

## DOCUMENT RESUME

ED 043 446

24

RC 004 752

TITLE Evaluation of Mobile Office Education Unit Utilization with Migrant Workers in Box Elder School District. Final Report.

INSTITUTION Utah Research Coordinating Unit for Vocational and Technical Education, Salt Lake City.; Utah State Dept. of Public Instruction, Salt Lake City.

SPONS AGENCY Office of Education (DHEW), Washington, D.C. Bureau of Research.

BUREAU NO BR-6-3046

PUB DATE 69

GRANT OEG-4-7-063046-1612

NOTE 13p.

EDRS PRICE MF-\$0.25 HC-\$0.75

DESCRIPTORS \*Adult Vocational Education, Business Skills, Communication Skills, Mexican Americans, \*Migrant Workers, \*Mobile Educational Services, \*Office Occupations Education, Practical Mathematics, \*Program Evaluation, Student Attitudes

IDENTIFIERS \*Utah

## ABSTRACT

The purpose of this mobile-unit vocational education program was to focus on the basic communication skills, business skills, and math skills believed necessary to qualify better the migrant worker in securing entry jobs in the field of office occupations. The program was designed to meet the needs of the migrant worker from 14 to 30 years of age. Of 29 entering students, 8 completed the 8-week course. All of the 8 students indicated positive attitudes toward school and toward the types of skills taught, although 2 reacted negatively to reading. Greater gains were made in those skills which allowed for manipulation and self-discovery than in those which were taught by the lecture method. Included as recommendations were that there be closer coordination between educational programs for migrant workers; that some method be developed to provide for continuous educational programs as migrant workers move; and that counseling services be made available for employment and educational counseling. (JH)

ED043446

U.S. DEPARTMENT OF HEALTH, EDUCATION  
& WELFARE  
OFFICE OF EDUCATION  
THIS DOCUMENT HAS BEEN REPRODUCED  
EXACTLY AS RECEIVED FROM THE PERSON OR  
ORGANIZATION ORIGINATING IT. POINTS OF  
VIEW OR OPINIONS STATED DO NOT NECES-  
SARILY REPRESENT OFFICIAL OFFICE OF EDU-  
CATION POSITION OR POLICY



FINAL REPORT  
Project No. 6-3046  
Grant No. OEG-4-7-063046-1612

EVALUATION OF MOBILE OFFICE EDUCATION  
UNIT UTILIZATION WITH MIGRANT WORKERS IN  
BOX ELDER SCHOOL DISTRICT

Maurine B. Lee, Principal Investigator  
John F. Stephens, Project Director  
Utah Coordinating Unit for Research in  
Vocational and Technical Education  
1676 University Club Building  
Salt Lake City, Utah 84111

Summer 1969

The research reported herein was performed pursuant to a contract with the Office of Education, U.S. Department of Health, Education, and Welfare. Contractors undertaking such projects under Government sponsorship are encouraged to express freely their professional judgment in the conduct of the project. Points of view or opinions stated do not, therefore, necessarily represent official Office of Education position or policy.

004752

## TABLE OF CONTENTS

	Page
PURPOSE . . . . .	1
METHOD OF STUDY . . . . .	1
CURRICULUM OBJECTIVES . . . . .	2
THE STUDENTS . . . . .	2
RESULTS OF TESTING AND INSTRUCTION . . . . .	3
THE TEACHER . . . . .	7
STUDENT ATTITUDES . . . . .	7
SUMMARY AND CONCLUSION . . . . .	8
RECOMMENDATIONS . . . . .	10

## PURPOSE

The purpose of this vocational-educational program was to focus on the basic communication skills, business skills, and math skills believed to be necessary to better qualify the migrant worker to secure entry jobs in the office occupations field.

## METHOD OF STUDY

The method used in the study included the following techniques.

A. The students were interviewed at the beginning and termination of the training program to determine their attitudes toward school and work, and their aspirations. A questionnaire was used to determine these attitudes.

B. Since reading performance is often related to attaining and keeping employment, an informal reading inventory was administered using reading experiences along with questions determining comprehension based on the Scott-Foresman Reading Series, pre-primer through sixth grade. The Gray's Oral Reading Paragraphs were also administered to confirm the reading level attained and to test beyond the sixth grade level. Gray's Paragraphs were the only measure beyond the sixth grade level.

