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>
### Follow up — Secondary

<table>
<thead>
<tr>
<th>Question</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Students should take the TAAS test immediately after the classes end?</td>
<td>6</td>
<td>0</td>
</tr>
<tr>
<td>2. Secondary students had time to work on other study material?</td>
<td>0</td>
<td>6</td>
</tr>
<tr>
<td>3. Longitudinal data should be kept on students who take the TAAS test after attending TI-IN classes?</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td>4. More study materials should be used to assist the students in understanding the lessons?</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>5. More study time is needed for doing lessons for the TI-IN classes?</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>6. More concern needs to be taken for LEP students?</td>
<td>3</td>
<td>0</td>
</tr>
</tbody>
</table>

**Comments?**

One teacher reported that regarding secondary students, the material available is adequate, but time is the problem. A longer class that would allow "thinking time" would help. It would also be good to do several problems or examples of the same type in order to somewhat master the skill.
Distance Learning Pre/Post Test Score Reports
Distance Learning Pre/Post Test Score Report

Billings, Math
Summer, 1992

Questions were taken from Practice Test: Texas Assessment of Academic Skills

No data received for grades 3, 7-12.
Distance Learning Pre/Post Test Score Report

Billings, Reading
Summer, 1992

<table>
<thead>
<tr>
<th>Grade</th>
<th># of Students Tested</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>6</td>
<td>3</td>
</tr>
</tbody>
</table>

No data received for grades 3, 7-12.

Questions were taken from *Practice Test: Texas Assessment of Academic Skills*
# Distance Learning Pre/Post Test Score Report

## Billings, Writing

### Summer, 1992

## Graphical Representation

<table>
<thead>
<tr>
<th>Grade</th>
<th># of Students Tested</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>6</td>
<td>2</td>
</tr>
</tbody>
</table>

No data received for grades 3, 7-12.

*Questions were taken from *Practice Test: Texas Assessment of Academic Skills*. 

---

<table>
<thead>
<tr>
<th>Grade</th>
<th># of Students Tested</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>6</td>
<td>2</td>
</tr>
</tbody>
</table>

No data received for grades 3, 7-12.

*Questions were taken from *Practice Test: Texas Assessment of Academic Skills*. 

---
Distance Learning Pre/Post Test Score Report

Fromberg, Math
Summer, 1992

Questions were taken from Practice Test: Texas Assessment of Academic Skills

* No data received for grades 7 and 10.
Distance Learning Pre/Post Test Score Report

Fromberg, Reading

Summer, 1992

Grade | # of Students Tested
-----|----------------------
 3   | 1                    
 4   | 4                    
 5   | 1                    
 6   | 3                    
 8   | 1                    
 9   | 1                    
11   | 2                    
12   | 1                    

No data received for grades 7 and 10.

* Questions were taken from Practice Test: Texas Assessment of Academic Skills
Distance Learning Pre/Post Test Score Report
Fromberg, Writing
Summer, 1992

Questions were taken from Practice Test: Texas Assessment of Academic Skills.

No data received for grades 7 and 10.
Distance Learning Pre/Post Test Score Report
Glendive, Math
Summer, 1992

<table>
<thead>
<tr>
<th>Grade</th>
<th>Pretest</th>
<th>Posttest</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>9.0</td>
<td>0</td>
</tr>
<tr>
<td>7</td>
<td>8.0</td>
<td>7.5</td>
</tr>
<tr>
<td>9</td>
<td>7.0</td>
<td>6.0</td>
</tr>
<tr>
<td>10</td>
<td>6.0</td>
<td>5.0</td>
</tr>
<tr>
<td>11</td>
<td>5.0</td>
<td>4.0</td>
</tr>
<tr>
<td>12</td>
<td>4.0</td>
<td>3.0</td>
</tr>
<tr>
<td>13</td>
<td>3.0</td>
<td>2.0</td>
</tr>
<tr>
<td>14</td>
<td>2.0</td>
<td>1.0</td>
</tr>
<tr>
<td>15</td>
<td>1.0</td>
<td>0.0</td>
</tr>
</tbody>
</table>

Questions were taken from Practice Test: Texas Assessment of Academic Skills

No data received for grades 3, 5, 6 and 8.
Distance Learning Pre/Post Test Score Report

Glendive, Reading

Summer, 1992

Questions were taken from Practice test: Texas Assessment of Academic Skills

No data received for grades 3, 5, 6, and 8.
Distance Learning Pre/Post Test Score Report

