



Parent's and Teacher's Manual

Created by:

The WordBox!tm Company

Your WordBox!™



An Apple IIGS® Implementation of

In-Context!™

A Comprehensive Reading Method

by Dr. Dorothy M. Loar

Parent's and Teacher's Manual

Created by:

The WordBox!™ Company
P.O. Box 1115
Belmont, California 94002

Warranty Notices

The WordBox! Company

Exclusion of Program Warranties: Limited Warranty for Media

THIS PROGRAM IS PROVIDED "AS IS." THERE IS NO WARRANTY OF ANY KIND, EXPRESSED OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. YOU ASSUME THE ENTIRE RESPONSIBILITY AND RISK FOR SELECTION OF THE PROGRAM TO ACHIEVE YOUR INTENDED RESULTS AND FOR THE INSTALLATION, USE AND RESULTS OBTAINED FROM THE PROGRAM. THERE IS NO WARRANTY THAT THE PROGRAM'S OPERATION WILL BE UNINTERRUPTED OR ERROR FREE. IF THIS PROGRAM PROVES TO BE DEFECTIVE, YOU (AND NOT ANY DEVELOPER, MANUFACTURER, DISTRIBUTOR OR DEALER OF THIS PROGRAM) ASSUME THE ENTIRE COST OF SERVICE, REPAIR OR CORRECTION.

The WordBox! Company warrants that the CD-ROM disk on which this program is provided will be free from defects in materials and workmanship for a period of ninety (90) days from the date of acquisition of the disk by the first retail purchaser, as evidenced by a copy of your receipt. This limited warranty does not cover defects resulting from abuse, misuse, or accident.

SOME STATES DO NOT ALLOW THE EXCLUSION OF IMPLIED WARRANTIES, SO THE ABOVE EXCLUSION MAY NOT APPLY TO YOU. THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS. YOU MAY HAVE OTHER RIGHTS WHICH VARY FROM STATE TO STATE.

Limitation of Liability and Remedies

The entire liability under this Agreement or otherwise of any developer, manufacturer, distributor or dealer of this program, and your exclusive remedy under the limited CD-ROM disk warranty provided by The WordBox! Company, shall be the replacement by The WordBox! Company of any CD-ROM disk that proves to be defective and that you return to The WordBox! Company, along with a copy of your receipt, within the warranty period, provided that you returned the enclosed registration card to The WordBox! Company within ten (10) days after the date of acquisition of the disk by you. If The WordBox! Company fails to replace a defective disk with a disk that meets the limited warranty provided above, you may terminate this Agreement by returning the disk and all related materials to The WordBox! Company. The amount you paid will be refunded in full.

IN NO EVENT WILL ANY DEVELOPER, MANUFACTURER, DISTRIBUTOR OR DEALER OF THIS PROGRAM BE LIABLE TO YOU OR TO ANY THIRD PARTY FOR ANY DAMAGES WHATSOEVER, INCLUDING, WITHOUT LIMITATION, LOST PROFITS, THE COST OF RECOVERY OR REPLACEMENT OF LOST INFORMATION OR DATA, LOSSES DUE TO BUSINESS INTERRUPTION, OR ANY OTHER DIRECT, INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OF OR INABILITY TO USE THE PROGRAM, EVEN IF ADVISED OF THE POSSIBILITY OR LIKELIHOOD OF SUCH DAMAGES. SOME STATES DO NOT ALLOW THE LIMITATION OR EXCLUSION OF LIABILITY FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU.

Apple Computer, Inc.

APPLE COMPUTER, INC ("APPLE") MAKES NO WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING WITHOUT LIMITATION THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, REGARDING THE APPLE SOFTWARE. APPLE DOES NOT WARRANT, GUARANTEE OR MAKE ANY REPRESENTATIONS REGARDING THE USE OF THE RESULTS OF THE USE OF THE APPLE SOFTWARE IN TERMS OF ITS CORRECTNESS, ACCURACY, RELIABILITY, CURRENTNESS OR OTHERWISE. THE ENTIRE RISK AS TO THE RESULTS AND PERFORMANCE OF THE APPLE SOFTWARE IS ASSUMED BY YOU. THE EXCLUSION OF IMPLIED WARRANTIES IS NOT PERMITTED BY SOME STATES. THE ABOVE EXCLUSION MAY NOT APPLY TO YOU.

IN NO EVENT WILL APPLE, ITS DIRECTORS, OFFICERS, EMPLOYEES OR AGENTS BE LIABLE TO YOU FOR ANY CONSEQUENTIAL, INCIDENTAL OR INDIRECT DAMAGES (INCLUDING DAMAGES FOR LOSS OF BUSINESS PROFITS, BUSINESS INTERRUPTION, LOSS OF BUSINESS INFORMATION, AND THE LIKE) ARISING OUT OF THE USE OR INABILITY TO USE THE APPLE SOFTWARE EVEN IF APPLE HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. BECAUSE SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF LIABILITY FOR CONSEQUENTIAL OR INCIDENTAL DAMAGES, THE ABOVE LIMITATIONS MAY NOT APPLY TO YOU.

Trademark and Copyright Notices

YourWordBox! courseware, software, and manuals are fully copyrighted works and as such are protected under the copyright laws of the United States of America. All copyrights and other proprietary rights are retained by Terry W. Loar. Duplication for any purpose whatsoever constitutes infringement of copyright laws and the offender is liable to civil damages of up to \$50,000 in addition to actual damages, plus criminal penalties of up to one year imprisonment and/or a \$10,000 fine.

Copyright 1990 Terry W. Loar All Rights Reserved

"WordBox!", "YourWordBox!", "In-Context!", and the wordbox logos are all trademarks of Terry W. Loar.

NOTE:

THIS PROGRAM HAS FUNCTIONS TO PRINT SOME OF THE GRAPHIC SCREENS AND THE STUDENT'S PERFORMANCE REPORT (BOTH AS DESCRIBED IN THE YOURWORDBOX! MANUAL) ON AN IMAGEWRITER® II PRINTER. THE LICENSEE IS PERMITTED TO MAKE USE OF THESE PROGRAM FUNCTIONS WITH THE RESTRICTIONS THAT: NO FURTHER REPRODUCTION OR FACSIMILE OF THE IMAGEWRITER PRINTOUT MAY BE MADE, **AND** ONLY ONE PRINTOUT OF EACH PICTURE OR REPORT PER STUDENT IS ALLOWED, **AND** IN THE CASE OF THE GRAPHICS PICTURE THE STUDENT MUST USE THE PICTURE FOR HIS OR HER OWN PERSONAL PEDAGOGICAL PURPOSES, **AND** IN THE CASE OF THE PERFORMANCE REPORT THE PARENT OR TEACHER MAY USE THE REPORT ONLY FOR HIS OR HER EVALUATION OF THE STUDENT'S PROGRESS.

Apple and GS/OS are registered trademarks of Apple Computer, Inc.

Appleworks is a registered trademark of Apple Computer, Inc., licensed to Claris Corporation. Claris is a trademark of Claris Corporation.

YourWordBox! contains material from ORCA/Pascal Run-time Libraries, copyright 1987-1988 by Bytes Works Inc. Used with permission.

Acknowledgements

Dr. Dorothy M. Loar is a woman who has been dedicated to educating and providing challenging classroom environments to elementary school children since 1945. Dr. Loar is the creator of the In-Context! Comprehensive Reading Method and the author of the courseware which is the input to the YourWordBox! software. Dr. Loar taught at the early elementary level for more than twenty years and taught and did research at the university level for an additional fifteen years.

Terry W. Loar is an aerospace computer scientist and software engineer who believes in the early-age learning potential of children and in the enhanced depth of learning when the child is personally invested. Mr. Loar is the designer and author of the YourWordBox! software, Volume I graphics, animation and manual. His is the male voice for some of the courseware subjects and lessons. He is the President and owner of The WordBox! Company.

Joseph Szarek is the Art Director of The WordBox! Company. Mr. Szarek has been a fine artist and Color School Impressionist since 1969. His oil paintings are currently being exhibited in galleries throughout New England and in San Francisco. Mr. Szarek is not only a proponent of early childhood learning but also of the full contextual learning environment. Mr. Szarek became very enthusiastic about YourWordBox! when he saw a prototype of the program. His dedication to its educational principles and his sensitivity to children's needs and learning abilities is made clear in his artwork as displayed in each of the YourWordBox! lessons.

