A project offered special training to instructors and volunteer tutors for adult basic education classes in recognizing and helping adults who are enrolled in adult education programs with learning disabilities. These instructors and tutors were taught the necessary skills through a series of three 3-hour inservice sessions. The regular instructors and tutors were trained in the use of alternate techniques that would enable them to assist students on an individual basis and help them advance their general literacy skills. Some strategies presented were "Tic Tac Toe" math, individualized vocabulary program, rhyming lists, and sight-sound word recognition. Eight volunteer tutors were chosen to attend. (An appendix contains evaluation forms completed by tutors concerning a student with whom alternate teaching techniques were used.) (YLB)
Final Report

Helping Learning Disabled Adults Through Special Tutorial Techniques

1992 - 1993

Reading Area Community College
10 South Second Street
Reading, PA 19603

Phone number: (215) 372-4721, ext. 261

Federal amount of Grant - $5,000
Total amount of Grant - $6,670
Section 353 Special Project: 99-3025

Pieter V. Miller, Project Director
Reading Area Community College

Ann L. Papada, Coordinator
Reading Area Community College

"The activity which is the subject of this report was supported
in part by the U.S. Department of Education. However, the
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or policy of the U.S. Department of Education or the
Pennsylvania Department of Education, and no official endorsement
by these agencies should be inferred."
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(student evaluations/achievements as submitted by volunteer tutors)
Title: Helping Learning Disabled Adults Through Specialized Tutorial Techniques

Address: Reading Area Community College
10 South Second Street
Reading, PA 19603
Phone number: (215) 372-4721

Project No: 99-3025 - Funding: $5,000

Duration of Project: September 1, 1992 To: June 30, 1992

Section 353 Special Project: 99-3025

Pieter V. Miller, Project Director
Reading Area Community College

Ann L. Papada, Coordinator
Reading Area Community College

Objectives: 1) To train dedicated volunteer tutors who will enhance the experience of these special students deemed learning disabled by offering them enrichment via extra tutoring time using alternative teaching techniques. 2) To have instructors and tutors help the students transfer their new skills to that of everyday family, job, and community living.

Description: The Reading Area Community College would like to offer special training to instructors and volunteer tutors for Adult Basic Education classes in recognizing and helping learning disabled adults who are enrolled in adult education programs. These instructors and tutors would gain the necessary skills through a series of three three-hour in-service sessions instructed by a specialist. The regular instructors and tutors would be trained in the use of alternate techniques and would assist the students on an individual basis, thus helping them to advance their general literacy skills. Some strategies to be presented would be: "Tic Tac Toe" Math, individualized vocabulary programs, rhyming lists and sight-sound word recognition.

Target Audience: Learning disabled students in Berks County, Pennsylvania Adult Basic Education classes (grant could be implemented by any ABE facility and institution).

Method of Evaluation: Instructors and tutors will evaluate progress and accomplishments of each student's individualized program.
Findings: There is a high incident of students with learning differences to be found in the ABE classrooms of the Berks County, PA area. These students need extra, individualized aid to help them bridge the gaps which separate them from skills necessary for their function in a 1990's environs.

Conclusion: Regular classroom instructors and volunteer tutors were able to greatly assist students thought to have learning disabilities. This was possible after the instructors/volunteer tutors received specific training to initiate the remedial process.
Introduction:

Helping Learning Disabled Adults Through Special Tutorial Techniques was offered through the Adult Education Department of Reading Area Community College, Reading, Pennsylvania. The official starting date of this grant was September 1, 1992, and the official ending of the project was June 30, 1993.

This project was prepared to expand upon the previous project, Practical Applications of Alternative Teaching Methods. Any questions regarding this individual project may be forwarded to Ann L. Papada, Project Coordinator, East Shore office building, 4th floor, Reading Area Community College, Box 1706, Reading, PA 19603.

The target audience of this report is any literacy facility or group wishing to offer tutorial aid or assistance to its students who are learning disabled.

