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ABSTRACT

A three-year project carried out by the Microcomputers and Reading Committee of the New Jersey Reading Association involved the collection, improvement, and distribution of free microcomputer software (public domain programs) designed to deal with reading and writing skills. Acknowledging that this free software is not without limitations (poor documentation, poor spelling and grammar, etc.), the committee nevertheless felt that most teachers would be more than happy to have these diskettes available for their students. As a result, the project began with a survey of the availability of public domain software and location of sources. Programs were stored on master diskettes in the categories of reading/literature, teacher utilities, content areas, writing, and thinking activities. The next stage involved the evaluation and screening of the programs that had been collected. Programs that were unsuitable were discarded. All programs identified as appropriate were then field tested by computer-using teachers in New Jersey public schools. At the same time, a documentation set was drawn up and duplicated. Reprogramming and modification of the software began when the reports on field testing arrived. Future plans call for the creation of content area diskettes, diskettes for teaching writing, and a diskette of thinking games. (A list of programs on each diskette and documentation for some of the programs are appended.)
 (HOD)

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A PUBLIC DOMAIN SOFTWARE LIBRARY
FOR READING AND LANGUAGE ARTS

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Paper presented at the New Jersey Reading Association Annual
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The purpose of this presentation is to discuss and demonstrate the results of a three-year project carried out by the Microcomputers and Reading Committee of the New Jersey Reading Association. The project involved the collection, improvement, and distribution of free microcomputer software designed to deal with reading and writing skills.

What is a "public domain" program?

Most of the software used in classrooms today is not public domain. It has been created by professional programmers and published by commercial publishers with the primary goal of financial gain. That is, its creators and manufacturers very reasonably hope to make a profit from their labors. As a result, they have copyrighted the software. Just as it is illegal to photocopy copyrighted printed books, it is illegal to copy copyrighted software (the exact legal parameters for copying software have not yet been clearly decided by the courts; it is apparently legal to make "archival" backup copies).

In addition to its illegality, commercial publishers often add what is called "copy protection" to their software to protect their programs from being copied by those who would not be deterred by the law. This copy protection involves using special programming and data storage techniques to make copying of software very difficult for the ordinary computer user.

Public domain microcomputer software, on the other hand, is not copyrighted. It may be copied easily and legally. Its

creators have decided not to market their programs, but rather they have donated the programs to the public for free use.

For example, if a computer user sees the need for a particular type of computer program that is not available elsewhere, she may decide to write a program to fit that need. The content of the program may vary from an inventory procedure for a hat store to an exercise on proper use of adjectives to a simulation of some scientific process. After completing the program, the programmer would donate a copy of it on a diskette to her local computer club (often called a "computer users group"). The program is then in the "public domain," and copies of it will be distributed to those club members who would like to use it.

As time goes on, the local computer user group will trade its collection of programs with other user groups throughout the country, sending copies of the programs on diskettes through the mail or over telephone lines using modems. There is an informal network of such groups, many of which maintain public domain software libraries for a wide variety of computer models. Within a short time, the program will be available through computer user groups in all parts of the country.

Why would a programmer not copyright his program? In most cases, public domain programs are relatively simple. They are not the finished products one would expect from a commercial publisher, and as a result they have little or no commercial value. In other cases, the programmer simply is not concerned with making money from his hobby and does not want the bother involved in commercial ventures.

In 1983, the Microcomputers and Reading Committee of the New Jersey Reading Association began a project to collect, improve, and distribute public domain software of interest to teachers of reading and language arts. While this software does not have the comprehensive qualities to entirely replace commercial software in the classroom, many public domain programs can be useful for limited purposes.

Characteristics of Public Domain Programs

No teacher can plan on replacing his library of commercial software with public domain programs. Their limitations are simply too severe. The role of this free software is simply supplemental--it is to be used to supplement a respectable library of purchased programs. Public domain programs generally suffer from one or more of the following problems.