Glendive, Writing
Summer, 1992

Questions were taken from Practice Test: Texas Assessment of Academic Skills

<table>
<thead>
<tr>
<th>Grade</th>
<th># of Students Tested</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>8</td>
</tr>
<tr>
<td>7</td>
<td>1</td>
</tr>
<tr>
<td>9</td>
<td>1</td>
</tr>
<tr>
<td>10</td>
<td>1</td>
</tr>
<tr>
<td>11</td>
<td>1</td>
</tr>
<tr>
<td>12</td>
<td>2</td>
</tr>
</tbody>
</table>

No data received for grades 3, 5, 6 and 8.
Distance Learning Pre/Post Test Score Report

Hardin, Math
Summer, 1992

Grade
Pretest
Posttest

No data received for grades 3-4, 6-10, and 12.

Questions were taken from Practice Test: Texas Assessment of Academic Skills
Distance Learning Pre/Post Test Score Report

Hardin, Reading

Summer, 1992

* Questions were taken from Practice Test: Texas Assessment of Academic Skills
Distance Learning Pre/Post Test Score Report

Hardin, Writing

Summer, 1992

Questions were taken from Practice Test: Texas Assessment of Academic Skills

<table>
<thead>
<tr>
<th>Grade</th>
<th># of Students Tested</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>11</td>
<td>2</td>
</tr>
</tbody>
</table>

No data received for grades 3-4, 6-10, and 12.
Distance Learning Pre/Post Test Score Report
Hysham, Math
Summer, 1992

Mean # of Items Correct

<table>
<thead>
<tr>
<th>Grade</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>12</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pretest</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3.0</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Posttest</td>
<td>2.5</td>
<td>0.0</td>
<td>1.0</td>
<td>2.3</td>
<td>2.0</td>
<td>6.5</td>
<td>4.0</td>
<td>4.0</td>
<td>5.5</td>
<td>6.0</td>
</tr>
</tbody>
</table>

No data received for grades 9 and 12.

* Questions were taken from Practice Test: Texas Assessment of Academic Skills
Distance Learning Pre/Post Test Score Report
Hysham, Reading
Summer, 1992

Questions were taken from *Practice Test: Texas Assessment of Academic Skills*
Distance Learning Pre/Post Test Score Report
Hysham, Writing
Summer, 1992

Grade | # of Students Tested
---|---
3 | 4
4 | 1
5 | 6
6 | 4
7 | 2
8 | 1
9 | 1
10 | 2
11 | 3

No data received for grade 12.

* Questions were taken from Practice Test: Texas Assessment of Academic Skills
Distance Learning Pre/Post Test Score Report

Sidney, Math

Summer, 1992

Questions were taken from Practice Test: Texas Assessment of Academic Skills

* No data received for grades 3, 4, 8, and 10.

Grade | # of Students Tested
--- | ---
5     | 5
6     | 2
7     | 1
9     | 4
11    | 4
12    | 3
Distance Learning Pre/Post Test Score Report
Sidney, Reading
Summer, 1992

- Questions were taken from Practice Test: Texas Assessment of Academic Skills
Distance Learning Pre/Post Test Score Report

Sidney, Writing

Summer, 1992

* Questions were taken from *Practice Test: Texas Assessment of Academic Skills*

No data received for grades 3, 4, 8, and 10.
Distance Learning Pre/Post Test Score Report
Overall, Math
Summer, 1992

Questions were taken from Practice Test: Texas Assessment of Academic Skills
Distance Learning Pre/Post Test Score Report

Overall, Reading

Summer, 1992

<table>
<thead>
<tr>
<th>Grade</th>
<th># of Students Tested</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>4</td>
<td>14</td>
</tr>
<tr>
<td>5</td>
<td>20</td>
</tr>
<tr>
<td>6</td>
<td>12</td>
</tr>
<tr>
<td>7</td>
<td>4</td>
</tr>
<tr>
<td>8</td>
<td>2</td>
</tr>
<tr>
<td>9</td>
<td>7</td>
</tr>
<tr>
<td>10</td>
<td>3</td>
</tr>
<tr>
<td>11</td>
<td>12</td>
</tr>
<tr>
<td>12</td>
<td>6</td>
</tr>
</tbody>
</table>

* Questions were taken from Practice Test: Texas Assessment of Academic Skills
Distance Learning Pre/Post Test Score Report