The address of the Pennsylvania F.R.5 Division of Adult Basic and Literacy Programs is 333 Market Street, Harrisburg, PA 17126-0333.

The address of Advance is PDE Resource Center, 333 Market Street, Harrisburg, PA 17126-0333. Copies of this report will be filed for the next five years with Advance.
Objectives:

The objectives of the Section 353 Special Project Helping Learning Disabled Adults Through Specialized Tutorial Techniques were as follows: 1) To train dedicated volunteer tutors who will enhance the experience of special students deemed learning disabled by offering them enrichment via extra tutoring time using alternative teaching techniques. 2) To have instructors and tutors help the students transfer their new skills to that of everyday family, job and community living.

The entire staff of the Adult Education Department at Reading Area Community College participated in the project. Mr. Pieter Miller, Dean of Student Services and Continuing Education, was overall director of the project. Mary Schmidt, Coordinator of ESL, ABE and GED programs, directed all the paid instructors who referred students needing help. Ann Papada, an ABE instructor, coordinated the project.

The special volunteer tutors chosen as participants in this project were recommended by the Tutor Program funded through Adult Literacy. This Adult Literacy grant gave previous initial introductory training to the volunteer tutors. Their time spent tutoring was generously volunteered. They were through Helping Learning Disabled Adults Through Specialized Tutorial Techniques, this Section 353 grant, given the extra skills to recognize and aid the students perceived to be Learning Disabled by their instructors.
The key participants, coordinator and tutors were chosen during September, 1992. Dr. Richard Cooper of the Center for Alternative Learning, Bryn Mawr, PA, accepted the challenge of presenting the workshops to the tutors. Dates for the three workshops were set for October 7, 1992, October 28, 1992 and November 4, 1992.

**Body of Report:**

The Reading Area Community College, located in Reading, Pennsylvania, recognizes that a high percentages of students in Adult Basic Education classes are learning disabled. The Adult Education Department of the college has tried to serve these students in new, innovative, ever-evolving ways each year. During the 1992-93 school year, via this Section 353 Helping Learning Disabled Adults Through Special Tutorial Techniques, it made available to them trained tutors to help them surmount some of their problem areas.

The eight volunteer tutors chosen to attend the three training sessions conducted by Dr. Richard Cooper were: Christine E. Deppen, Margitta Pfleger, Tabitha Dundore, Suzanne S. Holm, Patricia Promutico, Deborah James, Lisa Ianni and Stuart Powell. They were chosen due to past, proven, dedicated service to the local ABE program.

Short summaries of each of the three three-hour workshops presented by Dr. Cooper are as follows: (It must be stated that neither instructors nor tutors were trained to diagnose learning disabilities.)
students suspected of being such were assisted via this grant.)

October 7, 1992

This evening's workshop attempted to define or explain some basic qualities/characteristics of the learning disabled person. These could be found in a single area or multiple areas.

Dr. Cooper perceives the following three levels of human learning disability:

1. Perception/Information In
2. Processing/Information Through
3. Communication/Information Out

These three levels can/could have the four major or three minor characteristics:

Major
1. Visual - can be wide field or narrow field
2. Auditory - mis-hear, can stick on first sound or syllables and not hear the rest, have ambiguous vocabulary, mispronunciation comes out because don't hear correctly.
3. Right/left discrimination > reversals, these students can't make decisions, have memory difficulty, directionality, if choices aren't clear, the student can't decide.
4. Racing mind or attention deficit disorder, students skip letters, skip steps, have tangential thinking, faster it goes > more trouble, are always in a hurry, won't check or proofread.
Minor

1. Motor coordination: a) gross motor or b) fine motor: eye/hand > handwriting tracking, lips and tongue.

2. Sequencing: can't put in logical order, show non-sequential logic.

3. Organizational: can't categorize.

October 28, 1992

During tonight's workshop Dr. Cooper gave some techniques for helping the student experiencing language problems. All the characteristics mentioned last week affect language. It is his opinion that there are, indeed, some people who cannot learn to read because of complex learning disabilities, possibly coupled with mental retardation or other problems.