1. Poor documentation. The documentation, or instructions for use, included in public domain software is often insufficient or entirely lacking. The original programmers sometimes simply did not take the time to include instructions. New Jersey Reading Association volunteers either added documentation to the program, or else included instructions in an accompanying pamphlet.

2. Poor spelling and grammar. Programmers are notoriously poor users of Standard English. Software in the public domain often requires major changes in spelling and grammar before it can be used in the classroom. Programs on the NJRA disks have

been checked for appropriateness, and modified when necessary.

3. User unfriendly. The term "user friendliness" refers to how easy the program is to understand and to use. Public domain programs in education are usually constructed by amateur programmers who have little knowledge of programming enhancements that help users. The programs can be confusing and poorly designed. NJRA volunteers were generally unable to make major programming modifications to improve user friendliness. Some programs in the public domain were simply screened out as impossible to use successfully in the classroom. Almost all the programs included on the NJRA disks would benefit from such modifications.

4. Uncertain quality. The quality of the programming, in terms of programming, design, and educational content, can be questionable. Many programs are almost impossible to use. Others may be educationally valueless. Such programs were not included on NJRA diskettes.

5. Not comprehensive. Most amateur programmers are unwilling or unable to construct large-scale programs to deal with their topics. Public domain programs are usually very short and many times do not provide adequate instruction or practice.

6. No frills. Few public domain programs include such frills as high resolution (i.e., highly detailed) graphics or sound. The programming of pictures and music is very time-consuming, and most amateurs have not been able to include such enhancements in their programs.

Why Use Public Domain Programs?

With all of the negative aspects of public domain programs listed above, most teachers might be asking themselves the question, "Why bother to use this software at all?" It is true that the limitations of these programs cannot be overemphasized. Many experts in computer-assisted instruction have no use for the public domain libraries. The Computer Department of the Philadelphia Public Schools, for example, has recently abandoned its educational public domain library that consisted of hundreds of programs in the various skill and content areas.

There are some important advantages to public domain software, however. Most teachers are more than happy to have these diskettes available for their students.

1. Price. Public domain programs are free. Users only pay for the cost of the blank diskette on which to store the programs, usually about two dollars, and the cost of distribution. Each diskette will hold many programs. NJRA diskettes contain about ten programs each.

2. Usefulness. Public domain programs can be useful. NJRA programs teach students the alphabet and computer keyboard (Alphabet Antics), allow students to send electronic messages to one another (Electronic Mailbox), provide humorous word games (Hangman), and so forth. Even very simple software can be helpful in classrooms.

3. Interesting. Perhaps some of the programs are worth just five or ten minutes of your students' time, but they are interesting nonetheless. Aphorism, for example, generates random

"words of wisdom" for students to read. While certainly the program does not have much substance, it will provide a few minutes of amusement as students try to make sense out of the seeming profound nonsense that the computer is printing.

4. Can do the same thing as more expensive programs. One of the most popular commercial speed reading programs on the market today functions as a tachistoscope in flashing words and phrases on the computer screen. The public domain program Speed Reading will do much the same thing, for free.

5. Modifiable. One of the major advantages of public domain programs is that they can be modified to suit the individual user's needs. Commercial programs are generally programmed in such a way that teachers cannot change the programs. Public domain programs can be changed by any teacher who has the programming knowledge. In Speed Reading, for example, teachers can easily modify the words and phrases to be flashed on the computer screen so as to use stories of their own choice. In Hangman-2, teachers can substitute vocabulary words from their own curriculum in the program for children to use in a computerized version of the traditional Hangman game.

Construction of the Public Domain Library

Distribution of public domain disks involves a good deal of time and energy on the part of volunteers. Disks must be purchased, copied, and organized for mailing. Documentation must be duplicated. Finances must be arranged. As a result, the New

Public Domain

Jersey Reading Association does not have the resources to distribute its collection of software outside the state.

Computer users outside New Jersey may be interested in following the same procedures used within NJRA to form their own software libraries.

