A model telephone instructional system was developed to provide adult basic education and General Educational Development (GED) preparatory instruction to adults in rural areas. Forty adults were enrolled in the program, pretested, evaluated, and provided with appropriate textbooks. A toll-free telephone was installed in the teacher's home, but students did not call the teacher as had been anticipated. Students were encouraged to contact the teacher, but the communication remained one-way--teacher to student. Student input regarding program effectiveness was collected through a mailed survey (4 of 40 surveys were returned) and telephone interviews with 12 students. Those students who had not called the teacher indicated that they never felt the need to call. Students who did call found it difficult to understand mathematics (algebra) explanations over the telephone. Problems with the project were the expense of the toll-free WATS line and the control of textbooks. (Attachments include a registration form, news release, lists of textbooks used, and a questionnaire.) (YLB)
FINAL REPORT OF 310 PROJECT

TELEPHONE INSTRUCTION INVOLVING RURAL ADULTS

By

Dennis Bidwa
Coordinator, Adult Education Program

July 30, 1982

Project: No. 99-1804
Grantor: Pennsylvania Department of Education
         Bureau of Vocational Education
         Division of Adult Education & Training
         Programs
         333 Market Street
         Harrisburg, PA 17108

Grantee: Lincoln Intermediate Unit No. 12
         P. O. Box 70
         New Oxford, PA 17350

This project was funded under a Section 310 grant of the Adult Education Act of 1978 (P.L. 95-561). Opinions expressed do not necessarily reflect the opinions of the Pennsylvania Department of Education nor the U.S. Office of Education and no endorsement of USOE should be inferred.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abstract</td>
<td>1</td>
</tr>
<tr>
<td>Introduction</td>
<td>1</td>
</tr>
<tr>
<td>Narrative:</td>
<td></td>
</tr>
<tr>
<td>Identifying Community Resources</td>
<td>3</td>
</tr>
<tr>
<td>Publicity</td>
<td>3</td>
</tr>
<tr>
<td>Teacher Selection</td>
<td>4</td>
</tr>
<tr>
<td>Telephone Installation</td>
<td>4</td>
</tr>
<tr>
<td>Student Registration &amp; Testing</td>
<td>5</td>
</tr>
<tr>
<td>Class Operation</td>
<td>5</td>
</tr>
<tr>
<td>Evaluation</td>
<td>6</td>
</tr>
<tr>
<td>Problems</td>
<td>8</td>
</tr>
</tbody>
</table>

**Attachments:**

<table>
<thead>
<tr>
<th>Attachment</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Publicity Flyer</td>
<td>1</td>
</tr>
<tr>
<td>News Release</td>
<td>2</td>
</tr>
<tr>
<td>Profile of Student Group</td>
<td>3</td>
</tr>
<tr>
<td>Textbooks Used</td>
<td>4</td>
</tr>
<tr>
<td>Evaluation Questionnaire</td>
<td>5</td>
</tr>
<tr>
<td>Student Distribution</td>
<td>6</td>
</tr>
</tbody>
</table>

Copies of this report may be obtained at no charge from:

Adult Education Program  
Lincoln Intermediate Unit No. 12  
P. O. Box 70  
New Oxford, PA  17350
ABSTRACT:

The "Telephone Instruction Involving Rural Adults" project was designed to test materials and delivery systems in order to design an effective and economical program for providing adult basic education and GED preparatory instruction to adults in rural areas.

The target area was approximately 100 square miles of south-central Pennsylvania in Franklin and Fulton Counties where due to mountainous and semi-mountainous terrain travel is done over circuitous secondary roads and highways. Because of the difficulty of travel and the sparsity of population centers it was impossible to establish a permanent class location and attract a sufficient number of students to justify the expense.

It was felt that by communicating with the students primarily through the mail and by telephone an adequate number of adult students could be provided adult education services at an economical cost.

Our basic premise was that once the students were enrolled into the program, pre-tested, evaluated, and provided with appropriate textbooks and a toll-free telephone number through which they could talk with a teacher they would work through the texts; communicating with the teacher frequently by telephone.

Forty adults were enrolled in the program, pre-tested, evaluated, and provided with appropriate textbooks. The toll-free telephone was installed in the teacher's home, making her available virtually all of the time. Students did not respond as anticipated -- they would not call the teacher. Communication was one-way -- teacher to student. Various means were attempted to encourage the students to contact the teacher, none of which were successful in creating the desired two-way linkage between the student and teacher.