Check to see if:

1. Student knows alphabet, can read it, identify all letters - use different prints and sizes of prints.

   Must learn alphabet - don't spend all tutor time but ascertain which letter/s they don't know.

2. Student knows basic sounds of letters.

   Student who doesn't may have auditory processing problems.

   Pick environmental words to work with first from family, neighborhood, job, hobbies, etc. Can develop basic sounds from these words.
Must see and hear word many, many times = burn the word into memory.

Use compound words: use "ball" as contextual clue and add prefixes and suffixes: Football, baseball, ballgame, ballpark.

Work on:

1. Decoding Skills
   a. phonetics may work
   b. word part decoding
      1. prefixes
      2. suffixes
      3. root words
      4. small words in words
   c. reverse word attack
      --------ance
      --------dance > go
      -------tendance backwards
   d. word comparisons/differences
      - board - broad
      - compete - complete
   e. stopping reversals
      example:  saw - was
      was is more common, so learn "w" = weighted learning
      example:  on - no
      say "n", say "o" = no

2. Leaving off Endings
   have students just read the ends of words from selected paragraphs so they will become accustomed to common ones - ly, ing, s, ies, ed, tion, ment, ance, ence, etc.
3. Triggers

watch for places in oral reading where a student may see a word such as profit, but say cash

4. Comprehension

check for weak vocabulary - maybe can't understand the nebulous or abstract

check basic, common word meanings

experiential - help student integrate vocabulary into their own life's experience rather than that of the author's

5. Writing and Spelling

- have student write using high interest words

- have student write everyday

- have student write short notes to people using words he/she needs to know

- make student aware of parts of speech

- change words via prefixes, suffixes, other endings

- do sequencing as working from is - his - this

- use mnemonics

- use rhyming words - oat, boat, coat, throat

- force stretching of adjectives - car, red car, new red car - expensive new red car

- force stretching of adverbial expressions - run, run well, run very well, run very well often
November 4, 1992

Dr. Cooper devoted this three-hour session to advising tutors/instructors as to possible ways of remediating disabilities/weaknesses in the area of mathematics.

Things to do or ways to help students see mathematical situations in their environment:

1. have students count things
2. compare colors, how many reds/how many yellows of objects
3. see sizes
4. weigh things
5. measure things (linear)
6. form fractions from common groupings: ex: there are 8 students in the classroom of whom 4 are female and 4 are male – hence 4/8 = 1/2 = male/female
7. compare sizes of supermarket item sizes: etc., etc., etc.

The following is a brief explanation of Dr. Cooper's Tic Tac Toe math multiplication table system. Further information and workbooks can be obtained by writing to:

Dr. Richard Cooper
Learning Disabilities Resources
P. O. Box 716
Bryn Mawr, PA 19010
(215) 525-8336
It is first necessary to have students 1) understand all the possible combinations of positive values which add to ten. 2) and doubling number values from 1 to 9 -----

1. \[
\begin{array}{cccc}
1 & 2 & 3 & 4 \\
9 & + & 8 & + \\
10 & 10 & 10 & 10 \\
\end{array}
\]

2. \[
\begin{array}{c}
1+1=2 \\
2+2=4 \\
3+3=6 \\
4+4=8 \\
5+5=10 \\
6+6=12 \\
7+7=14 \\
8+8=16 \\
9+9=18 \\
6\times2=12 \\
7\times2=14 \\
8\times2=16 \\
9\times2=18 \\
\end{array}
\]

3) and difference between an odd and even number. An even number is divisible evenly by 2 or ends in 0, 2, 4, 6 or 8. An odd number ends in 1, 3, 5, 7 or 9.
4) Places for tables are always as follows:

\[
\begin{array}{ccc}
1 & 4 & 7 \\
2 & 5 & 8 \\
3 & 6 & 9 \\
\end{array}
\]