Figure 1 illustrates the basic procedures used in the NJRA project. The project began with a survey of the availability of public domain software and location of sources. The committee members decided to center their attention on Apple II-compatible software only. Since the Apple II series of computers grabbed the attention of amateur programmers early on in the "microcomputer revolution," a great deal of public domain software exists for this model computer--far more than exists for all other models combined. Also, the Apple II-series is the most widely available in schools today.

The committee then began to collect the public domain programs that might be of interest to reading and language arts teachers. Programs were stored on master diskettes in the following categories: Reading/Literature, Teacher Utilities, Content Areas, Writing, and Thinking Activities. (As of April, 1985, completed diskettes are available in only the first two categories.)

The major sources of programs were computer clubs in the New York-New Jersey-Pennsylvania area. These clubs often have collections of hundreds of diskettes containing thousands of programs. The committee members sorted through the programs, identifying educationally important programs and copying them onto the committee's master diskettes.

In addition, committee members searched through computer books and periodicals for "listings" of educational programs. Listings appear frequently in certain periodicals. A listing is an actual computer program list line by line in print, designed to be typed into computers by the periodical's readers. Committee members typed the programs into their computers and saved them on the master diskettes.

The next stage involved the evaluation and screening of the programs that had been collected. Committee members sorted through the collection of programs to identify those that would be of most value to reading and language arts teachers. Programs that were unsuitable were discarded. In addition, programs that were so poorly designed as to require extreme modifications beyond the capacity of the committee were discarded. All programs identified as appropriate were then field tested by computer-using teachers in New Jersey public schools. Teachers used a Field Testing Report Form (see Figure 2) to report deficiencies. Programs about which teachers and students concurred as possessing educational value were targeted for modification and improvements as required.

At the same time, a set of documentation was drawn up and duplicated. The documentation was necessarily simple and to-the-point, as required by time constraints on committee members. Short descriptions of each program were written for perusal by teachers using the software. In addition, those programs that did not have sufficient "internal documentation" (that is, instructions for use that would appear on the computer screen)

were provided detailed printed directions within the documentation pamphlet (see Appendix A).

Reprogramming and modification of the software began when the reports on field testing arrived. Any programs requiring extensive reprogramming were discarded or "tabled" for possible future attention. This step was the most demanding and time-consuming, as programs required extensive retesting after programming had finished to make sure they functioned appropriately. Committee members decided to center their attention on the reading/literature programs and teacher utility programs.

At this point, programs were assembled onto three master diskettes, titled Reading/Literature #1, Version 3/84, Reading/Literature #2, Version 3/84, and Teacher Utilities #1, Version 3/84. The version number indicated the date on which that particular version of the diskette was finally completed for distribution. Contents of each diskette are listed in Figure 3.

Distribution began in the spring of 1984. The master diskettes were duplicated using a special duplication program that was somewhat faster than the standard COPYA utility provided on the Apple Dos System Master diskette. Funding for the initial purchase of duplication diskettes was provided by the New Jersey Reading Association.

Most computer clubs distribute their public domain software diskettes at monthly club meetings. Members bring blank diskettes and trade them for diskettes containing the programs, or else the members will pay a nominal charge to cover cost of the diskette (usually about three dollars). The Microcomputers

and Reading Committee decided that this procedure would be unsuited to the needs of NJRA members, especially since the association's conferences were held only three times per year. As a result, diskettes are distributed through the mail. Figure 4 provides a copy of the form letter sent to those requesting information. Members send three dollars per diskette to the committee to cover costs of the diskette and of mailing. The public domain diskettes are then mailed in cardboard covers to the members, with a copy of the documentation.