C. A mathematics pre-test and post-test, constructed to meet the objectives of the program, was administered.

D. A multiple choice test concerning money, banking, credit, and interest at the beginning and termination of the instruction period was administered.

E. Since typewriting was new to each member of the class, post-testing was all that was deemed necessary to measure gains in this area.

F. Telephone calls placed from a central telephone station determined the ability to place and answer a business call for pre-test purposes.

G. A case study was developed for each of the subjects to identify family or experiential factors of significance.

Treatment of data consisted of tabulating beginning and final scores, determining gains or losses in each area examined, and analyzing the effectiveness of the instructional program on the basis of gains in terms of the stated goals of the summer program. No attempt was made to determine whether the subjects actually did obtain or maintain employment or use their income wisely after the instruction. If there were changes in aspirations or interests that could lead to self-sufficiency, these were counted as gains.

## CURRICULUM OBJECTIVES

The curriculum included the following:

### 1. Communication skills--

- a. Read and write the alphabet
- b. Read orally
- c. Talk to visitors
- d. Make a business call and deliver a message by telephone
- e. Answer the telephone as though working at a place of business
- f. Make an extemporaneous oral presentation

### 2. Math skills--

- a. Learn the multiplication tables 1 through 10
- b. Add 5 digit numbers (carrying)
- c. Add a column of 4 digit numbers (carrying)
- d. Subtract a four digit number with a positive answer (borrowing)
- e. Multiply using a single multiplier
- f. Divide using a single divisor

### 3. Business skills--

- a. Know the alphabetic keyboard of the typewriter
- b. Complete a speed test without losing self-control
- c. Type continuously for one minute
- d. Properly fill out a check (including the stub) when the amount of check and the bank balance are given
- e. Know the difference between a checking account and a savings account
- f. Understand the concept of credit and its advantages and disadvantages
- g. Know how the bank uses interest in the banking procedure

## THE STUDENTS

The program was designed to meet the need of the migrant worker from 14 to 30 years of age.

During the month of June there were 350 migrant workers between the ages of 14 to 30 years living in Box Elder County, Utah. The number increased to 380 during the month of July.

The program drew from the total number of workers residing in Box Elder County during the month of June. Of these 350 migrants, 29 (ages 13 to 29) enrolled in the class. This represented eight per cent of the total migrant population between the ages of 14 and 30 years.

Twenty-nine students began the basic vocational education course which was held according to two schedules. Fourteen members attended on Monday and Wednesday, and fifteen attended on Tuesday and Thursday evenings from 8:00 p.m. to 10:00 p.m. The students met in class four hours a week for a period of eight weeks (June 16-August 8, 1969).

By the end of the fifth week all of the Monday-Wednesday members had dropped out and the class continued to completion with part of the Tuesday-Thursday class members.

Of the original 29, 15 dropped, apparently due to lack of interest, during the first five weeks, while six discontinued due to moving to another location. Eight students followed the course to its conclusion. Of the completors, the average age was 16 years, while the average grade level last attended was the 7th grade. None of the students were married, their ages ranged from 13 to 20 years, and all were identified as Mexican-American.

### RESULTS OF TESTING AND INSTRUCTION

#### 1. Communication skills.

##### a. Read and write the alphabet:

When given a pre-test it was determined that each class member could read both the capital as well as the lower case of the alphabet when shown a card listing the letters out of alphabetical order. It was also determined that each member was able to write the letters when given the letters at random.

##### b. Read orally:

Since the students read on different levels and there were no class manuals to meet the various reading levels, the subjects read orally to the pre-tester in order to discover the reading level of each student. Reading materials provided were pre-primer through the twelfth grade.

Each student read to the tester and answered comprehension questions in order to establish the reading level through comprehension as well as by word recognition.

The pre-test (of the eight completing the course) found the average reading level to be 2.85 years below the grade level last attended. Two of the eight raised their reading level one grade on the post-test measure. The total group averaged 2.75 years below the last grade level attended on the post-test, and the reading levels ranged from one year above grade level last attended to six years below grade level last attended.

c. Talk to visitors:

Visitors of three age levels were circulated among the students. One was a child (girl 11 years), one was a teenager (boy 14 years), and one was an adult (male).