5) Fives tables don't follow rules completely:

a. draw grid
b. place 5's where an X would cross grid and O's in other boxes
c. Then fill in grid

\[
\begin{array}{ccc}
5 & O & 5 \\
O & 5 & 0 \\
5 & 0 & 5 \\
\end{array}
\]

\[
\begin{array}{ccc}
5 & 20 & 35 \\
10 & 25 & 40 \\
15 & 30 & 45 \\
\end{array}
\]
6) **Odd number tables:**

   a. a 5 always goes in the middle at the 5 position
   
   b. double the 3
   
   c. place 7 in box opposite 3 to add to 10 and place 4 in box opposite 6 to add to 10

   d. look for a 1, 2, 3, 4, 5, 6, 7, 8, 9 pattern and fill in
   
   e. add by 3's and finish filling in the grid with 10's digits

   follow this sequence for any odd-numbered table.
7) **Even number tables:**

   a. a 0 always goes in the middle at the 5 position

   b. double the 2

   c. place 8 in the box opposite 2 and 6 in the box opposite 4 to add to 10

   d. ignore the 0 and observe the 2, 4, 6, 8 pattern - write the same pattern in the open spots

   e. add by 2's and finish filling the grid with 10's - digits where needed

   (follow this sequence for any even-numbered table.)
This Tic Tac Toe method is indeed perplexing to the person who knows the tables. However, to a person who has always floundered in math and not been able to conquer anything beyond simple addition and subtraction, this can open an entire new horizon of power. It does work. The students can zip off tables as they need them and often discover that, after some time working with this method, the tables have, in fact, become embedded in their minds. Multiplication and division of whole numbers, math functions working with common fractions and decimal/percent math are now within their power world to grasp.

Summary:

The beauty and power of this project are twofold:

1. Reading Area Community College trained 8 volunteer tutors in some special tutorial techniques.

2. These tutors used these skills in the '92-'93 academic year and will continue to be able to do so in the future.

There were not really any goals which were not met. A frustration to the coordinator was trying to get volunteer tutors to submit written evaluation regarding their students, tutorial methods employed and progress achieved. The tutors were very diligent in time spent with their students but did not deem documented follow-up for this report an important part of their responsibility.

Written questionnaires submitted by tutors are included at the end of this report. One tutor trained via this grant was so enthused by the Tic Tac Toe method that he, in turn, trained another tutor in its use. This occurred at Teen Challenge Training Center, Inc. of Rehrersburg, PA. Follow-up of help
given by this person to another is likewise included in this report.
Student-Tutor Evaluation Form

1. Name of tutor: **TABITHA DUNDORE**

2. Initials or representation of student as will be used in narrative: **HM**

3. Place and time of tutoring: **THURSDAY EVENINGS**  
   **ADULT EDUC. CLASSROOM**

4. Number of hours spent tutoring: **6-7**

5. Instructor's initial assessment or reason for suggesting special techniques: The student was having difficulty changing percents to decimals and vice versa.

6. Description of techniques and materials used:
   We developed the following techniques based on the alphabet: **ABCD,...,PQRST...**

   When changing a **Decimal** to a **Percentage**, we move the decimal 2 places to the right because **P** is to the right of **T** in the alphabet.

7. Narrative of student progress, accomplishments:
   The student did use the diagram for a week or two when doing these particular problems and seemed to gain confidence as they continued to get the correct answers.

   When changing a **Percentage** to a **Decimal**, you move the decimal point 2 places to the right because **D** is to the right of **P**.

   \[
   \text{Decimal} \rightarrow \text{Percentage} \quad P \rightarrow P
   \]

   I would clarify this diagram for them.
Student/Tutor Evaluation Form

1. Name of tutor: Stuart D. Powell

2. Initials or representation of student as will be used in narrative: George A.

3. Place and time of tutoring: TCIC, 1/2 hrs./session

4. Number of hours spent tutoring: ~90 hrs.

5. Instructor's initial assessment or reason for suggesting special techniques:
   
   George's reading comprehension was evaluated to be at a remedial level - via TABE Test (written) and Informal Placement Test (computer).