Our recommendations for dealing with this lack of student participation are discussed in this report.

INTRODUCTION:

As providers of adult education services to the residents of Franklin and eastern Fulton Counties we were faced with the problem of how to provide educational opportunities to the rural population. Adult basic education and GED preparatory classes operating in Chambersburg, the county seat, were well attended by the residents in the immediate area, however, the rural population was not being served.
Due to the mountainous terrain and the complete lack of public transportation services, interested rural adults faced a sixty mile round trip in order to participate in the existing Adult Education program.

This project was designed with two primary objectives:

1. Develop a model telephone instruction system.
2. Enable thirty-five (35) rural adults to meet their individual objectives through participation in the project.

All activities were scheduled according to the following time frame:

<table>
<thead>
<tr>
<th>TIME SCHEDULE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jul Aug Sep Oct Nov Dec Jan Feb Mar Apr May Jun</td>
</tr>
<tr>
<td>1. Identify Community Resources</td>
</tr>
<tr>
<td>2. Publicity</td>
</tr>
<tr>
<td>3. Recruit Participants</td>
</tr>
<tr>
<td>4. Recruit/Hire Instructor</td>
</tr>
<tr>
<td>5. Develop Mail-Out Materials</td>
</tr>
<tr>
<td>6. Registration/ Counseling</td>
</tr>
<tr>
<td>7. Telephone Instruction</td>
</tr>
<tr>
<td>8. Furnish Articles, Progress Reports</td>
</tr>
<tr>
<td>9. Counseling</td>
</tr>
<tr>
<td>10. Evaluation</td>
</tr>
</tbody>
</table>

One part-time staff member carried out most functions associated with this project. This teacher contacted the schools and community agencies in the targeted service area, arranged and conducted student recruiting meetings, enrolled and tested new students, mailed textbooks, and was available to the students as the resource teacher once they began their course of study.

This report is designed to be an aid to program developers who are exploring ways to serve potential students who cannot, for various reasons, regularly come to a central location for a more traditional adult education class. Our intention is to highlight functions which, if duplicated, should be altered to become more economical and to suggest additional functions which could be added in order to increase the potential of program success.
Permanent copies of this report will be on file in the following locations:

Pennsylvania Department of Education
Bureau of Vocational Education
Division of Adult Education and Training Programs
333 Market Street
Harrisburg, PA 17108

Lincoln Intermediate Unit No. 12
Adult Education Program
P.O. Box 70
New Oxford, PA 17350

Telephone Instruction Involving Rural Adults

Identifying Community Resources

Due to the rural nature of the targeted area there was not a large number of organizations through which to coordinate this effort.

The guidance counselor at the area high school agreed to act as our contact person for the northern part of the area. He maintained a supply of our textbooks for students and handled referral calls.

Fulton County CETA agreed to act as the contact point for the central part of the target area, providing distribution of textbooks and information services.

Our teacher's home served as the southeastern contact area.

Contact persons were established at the local newspapers, major employers, Bureau of Vocational Rehabilitation, and the Office of Employment Security.

Publicity

Once the contact persons were established throughout the service area, each was briefed regarding our project. Each supporting agency was supplied with handouts to be distributed (see attachment 1).

Releases were sent to each of the local newspapers publicizing the program (see attachment 2).

Students who had attended one of our ABE/GED classes and had dropped out were contacted and invited to participate in the telephone project.

Arrangements were made with the Parent-Teachers Association of Fannett-Metal High School, our northern area contact point, to give a presentation to their membership and conduct registration during the same meeting. Similar arrangements were made with the Fulton County CETA office in McConnellsburg, our central area contact point, and the site of our ABE/GED class in Chambersburg.
The effectiveness of the registration meetings was questionable. While the PTA meeting was the largest audience only five (5) students indicated that they found out about the program through the PTA (see attachment 3, VII).

Newspaper releases and word-of-mouth appeared to be the most effective publicity vehicle accounting for nearly half of the students (see attachment 3, VII). For a number of reasons prospective students were reluctant to attend a "special" meeting to learn about the telephone class. While some of the reasons the students gave for not attending were valid, we suspected that many adults experienced the typical apprehension most adults encounter when inquiring about adult education classes or making a commitment to an educational program. The newspaper releases gave the students an opportunity to consider the program and subsequently enroll without having to make a face-to-face commitment to a teacher. By looking at the times of enrollment (attachment 3, VI) many students apparently learned of the program, considered it, and finally enrolled in November.