Angie Coiro provides the female voice for the verbal introduction to the Program and for some of the courseware subjects and lessons. Ms. Coiro is an announcer at KQED Radio and a free-lance voice talent in the San Francisco Bay Area. Her enthusiasm for YourWordBox! reflects her love of the spoken and written word and her belief that reading skills are fundamental and crucial to personal esteem and success.

Table of Contents

How to Use the YourWordBox! Manuals 1

PARENT'S AND TEACHER'S SECTION 2

The WordBox! Company Philosophy 2

What is the In-Context! Comprehensive Reading Method? 3

How do the Reading Method, Courseware and Software Differ? 6

How to Introduce Each Subject to the Student 7

TECHNICAL SECTION 12

Getting Started 12

YourWordBox! is Self-Booting 12

Other Volume Demonstrations 16

Eight Topic Demonstration (Interactive) 16

Eight Topic Demonstration (Non-Interactive) 16

Accessing the Bonus Programs 17

TUTORIAL SECTION 18

Quick Tutorial 19

Detailed Tutorial 20

TEACHER'S Screens 20

ENTER STUDENT'S NAME Screen 21

SELECT SUBJECTS Screen 24

SELECT OPTIONS Screen 25

BEGINNING OF SESSION Screen 28

STUDENT'S Screens 29

SUBJECT Screens 29

INTRODUCTION Screen 29

LESSON Screen 30

SUBJECT Screens (continued) 32

REVIEW Screen 32

TEST Screen 33

WORKBOOK Screen 34

STORYBOOK Screen 35

TEACHER'S Screens (Continued) 36

SELECT **esc** DESTINATION Screen 36

END OF SESSION Screen 38

Student's Performance Report 39

Bonus Programs 42

tell.stories 42

show.pictures 42

run.animation 42

speak.text 42

spell.text 42

story.anim 42

story.text 42

print.report 42

Error Conditions 43

APPENDICES

Appendix A - YourWordBox! Hierarchy of Courseware

Appendix B - List of YourWordBox! Courseware

Appendix C - YourWordBox! Word List for Volume I

Appendix D - YourWordBox! Word List for Volume II

Appendix E - YourWordBox! Word List for Volume III

Appendix F - Theoretical Foundation of In-Context!

Appendix G - Self-Focused Attention and Learning to Read with YourWordBox!

Appendix H - Critique Form

List of Figures

Figure 1a	Volume I Introductory Screen	13
Figure 1b	Volume II Introductory Screen	14
Figure 1c	Volume III Introductory Screen	14
Figure 1d	Demonstration Introductory Screen	15
Figure 2	In-Context Comprehensive Reading Method Screen	15
Figure 3	Copyright Screen	16
Figure 4	ENTER STUDENT'S NAME Screen	20
Figure 5a	SELECT SUBJECTS Screen Volume I	22
Figure 5b	SELECT SUBJECTS Screen Volume II	23
Figure 5c	SELECT SUBJECTS Screen Volume III	23
Figure 5d	Demonstration SELECT SUBJECTS Screen	24
Figure 6	SELECT OPTIONS Screen	25
Figure 7	BEGINNING OF SESSION Screen	28
Figure 8	SUBJECT INTRODUCTION Screen	29
Figure 9	LESSON Screen	30
Figure 10	REVIEW Screen	32
Figure 11	TEST Screen	33
Figure 12	WORKBOOK Screen	34
Figure 13	STORYBOOK Screen	35
Figure 14	SELECT esc DESTINATION Screen	36
Figure 15	END OF SESSION Screen	38
Figure 16	Student Performance Report	39

"When I use a word," Humpty-Dumpty said in a rather scornful tone, "it means just what I choose it to mean - neither more nor less."

"The question is," said Alice, "whether you *can* make words mean different things."

"The question is," said Humpty-Dumpty, "which is to be master - that's all."

Lewis Carroll

Not higher sensitivity, not longer memory or even quicker association sets man so far above other animals that he can regard them as denizens of a lower world; no, it is the power of using symbols that makes him lord of the earth.

Susanne Langer

The dangers that face the world can, every one of them, be traced back to science. The salvations that may save the world will, every one of them, be traced back to science.

Isaac Asimov

God is in the details.

Kurt Herbert Adler

Notes:

How to Use the YourWordBox! Manual

The best way to become familiar with YourWordBox! depends upon your personal preference. If you like to read manuals, then do read on and enjoy the material and perform the Tutorial when you get to it. If, however, you are like this writer and prefer to see how programs work without reading instructions, then *jump right ahead to the Quick Tutorial on page 19, stopping by the Technical Section on your way to see if the computer is set up correctly and to find out how to load the program. It would be handy to use the Quick Reference Card in this case.* Either way, enjoy YourWordBox!.

There are three Sections plus Appendices in this manual: the *Parent's and Teacher's Section*, the *Technical Section* and the *Tutorial Section*. There is also a *Quick Reference Card* included in this package.

The *Parent's and Teacher's Section* provides you with:

- a) a broad-brush view of The WordBox! Company philosophy, the reading methodology and the program,
- b) an explanation of how to prepare the student for each subject.

The *Technical Section* talks about hardware, bytes, boots and many other technical concepts. The purpose of this Section is to tell you what computer configuration you need and how to get the program running. Once the computer is set up you need not worry about technical matters ever again.

The *Tutorial Section* describes the way the program actually executes on the IIGS. It gives you a quick tutorial run through the program plus a more detailed tutorial and explanation of each function.

The *Appendices* support all of the Sections. They contain lists of words and sentences which the student will be learning (the YourWordBox! Word List) and the theoretical foundations underlying the reading method and the program.

A *Quick Reference Card* is provided so that you may quickly determine how to perform a specific function without referring to the manual.

PARENT'S AND TEACHER'S SECTION

The WordBox! Company Philosophy

We, at The WordBox! Company encourage parents or primary caregivers to frequently read to their children from children's books, to introduce their children to the library at an early age, to allow their children to freely explore all of the wonderful nooks and crannies in libraries, museums and other places where the wisdom and substance of life, history, and living is found. And during this experience to let their children know that they are special *individuals* and that learning is a *natural* and highly *personal* process.

We believe that neither this nor any other technology should replace human contact in the learning experience. Further, we believe that children, in their uniqueness, should develop at their own pace. Parents and teachers should make learning materials and environments available to the child, but should not push the child beyond his or her own personal level of development.

We further believe that *parents and teachers teach*. Desks, pencils, paper, chairs, textbooks, blackboards, chalk, theories of learning, teaching methods, and classroom ambiance all exist simply to help the parent and teacher. As our society becomes "higher and higher tech," the need for one human teaching another human will continue to be the essential ingredient in the learning process. Fortunately, parent's and teacher's tools have become more sophisticated. The computer is the most sophisticated of these tools. If it is to *serve* us in an optimal way, then it should be used simply as a tool, albeit as a powerful, solid, substantial parent's and teacher's aid, which is integrated into the home and classroom just as desks, pencils, paper and chalk.

The WordBox! Company was organized specifically to build the YourWordBox! software as an Apple IIGS® implementation of The In-Context! Comprehensive Reading Method. The courseware and software have been developed over a period of twelve years. There have been three proof-of-concept models built on various Apple computers, using everything from audio cassette tape input to synthesized voice. The affordable computing technology which preceded the Apple IIGS, however, was insufficient to provide a learning environment which would be rich enough to teach students how to read in any meaningful, lasting or substantial way. The graphics and text were relatively crude and there was no human voice capability. A student cannot properly learn the nuances, obvious or subtle, of human language by listening to a machine that does not sound human. The affective component, among other essential speech ingredients, is simply missing. The Apple IIGS changed all of that. The graphics and text are vastly improved over previous generations. The human voice capability uses the same digital encoding technology which has been found to be the superior method for most faithfully preserving all ranges of sound, including human voice. Your home CD player with its rich, full sound spectrum uses this same technology.



What is the In-Context! Comprehensive Reading Method?