Though some of the students were shy, they talked to the visitors without exception. No post-test was used since the desired goal was attained during the pre-test. It should be noted here that the pre-test was accomplished within the classroom, where students felt comfortable with the surroundings. Only classroom behavior was measured, not the social behavior outside the classroom.

d. Make a business call and deliver a message by telephone:

Here the teacher stressed answering the business call. The calls were placed by only one student from a central telephone so only he had the experience of placing business calls, making testing for all of the students impossible.

e. Answering the telephone as though working at a place of business:

Answering the telephone properly was identified, by the instructor, by five steps: (1) the greeting; (2) identification of the company name; (3) personal identification by person answering; (4) the body or message to be taken; (5) the closure (the person answering the telephone should allow the caller to complete his business).

Eight out of eight improved from the pre-test to the post-test. The average improvement was 1.75 points. (Total number of points possible was five.)

f. Extemporaneous presentation:

When the class began, some of the members were not acquainted with one another. Since we were working with relatively shy individuals, it was deemed important that the students should become acquainted. For this reason the extemporaneous presentation served as an introduction as well as an opportunity to speak extemporaneously.

The pre-test was taken from a student centered approach. Each student presented himself to the class giving background information which he felt would help us to know him better and describing what he expected to gain from the class.

The students were timid at first; however, they gained confidence from one another and the presentations went well.

Since every student participated in the presentation and the goal was simply to have each student speak extemporaneously, no post-test was deemed necessary.

## 2. Math skills.

### a. Learn the multiplication tables 1 through 10:

In order to determine the ability to multiply, a four minute time limit was placed on the student. It has been previously established that completing the 110 facts in a four minute time limit required rote recall, as there was not time to "figure out" each problem within the time limit.

Since it was important that the student should not be put in a threatening position the tester began with 100 basic addition facts (also carrying a four minute time limit), assuming that addition was easier to figure than multiplication. This also prepared the student for the time factor in advance of the multiplication pre-test.

The addition page was introduced as a game and the students seemed to like this. When the multiplication page, having the same format, was given, they appeared eager to try. Upon completing the multiplication many of the students asked for extra sheets of multiplication facts so that they might practice at home.

Multiplication, although it was included in the prospective curriculum, was not taught during the course of the class. There was, however, a 13 point increase in the average score on the post-test. Four of the eight improved, while three of the students made remarkable gains.

The following math skills, though listed in the curriculum, were not formally presented during the course of the class:

- b. Add five digit numbers (carrying).
- c. Add a column of four single digit numbers (carrying).
- d. Subtract a four digit number with a positive answer (borrowing).
- e. Multiply using a single multiplier.
- f. Divide using a single divisor.

The scores are presented here to determine whether gains did take place, simply because of the classroom orientation. It might be noted that mathematics was used in filling out a check stub; however, it was not aimed at any of these concepts.

Number able to compute the problems correctly:

	<u>Pre-Test</u>	<u>Post-Test</u>
Addition (5 digit numbers)	7 of the 8	7 of the 8
Column Addition (4 numbers)	7 of the 8	7 of the 8
Subtraction (4 digit)	7 of the 8	7 of the 8
Division (single divisor)	7 of the 8	8 of the 8

The only change noted here was in the process of division, since 8 out of 8 were able to complete the problems correctly on the post-test as opposed to 7 out of 8 on the pre-test.

### 3. Business skills.

- a. Know the alphabetic keyboard of the typewriter.

The first hour of each class period was spent typewriting. At the end of the eight weeks each member had completed the alphabetic keyboard, showing varying degrees of competency. Since typewriting was new to every member, no pre-test was administered.

Eight of the eight students completed the alphabetic keyboard.

Instructors rating of the students' proficiency in typewriting:

Excellent--speed good, error capacity small - 2 of the 8 were rated excellent  
Good--very little looking at keys - 5 of the 8 were rated good  
Poor--not sure of the keys - 1 of the 8 was rated poor

- b. Complete a speed test without losing self-control.

Self-control was interpreted by the instructor to mean taking the test without stopping, talking, or giggling, and completing in the desired time limit. All of the students were able to complete this task.

- c. Type continuously for one minute.

Each student completed this objective.

- d. Properly fill out a check (including the stub) when the amount of the check and the bank balance are given.

