The Efficient-Reading Builder #2

4th-5th grade reading ability

Improve reading skills and earn playtime on the "Saucer Zap" game.

THE EFFICIENT READING BUILDER

Apple II with a Language Card and Applesoft, Apple II+, Apple IIe, Apple IIc, or Apple III with at least 48K

Compu-Teach

THE EFFICIENT READING BUILDER

**© Compu-Teach Inc., 1984
240 Bradley Street
New Haven, Ct.**

The Efficient Reading Builder will run on an Apple II with a Language Card and Applesoft, Apple II+, Apple IIe, Apple IIc, or Apple III (in Emulation Mode) with DOS 3.3 (16 sector), 1 disk drive and at least 48K.

This booklet contains:

INSTRUCTIONS FOR STARTING UP *THE EFFICIENT READING BUILDER*.

Always remember, when working with diskettes: Never use force to insert a disk into a disk drive or to close a drive door, and never open a drive door unless the drive is silent and the red light is off.

For the Apple II, Apple II+:

1. Turn off your computer.
2. Lift the door on the disk drive; if you have two disk drives, use drive ONE.
3. Gently slide the disk in, oval-cutout end first, label side up.
4. When the disk is completely inside, close the door on the disk drive until it clicks shut.
5. Turn the computer ON.

For the Apple IIe and IIc:

1. If your computer is OFF, follow the instructions given above.
2. If your computer is already ON, insert the disk as described in instructions 2 through 4 above.
3. Then hold down the OPEN APPLE key while pressing CONTROL—RESET.

For the APPLE III: Please consult your USER'S MANUAL.

The Efficient Reading Builder will then be loaded from the disk into the computer. This takes a short time. Please be patient.

OPERATING INSTRUCTIONS.

OVERVIEW:

The Efficient Reading Builder has three major sections. They are:

1. The Reading Builder itself.
2. The Saucer Zap Game, which follows each reading exercise.

3. An extensive set of teacher options (for teacher use ONLY).

Each section has self-explanatory on-screen instructions for the user to follow, and a page of student instructions appears later in this document.

A NOTE TO THE TEACHER:

The Teacher Options section allows the instructor to maintain and inspect student records and to perform various other maintenance functions. The Teacher Options are never intended to be seen or used by the student, so there is nothing in the program to explain how to access these records. They are locked by a secret code word which should be known only to the teacher or instructor.

ACCESSING THE STUDENT RECORDS:

In order to get into the student record file, you need to know and use a secret password. Follow this procedure:
—Go to the Title Screen, which shows the *Efficient Reading Builder* logo.
—Press CTRL-T, that is, the CONTROL key and the T key.
—Then release both keys simultaneously.
—The screen will then change and you will be asked for a password. There is a password already installed in the program [SECRET], but you may change this password to one of your own, as you will see from the options that follow.
—When you type in this password, the letters will NOT appear on the screen in order to prevent students from learning the word.
—Press the RETURN key.
—The computer will then display the Teacher Options Menu.

THE TEACHER OPTIONS:

1. Add a student to the roster.
2. Remove a student from the roster.

3. See a student's record.
4. List the entire roster.
5. Change the password.
6. Play the Saucer Zap Game.
7. Zero the game high score.
8. Exit teacher menu.

—To choose an option, you should press the number key beside it.
—Each option has specific on-screen instructions for you to follow.
—To leave the Teacher Options Menu, choose the EXIT option (#8), which will return you to the Title Screen.

STUDENT RECORDS:

In order for a student to use the *Efficient Reading Builder* program, the student MUST have his or her name listed on the roster. The computer will not allow anyone to play if they are not on this list. Thus the roster controls who is to play, and the teacher controls the roster.

ENTERING A STUDENT'S NAME:

To enter a student's name, follow the instructions for the Teacher Options Menu and choose the appropriate option. The computer will give you clear on-screen instructions as to how to enter the student's name.

Similarly, you may DELETE a student's name from the roster, INSPECT a particular student's record, or CHECK the entire roster with options from the main menu of teacher's options. Other options allow you to change the password and to set the game high score at zero.

RUNNING *THE EFFICIENT READING BUILDER*.

When the student starts up *The Efficient Reading Builder*, he or she will first be asked to enter his or her name (which must have previously been entered into the roster by the instructor).

SELECTING A READING SPEED:

The student will be asked to select a reading speed using the number keys 1 to 9 at the top of the keyboard. The lower the number selected, the faster the speed. The student should select a speed and then press the RETURN key.

CHANGING THE READING SPEED:

The reading speed may be changed at any time when passages of text are being presented on-screen by simply pressing the appropriate number.