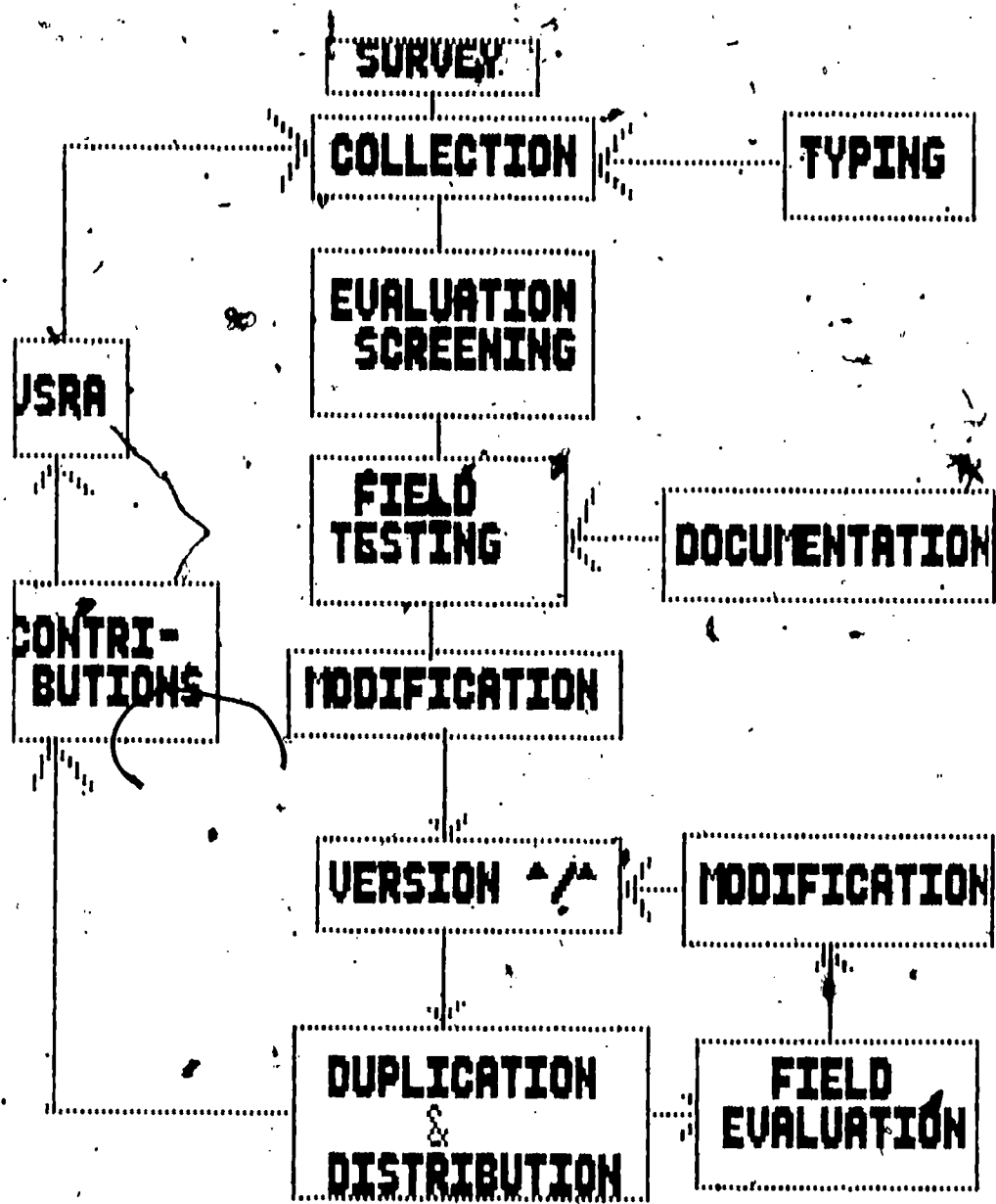
The process of development continues, however. As diskettes are mailed to teachers, each is accompanied by a request for feedback on program quality. As teachers respond, and as committee members continue their own field evaluations, changes are made in the programs as required. New versions of the master diskettes are then created and duplicated for distribution.

The newer versions of the diskettes (Version 9/84 and Version 1/85) have included increased internal documentation. A series of introductory programs have been developed that boot automatically when the computer is turned on. The program briefly describes the NJRA project and requests feedback. Instructions are then given as to how to run the programs and how to catalog the diskette (see Appendix B).