Here a check made out to M.O.E. was given to each student. A pre-test was given before instruction, and after the training period the post-test determined the gain.

There were sixteen possible points in the successful completion of the check. Eight of the eight students improved. The average improvement was 6.50 points.

- e. Know the difference between a checking account and a savings account.

Here a pre-test was given which included various aspects of banking. Two of the pre-test questions were selected to determine the identification of the student's knowledge of the checking account. Both were to be answered correctly to determine the understanding of this concept. None of the eight were

able to answer correctly on the pre-test. One of the eight was able to answer these questions correctly on the post-test.

- f. Understand the concept of credit and its advantages and disadvantages.

From the banking pre-test, questions were selected to determine the understanding of the concept of credit. Both questions were to be answered correctly to determine the student's understanding of this concept. One of the eight was able to answer the questions on the pre-test. The number was increased to three of the eight on the post-test.

- g. Know how the bank uses interest in the banking procedure.

The test on banking again determined the comprehension of this concept. Here questions were used to determine the understanding of this concept by the student.

Three of the eight completing the course were able to identify the correct answers, causing the tester to assume understanding on the part of the students.

#### THE TEACHER

The teacher had a free and easy manner with the students. He accepted them as individuals of worth and caused them to feel welcome in the educational program. He had good rapport with his class members and displayed understanding, empathy and a non-judgmental attitude deemed to be important in the teacher/migrant relationship.

#### STUDENT ATTITUDES

The tester found the students to be most cooperative. They displayed a willingness to do whatever was asked of them and voiced their approval of the pre-testing. They particularly liked those portions having to do with them and their personal attitudes. Even those who were not fond of reading responded positively when asked to read. (Here the tester started each one on a low enough level so as not to be threatening and then moved up as rapidly as the student was able to move.)

While working on a one to one basis during the testing, the students often indicated their scholastic desires. Those who had dropped out of school were interested in completing school and desirous of finding a way to attend high school.

Eight of the eight completing the course indicated a positive attitude toward school at the beginning of the course. This same positive attitude on the part of the students was also verbalized at the close of the class. Two of the eight indicated that they would like the opportunity to return to school since they had dropped out several

years earlier. Both of them said they recognized the value of an education and were seeking to find a way to complete high school by attending night school.

Of the eight completing the course, six responded in a positive manner toward reading on both the pre-test and the post-test, with statements ranging from, "reading is fun" to "reading is interesting and educational." Two of the eight responded in a negative manner with, "reading is bad" and "reading is awful." Both of these girls read very poorly and the post-test indicated that they still felt as negative about reading as they had when the pre-test was given.

Each student had a positive attitude toward typewriting during the pre-test, responding with statements like, "fun" and "great", and this attitude continued through the post-test.

Each of the eight subjects indicated a positive attitude toward mathematics at the beginning of the course; only one stated that though she liked to do math, some problems were difficult. The post-test found them still liking mathematics.

Eight of the eight subjects indicated a positive attitude toward the family unit in the pre-test. Statements such as, "my family is great," is "good," and "fun" were the answers most frequently given in both the pre-test and the post-test.

#### SUMMARY AND CONCLUSION

The impact of the vast majority of programs for migrant worker students in this age group has been almost negligible. Probably the main reason for this has been non-attendance. Students are enthusiastic the first time, but interest and attendance drop off markedly thereafter. This pattern was also evidenced in this program.

Locating the learning program so far from the migrant camp may have been a direct cause of the withdrawal of students from the program. The migrant has little enough incentive to become educated without the necessity of traveling so far to attend class after a hard day's work in the field. (Most of the students had to travel from Tremonton to Brigham City.)

Each student (of the 8 completing the course) indicated a positive attitude toward school at the time of registration, which seems to show that the program drew only those who had found school to be rewarding in the past.

Of those completing the course, two of them changed their occupational desires during the course of the class. One changed her occupational choice from housewife to stewardess. Another changed his choice from construction worker to engineer. From the observations of the teacher and the tester, the latter seemed to be a realistic choice since he was a very capable young man.

None of the students chose being a migrant worker as their desired occupation. In fact, five of the eight indicated they disliked migrant work. Two stated that they liked it but would not like to stay. One indicated that he liked it and could be happy working at it, but at the same time he indicated his desire to become a lawyer but felt that he was not smart enough and therefore he could be satisfied to remain a migrant if nothing better was available.