THE READING EXERCISES:

A total of sixteen reading passages will appear word by word at the speed selected by the student. At a certain point the words will stop and a flashing ARROW will appear where the next word should be. When this happens, the student should read up to where the arrow is and then press the RETURN key. When this is done, one of two things will happen:

1. One word will appear next to the arrow; this word may or may not fit the context of the reading passage. But as soon as the student has read the word, he should press the RETURN key. It is important that the student do this as soon as he has read the word because his reading time is being measured.

From time to time, instead of continuing after the word has been presented, the computer will announce a SURPRISE QUIZ and ask the student to remember the word which he has just read.

In this event, the Surprise Quiz will begin immediately after the word has appeared and the student has pressed the RETURN key. The screen will show two words identified by the letters [A] and [Z]. The student must enter the letter of the word which was seen on the screen after the arrow, NOT the letter of the word which is correct in the context. Thus the student should read and remember the word and press the RETURN key only after reading and understanding the word.

The word which the computer displays may not always be correct or fit the context. The student should stay alert to note the word and understand its meaning. This may seem a little odd at first, but the student should be encouraged not to worry about this and understand that this is meant to happen. Part of the purpose of the program is to teach the student to recognize whether or not the words actually fit the context.

2. The second thing which might happen is that instead of one word appearing, TWO words will appear, identified by the letters [A] and [Z]. In this instance, the student must select which word better fits the context of the reading passage.

TIMING AND SCORING:

Except during the Surprise Quiz the student's response time between the first RETURN and the second RETURN, or the time taken for an A/Z response, is being measured. Speed in response time is important, but incorrect answers take away many points from the final score. The student should be encouraged to go as fast as possible without making mistakes. Also, the kind of test the student is presented with at each reading exercise is chosen by the computer at random, as is the assignment of the correct answer to the [A] or [Z] keys.

THE SCORING DISPLAY:

After the student has read sixteen passages, the computer will announce that the round of reading has been completed and the student's scores will be displayed by colorful and easily understood bar graphs. The student will be scored for the following skills:

—READING QUICKLY.
—CHOOSING WORDS QUICKLY.
—NOTICING WRONG WORDS.

ROCKET FUEL UNITS:

The student will also receive an amount of Rocket Fuel Units

which will be shown on the next display screen. The fuel units represent the amount of time won by the student to play the Saucer Zap Game.

The amount of fuel won by the student is determined both by the student's score in the current reading exercise and by his or her performance in previous sessions. More rocket fuel will be allocated as the student improves, less if the reading scores drop.

THE SAUCER ZAP GAME:

After each reading exercise the student is given the choice to play the Saucer Zap Game, if he or she wishes, or to skip the game.

There are instructions on how to play the Saucer Zap Game on-screen before the start of the game. It is an arcade-style game in which the student tries to zap the saucer without getting zapped by the saucer or the Monster Bug which will chase the ship. The game ends either when the student has run out of fuel (time) or when the student's ship has been zapped by the aliens three times. At the end of the Saucer Zap Game the student may choose to end the session or to continue with more reading exercises.

STUDENT GUIDE TO *THE EFFICIENT READING BUILDER*.

This program is designed to test your reading skills and to help you improve them. Instructions will appear during the game to tell you exactly what to do. Remember, you can always ask your teacher or another student who has already run the program for help if you are not sure what to do.

To start up the program, follow the directions your teacher will give you (or allow the teacher to start the program for you). When you are through with your session with the computer, you may continue with more reading lessons if you want to or if your teacher has told you to (and play Saucer Zap after each

one), or you may let someone else use the computer. Your teacher will tell you what to do.

That's all you need to know. You should find all the help you need right there in the program. If there are parts that you don't understand, your teacher or a more experienced user will be able to help. Once you get used to working with the computer and you get to know the *Efficient Reading Builder* program, we think you'll agree that this way of learning to read better can also be lots of fun. And remember, the more experienced you become, the more you'll be able to help your fellow students.

THE EDUCATIONAL PRINCIPLES OF *THE EFFICIENT READING BUILDER*.

The objective of *The Efficient Reading Builder* is to train students to improve an aspect of reading known as "executive control," which has been shown to be central to the development of reading proficiency. "Executive control" refers to the reader's awareness of how the diverse aspects of reading are coordinated.

Extensive research has shown that reading involves many different processes. For example, strings of letters must be decoded or understood as the complete word which the strings represent. This and other processes which are driven by the text itself are sometimes called "bottom-up" processes. On the other hand, the reading material must also be given a meaningful interpretation and related to what the reader knows about the world. Processes that deal with more knowledge than is contained in the text itself are called "top-down" processes. Furthermore, the proficient reader must be able to execute these many processes both rapidly and accurately. To attain this, the processes of reading must be efficiently coordinated with each other, and it is this controlled coordination that *The Efficient Reading Builder* aims to develop. Feedback is given to the student concerning performance on the different aspects and goals of reading and on their efficient coordination. This feedback helps the student develop an awareness of the processes involved and the coordination between them. Instruc-

tional feedback and game rewards are presented relative to each student's past performance.