The committee has continued to develop other diskettes, but the demands of distribution have cut heavily into the amount of time available for development. Contributions of reading/language arts software are accepted by the committee and stored on master diskettes for future evaluation. In addition,

the committee has received permission from the Virginia State Reading Association (VSRA) to distribute two diskettes of reading programs developed by that organization (VSRA Diskettes #1 and #2, see Figure 3).

The future plans of the committee include creation of a content area diskette containing elementary grade level science and social studies instructional programs and simulations, two diskettes containing programs for the teaching of writing, and a diskette of thinking games for cognitive development. A diskette of exercises compiled for use with the word processor Bank Street Writer is also planned. In addition, committee members hope to begin collection of programs designed for other computer models such as the IBM-PC and Commodore.



A Public Domain Software Library
for Reading and Language Arts

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SUNY--Geneseo

Figure 1. Construction of Library

Teacher Name _____

Level of Class _____

Program _____

Disk _____

PROBLEM REPORT

Description of Incident:

Action Taken or Suggested:

Description of Incident:

Action Taken or Suggested:

Description of Incident:

Action Taken or Suggested:

Figure 2. Field Testing Report Form

NEW JERSEY READING ASSOCIATION
PUBLIC DOMAIN SOFTWARE LIBRARY LIST

READING DISKETTE #1

Opinion Exercise
Alphabet Soup
Favorite Words
Sayings
Pet Pit Pat Pot
Scrambled
Mathspell
Vowel Search
Alphabet Antics
Logic-1, Logic-2, Logic-3,
Logic-4, Logic-5
Aphorism
Boggle
Word Flash
Speed Reading
Word Challenge

READING DISKETTE #2

Letter Recognition
Cryptogram
Letter Guessing Game
Poet
Soothsayer
Hangman-2
Alphabet & Sound.

TEACHER UTILITY DISKETTE #1.

Address Labels
Banner
Love
Diamond
Test Scorer
Visiscore
Electronic Mailbox
Grade
Readability Checker
Find-A-Word Create

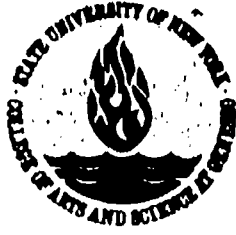
VSRA READING DISK #1

A & An
Alphabet Antics
Camp Letter
Cinquains
Clouzot
Cloze Test
Dale-Chall Progr
Fog Readability
Jotto
MatchGame
Simple Word PRCC
Vowel Search
Wumpus 2

VSRA READING DISK #2

Directory
Alphabet
Elem. Spelling
Grade Analysis
Grade Program
Haiku
Hangman
Jot
Limericks
Pat Pit Pot Put
Spelling Bee
VA's Presidents
Word Scramble
Word Wizard

Figure 3. List of Programs



STATE UNIVERSITY COLLEGE OF ARTS AND SCIENCE, GENESE0, N. Y. 14454

DEPARTMENT OF ELEMENTARY & SECONDARY
EDUCATION & READING

February, 1985

Thank you for your interest in the Apple Public Domain disks distributed by the New Jersey Reading Association's Microcomputers and Reading Committee.

At present we have five disks available for your use:
Reading/Literature #1
Reading/Literature #2
Teacher Utilities #1
VSRA Reading #1 (Virginia State Reading Assoc.)
VSRA Reading #2

Each is available in format for the Apple computer only. Each disk contains about ten programs.

Bear in mind that these are not commercially prepared. That is, public domain programs lack the finished qualities and comprehensiveness available from commercial publishers. They will supplement--not replace--a quality library of purchased materials.

Disks are available for \$3.00 each, which covers the cost of the disk and postage. Purchasers are urged to make copies of their own disks for distribution to teachers and parents. Mail checks made out to "Dr. Ernest Balajthy" to:

Dr. Ernest Balajthy, Co-chair
Microcomputer Committee of NJRA
Dept. of Elementary and Secondary
Education and Reading
State University College
Geneseo, NY 14454

We welcome your feedback and suggestions. Future disk offerings will be announced in NJRA publications.