Of the students who registered for the class, each one was able to read and write the alphabet. Each class member was also bilingual, and able to use and comprehend the English language.

Although reading was not formally taught, two of the eight completing the course raised their reading ability by one grade level from the pre-test to the post-test. The typewriting manual offered some reading material which may have aided one student (from third to fourth grade). However, it was not sufficient to raise the reading level of another from the seventh to the eighth grade. The grade level raise, on the part of the latter student was apparently due to the motivation of the learning situation. As the student stated it, "being in school causes me to read in my spare time."

Learning often takes place as a result of exposure without formalized teaching as evidenced by the scores on the multiplication post-test. Though multiplication was not covered in the school situation, the introduction of the timed multiplication sheet of 110 facts, used in the pre-test, apparently caused the students to become interested in learning the multiplication facts. Three of the students made remarkable gains in the post-test, while four of the eight made lesser gains in multiplication. In addition, one of the students made an increase in the ability to divide (though no class aid was given).

Each student was highly motivated to learn how to use the typewriter. This interest carried through to the completion of the course. Each student was successful in learning the alphabetic keyboard of the typewriter during the course of the class.

Greater gains were made when the subject matter was such that the student became involved in his own learning. Those skills which allowed for manipulation and self-discovery made greater profit than those requiring listening to lecture type material, as evidenced by greater gains in typewriting, endorsing checks (as well as check stubs) and answering the telephone properly (all manipulative skills), as opposed to the lecture method used in learning the concept of money and banking.

More than the presence or absence of family pressure and interest was apparently involved in the learning situation since the student making the greatest gain and the student making the least gain were members of the same family.

## RECOMMENDATIONS

It is recommended that:

1. There be a closer coordination between the educational program and the recruiters in the area. The prospective students were apparently poorly contacted. The first night of class no one arrived since the migrant workers had not been properly informed. The first two weeks were complicated by entering on different nights. This was apparently due to having been contacted late.

2. The Mobile Office Education Unit be placed in an area more easily accessible to the migrant students. If possible, the M.O.E. should be placed at a close proximity to the migrant camp. Most of the students had to be transported from Tremonton (since that is where they were working) to Brigham City each class night. Of the eight completing the course six of them came from Tremonton. Two of the girls (sisters) were living in Brigham City the year round. They were not technically migrants but were Mexican-American.

3. There be more manipulative materials used in the teaching of money, interest and banking concepts. Since this portion of the class was given by lecture method the students had little opportunity to discover the concepts for themselves. The needs of the students might better have been met through role playing. It is doubtful that some of the members of the class understood the terminology used in the lecture method.

4. There be better coordination among those working with the migrant population. Though this program was not filled with the desired number of students, VISTA people were inquiring about the use of the trailer and its facilities by them for teaching other migrants. The two programs could have complemented each other.

5. There be reading and mathematics help available to the students. These objectives were not considered in the teaching situation. Much of the progress that was made was apparently accomplished because of the use of pre-tests which would not have been introduced had it not been for this study.

6. There be up-to-date text books available in the mathematics and reading fields. The only books available (though never formally used) were obsolete books gathered from other schools. There was little variety available. Reading material should be available to the students in as wide a variety as possible.

7. There be some student texts or other printed materials for the money, finance and banking portion of the course geared to beginners. There were no materials available for student use. Information was presented through lecture and by use of the overhead projector. The students had no personal reference to work with.

8. An educative program be prepared and offered to meet the migrants completing the course enabling them to continue on where they left off.

9. Some effort be made to pass on the records, showing the educational attainment of those completing the class. This would enable them to continue the present program of learning in the next area where they might locate without the necessity of waiting until the next year to continue on.

10. Counseling services be made available to the students attending the class so their employment and education problems might be discussed. Two of the students in the class desired to learn of a way that they might complete their school (as they had dropped out) and they had no idea as to how they might be helped.

11. There be a follow-up study to determine whether the instruction did, in fact, result in greater self-sufficiency when subjects were compared with migrants of comparable status who did not participate in the training program.

12. A further study, using greater numbers, be conducted to determine the validity of the findings of this study. (Is this a typical group representing the migrant workers settling in Utah? Are similar "school oriented" learning patterns typical of other groups of migrant workers residing in this area?)