Overall, Writing

Summer, 1992

Mean # of Items Correct

Grade | Pretest | Posttest
-----|--------|--------
3     | 3.9    | 4.5    
4     | 4.1    | 5.5    
5     | 4.4    | 5.1    
6     | 5.5    | 5.7    
7     | 7.5    | 9.0    
8     | 8.0    | 8.0    
9     | 7.6    | 6.8    
10    | 7.0    | 6.1    
11    | 6.9    | 7.0    
12    | 7.0    | 8.8    

Grade | # of Students Tested
-----|-----------------------
3     | 5                     
4     | 15                    
5     | 20                    
6     | 12                    
7     | 4                     
8     | 2                     
9     | 7                     
10    | 3                     
11    | 12                    
12    | 6                     

* Questions were taken from Practice Test: Texas Assessment of Academic Skills
IV. Students: Sample Work
July 2, 1992

Dear President Bush

My name is Joan Carmena Torres. I am from San Luis Rio Colorado Sonora Mexico. I am writing about distance learning. We used TI-NU Network from Texas to Montana.

I like distance learning in reading because we follow directions. We med smoothe. They showed us the words different.

In math I learned a lot of fractions. I also learned how to put in missing numbers. I also learned how to find area.

I like the video that Mrs. Connell show in the t.v. In one video she show a dance that is called "El Tapatio." And she show other video that kids spoke Spanish.
Distance learning shows as alot of this Distance learning helps alot of kids on we wan to keep it. It helped me alot. I learn more English.

Sincerely,

Joan Carmine

[Signature]
June 2, 1999

Dear President Bush,

My name is Rosie Pacheco. I live in Bridger, Montana. I am writing about distance learning. We used T-Tw-IN Network from Texas to Montana. I like distance learning. I liked Reading because she showed us lots of different words that we didn't know. She showed us how to do different things. For instance, she showed us how to do trix to get some answers that we didn't know. They used video to show us how to sing in Spanish. I liked the zoo. Because I liked the animals. Because they were all pretty. I like Distance learning. It helps students learn things that they wouldn't be able to get in a year school.

Sincerely,
Rosa Pacheco.
Dear President Bush,

My name is Holly Pacheco and I live in Bridger, MT. I'm writing about Distance Learning. We used a TV network from Texas to Montana.

I like Distance Learning and reading because I learn how to follow directions to make a smoothie, how to take a story reading piece.

In math I learned a lot about fractions, how to put in missing numbers, and how to find the area of a polygon.

They used videos that showed us things about dances, how to say animal names in Spanish, and kids from a school that spoke Spanish.

Distance Learning helped me to understand more about math, reading, writing, learning more than you do in

July 2, 199
Querido presidente,

mi nombre es Sandra Rodríguez y de lo que le quiero escribir con todo gusto es de lo que ella escribió y entendí es de que también aprendí acerca de fracciones de matemáticas y a recurrir al área de los rombo, cuadrados, círculos y de los triángulos también aprendí acerca de líquido, también me gustó como particionaron las tortillas y la piña también me gustó cómo se sentían las maestras, fue con el que me sorprendió cuando abrí la español y de lo que escribí fue divisiones y multiplicaciones bueno es todo muchas gracias.

Sandra

Rodríguez
Dear Principal,

I believe that closing a school down at 4:00 p.m. is not a very good idea. This will mean that football, volleyball, and basketball will have no extra time to practice for their games. Another reason why I believe closing the school early is not a good thing, there won’t be much time for club meetings. This will cause for student council to have no time to discuss class activities. My last reason why school should not be closed early is some students cannot go back to school to pick up forgotten homework or equipment. Closing the school early will cause many changes and will cause our chances in winning games, because of the time taken out for practice. Please think of all the changes you will cause.

Sincerely,

Raquiel Baca
Dear Principal,

I believe that your decision would affect many of your students and co-workers. And these are some reasons why you should close the doors late.

First of all it will affect the students some. Many of the students could not practice some extracurricular activities. For example, Raquel was in volleyball for the past couple of years. She has won many trophies for her school. Martina was had been going to tutorials for the past five weeks in the afternoon for help and credit. But now she has to. These after school activities would have to cease.

The next example is that many of the teachers would stay behind in their school work. For instance, Mrs. Alice had to... up with her school work but she could not take her school work home... She would Cipher doing...
Dear Editor,

I was very concerned to learn about the killing of the Jewish people in the Nazi death camps. I do not believe that we have the right to judge others by their race or creed. I believe that we have the right to judge others by their actions.