Humans learn in a variety of ways. Just as there are many facets of intelligence, there are many modalities of learning. Some people learn in one way, others learn in another way. The In-Context! Comprehensive Reading Method attempts to provide the richest possible environment with the widest variety of teaching modes to enhance the student's learning. (Appendices F and G provide scholarly papers which describe the theoretical foundation and rationale for the reading method and its implementation.)

In this spirit, the In-Context! Comprehensive Reading Method is a parent's and teacher's aid which provides a multi-media approach to teaching pre-school, kindergarten and first-grade children how to read and to understand grammar. It is a contextual approach which combines graphics, text, animation and human voice - there is no synthesized voice. That is, words and grammar are learned within the context of pictures and simultaneously spoken stories, spoken and graphically represented sentence text, and as stand-alone entities which are spoken and shown as graphic text, all within the context of the story and picture. The method flows from the general picture and story to the specific word and culminates in the student "owning" the newly learned word. Words are learned within the context and logic of spoken and seen English grammar. The notion of parts of speech is introduced. This method is adaptable to all levels of learning abilities from children to adults and has features which may be used to aid learning disabled students. It provides a great deal of flexibility to the parent and teacher to tailor each learning session to the individual student's needs. It also has options and extra (bonus) programs which make it amenable to be used as a group learning device. The software includes student performance monitoring, reviews, tests, storybooks and workbooks. The software generates a Student's Performance Report (an Appleworks® spreadsheet file) which supplies the parent or teacher with statistics about the student's history and progress, performance, and test results. Individual progress files are maintained for the student on a floppy disk volume. The software prompts the parent or teacher with this information at the beginning of a session so that the student may automatically resume at the proper place or review a previously learned subject. The student's tailor-made environment is propagated from session to session.

The courseware consists of eight topics: nouns, verbs, adjectives, the alphabet, phonics, word suffixes, adverbs and the apostrophe. Each topic has three, four or five subjects. For example, Topic III - Adjectives, has a) basic adjectives, b) combining adjectives and nouns and c) combining adjectives, nouns, and verbs. Each subject has up to twenty-six lessons. There are twenty-eight subjects and over seven hundred lessons in all three Volumes.

The Reading Session is comprised of subjects which contain lessons. After a graphic and verbal introduction to the subject, each lesson performs the following routine:

- a) displays a story picture and simultaneously speaks the lesson story,
- b) asks the student to manipulate a graphic object which represents the lesson word(s). As the object is being manipulated with the mouse, a description of the object is spoken along with a special sound effect or an enhancing spoken description,
- c) displays the lesson sentence and speaks it at normal voice speed,
- d) simultaneously displays and speaks the lesson sentence text, left to right, one word per second,
- e) asks the student to repeat the lesson sentence(s),
- f) verbally rewards the student,
- g) optionally, asks the student to type in the sentence(s) and gives an appropriate verbal reward,

-
- h) simultaneously displays and speaks one, two, three, or four lesson words and, optionally, spells the words,
 - i) asks the student to repeat (or spell) the lesson word(s),
 - j) verbally rewards the student,
 - k) asks the student to locate the word(s) with the mouse or, optionally, type in the word(s) from the keyboard. Three attempts are allowed,
 - l) verbally rewards the student or assists the student if the word(s) is (are) not found,
 - m) unconditionally performs a short animation sequence with voice and sound (the child controls the termination of the animation),
 - n) tells the student to move the word(s) to his or her "wordbox" with the mouse. As each word is moved it is spoken,
 - o) the wordbox closes and the child then "owns" the word,
 - p) the lesson word(s) are repeated at a muffled volume from within the wordbox,
 - q) the above steps (a-p) are repeated until the last lesson is completed.
 - r) At the end of the last lesson a review is given. The wordbox opens and the words which the child has learned fly out, one at a time, accompanied by the spoken word.
 - s) There is a test which may be given after the last lesson. All of the subject's lesson words are displayed. Each word is spoken and the student clicks the appropriate word. A "correct" or "incorrect" verbal message is given immediately. The test results are displayed at the top of the screen when the test is over with an appropriate verbal reward.
 - t) A workbook may be presented on the screen at the end of each subject and the student is asked to match, underline, or circle the words which were learned. The screen is saved on the student's disk and the parent or teacher may review it at a later time.
 - u) A storybook is presented to the student at the end of each subject. An unspoken story or poem is displayed one word at a time (the rate may be set by the parent or teacher). At the end of each story the child is asked to type in a synopsis of the story to determine the student's reading comprehension. The synopsis is then saved on the student's disk and the parent or teacher may review it at a later time.
 - v) Student performance monitoring is performed throughout the lesson and a report is constantly being generated in the background. The report is saved on the student's disk along with the workbook pictures and storybook synopsis and it may be printed or viewed on the screen later.
 - w) The parent or teacher may interrupt the processing at any time to change the flow of the session
 - x) When the program is initiated it will automatically resume from the point at which the last lesson was run for each student and will pre-set the same options that were last used for the student.

There are several options which the parent or teacher may invoke for each subject. They include:

- a) framing each word in the lesson sentence as it is displayed,
- b) spelling (each letter is spoken) each lesson word,
- c) using the keyboard in lieu of the mouse (each lesson word letter is spoken as it is entered),
- d) choosing selected lessons,
- e) expanding the allowable correct answer area on the screen, and
- f) choosing to perform the review, test, workbook and/or storybook either with or without the lessons. (The parent or teacher may want to begin a new session by starting with a review of what was learned in the last session without the lessons.)

Each lesson has one or two lesson sentences and up to four lesson words. The lesson sentences and lesson words comprise the YourWordBox! Word List. It includes words which children hear

in modern vocabularies. We believe that it is important for children to recognize the words which are used in their daily life and instructional materials in conjunction with those which appear on the standard word lists. The YourWordBox! words are augmented by Dolch Basic Sight Vocabulary and Harris-Jacobson lists of high frequency words (see Harris p. 373-379 in Appendix F - References). Appendices C, D, and E show the YourWordBox! Word List.

Each lesson takes forty-five seconds to a few minutes to run, depending on the lessons, the student's ability and the options selected.

One sees that In-Context!, as implemented on the Apple IIGS, is a complete reading course and can be either paced at the parent's discretion or integrated into a full school year's curriculum. It is also extensible. More lessons will be added in the future for each subject and more subjects will be added to teach the more advanced grammatical concepts. The method may also be used for Learning Disabled, Adult Literacy and English as a Second Language Programs. Although this first implementation is directed at children of 4-7 years of age, it does not preclude its usage in these other environments. That is, the courseware is neither patronizing nor condescending and would not be offensive to adults who are motivated to learn how to read.

How do the Reading Method, Courseware and Software Differ?

- a) The In-Context! Comprehensive *Reading Method* is a process. It is conceptual and intangible.
- b) The *courseware* consists of the subjects and the lessons. They are tangible; they have pictures, stories, sentences and words, and they reside on the CD-ROM.
- c) YourWordBox! is the Apple IIGS *software* program which implements the In-Context! Comprehensive Reading Method. The software is also real and lives on the CD-ROM.
- d) Think of it in this way: the *courseware* is the data which the *software* processes in order to do what the *reading method* requires.

How to Introduce Each Subject to the Student

The YourWordBox! software provides the student with a verbal introduction to the upcoming subject in conjunction with a screen which shows the lesson words or pictures of words to be learned for that subject. The following sections are suggested preparatory methods which the parent or teacher may use prior to the session.

TOPIC 1 - NOUNS

Subject 1a - Pictures of Nouns

The parent or teacher introduces the subject prior to the Reading Session in the following way: "For each one of these pictures you will hear a story, then you will learn the word which is shown under the picture, and then you will see a cartoon." The lessons for this subject concentrate on the pictures of the nouns which the student will be learning in the next subject. During the lessons the student is asked to identify the picture, not the word. We have found that, after the tenth or so lesson, it is rewarding to have the student imagine what is going on inside of the wordbox since he or she has been putting many people, animals, things, and words into it. The workbook exercise asks the student to draw an oval around a picture and its corresponding word.

Subject 1b - One Noun in a Sentence

"For this subject you will learn the words which go with the pictures which you saw in the last subject. These words are called 'nouns'." The student is asked to identify the noun rather than the picture. The workbook exercise asks the student to match the word and the picture.