The computer provides an invaluable tool in the testing and reinforcement of these reading skills in a fashion which is not possible using conventional print media. The powerful computational facilities of the computer enable the instructor to accurately and minutely time a student's reading speed at a crucial point during a reading exercise while simultaneously testing and computing comprehension and coordination skills. *The Efficient Reading Builder* also personalizes its responses and tests to each particular student's needs, as it can "remember" and recall each student's skills and weaknesses.

Thus *The Efficient Reading Builder* is an ideal "teacher's aide." It provides individualized instruction according to the needs of each student; it measures each student's performance with an accuracy beyond conventional means and immediately provides the student with feedback on exactly how to improve his or her own reading skills. The program may easily be employed as a valuable part of any reading curriculum.

The special capabilities of the computer are utilized further to enhance the enjoyment of the instructional environment; quite simply, the computer can make learning more fun. The instructional portion of the program is highly interactive, demanding a good deal of thought and quick response from the student, and rewards good performance with extra time on an exciting computer game.

The Efficient Reading Builder is easily adaptable to many reading levels. There are three different versions of the program (each on a separate diskette), systematically graded according to principles that distinguish the type and difficulty of the reading tasks and the material to be read. Also, each diskette is usable for a considerable length of time since each contains a large number of reading passages, and built-in features continually shuffle the passages displayed and tests asked of the student each time any passage appears. There are literally thousands of permutations of the presented materials.

THE COMPU-TEACH PHILOSOPHY.

Learning is an active process. Children learn by doing. Ideally, education should utilize these principles. In school, children learn basic reading and arithmetic skills primarily by repetitive drills. Constant practice of new skills is important, but it should be done in a way which does not destroy the excitement of learning.

Children enjoy the challenge of intriguing problems. Therefore, the first step in our educational strategy is to develop interesting and challenging problems for an instructional situation. How can we best harness a child's interest and direct it into an educational experience?

Compu-Teach believes that we should use a child's natural motivation to have fun and play games.

Our educational programs are designed to entertain as well as instruct, so that children will enjoy using them. Not all children's games involve winning or losing; children also enjoy simple challenges, like throwing a ball back and forth. Compu-Teach advocates teaching children by presenting them with enjoyable and highly interactive situations—or, in another word, *games*.

To make the most of the interactive process, Compu-Teach programs teach not by rote drilling, but by challenging the child's understanding and abilities. Our computer scientists and graphic artists create learning experiences that encourage the child to play longer; this extends the period of exposure to the instructional materials. Our educational experts ensure that each game teaches important concepts. We also gear the presentation and challenges of each game to the age and abilities of the child playing it. So, when a child plays our games, he is rewarded not only by the graphics, animation, and sounds of the program, but also by the excitement and satisfaction of mastering new abilities and discovering new ideas.

Compu-Teach programs entertain, challenge, and reward a child's performance.

TECHNICAL INFORMATION.

For those who wish further information about the theoretical rationale for *The Efficient Reading Builder*, consult Dr. Spiro's paper (with P. David Pearson) in *Instructor Magazine* (May 1982, pp. 46-48). For a more detailed treatment, see his chapter in Spiro, Bruce, and Brewer (Eds.), *Theoretical Issues in Reading Comprehension* (Hillsdale, N.J.: Lawrence Erlbaum Associates, 1980).

ACKNOWLEDGEMENTS.

CREDITS

Concept and design by Rand J. Spiro, Ph.D.
Program by John Brewer
Documentation by Rand J. Spiro, Ph.D.
Edited by David Lilly

The Efficient-Reading Builder #2

Improving reading skills has never been as much fun as it is in this program from Compu-Teach. The combination of challenging reading tasks linked with a fast-paced action game provide motivation and incentive for improvement. Depending on the amount of success in the instructional portion of the program, the student earns increasing amounts of time on the exciting "Saucer Zap" game after each lesson is completed.

Extensive research into the processes involved in the teaching of reading results in an ideal "teacher's aide" designed to reinforce in-class teaching in a way that would be impossible for the teacher with conventional text or lessons. While the program is run independently by students, it is initially under direct teacher control. Access to files and records is only through the teacher's own codeword which "unlocks" the program, thus ensuring confidentiality.

For the student, on-screen directions allow independent running of the program. User-choice of reading levels and running speeds allow individual learning rates. A selection of tests and reading tasks constantly vary the challenge to the student.

The unique capabilities of the computer are combined in this one program from Compu-Teach: total interactive control, individualized learning, instructional feedback, and student records and recall for the teacher. All this plus the dynamic action graphics of an exciting computer game!

Apple II, Apple II+, Apple IIe with at least 48K
IBM PC, IBM XT with at least 128K
$29.95

Compu-
Teach

COVER PRINTED IN U.S.A.