Sincerely,

June 22, 1937

203
There are limits to our freedom of speech. The government cannot stop us because freedom of speech is a right. Finally, society needs us. The more our freedom is limited, the more we have to do with the government. This is why we should not limit our freedom. The government should not decide on our morals. (Who should?)
Dear Editor,

Many people here in Levelland Texas are against the city officials about them having to bend many heavy metal concerts due to foul and abusive language. And there are some reasons why.

First of all, many people believe that concerts should play what our they want to play and say what ever they want to say. For example it's not like the city officials are used to foul and abusive language in their daily life. And that is my first example.

My second reason is that anybody that would be offended by anything that the group our writer would say or do could just leave. For example Bob want... to a concert with one of his best friend and his friend was offended by the guards so he decided to leave the concert.

And that is why many of the people here in Levelland are against the city officials about bending many heavy metal concert.

Sincerely,

(C.C.O.C of Levelland)

(This would only be from you.)

(This would be a 1 but probably be revised to a 2 with only a little work.)
V. Appendixes
Appendix A

TAAS Instructional Targets (Grade 5)
Domain: Written Communication

*Objective 1: The student will respond appropriately in a written composition to the purpose/audience specified in a given topic.
- Vary word and sentence choice for purpose and audience
- Write compositions incorporating information from sources other than personal experience
- Write information discourse of a variety of types
- Write persuasive discourse of a variety of types
- Use various composition models as aids in developing writing skills
- Use formal and informal language appropriately
- Use aural and visual stimuli for writing
- Evaluate content

*Objective 2: The student will organize ideas in a written composition on a given topic.
- Use the composing process to plan and generate writing
- Evaluate organization of writing
- Write descriptive, narrative, and expository paragraphs

*Objective 3: The student will demonstrate control of the English language in a written composition on a given topic.
- Evaluate appropriate transition, clarity of language, and appropriate word and sentence choice
- Use the forms and convention of written language appropriate word and sentence choice
- Use parts of speech effectively in sentences
- Use the fundamentals of grammar

*Objective 4: The student will generate a written composition that develops/supports/elaborates the central idea stated in a given topic.
- Demonstrate clear and logical thinking in support and development of central idea
- Evaluate topic development

*Objective 5: The student will recognize appropriate sentence construction within the context of a written passage.
- Recognize complete sentences and avoid fragments and run ons
- Combine sentence parts and sentences to produce a variety of sentence structures including simple, compound, and complex

*Objective 6: The student will recognize appropriate English usage within the context of a written passage.
- Use common affixes to change words from one part of speech to another
- Use correct subject-verb agreement with nouns, personal pronoun, indefinite pronouns, and compound subjects, and use correct pronoun antecedent agreement
- Recognize correct verb tense and correct form of tense of irregular verbs, and avoid faulty shifts in tense
- Use the appropriate forms of adjectives and adverbs and the correct case of pronouns, and avoid the use of double negatives
DOMAIN: Reading Comprehension

*Objective 1: The student will determine the meaning of words in a variety of written texts.
  - Use knowledge of the meanings of prefixes and suffixes to determine word meanings
  - Use context clues (e.g., synonym, antonym, definition and explanation, description, or example) to determine the meaning of an unfamiliar word
  - Use context clues to determine the meanings of specialized/technical terms

*Objective 2: The student will identify supporting ideas in a variety of written texts.
  - Recall supporting facts and details
  - Arrange events in sequential order
  - Describe the setting of a story (time and place)

*Objective 3: The student will summarize a variety of written texts.
  - Identify the stated or paraphrased main idea of selection
  - Identify the implied main idea of selection
  - Describe the setting of a story (time and place)

*Objective 4: The student will perceive relationships and recognize outcomes in a variety of written texts.
  - Identify the causes of a given event or a character's actions
  - Predict probable future actions and outcomes

*Objective 5: The student will analyze information in a variety of written texts in order to make inferences and generalizations.
  - Use graphic sources for information
  - Draw logical conclusions
  - Understand the feelings and emotions of characters

*Objective 6: The student will recognize points of view, propaganda, and/or statements of fact and nonfact in a variety of written texts.
  - Distinguish between fact and nonfact

Taken from TEA Specifications
* Asterisk indicates objectives addressed in summer migrant project
Domain: Concepts