Subject 1c - Two Nouns in a Sentence

"For this subject you will learn two nouns for each sentence." The student is asked to identify two nouns. The workbook exercise asks the student to underline each of the nouns with one line.

TOPIC 2 - VERBS

Subject 2a - Verbs

"You will now learn words which tell about people and animals doing things. These words are called 'verbs'." The student is asked to identify a verb. The workbook exercise asks the student to underline each of the verbs with two lines.

Subject 2b - Verbs (Reinforcement)

This subject is an extension of Subject 2a.

Subject 2c - Verbs and Nouns

"You will now see how the nouns and the verbs that you have already learned are used together." The student is asked to identify a noun and a verb. The workbook exercise asks the student to underline each of the nouns with one line and each of the verbs with two lines.

TOPIC 3 - ADJECTIVES

Subject 3a - Adjectives

"You will now learn words which tell more about the nouns which you have already learned. These words are called 'adjectives'." The student is asked to identify an adjective. The workbook exercise asks the student to underline each of the adjectives with three lines.

Subject 3b - Adjectives and Nouns

"You will now see how the nouns and the adjectives that you have already learned are used together." The student is asked to identify a noun and an adjective. The workbook exercise asks the student to underline each of the nouns with one line and each of the adjectives with three lines.

Subject 3c - Adjectives, Nouns and Verbs

"You will now see how the nouns, verbs, and adjectives that you have already learned are used together." The student is asked to identify a noun, a verb, and an adjective. The workbook exercise asks the student to underline each of the nouns with one line, each of the verbs with two lines, and each of the adjectives with three lines.

TOPIC 4 - THE ALPHABET

Subject 4a - The Alphabet

"You will now learn the letters of the alphabet and see how they are used in the words which you have already learned." The student is asked to identify the lesson's letter as the first letter of the lesson word. The workbook exercise asks the student to underline the lesson letter which begins the lesson word.

Subject 4b - The Keyboard

"You will now see the letters of the alphabet on the keyboard of the computer. You will learn how to type them in so that you can use the keyboard from now on." The student is asked to identify the capital and small letters on the keyboard.

Subject 4c - Capital Letters

"You will now see how the capital letters are used in some new words which are people's names." The student is asked to identify the lesson's capital letter as the first letter of the lesson

word - a person's name. The workbook exercise asks the student to underline the capital letter which begins the name.

TOPIC 5 - PHONICS

Subject 5a - Consonants

"You will now learn how to make new words from words that you already know." The student is asked to identify the new additions, consonants, to the root word. The workbook exercise asks the student to underline these new additions.

Subject 5b - Changing Letters

"You will continue to learn how to make new words from words that you already know." The student is asked to identify the new additions, consonants and vowels, to the root word. The workbook exercise asks the student to underline these new additions.

Subject 5c - Two Consonants Together

"Now you will learn how the letters that you have already learned make certain sounds." The student is asked to identify the sounds, digraphs and blends, within the lesson word. The workbook exercise asks the student to underline these sounds.

Subject 5d - Vowels

"You will now learn more about how some of the letters that you have already learned make certain sounds. These letters are called vowels." The student is asked to identify the sounds, vowels, within the lesson word. The workbook exercise asks the student to underline these sounds.

Subject 5e - Effect of Final 'e'

"You will now learn what happens when an 'e' is added to the end of a word." The student is asked to identify the final 'e.' The workbook exercise asks the student to underline the final 'e.'

TOPIC 6 - WORD SUFFIXES

Subject 6a - Pluralization

"Now you will learn how to change a noun to make it mean more than one person, place, or thing. These new nouns are called plurals." The student is asked to identify the additions within the lesson word. The workbook exercise asks the student to underline these additions.

Subject 6b - Past Tense

"Now you will learn how to change a word to show that something happened some time ago." The student is asked to identify the additions within the lesson word. The workbook exercise asks the student to underline these additions.

Subject 6c - Comparative and Superlative Degree

"Now you will learn how to change a word to show how things are different." The student is asked to identify the additions within the lesson word. The workbook exercise asks the student to underline these additions.

Subject 6d - Adding 'ing'

"Now you will learn how to change a word by adding 'ing.'" The student is asked to identify the additions within the lesson word. The workbook exercise asks the student to underline these additions.

TOPIC 7 - ADVERBS

Subject 7a - Adverbs

"Now you will learn some new words which tell how people or animals do things. These words are called adverbs." The student is asked to identify the adverbs. The workbook exercise asks the student to underline these adverbs with four lines.

Subject 7b - Adverbs and Verbs

"You will now see how the verbs and adverbs that you have already learned are used together." The student is asked to identify the verb and an adverb. The workbook exercise asks the student to underline each of the verbs with two lines and each of the adverbs with four lines.

Subject 7c - Adverbs and Adjectives

"You will now see how the adjectives and adverbs that you have already learned are used together." The student is asked to identify the adjective and an adverb. The workbook exercise asks the student to underline each of the adjectives with three lines and each of the adverbs with four lines.

TOPIC 8 - THE APOSTROPHE

Subject 8a - The Apostrophe

"You will now see how two words can be made into one word. It is done with the apostrophe. The apostrophe is a little mark which shows that letters are missing." The student is asked to identify the words before and after using the apostrophe. The workbook exercise asks the student to draw an oval around the words with the apostrophe.

Subject 8b - The Apostrophe With the Verb "Do"

"You will learn how to make new words from the verb 'do' and the verb 'does' by using the apostrophe." The student is asked to identify the words before and after using the apostrophe. The workbook exercise asks the student to draw an oval around the words with the apostrophe.

Subject 8c - The Apostrophe With the Verb "Have"

"You will learn how to make new words from the verb 'have' and the verb 'has' by using the apostrophe." The student is asked to identify the words before and after using the apostrophe. The workbook exercise asks the student to draw an oval around the words with the apostrophe.

Subject 8d - Apostrophe - Other Uses

"You will learn how to make new words from other verbs by using the apostrophe." The student is asked to identify the words before and after using the apostrophe. The workbook exercise asks the student to draw an oval around the words with the apostrophe.

TECHNICAL SECTION

Getting Started

Note: **CHECK THIS FIRST.**

Please see the Apple IIGS Owner's Guide to help you with this Section.

To run YourWordBox! you need:

1. An Apple IIGS.
 2. 1 1/2 MBytes of RAM.
 3. ROM Version 01 (minimum).
 4. Color Monitor (RGB Preferred)
 5. A 3 1/2" or 5 1/4" floppy disk drive.
 6. Apple CD SC™ CD-ROM drive (or equivalent) and SCSI interface card (Rev. C minimum).
 7. An external amplifier and speaker or a headset.
 8. An empty formatted 3 1/2" or 5 1/4" floppy disk online with the volume name '/kidsdisk.'
- This disk holds the student's records. It is suggested that each student have her or his own floppy disk. Also, it would be best to have some spare empty disks on hand with the volume name '/kidsdisk' available in case the current student's disk becomes full. The software automatically takes care of the file management, but you have to put in the new disk yourself.

All of the software and courseware that you need resides on the CD-ROM. Now you are ready to load YourWordBox!. There is only one method for doing this. Please see the Apple IIGS Owner's Guide and the Apple CD SC (CD-ROM) Owner's Guide to help you with the next procedure, if necessary.

YourWordBox! is Self-booting

Using the IIGS Control Panel:

- a) set the startup slot to the slot in which the SCSI interface card for your CD-ROM drive is located. This will usually be Slot 7.
- b) Set the SCSI device address of the CD-ROM to 6. No other device may have this same address.
- c) Set RAM Disk to 0K.
- d) Set RAM Cache to 0K if 1.5 MBytes of RAM or to 32K if 1.75 MBytes or greater.
- e) Set Date Format to MM/DD/YY and Time Format to AM/PM.
- f) Now put the YourWordBox! CD-ROM into the CD-ROM caddy and insert it into the CD-ROM drive.