Teacher Selection

A teacher was chosen who had demonstrated her classroom abilities in our ABE program and who possessed the necessary personal organization required by this project. She is certified in elementary education and has three years experience in adult basic education. Her effervescent personality was a definite plus in this program since several of the students never met her personally but had all their communication over the telephone. Many times the student who called needed not only an answer to a particular question but the encouragement to continue the program.

Telephone Installation

Due to the fact that concept behind this telephone project was to offer a nonconventional adult education service we chose to install the telephone in the teacher's home. By having the telephone in her home we were not confined to the normal operating hours of an office or school building. She could arrange her schedule according to the class demands.

When determining what type of phone service to use we judged that 95% of the incoming calls would be toll calls and in order to make the class cost free to the students the charges would be reversed. By estimating the number of incoming calls and the time of each we felt that an incoming toll-free Wide Area Telephone Service (WATS) line would be the most economical. This selection of a WATS proved to be a delaying factor in getting the class underway. It took far longer to have the line installed than we anticipated.
It was later explained that since the WATS line was inter-company, it had to be engineered for the service area.

The usage of the WATS line never developed to the point that it was actually the most economical alternative (see attachment 3, VIII). This area is discussed in the Problems and Recommendations section.

Student Registration and Testing

Our original intent was to be able to register thirty-five (35) students through the three orientation meetings we scheduled at the start of the project. We chose the Test of Adult Basic Education (TABE) because of the three levels of difficulty and the appropriateness for the diversity of students we expected. Students did not attend the orientation meetings as anticipated even though we scheduled them in three locations so no one would have far to travel. The students who did register at one of the orientation meetings were given the TABE Locater and then the appropriate level TABE. Students who were initially tested proved to be at a higher academic level than we expected (see attachment 3, IV). Subsequent students who registered by mail or telephone were given Level D of the TABE, with no Locater used. This saved time and apparently was successful because none of the students who were questioned during the project evaluation felt the TABE was threatening or discouraging.

Once the teacher received the completed TABE she evaluated the test and determined what textbooks would be appropriate for each student.

See attachment 6 for students' geographical distribution.

Class Operation

Each student's TABE results were reported to them and the appropriate textbooks either sent or the students were requested to pick them up if they lived near one of the three contact offices. (See attachment 4 for a list of textbooks used).

Included with the textbooks a letter of welcome was sent, in which the telephone number was given along with an explanation that it was a toll-free number to be used at no charge to the students. The letter indicated that the teacher would be available Tuesdays and Thursdays 1:00 - 3:00 P.M. Students were instructed to begin their studies and to call the teacher frequently to ask questions or report their progress. Generally speaking, the students did not call! (See attachment 3, VIII).
Letters were sent to each student enrolled in the program when it soon became apparent that the students were not using the WATS line as anticipated. All students were asked to call the teacher and report their progress and discuss any problems they were encountering. While this letter did get some response, the majority of the students still did not respond.

Several of the students were then called by the teacher in an attempt to determine student progress. Some of the students indicated that a class meeting might be beneficial. Class meetings were scheduled at each of the three contact locations. Invitations were sent to each of the students asking them to attend the meeting nearest their homes. Four students chose to attend the class meetings. One student did call and explained that she could not attend due to transportation problems.

Even though the teacher continued to attempt to elicit student response through letters and telephone calls the incoming call count remained low for the remainder of the program.

A review of the teacher's incoming telephone call log indicates that of the student calls that were made few were actually pertaining to the study material. Students called about TABE results, getting their textbooks, or inquiries about GED test sites and GED test information.

Students were notified that the teacher would not be available to them after May 28th. The toll-free telephone remained in service until June 30th to accommodate the few students who would call hopefully reporting GED test results.

Evaluation

Two methods were used in attempting to get student input regarding the effectiveness of the telephone project. A survey (see attachments) was mailed to each student with a self-addressed stamped envelope to facilitate the return of the forms. As was typical throughout the year only four of the forty surveys sent out were returned to the teacher.

From the four responses:

1. All were enrolled in the class six months or more.
2. All felt the telephone class was helpful to them.
3. When asked advantages/disadvantages of the class each of the respondents indicated that it was reassuring to know that they could call the teacher if a problem arose either with a particular subject or with their studying in general.

4. Only one suggestion was given for improvement -- that the teacher send out quizzes or tests to see if the students were progressing.