*Objective 1: The student will demonstrate an understanding of number concepts.
  - Translate whole numbers (name to numeral/numeral to name)
  - Compare and order whole numbers
  - Use whole number place value
  - Round whole numbers (to nearest ten or hundred)
  - Use odds, evens, and skip counting
  - Recognize and compare fractions using patterns and pictorial models

*Objective 2: The student will demonstrate an understanding of mathematical relations, functions, and other algebraic concepts.
  - Use whole number properties and inverse operations
  - Determine missing elements in patterns
  - Use number line representations for whole numbers and decimals

*Objective 3: The student will demonstrate an understanding of geometric properties and relationships.
  - Recognize two-and three-dimensional figures and their properties
  - Identify informal representations of congruence and symmetry

*Objective 4: The student will demonstrate an understanding of measurement concepts using metric and customary units.
  - Solve problems with metric and customary units and problems involving time (simple time conversions; elapsed time)
  - Find the perimeter
  - Find area (with grids)

*Objective 5: The student will demonstrate an understanding of probability and statistics.
  - Determine possible outcomes in a given situation
  - Analyze data and interpret graphs (including line graphs)

Domain: Operations

*Objective 6: The student will use the operation of addition to solve problems.
  - Add whole numbers and decimals (tenths and hundredths; using models)

*Objective 7: The student will use the operation of subtraction to solve problems.
  - Subtract whole numbers and decimals (tenths and hundredths; using models)

Taken from TEA Specifications
* Asterisk indicates objectives addressed in summer migrant project
Appendix B

TAAS Instructional Targets (Exit Level)
Domain: Written Communication

*Objective 1: The student will respond appropriately in a written composition to the purpose/audience specified in a given topic.
- Vary word and sentence choice for purpose and audience
- Write compositions incorporating information from sources other than personal experience
- Write information discourse of a variety of types
- Write persuasive discourse of a variety of types
- Use various composition models as aids in developing writing skills
- Use formal and informal language appropriately
- Use aural and visual stimuli for writing
- Evaluate content

*Objective 2: The student will organize ideas in a written composition on a given topic.
- Use the composing process to plan and generate writing
- Evaluate organization of writing
- Write descriptive, narrative, and expository paragraphs

*Objective 3: The student will demonstrate control of the English language in a written composition on a given topic.
- Evaluate appropriate transition, clarity of language, and appropriate word and sentence choice
- Use the forms and convention of written language appropriate word and sentence choice
- Use parts of speech effectively in sentences
- Use the fundamentals of grammar

*Objective 4: The student will generate a written composition that develops/supports/elaborates the central idea stated in a given topic.
- Demonstrate clear and logical thinking in support and development of central idea
- Evaluate topic development

*Objective 5: The student will recognize appropriate sentence construction within the context of a written passage.
- Recognize complete sentences and avoid fragments and run ons
- Combine sentence parts and sentences to produce a variety of sentence structures including simple, compound, and complex

*Objective 6: The student will recognize appropriate English usage within the context of a written passage.
- Use common affixes to change words from one part of speech to another
- Use correct subject-verb agreement with nouns, personal pronoun, indefinite pronouns, and compound subjects, and use correct pronoun antecedent agreement
- Recognize correct verb tense and correct form of tense of irregular verbs, and avoid faulty shifts in tense
- Use the appropriate forms of adjectives and adverbs and the correct case of pronouns, and avoid the use of double negatives
Objective 7: The student will recognize appropriate spelling, capitalization, and punctuation within the context of a written passage.

- Use the fundamentals of spelling
- Use appropriate capitalization
- Use the fundamentals of punctuation

Texas Education Agency TAAS Specifications

* Asterisk indicates objectives addressed in summer migrant project
DOMAIN: Reading Comprehension

- **Objective 1:** The student will determine the meaning of words in a variety of written tests.
  - Use context clues to choose the appropriate meaning of multiple-meaning words
  - Use knowledge of the meanings of prefixes and suffixes to determine word meanings
  - Use context clues (e.g., synonym, antonym, definition and explanation, description, or example) to determine the meaning of an unfamiliar word
  - Use context clues to determine the meanings of specialized/technical terms

- **Objective 2:** The student will identify supporting ideas in a variety of written texts.
  - Recognize facts and details
  - Arrange events in sequential order
  - Follow complex directions