Note: The reasons that this is the only way that YourWordBox! should be loaded are that:

a) If it is launched from the Desktop or other Launchers it will probably terminate with an "OUT OF MEMORY" fatal error at some point. The main YourWordBox! program is very memory intensive and cannot co-reside with the Desktop or any other program unless you have 1.75 Mbytes or more of RAM. The Bonus Programs, however, are executed from the Desktop, they do not use as much memory as the main program.

b) It may be that the version of GS/OS that is used by another Launcher or Desktop is not compatible with YourWordBox!.

After booting, YourWordBox! displays a screen which identifies the appropriate YourWordBox! program (Volume I, II, III or Demo) with a short animation. The In-Context! Reading Method screen and a copyright notice screen are then displayed. Refer to Figures 1 through 3. Loading the program takes less than one minute. The loading process stops at the ENTER STUDENT'S NAME screen.

Figure 1a - Volume I Introductory Screen

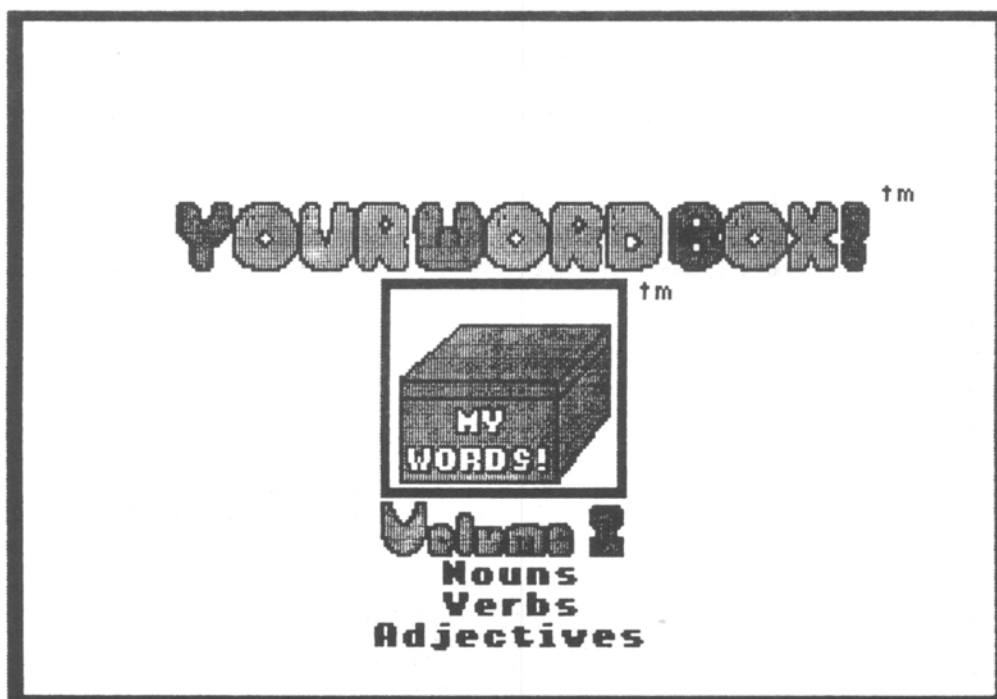


Figure 1b - Volume II Introductory Screen

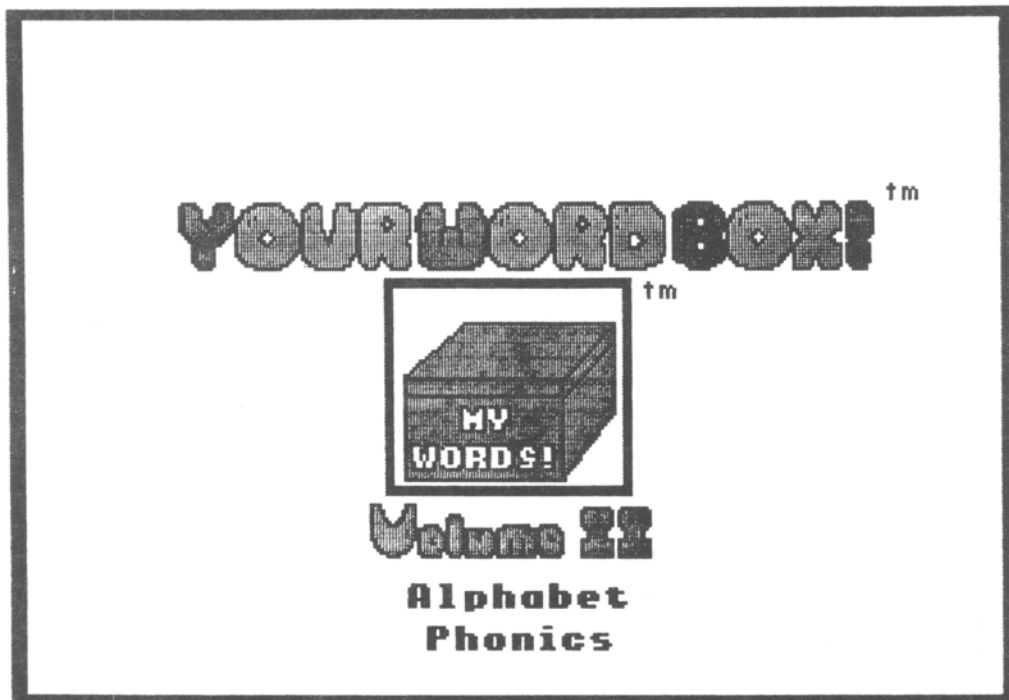


Figure 1c - Volume III Introductory Screen

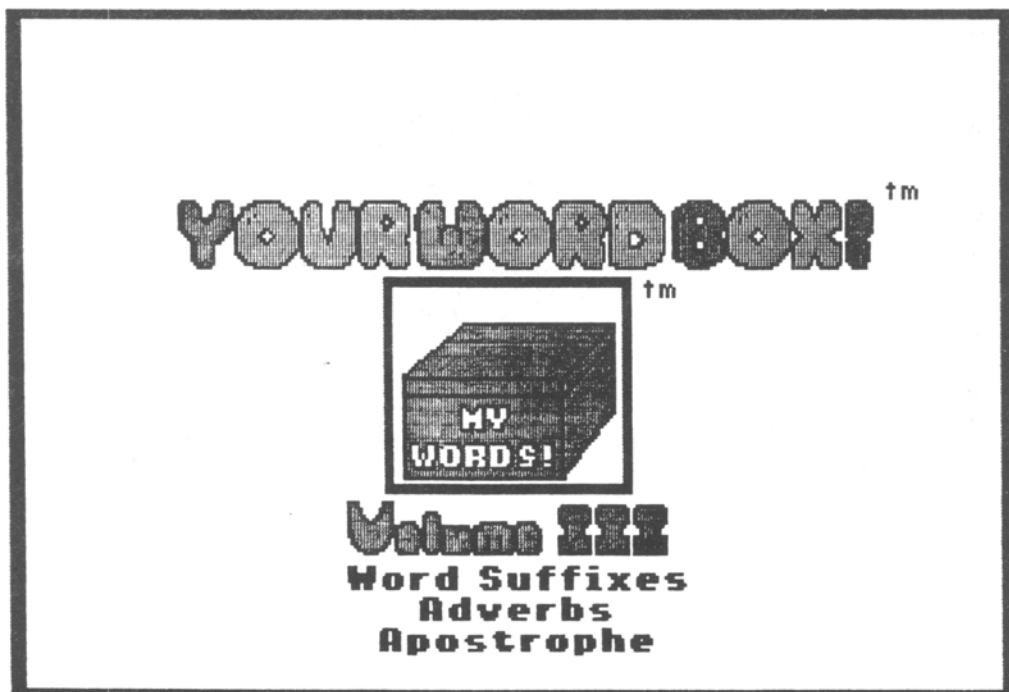


Figure 1d - Demonstration Introductory Screen

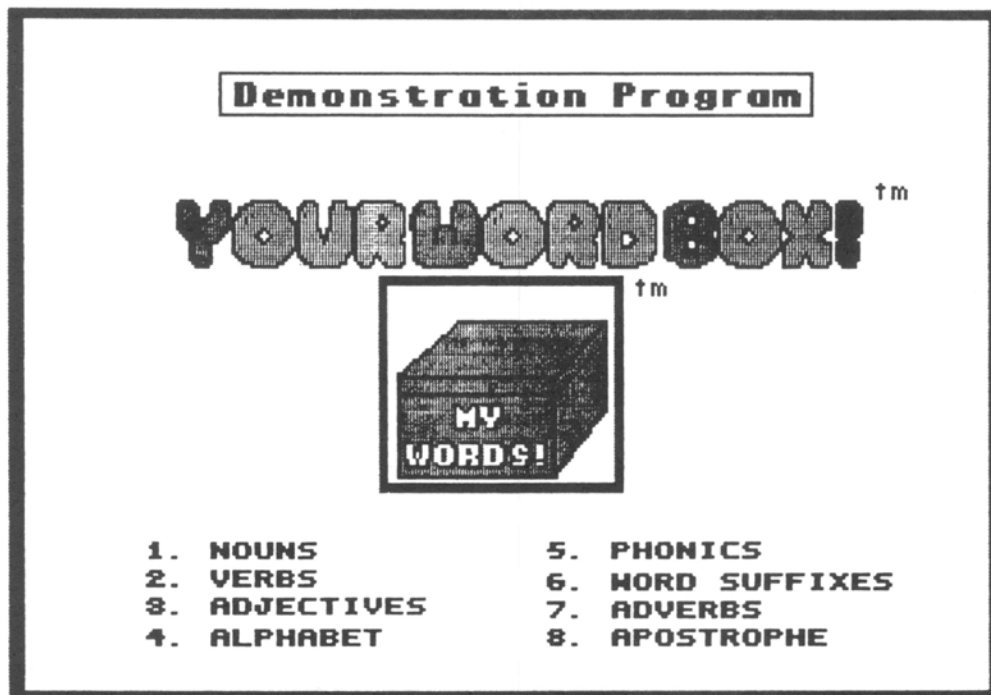


Figure 2 - In-Context! Comprehensive Reading Method Screen

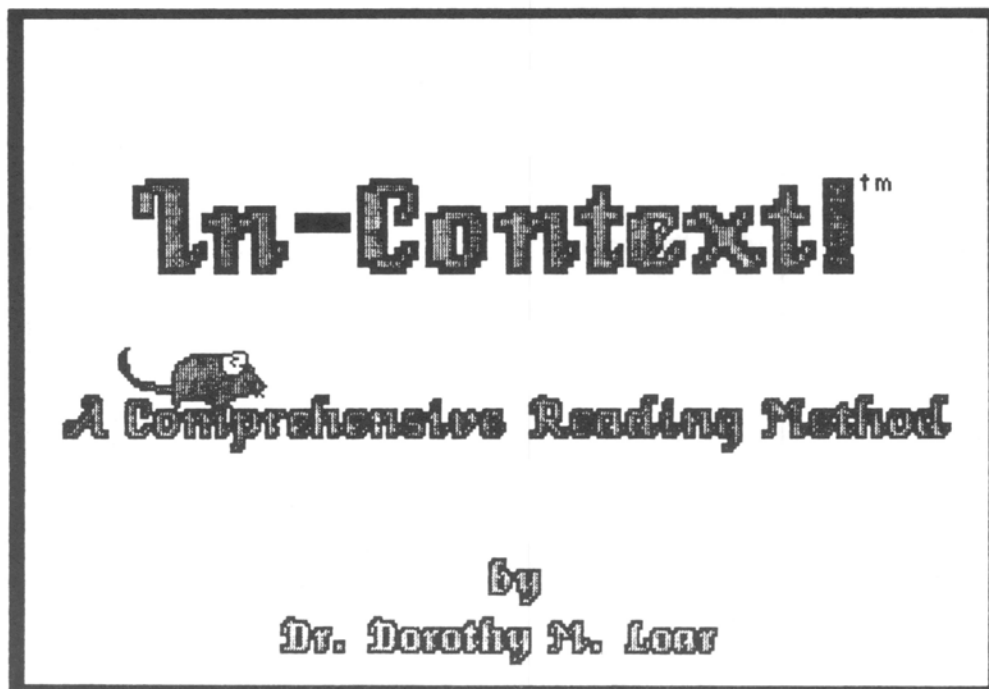
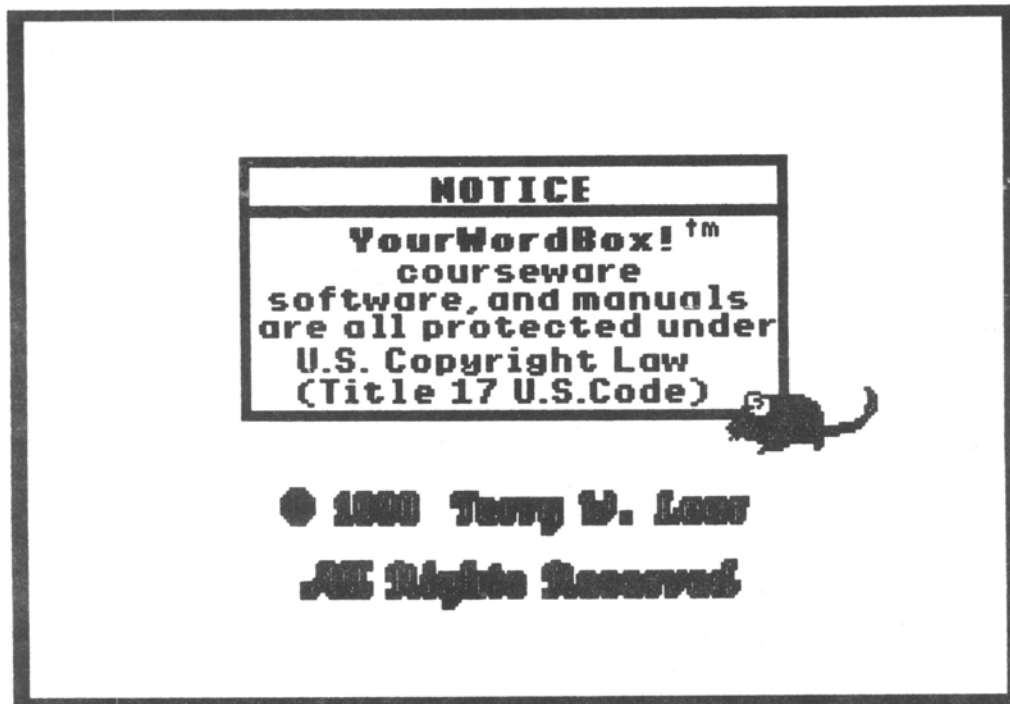


Figure 3 - Copyright Screen



Other Volume Demonstrations