5. Each indicated they called the teacher more than once.

6. Each felt the textbooks were helpful.

7. No additional materials were suggested.

8. Each agreed that the class was worth their time and effort.

Because of the poor return rate of the mailed survey the project coordinator attempted to get a representative response through telephone contact with the students.

Twelve students were contacted and asked essentially the same questions as on the mailed survey.

Even though none of the students had completed their studies or taken the GED examination ten of the twelve indicated that they were still working in their books. Two students had moved from the area. All of the students agreed that the TABE was not threatening nor were they discouraged by taking a test as the first phase of the class.

When questioned why they did not call the teacher most indicated that they never felt the need to call. They were getting help from husbands, wives, friends, etc. Two students indicated that they had called the teacher with questions about algebra problems but found it very difficult to understand the explanations without having the teacher write the problem solution down in front of them as in a typical classroom.

None of the students had any complaints about the textbooks. They felt the books were easy to follow and didn't require a teacher's explanation for most areas.

As of the closing date of the project the student participation was as follows:

- 44 Enrolled in class
- 40 Completed and returned the TABE
- 2 Successfully completed GED examination
- 2 Verified as moved from area
- 8 Still studying
- 5 Scheduled to take GED examination
- 23 No record - did not respond to mail; unable to contact by telephone.
Problems and Recommendations

The toll-free WATS line proved to be the biggest problem of the project and certainly the primary area of recommended change.

From the outset the student use of the WATS line did not reach anticipated levels. Considering the number of incoming calls it would be far more economical to use a regular telephone line and permit students to call collect.

Considering our evaluations and student responses the concept of providing a teacher solely for the telephone class may not have been a good investment of teacher time. Many of the calls handled were of a general information nature which could have been answered by an individual in the Adult Education office. The teacher's incoming call log indicated that the academic questions were in the mathematics area, mostly algebra questions.

Students who did call the teacher indicated that they found it difficult to understand explanations of algebra over the telephone. The few calls that were made to the teacher and the questionable effectiveness of the communication indicated to us that the WATS line was not a cost-effective component of this project.

A second less serious problem was the control of textbooks. Even though we maintained three contact points throughout the target area we had difficulty recovering textbooks as the program ended. During the telephone contact part of the evaluation a significant number of class participants indicated they were still working in their textbooks and chose to keep them if possible. For those students who indicated they had completed the program we were dependent upon their promises for returning the books. More book control could be maintained if the books were checked out through a library system.

Perhaps arrangements could be made with county libraries whereas they would maintain control of books and information packets explaining how an adult could study independently for the GED examination. The information would include the telephone number of a contact person in the nearest adult education office.

One obvious weakness of this project where each student studied independently at their own pace was the loss of the motivational factor and common support gained from a more traditional adult education class.
YOU CAN NOW PREPARE TO SUCCESSFULLY COMPLETE THE GED EXAMINATION IN YOUR OWN HOME.

LINCOLN INTERMEDIATE UNIT NO. 12, IN COOPERATION WITH THE PENNSYLVANIA DEPARTMENT OF EDUCATION, ADULT EDUCATION DIVISION, IS OFFERING A HOME STUDY COURSE TO HELP YOU OBTAIN A HIGH SCHOOL EQUIVALENCY DIPLOMA (GED).

WHO — ANY PENNSYLVANIA RESIDENT AGE 16 YEARS OR OLDER WHO IS NOT CURRENTLY ENROLLED IN SCHOOL AND NEVER GRADUATED FROM HIGH SCHOOL AND WANTS TO OBTAIN THEIR HIGH SCHOOL EQUIVALENCY DIPLOMA.

WHEN — NOW! THE CLASS IS STARTING NOW. ONCE YOU ARE REGISTERED, TEXTBOOKS WILL BE SENT TO YOU FREE OF CHARGE AND YOU CAN BEGIN YOUR STUDIES.

HOW — A TEACHER WILL BE AS CLOSE AS YOUR TELEPHONE. A TOLL FREE TELEPHONE NUMBER WILL BE PROVIDED.

WHAT — THE AREAS OF STUDY WILL BE THE FIVE SUBJECT AREAS OF THE GED EXAMINATION - ENGLISH, SOCIAL STUDIES, MATHEMATICS, SCIENCE, AND READING.

TO REGISTER — RETURN THIS REGISTRATION FORM OR TELEPHONE 717-263-2537

I AM INTERESTED IN THE HOME STUDY GED CLASS. PLEASE CONTACT ME WITH MORE INFORMATION.