Figure 4. Form Letter with Distribution Information

APPENDIX A

DOCUMENTATION

NEW JERSEY READING ASSOCIATION

MICROCOMPUTERS AND READING COMMITTEE

PUBLIC DOMAIN SOFTWARE LIBRARY: APPLE DISKETTES

DOCUMENTATION BOOKLET

January, 1985 Version

For information, contact:

Dr. Ernest Balajthy
Dept. of Elementary & Secondary
Education & Reading
SUNY--Geneseo
Geneseo, NY 14454
716-245-5259/5558

READING DISKETTE #1

OPINION EXERCISE

Ten problems on differentiating fact from opinion, for elementary students.

Source: Dr. Virginia Modla, Reading Curriculum Associate, Cheltenham Twp. School District, Elkins Park, PA 19117

ALPHABET SOUP

Beginning reading exercise. Students type in alphabet.

FAVORITE WORDS

A simple word play activity. Asks for favorite adjective and noun, then places them together to ask, "HAVE YOU EVER SEEN A _____?"

SAYINGS

Hangman game with well-known sayings to guess.

Source: Mark Cross, Softside Magazine, Feb. 1981, pp. 59-61. Sun Coast Computer Assoc., #289.

PET PIT PAT POT

Word identification. Child is given a problem such as, PART OF A FLOWER, and must identify an appropriate word beginning with PET, PIT, PAT or POT. 10 problems.

Source: CUE Softswap #2.

SCRAMBLED WORD

A scrambled word is presented. Child types in his guess. 3 tries, then answer is presented.

Source: CUE Softswap #2.

MATHSPELL

A simple spelling game for visual identification and spelling of geometric terms.

Source: CUE Softswap #4.

VOWEL SEARCH

Words are presented and child must determine whether letters in them are vowels, or if the vowels are long or short.

Source: CUE Softswap #6.

ALPHABET ANTICS

Alphabet drills:

1. Letter Match--Letter is presented and child must type it.
2. Letter Sequence--2 letters are presented (e.g., K_M) and child must type missing letter.
3. Follow the Letter--Letter is presented and child must type letter which follows it in the alphabet.
4. Find the Missing Letter--Letter is presented and child must type letter which precedes it in the alphabet.

LOGIC-1, LOGIC-2, LOGIC-3, LOGIC-4, LOGIC-5
Exercises in logic and critical reasoning.

APHORISM

An aphorism generator. Automatically constructs as many nonsense aphorisms as desired from randomly chosen words.

Examples:

GARBAGE IS THE FATHER OF APOPLEXY.

Source: CUE Softswap Reading disk. Modified, NJRA 8/84

BOGGLE

Find-A-Word activity designed to be played with at least two students. Students must write down any words they find in the puzzle. A timer ticks away the seconds.

Source: CUE Softswap Reading Disk

WORD FLASH

Uses the monitor as a tachistoscope, flashing single words. User has control over level of words (below 11 years and above) and speed of flash. Utility option allows user to flash words of his own choice. No activity required on part of user after word is flashed.

Source: CUE Softswap Reading Disk

SPEED READING

Uses the monitor as a tachistoscope, flashing phrases and sentences. User has control of both phrase length (5 levels) and speed of flash (5 levels). After presentation, user must type in sentence. Immediate feedback, with total score given at end of each 10 word lesson.

Source: CUE Softswap Reading Disk

WORD CHALLENGE

Paddles required. Two players. An alphabet field is presented, with a definition. Players move their cursor by using paddles, to various letters. The object is to be the first to guess the five-letter word matching the definition.

Source: CUE Softswap Reading Disk, by Elrhea M. Bigham

READING DISKETTE #2

LETTER RECOGNITION

Letter or word is placed on screen. Student must type same. Several lessons.

Source: Sun Coast Computer Association #281

CRYPTOGRAM

A cryptogram activity in which one set of letters in a message is substituted for another. Players must decode the message. For example, QXX/LKX OINN might be SEE THE BALL.