6. Description of techniques and materials used:
   
   1) Computer-Assisted learning - Project Life Series
   2) SRA reading Labs
   3) Prescriptive Spelling (Bks 1-3)
   
   The 3 materials above were used to facilitate increased competency in word recognition, reading proficiency, and reading

7. Narrative of student progress/accomplishments: comprehension

   George's reading comprehension has improved significantly. He began at a remedial level and has proceeded to a 6th grade level (R—6.0, +6).
   
   His word comprehension, however, has shown no significant improvement. He was re-evaluated using the Informal Placement Test (computer).
Student/Tutor Evaluation Form

1. Name of tutor: Stuart Powell

2. Initials or representation of student as will be used in narrative: Donovan F.

3. Place and time of tutoring: Teen Challenge GED Class - Basic Math Nov., '92

4. Number of hours spent tutoring: 8 1/2 hours

5. Instructor's initial assessment or reason for suggesting special techniques:

   Donovan was highly remedial in multiplication skills. He was able to complete (correctly) only 15 of 45 simple (1-9) multiplication problems. He did not know his basic times tables.

6. Description of techniques and materials used:

   Dr. Cooper's "Tic Tac Toe" multiplication method was used in an effort to help student master multiplication skills.

7. Narrative of student progress/accomplishments:

   Initially the student did not comprehend the system, but within 5 hours of tutoring, Donovan was able to do the multiplication problems that he could not before. After 8 hours of tutoring in addition to independent study, Donovan was comfortable with multiplication of single and double digit problems.
Student/Tutor Evaluation Form

1. Name of tutor: Stuart Powell

2. Initials or representation of student as will be used in narrative: Raymond S.

3. Place and time of tutoring: TCTC GED Math Class - Basic Level Nov, '92

4. Number of hours spent tutoring: 10

5. Instructor's initial assessment or reason for suggesting special techniques:
   Raymond had difficulty remembering his multiplication times tables accurately; especially his 6 through 9 times tables.

6. Description of techniques and materials used:
   Dr. Cooper's "Tic Tac Toe" multiplication method was used in an effort to help Raymond master multiplication skills.

7. Narrative of student progress/accomplishments:
   Raymond, although functional with multiplication skills, took well to the new method of multiplication. Within 6 hours of tutoring, he learned and mastered single digit multiplication. He went on to more complex two and 3 digit multiplication and division within the next 4 hours of tutoring.
Student/Tutor Evaluation Form

1. Name of tutor: Stuart Powell

2. Initials or representation of student as will be used in narrative: Tyrone E.

3. Place and time of tutoring: TCC Remedial Reading Class, Oct., 92

4. Number of hours spent tutoring: 20

5. Instructor's initial assessment or reason for suggesting special techniques:
   Tyrone was functionally illiterate, a non-reader. He recognized a few words by sight but not enough to make up a sentence or a complete thought. He was at a 1st or 2nd grade level.

6. Description of techniques and materials used:
   Phonetics, alphabet sounding - consonants and vowels, flash cards, "CORE" laser disc program and SRA were utilized.

7. Narrative of student progress/accomplishments:
   Tyrone showed improvement up to a 3rd grade level. He was very eager to learn how to read. Although he has a high school diploma, he realizes his reading deficiency and is actively taking the necessary steps to correct and improve his skills.
Student/Tutor Evaluation Form

1. Name of tutor: [Student's name]

2. Initials or representation of student as will be used in narrative: [Student's initials]

3. Place and time of tutoring: [Reading High School - evening]

4. Number of hours spent tutoring: [Tutor's initials]

5. Instructor's initial assessment or reason for suggesting special techniques: [Very weak language/reading skills]

6. Description of techniques and materials used: [Need environmental words, words from 12 Step A.A. program which D. wanted to be able to read]

7. Narrative of student progress/accomplishments: [Improved in reading and spelling - D. really plugged]

D.'s math skills were adequate
Student/Tutor Evaluation Form

1. Name of tutor: **Lynn Danni**

2. Initials or representation of student as will be used in narrative: **J. T.**

3. Place and time of tutoring: Reading High School 6:30-8:30, Thursday evening.

4. Number of hours spent tutoring: **36 hrs.**

5. Instructor's initial assessment or reason for suggesting special techniques: J. T. was diagnosed as learning disabled / dyslexic by Dr. Richard Cooper.