- **Objective 3:** The student will summarize a variety of written texts.
  - Identify the stated main idea of a selection
  - Identify the implied main idea of a selection
  - Identify the best summary of a selection

- **Objective 4:** The student will perceive relationships and recognize outcomes in a variety of written texts.
  - Perceive cause and effect relationships
  - Predict probable future actions and outcomes

- **Objective 5:** The student will analyze information in a variety of written texts in order to make inferences and generalizations.
  - Interpret graphs, charts, diagrams, and tables
  - Make inferences and draw conclusions
  - Make generalizations
  - Evaluate and make judgments
  - Describe plot, setting, character, and mood in literary selections

- **Objective 6:** The student will recognize points of view, propaganda, and/or statements of fact and nonfact in a variety of written texts.
  - Recognize the author's point of view and purpose
  - Recognize the forms of propaganda
  - Distinguish between fact and nonfact

Taken from TEA Specifications
* Asterisk indicates objectives addressed in summer migrant project
TEXAS ASSESSMENT OF ACADEMIC SKILLS
INSTRUCTIONAL TARGETS
MATHEMATICS
Exit Level

DOMAIN: Concepts

* Objective 1: The student will demonstrate an understanding of number concepts.
  * Use scientific notation
  * Compare and order real numbers
  * Round whole numbers
  * Determine relationships between and among fractions, decimals, and percents
  * Find square roots

* Objective 2: The student will demonstrate an understanding of mathematical relations, functions, and other algebraic concepts.
  * Use real number properties and inverse operations
  * Determine missing elements in patterns
  * Identify ordered pairs and solution sets in one and two dimensions
  * Apply ratio and proportion
  * Evaluate variable and expressions (formulas)
  * Solve simple equations involving integers, decimals, and fractions

* Objective 3: The student will demonstrate an understanding of geometric properties and relationships.
  * Use the basic elements of geometry (point, line, segment, ray, angle)
  * Use geometric figures and their characteristics
  * Use right-triangle properties
  * Use indirect measurement with similar triangles
  * Apply geometric properties

* Objective 4: The student will demonstrate an understanding of measurement concepts using metric and customary units.
  * Use metric and customary units
  * Solve problems involving measures
  * Find distance, perimeter, circumference, area, surface area, and volume
  * Recognize precision

* Objective 5: The student will demonstrate an understanding of probability and statistics.
  * Use counting procedure (tree diagrams, multiplication)
  * Find probability of simple and compound events
  * Determine the mean, the median, and the mode

DOMAIN: Operations

* Objective 6: The student will use the operation of addition to solve problems.
  * Use the operation of addition with real numbers in practical situations

* Objective 7: The student will use the operation to solve problems.
  * Use the operation of subtraction with real numbers in practical situations.

* Objective 8: The student will use the operation of multiplication to solve problems.
  * Use the operation of multiplication with real numbers in practical situations
**Objective 9:** The student will the operation of division to solve problems.
- Use the operation of division with real numbers in practical situation

**DOMAIN: Problem Solving**

**Objective 10:** The student will estimate solutions to problem situations.
- Estimate solutions

**Objective 11:** The student will determine solution strategies and will analyze or solve problems.
- Identify strategies for solving or solve proportion problems
- Determine methods for finding or find percent and percentage
- Determine methods for solving or solve measurement problems
- Formulate or solve problems using geometric concepts
- Analyze or solve probability and statistics problems
- Make predictions

**Objective 12:** The student will express or solve problems using mathematical representation.
- Formulate equations/inequalities
- Analyze or interpret graphs, charts, tables, maps, or diagrams and use the information derived to solve problems

**Objective 13:** The student will evaluate the reasonableness of a solution to a problem situation.
- Determine the validity of conclusions drawn from statistical data
- Evaluate reasonableness

*Taken from TEA Specifications*
* Asterisk indicates objectives addressed in summer migrant project*
Appendix C
Contact List - Texas Distance Learning Project
Contact List-Texas Distance Learning Project

**Texas Education Agency**
Frank Contreras, Director of Migrant Education
1701 North Congress Avenue
Austin, Texas 78701
512/463-9067
FAX: 512/463-9838

**Texas Migrant Interstate Program**
Tomas Yañez, Director
P.O. Drawer "Y"
Pharr, Texas 78577
1-800-292-7006
FAX: 512/781-0046