NAME

ADDRESS

TELEPHONE NUMBER

RETURN TO: ADULT EDUCATION, LINCOLN INTERMEDIATE UNIT NO. 12, P. O. BOX 70, NEW OXFORD, PA 17350
ATTACHMENT 2

NEWS RELEASE

LIU OFFERS HOME-STUDY GED PLAN

A home-study program for adults wishing to receive their high school diploma equivalent is currently underway in Franklin County. The GED (General Educational Development) program provides adults who have not finished high school a chance to obtain a diploma.

The home-study program is available to adults who do not have transportation and/or access to a designated GED learning center in the county. Students enrolled in the program have easy access to their GED instructor through a toll-free telephone number.

The program is offered free of charge and includes a review of mathematics, English, science, social studies and reading skills. Students work at their own pace. For more information, call the Franklin County Learning Center at 263-2537.
## Profile of Student Group

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Students</td>
<td>4</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### II
- **Male**: 10
- **Female**: 30

### III
- **Number receiving public assistance**: 10
- **Number employed**: 9
- **Number unemployed**: 31

### IV
- **Entry Level**
  - **5-8**: 13
  - **9-12**: 27

### V
- **Race**
  - **Black**: 2
  - **Hispanic**: 1
  - **White**: 37

### VI
- **Times of Enrollment**
  - **September**: 9
  - **October**: 1
  - **November**: 15
  - **December**: 5
  - **January**: 3
  - **February**: 4
  - **March**: 2
  - **April**: 1

### VII
- **How Students Found Out About the Program**
  - **Relative, friend**: 5
  - **PTA Notice**: 5
  - **Student in ABE/GED**: 3
  - **Newspaper**: 14
  - **Local Board of Education**: 3
  - **CETA**: 5
  - **School Counselor**: 1
  - **Human Services Agency**: 3
  - **Handout**: 1
  - **Total**: 40

### VIII
- **WATS Line Usage**
  - **Incoming Calls/Hrs.**
    - **Nov**: 12/0
    - **Dec**: 19/2.0
    - **Jan**: 20/2.9
    - **Feb**: 13/2.5
    - **Mar**: 19/1.7
    - **Apr**: 15/1.1
    - **May**: 13/1.0
    - **Jun**: 10/2.0

### IX
- **Reasons for Enrolling**
  - **To get GED**: 33
  - **To improve basic skills**: 4
  - **Improve job prospects**: 1
  - **Self-satisfaction**: 2
## ATTACHMENT 4

### Textbooks Used

<table>
<thead>
<tr>
<th>Publisher</th>
<th>GED Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cambridge Book Co.</td>
<td>High School Equivalency Examination</td>
</tr>
<tr>
<td></td>
<td>The Writing Skills Test</td>
</tr>
<tr>
<td></td>
<td>The Social Studies Test</td>
</tr>
<tr>
<td></td>
<td>The Science Test</td>
</tr>
<tr>
<td></td>
<td>The Reading Skills Test</td>
</tr>
<tr>
<td></td>
<td>The Mathematics Test</td>
</tr>
<tr>
<td></td>
<td>Exercise Books - Writing</td>
</tr>
<tr>
<td></td>
<td>Social Studies</td>
</tr>
<tr>
<td></td>
<td>Science</td>
</tr>
<tr>
<td></td>
<td>Reading</td>
</tr>
</tbody>
</table>

### Pre-GED Level

<table>
<thead>
<tr>
<th>Publisher</th>
<th>GED Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cambridge Book Co.</td>
<td>Introduction to Mathematics, Books 1 &amp; 2</td>
</tr>
<tr>
<td></td>
<td>Introduction to Reading</td>
</tr>
<tr>
<td></td>
<td>Introduction to English</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Contemporary Book Co.</th>
<th>GED Level</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number Power</td>
</tr>
<tr>
<td></td>
<td>Number Power 2</td>
</tr>
</tbody>
</table>
ATTACHMENT 5

QUESTIONNAIRE

1. What month did you enroll? __________

2. Was the phone class a help to you? Yes No

3. How was it a help? The advantages? Disadvantages?

4. How could the phone class be improved?

5. How often did you call the instructor? Never Once More than once

6. Were the books you used a help? Yes No

   Could you understand the majority of the material within the books?
   (Please give the name of the books if you remember.)

7. What other materials would have been helpful to you in studying?

8. In your own opinion do you think the phone class was worth your time and effort?