LETTER GUESSING GAME

Computer guesses a letter (or number) you've chosen.

By Hoon Ko.

POET

Program automatically produces poetic-like structures from random word lists.

Example:

The full thoughtful memory that

rushes below the sun's song

Too warm, too dim, flees on.

Source: CUE Softswap Reading Disk

SOOTHSAYER

Ask the computer a question and you receive a response rich in wisdom. Source: Michael Crichton, The Electronic Life. New York: Alfred A. Knopf, 1983, pp. 171-174.

HANGMAN-2

Hangman game. By Wendell Bitter.

ALPHABET & SOUND

Plays the alphabet song to accompany a letter identification exercise, to teach order of alphabet. By Lynn Crawford & Ken Keating.

NJRA TEACHER UTILITY DISKETTE

ADDRESS LABELS

Automatically print out address labels, entered by user as DATA statements at end of program. Also sorts by number, record, state. Directions included within program.

Source: CUE Softswap Guidance Disk

BANNER

Types any message in large poster-like letters. Printer required.

Responses:

Horizontal: A response of 1 prints letters 1 inch wide, etc.

Vertical: A response of 1 prints letters 1 inch high, and so forth for different size letters.

Centered: Y centers letters on printed page.

Character: A \$ will cause all letters to be printed using the dollar sign symbol. Any symbol or letter may be chosen. An ALL response causes each letter to be printed using its own character.

Statement: Here type the statement you want printed.

Set page: Carriage Return begins printing.

LOVE

Uses a message of your choice to form a pattern based on Robert Indiana's LOVE sculpture.

Printer required.

DIAMOND

Uses a message of your choice to form a diamond pattern. Printer required.

TEST SCORER

Analyzes test data: Mean, total number of scores, variance, standard deviation, lowest score, highest score, frequency of each letter grade. Also alphabetizes list if student names are input with grades.

Source: Ernest Balajthy, Education Dept., Beaver College, Glenside, PA 19038

VISISCORE

Input number of items on test. Program determines percentage score for any number wrong.

Source: Bill Wadlinger, American Language Academy, c/o Beaver College, Glenside, PA 19038

ELECTRONIC MAILBOX

A simple version of an electronic bulletin board service for the classroom. Enables students to leave messages for one another on the computer.

Source: Muller, Bob, and Debbie Kovacs. "An Electronic Mailbox," Teaching and Computers, 1, no. 1 (Spring 1983), 38-41.

GRADE

Give number of test questions and computer chart of grades

for number wrong will appear.

READABILITY CHECKER

Input passages. Will automatically determine readability.
Does not indicate which formula is used.

FIND-A-WORD CREATE

Creates a Find-A-Word puzzle based on words you input.