**Migrant Education Program Coordination Center**
Tadeo Reyna, Director
Patrick McMann, Coordination Specialist
Texas A & I University
Campus Box 152
Kingsville, Texas 78363
1-800-338-4118
FAX: 512/595-2726

**TI-IN Network**
Robert Nelson, Vice President of Programming
121 Interpark #300
San Antonio, Texas 78216-1803
512/490-3900
FAX: 512/490-2630

**Education Service Center, Region XX**
Don Knezek, Associate Director of Educational Technology
Art Sepulveda, Coordinator of Migrant/Bilingual
Sheila Nicholls, Director of Telecommunications
San Antonio, Texas 78208
512/299-2400
FAX: 512/255-4713
Appendix D

Contact List - Montana Migrant Program
# CONTACT LIST - MONTANA MIGRANT PROGRAM

**June 11, 1992**

<table>
<thead>
<tr>
<th>PROGRAM</th>
<th>DIRECTOR</th>
<th>TEACHER-PARTNERS</th>
<th>TELEPHONE NUMBER</th>
<th>NUMBER OF STUDENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Billings</td>
<td>Doris von Kleck</td>
<td>Karen McMillen-Elementary</td>
<td>(406) 255-3853</td>
<td>14 - Elementary</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Patty Steuerwald-Secondary</td>
<td>(406) 255-3784 FAX</td>
<td>12 - Secondary</td>
</tr>
<tr>
<td>Hysham</td>
<td>Glen White</td>
<td>Larry Fink - Elementary</td>
<td>(406) 342-5237</td>
<td>12 - Elementary</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Steve Hollowell - Elementary</td>
<td>(406) 342-5257 FAX</td>
<td>10 - Secondary</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mike Rea - Secondary</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Elena Arneson - Aide - Secondary</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.14</td>
<td>Keith Fletcher</td>
<td>Barbara Bennett - Secondary</td>
<td>(406) 665-1708</td>
<td>14 - Elementary</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Bob Cheeseman - Elementary</td>
<td>(406) 665-2784 FAX</td>
<td>5 - Secondary</td>
</tr>
<tr>
<td>Hardin</td>
<td>Brent Potts</td>
<td>Marla Zinff - Elementary</td>
<td>(406) 482-5501</td>
<td>13 - Elementary</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Lois Ratliff - Elementary</td>
<td>(406) 482-4358 FAX</td>
<td>18 - Secondary</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Brent Leibach - Secondary</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sidney</td>
<td>Brent Potts</td>
<td>Linda Alberta - Elementary</td>
<td>(406) 668-7755</td>
<td>12 - Elementary</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Tracy Sanders - Secondary</td>
<td>(406) 668-7602 FAX</td>
<td>5 - Secondary</td>
</tr>
<tr>
<td>Fromberg</td>
<td>Rich Alberta</td>
<td>Donna Nessel - Elementary</td>
<td>(406) 365-4155</td>
<td>15 - Elementary</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Audrey Wiley - Secondary</td>
<td>(406) 365-8944 FAX</td>
<td>10 - Secondary</td>
</tr>
<tr>
<td>Glendive</td>
<td>John Trangmoe</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
# CONTACT LIST - MONTANA MIGRANT PROGRAM

June 24, 1992

<table>
<thead>
<tr>
<th>PROGRAM</th>
<th>DIRECTOR</th>
<th>TEACHER-PARTNERS</th>
<th>TELEPHONE NUMBER</th>
<th>NUMBER OF STUDENTS</th>
</tr>
</thead>
</table>
| Billings | Doris von Kleeck | Karen McMillen - Elementary  
|          |               | Patty Steuerwald - Secondary                       | (406) 255-3853  
|          |               |                                                      | (406) 255-3784 FAX   | 16 - Elementary  
|          |               |                                                      |                        | 14 - Secondary  |
| Hysham   | Glen White    | Larry Fink - Elementary  
|          |               | Steve Hollowell - Elementary  
|          |               | Mike Rea - Secondary  
|          |               | Elena Arneson - Aide - Secondary                     | (406) 342-5237  
|          |               |                                                      | (406) 342-5257 FAX   | 19 - Elementary  
|          |               |                                                      |                        | 11 - Secondary  |
| Hardin   | Keith Fletcher| Barbara Bennett - Secondary  
|          |               | Bob Cheeseman - Elementary                           | (406) 665-1708  
|          |               |                                                      | (406) 665-2784 FAX   | 12 - Elementary  
|          |               |                                                      |                        | 3 - Secondary  |
| Sidney   | Brent Potts  | Maria Zinff - Elementary  
|          |               | Lois Ratliff - Elementary  
|          |               | Brent Leibach - Secondary                            | (406) 482-5501  
|          |               |                                                      | (406) 482-4358 FAX   | 15 - Elementary  
|          |               |                                                      |                        | 12 - Secondary  |
| Fromberg | Rich Alberta | Linda Alberta - Elementary  
|          |               | Tracy Sanders - Secondary                             | (406) 668-7755  
|          |               |                                                      | (406) 668-7602 FAX   | 13 - Elementary  
|          |               |                                                      |                        | 8 - Secondary  |
| Glendive | John Trangrooe| Donna Nesset - Elementary  
|          |               | Audrey Wiley - Secondary                              | (406) 365-4155  
|          |               |                                                      | (406) 365-8944 FAX   | 11 - Elementary  
|          |               |                                                      |                        | 8 - Secondary  |
Appendix E