6. Description of techniques and materials used: Constant repetition, basic noun/verb flash cards; use of rewards from J. T.'s business, which deals in money and number awards.

7. Narrative of student progress/accomplishments:

   J. T. progressed through end of Level A and felt good about knowing and recognizing important words for his life.
Student/Tutor Evaluation Form

1. Name of tutor: Robert Shuler  

2. Initials or representation of student as will be used in narrative: Enos B  

3. Place and time of tutoring: T.C.T.C. 12/1/92 - 1/28/93  

4. Number of hours spent tutoring: 20  

5. Instructor's initial assessment or reason for suggesting special techniques: Persistent problem with memorizing multiplication tables.  

6. Description of techniques and materials used: Tic Tac Toe time table technique  

7. Narrative of student progress/accomplishments:  

My name is Robert Shuler, I worked with Enos B. in a basic math classroom setting. Enos was experiencing quite a lot of trouble with the memorization of times tables. This prevented him from being able to perform well in class. He had already been exposed to the tic tac toe grid system the month before, and I worked with him to smooth over the areas he was still trying to grasp. He worked well with the system and adapted it into use with most of his work. It helped him immensely at first, but the main benefit for Enos is that now he has truly begun to have the tables memorized as a direct result of continual use of the tic tac toe method. Enos is now working diligently in our Intermediate level class.  

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Parent/Teacher
Student/Tutor Evaluation Form

1. Name of tutor: Suzanne Holm

2. Initials or representation of student as will be used in narrative: M.C.

3. Place and time of tutoring: Racine Wed 10-11

4. Number of hours spent tutoring: 11 hrs including Jan.

5. Instructor's initial assessment or reason for suggesting special techniques:
   Math weakness

6. Description of techniques and materials used:
   Review of problem solving - We did her every week. We used her textbook (GED) and did GED exams.

7. Narrative of student progress, accomplishments:
   Mary has mastered the multiplication tables. For the most part, she continues to experience difficulty with word problems. She definitely does not retain information from session to session.

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Student/Tutor Evaluation Form

1. Name of tutor: Christine Heppen

2. Initials or representation of student as will be used in narrative: KB

3. Place and time of tutoring: RHS 6:30-7:30

4. Number of hours spent tutoring: 3-4 11/16

5. Instructor's initial assessment or reason for suggesting special techniques:
   Instructor did not suggest, I used them on my own (language)

6. Description of techniques and materials used:
   I used flashcards with K.B. and used continuous repetition.

7. Narrative of student progress/accomplishments:
   K.B. finished 2 workbooks and over 50 flashcards in the 3-4 months I worked with him.

BEST COPY AVAILABLE
Student/Tutor Evaluation Form

1. Name of tutor: **MARGITTA PFEIFER**

2. Initials or representation of student as will be used in narrative: **H.T.**

3. Place and time of tutoring: **SAT. 12-1, RACE**

4. Number of hours spent tutoring: **14**

5. Instructor's initial assessment or reason for suggesting special techniques:
   **STUDENT REQUESTED HELP WITH LANGUAGE. DROPPED OUT IN 10TH GRADE WHEN WORK GOT DIFFICULT AND SHE DIDN'T APPLY HERSELF TO HER STUDIES.**

6. Description of techniques and materials used:
   **HAD DIFFICULTY WITH LONG/SHORT VOWELS, PLURALS, WHICH PRONOUN TO USE, NOUN/VERB AGREEMENT, TUTORING REINFORCED CLASS LESSONS AND REVIEWED ANYTHING NOT UNDERSTOOD.**

7. Narrative of student progress/accomplishments:
   **STUDENT GRASPED LANGUAGE LESSONS WELL AND MADE GOOD PROGRESS. NO MATH WAS DONE AS MATH SKILLS WERE OKAY.**