You may access one sample lesson from each subject for the other two Volumes. If you would like to see what the other two Volumes look like then do the following. Re-boot the program and while it is loading (after the "Welcome to the IIGS" message) press either 1, 2, or 3 (no *return*) to select the corresponding Volume.

Eight Topic Demonstration (Interactive)

If you type 4 (no *return*) while the program is loading then the entire eight topics (twenty-eight subjects) may be accessed. It will allow you to access all of the subjects and lessons for this Volume plus one sample lesson from the subjects of the other two Volumes. This demo gives you a sample of what you can expect when you acquire the full three volume set of YourWordBox! subjects.

Eight Topic Demonstration (Non-Interactive)

If you type 5 (no *return*) while the program is loading then the entire eight topics (twenty-eight subjects) may be accessed. The subjects and lessons will run by themselves after the subject selection is made. This mode is very handy if the student, for some reason, is not able to use the keyboard or the mouse.

Accessing the Bonus Programs

The Bonus Programs are launched from the Apple IIGS Desktop. The Desktop will be loaded instead of YourWordBox! :

- a) if you type D (no *return*) while YourWordBox! is loading, or
- b) if you type D (*return*) after YourWordBox! terminates.

You may then launch a Bonus Program from the Desktop by double clicking on the relevant icon. Please refer to the section on Bonus Programs in the Tutorial Section below.