Project Sites and Number of Students
MONTANA DISTANCE LEARNING PROJECT

Project Sites: Billings
Fromberg
Glendive
Hardin
Hysham
Sidney

Participating Students:
Elementary - 92
Secondary - 66

Texas Homebase Sites:
Alamo           Harlingen           Paducah
Brownsville     La Joya             Plainview
Childress       La Porte            Post
Crystal City    Laredo             Raymondville
Del Rio         Levelland          San Juan
Donna           Los Fresnos         Seguin
Eagle Pass      McAllen            Uvalde
Edinburg
Appendix F

Editorial - "Migrant Children Use Distance Learning"
Migrant children use distance learning

By EMILY WALTER
Ranger-Review Staff Writer

A group of elementary school students sat in a Glendive classroom and counted, named dinosaur species, and practiced their language arts with a teacher in Texas.

"It's the way of the future," said John Trangmoe, director of the migrant school program in Glendive. The program known as Montana-Texas Distance Learning on the TIN Network connects Texas educators with migrant students in Glendive via live television broadcast by satellite.

The program is a pilot between the two states. It is also the first to specifically deal with "a target population," noted TIN Director of Telecommunications Sheila Nichols from San Antonio, Texas. Texas Education Agency and federal funds are financing the pilot program as part of the Texas Inter-State Migrant Program. The broadcasts are received simultaneously at six sites in Montana and students talk by telephone with the Texas instructor.

During a broadcast of TIN on Thursday, Trangmoe pointed out a number of instructional aids to increase the interest of the migrant children. The use of names common among Mexican families in word problems was one he noted. The migrant students also completed forms to provide their names, a brief biography, and photos for TIN instructor. The information allows teachers in Texas to call on individual students to answer questions, and praise them for outstanding work, Trangmoe indicated.

Nicholls added that children of migrant families do attend most of the school year in Texas, but rarely complete the entire term. As a result of the break in education, Nichols said the passing rate on the Texas Assessment of Academic Skills (TAAS) test for migrant students is low. Students take the TAAS as juniors and must pass in order to receive a diploma.

Skills needed to pass the TAAS are emphasized during the one-hour broadcasts from Texas to Montana. The broadcasts are received in Montana two times during the Monday-Thursday school week. Elementary students view the broadcast mornings from 10 to 11. The broadcast for junior high and high school students is evenings from 7:30-8:30. The TIN instructor continues to take student calls for one hour after the broadcast concludes.

TIN teaching partners at Jefferson receive lesson information prior to its broadcast and follow the course of study to prepare students, Nichols explained. These teachers are present with students during the broadcasts.

"The teaching partners are critical to the success of the program," Nichols said. "Glendive should be very proud of Audrey Wiley and Donna Nesset. They certainly are excellent teaching partners."

The success and recognition of its migrant summer school programs is one of the reasons Montana was selected for the pilot, Nichols said. Also, the state has only six sites — Glendive, Sidney, Hardin, Fromberg, Billings, and Haysan.

This year the enrollment in migrant school has dropped in Glendive. Trangmoe compared the high attendance day of 159 last year to 88 during the first two weeks of school this summer. He expects the trend to continue because of new planting techniques and equipment in the sugar beet industry which eliminate some manual labor.

The school serves migrant children from age 6 months to high school. Trangmoe estimates that 50 percent of the students are returning to the migrant program from the previous year. He added that the school is also beginning to serve children of former students.