APPENDIX B

LISTING OF INTRODUCTORY PROGRAM

LIST 5-350

```
5 HOME
10 VTAB 5: PRINT "READING/LITERATURE #1"
15 PRINT : PRINT : PRINT "APPLE DISK"
20 PRINT : PRINT "VERSION 1.1, JANUARY, 1985"
25 VTAB 15: PRINT "NEW JERSEY READING ASSOCIATION"
30 PRINT : PRINT "MICROCOMPUTERS AND READING COMMITTEE"
35 VTAB 22: PRINT "          PRESS ANY KEY --->"
40 GET A$
45 HOME
50 PRINT "          MENU"
55 VTAB 5: PRINT "          1  CATALOG"
60 PRINT : PRINT "          2  BACKGROUND INFORMATION"
65 PRINT : PRINT "          3  HOW TO RUN PROGRAMS"
75 GET A
80 IF A = 1 THEN GOTO 200
90 IF A = 2 THEN GOTO 300
100 IF A = 3 THEN GOTO 400
105 GOTO 45
200 HOME : PRINT CHR$ (4); CHR$ (4); "CATALOG"
299 END
300 HOME
302 PRINT "BACKGROUND INFORMATION"
304 PRINT : PRINT : PRINT "THIS DISK IS PART OF A COLLECTION OF"
306 PRINT : PRINT "PROGRAMS GATHERED BY THE MICROCOMPUTERS"
308 PRINT : PRINT "AND READING COMMITTEE OF THE NEW JERSEY"
310 PRINT : PRINT "READING ASSOCIATION. ALL PROGRAMS"
312 PRINT : PRINT "INCLUDED ARE 'PUBLIC DOMAIN'--DONATED"
314 PRINT : PRINT "TO THE PUBLIC BY THEIR CREATORS AND"
316 PRINT : PRINT "AVAILABLE FOR FREE COPYING. ALL USERS"
318 PRINT : PRINT "ARE URGED TO DISTRIBUTE COPIES OF THIS"
320 PRINT : PRINT "DISK TO INTERESTED PARENTS AND TEACHERS."
325 VTAB 23: PRINT "          PRESS ANY KEY, --->"
328 GET A$
330 HOME : PRINT "THE NJRA IS INTERESTED IN CONTINUING TO"
332 PRINT : PRINT "BUILD ITS COLLECTION OF PROGRAMS. YOU"
334 PRINT : PRINT "ARE URGED TO CONTRIBUTE PROGRAMS WHICH"
336 PRINT : PRINT "WILL BE OF INTEREST TO OTHERS WHO DEAL"
338 PRINT : PRINT "WITH READING AND THE LANGUAGE ARTS."
340 PRINT : PRINT "SUGGESTIONS FOR IMPROVEMENT OF EXISTING"
342 PRINT : PRINT "PROGRAMS IN OUR COLLECTION WILL ALSO BE"
344 PRINT : PRINT "APPRECIATED."
350 VTAB 23: PRINT "          PRESS ANY KEY --->"
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LIST 353-499

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353 GET A$
355 HOME : VTAB 10: PRINT "COLLECTION LIBRARIAN:"
358 PRINT : PRINT " DR. ERNEST BALAJTHY"
360 PRINT " DEPARTMENT OF ELEMENTARY"
361 PRINT " & SECONDARY EDUCATION &
362 PRINT " READING"
363 PRINT " SUNY COLLEGE AT GENESEO"
364 PRINT " GENESEO, NY 14454"
366 PRINT " (716) 245-5259 OR 5558"
385 VTAB 23: PRINT " <PRESS ANY KEY ---->"
390 GET A$
399 GOTO 45
400 HOME
402 PRINT "HOW TO RUN PROGRAMS"
404 PRINT : PRINT : PRINT " REFER TO THE CATALOG FOR THE NAME"
406 PRINT : PRINT "OF THE PROGRAM YOU WANT. TYPE THE WORD"
408 PRINT : PRINT "'RUN', FOLLOWED BY A SPACE, FOLLOWED BY"
410 PRINT : PRINT "THE EXACT NAME OF THE PROGRAM DESIRED."
412 PRINT : PRINT "THEN PRESS THE RETURN KEY AND WAIT FOR"
414 PRINT : PRINT "THE PROGRAM TO START."
415 VTAB 23: PRINT " PRESS ANY KEY ---->"
420 GET A$
432 HOME : PRINT "SOME PROGRAMS, IDENTIFIED BY AN 'I' IN"
434 PRINT : PRINT "THE LEFT COLUMN OF THE CATALOG, NEED"
436 PRINT : PRINT "INTEGER BASIC IN ORDER TO RUN. WITHOUT"
438 PRINT : PRINT "THIS SPECIAL PROGRAM, AN ERROR MESSAGE"
440 PRINT : PRINT "WILL BE PRINTED: 'LANGUAGE NOT "
442 PRINT : PRINT "AVAILABLE'. TYPE 'RUN INTEGER', THEN"
444 PRINT : PRINT "ALLOW THIS PROGRAM TO LOAD. ONLY THEN"
446 PRINT : PRINT "MAY YOU RUN THE PROGRAM DESIRED."
490 VTAB 23: PRINT "PRESS ANY KEY TO SEE THE CATALOG."
495 GET A$
499 GOTO 200
```