TUTORIAL SECTION

This Section is tutorial in nature. YourWordBox! is a relatively simple program to learn to use. The "screens" which are presented on your IIGS color monitor guide you through the program, one screen after another. The human voice messages which emanate from the Apple IIGS and the messages in the information/alert box on the screens cue you as to how you should proceed and give you information about what is happening. If you sit down at the IIGS and go through the Quick Tutorial, you will have mastered a great deal of YourWordBox!. There is also a more detailed tutorial following the Quick Tutorial. For each tutorial, follow the manual's text or the Quick Reference Card in conjunction with the screens as they appear. The term "tutorial" is used loosely. These are not rigid step-by-step procedures, merely guidelines; feel free to experiment as you go along, you can't break anything.

Terms

1. For the sake of simplicity the term 'teacher' is used throughout this Section. The teacher is anyone, such as a parent (or student), who performs the necessary functions to set up the reading session and help the student.
2. The term 'click' is also used. It means to press the switch on the mouse. The switch does not have to be held down.
3. The term '*return*' refers to the *return* key on the keyboard.
4. The term 'select' means that either the mouse may be clicked on the appropriate box or the contents of the box may be typed in.

Your Critique is Appreciated

If you have comments concerning any aspect of YourWordBox! or the In-Context! Comprehensive Reading Method we encourage you to complete the critique form in Appendix H or write us a letter and mail it to:

The WordBox! Company
P. O. Box 1115
Belmont, California 94002



Quick Tutorial

1. Insert a blank floppy disk named '/kidsdisk.'
2. Load in YourWordBox!. Refer to the Technical Section of this Manual for instructions on how to boot the CD-ROM.
3. Type in the Student's Name (your name) when the 'ENTER STUDENT'S NAME' screen appears. Use a format similar to 'J.P.JONES' (*return*).
4. Select 'P(roceed)' with the mouse or 'P' from the keyboard for this and all of the remaining teacher's screens.
5. Follow the verbal instructions. Subject 1a (Pictures of Nouns) will be loaded and will run 26 lessons with a review. During the lesson animation click to terminate the animation if you do not want it to repeat six times.
6. Press *esc* at any time to change the sequence of lessons or to quit. Being daring with this or any other feature of YourWordBox! is encouraged. You can learn a great deal by being daring, you know.

Detailed Tutorial

There are three types of YourWordBox! screens. One type is used by the teacher and two are used by the students. This tutorial will follow the sequence in which the screens are processed; therefore, we will alternate between the different types of screens to preserve continuity.

TEACHER'S SCREENS

A "session" is comprised of one or more "subjects." Each subject has a wide variety of ways in which it may be run. The teacher's screens help you to choose this variety and pre-plan each reading session. The following material is presented in the order in which it comes up on the screen.

Figure 4 - ENTER STUDENT'S NAME Screen

ENTER STUDENT'S NAME **reset** **proceed**

EXAMPLE: J.P. JONES

After loading YourWordBox! the program will stop at the ENTER STUDENT'S NAME screen. Refer to Figure 4 and look at this screen as a general example of a teacher's screen. The teacher's screens are divided into four boxes. The upper left box (dark blue) indicates the purpose of the screen. The upper right box (gray) provides alternatives for proceeding after you use the screen. The body (center box - light blue) of the screen is unique to the screen's

function. This is the "business" section of the screen. You will use this section to enter data and/or make selections concerning the reading session. The lower portion across the bottom is an information area (cream) or alert area (red) in case of an error. The following is a list of the teacher's screens. The program presents each screen in this sequence with the exception of the SELECT *esc* DESTINATION screen which we will discuss later.

1. ENTER STUDENT'S NAME screen,
2. SELECT SUBJECTS screen,
3. SELECT OPTIONS screen,
4. BEGINNING OF SESSION screen,

Note: The student's screens are displayed at this point until the end of the session.

5. END OF SESSION screen,
6. SELECT *esc* DESTINATION screen.

Note: For purposes of this tutorial and for any of the following teacher's screens, you may experiment as much as you like as long as the screen is displayed. You are encouraged to dwell on each screen and familiarize yourself with it. You can't do any damage. If you enter something which you want to change then select R(eset). This nullifies all of your previous entries for this screen. You may do this any number of times, the same screen will be re-presented until you select P(roceed). There is one exception to this. That is, if you select SAME FOR REST (see SELECT OPTIONS screen, below) then the program will proceed automatically and stop at the next screen, BEGINNING OF SESSION.

ENTER STUDENT'S NAME Screen

This screen is used to type in the student's name or click it from a list for a Reading Session.

Clicking From the List

If the floppy disk 'kidsdisk' contains data for more than one student then a list of names will be displayed. Simply click on the the relevant student's name as shown in the list which is presented on the screen.

Typing in the Name

If the floppy disk 'kidsdisk' contains data for only one student then that student's name will be displayed in the box and no typing is necessary. If there are no students on the disk or if (R)eset is selected then the name must be typed in.

The name must begin with a letter and it must be 15 or less alphanumeric characters in length with no embedded spaces. A period is the only special character allowed. The reason for this is that the student's name becomes a subdirectory on the student's floppy disk volume 'kidsdisk'. It must, therefore, conform to file naming conventions. It sounds more complex than it really is; it is generally consistent with how we usually write names, anyway.

Example and suggested format: J.P.JONES

This student's files will be located in the subdirectory '/kidsdisk/j.p.jones/' on the floppy disk.

If an error is made during entering the name, then the alert box at the bottom of the screen appears red with the appropriate directions. Simply continue to type valid characters. Use the *delete* key to backspace and erase a character.

Press *return* after entering the student's name. The name then centers itself in the box in capital letters.

If the name is correct then select P(roceed), otherwise select R(eset) and type in the correct name.

Figure 5a - Volume I SELECT SUBJECTS Screen

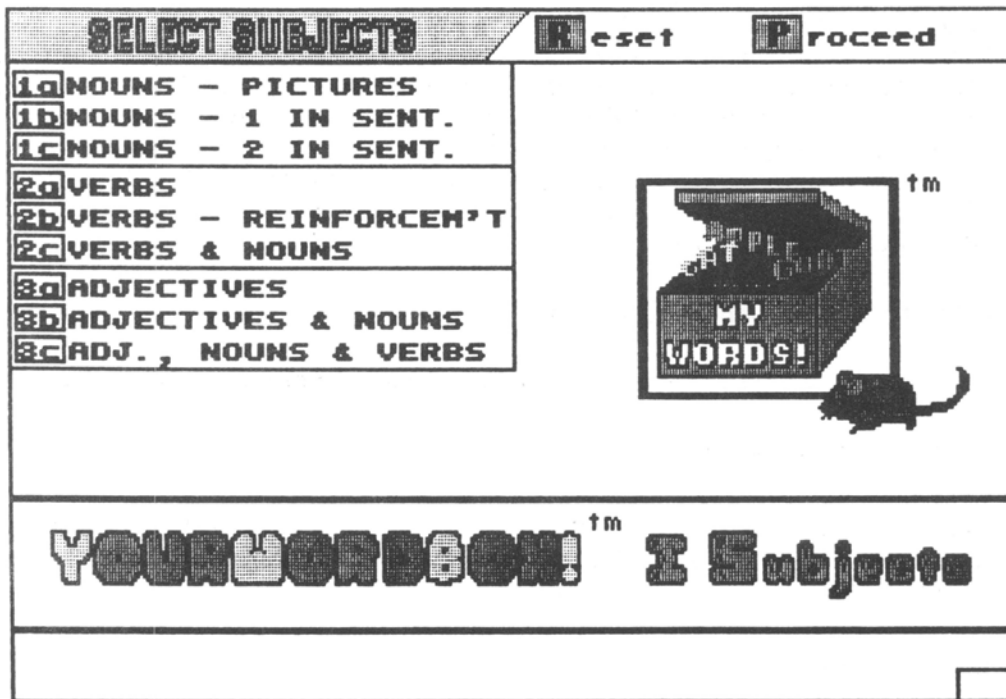


Figure 5b - Volume II SELECT SUBJECTS Screen

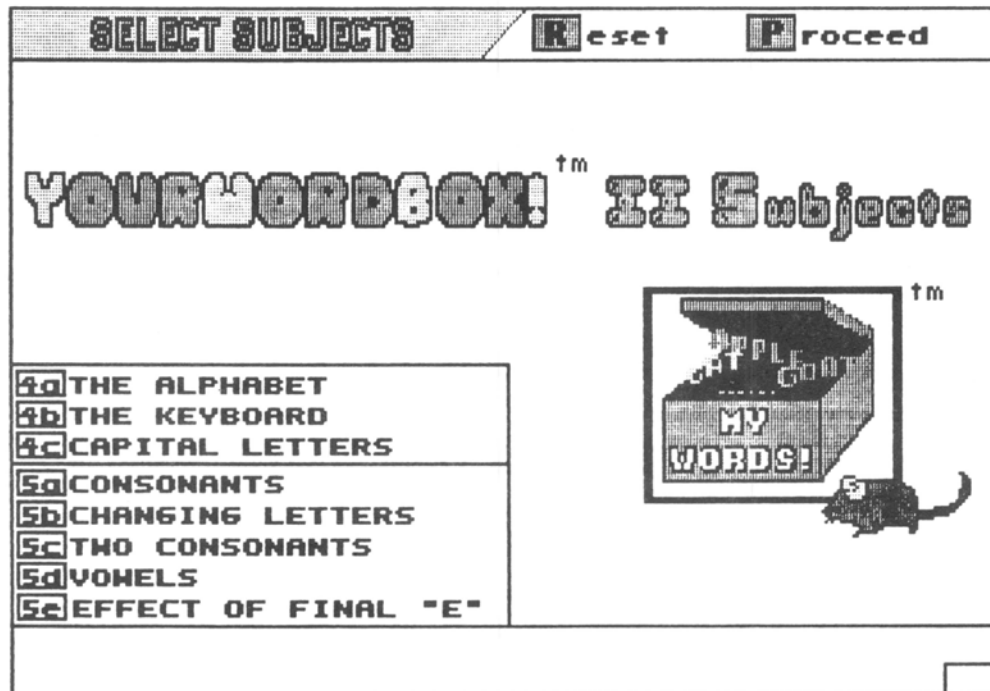


Figure 5c - Volume III SELECT SUBJECTS Screen

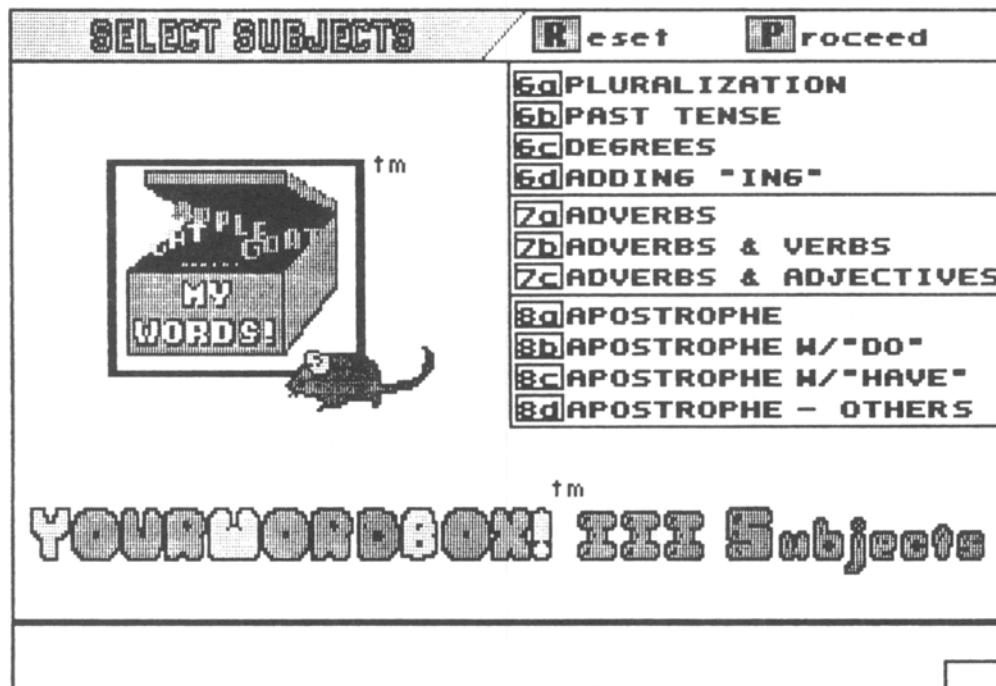



Figure 5d - Demonstration SELECT SUBJECTS Screen

SELECT SUBJECTS		Reset	Proceed
1a NOUNS - PICTURES	5a PLURALIZATION		
1b NOUNS - 1 IN SENT.	5b PAST TENSE		
1c NOUNS - 2 IN SENT.	5c DEGREES		
2a VERBS	5d ADDING "ING"		
2b VERBS - REINFORCEMENT	7a ADVERBS		
2c VERBS & NOUNS	7b ADVERBS & VERBS		
3a ADJECTIVES	7c ADVERBS & ADJECTIVES		
3b ADJECTIVES & NOUNS	8a APOSTROPHE		
3c ADJ., NOUNS & VERBS	8b APOSTROPHE W/"DO"		
4a THE ALPHABET	8c APOSTROPHE W/"HAVE"		
4b THE KEYBOARD	8d APOSTROPHE - OTHERS		
4c CAPITAL LETTERS			
5a CONSONANTS			
5b CHANGING LETTERS			
5c TWO CONSONANTS			
5d VOWELS			
5e EFFECT OF FINAL "E"			

SELECT SUBJECTS Screen

A Reading Session is comprised of subjects. Refer to Figures 5a through 5d. This screen is used to schedule the subjects for the reading session. A list of the subjects which are contained on this Volume of the YourWordBox! CD-ROM is presented. When the screen first comes up, the information/alert box indicates which subject/lesson this student last learned and the date and time at which it was learned. For example, the format 1a/13, indicates that the student's last lesson number was 13 in subject 1a. If a zero appears for the lesson number then it indicates that a review, test, workbook or storybook without lessons was run. The program will preselect the next sequential subject/lesson for you. It will also indicate if this student is new in which case the first subject on the volume will be preselected. A subject is scheduled for this session by clicking the box next to the subject's title or by typing in the subject's two characters (e.g., 1a no *return*). If typed in then the characters appear in the box at the lower right corner of the screen. The selected subject box turns white and a red 'X' appears. This indicates that this subject has been scheduled. A list of the scheduled subjects appears in the information/alert box as they are selected. The subjects may be scheduled in any order and any number of times. A total of 28 subjects may be scheduled. If a subject is scheduled more than once then the number of times that it has been scheduled appears in the selection box.


Note: One would not usually schedule more than one or two subjects per Reading Session, since each subject takes about 45 minutes to complete. Exceptions to this would be:

- a) if only a few lessons are scheduled per subject, or

b) if Story without lessons, Review without lessons, Test without lessons and/or Workbook without lessons are selected (see SELECT OPTIONS Screen).

If the selection is correct then select P(roceed), otherwise select R(eset) and re-schedule the subjects.

Figure 6 - SELECT OPTIONS Screen

 SELECT OPTIONS		R eset	P roceed
<input checked="" type="checkbox"/> FRAME ALL WORDS	<input checked="" type="checkbox"/> REVIEW - LESSONS		
<input checked="" type="checkbox"/> SPELL LESSON WORDS	<input checked="" type="checkbox"/> REVIEW - NO LESSONS		
<input checked="" type="checkbox"/> KEYBOARD ENTRY	<input checked="" type="checkbox"/> TEST - LESSONS		
<input checked="" type="checkbox"/> ALL LESSONS	<input checked="" type="checkbox"/> TEST - NO LESSONS		
<input checked="" type="checkbox"/> BOX EXPANSION	<input checked="" type="checkbox"/> WORKBOOK - LESS.		
<input checked="" type="checkbox"/> STORY - LESSONS	<input checked="" type="checkbox"/> WORKBOOK - NO LESS.		
<input checked="" type="checkbox"/> STORY - NO LESSONS	<input checked="" type="checkbox"/> SAME AS LAST		
	<input checked="" type="checkbox"/> SAME FOR REST		
FOR EACH LESSON IN SUBJECT:			

SELECT OPTIONS Screen

YourWordBox! provides the teacher with as much flexibility as possible. Refer to Figure 6. One option screen per scheduled subject is displayed sequentially. This screen allows the teacher to control each subject with several options. The options are pre-determined for each scheduled subject by selecting the appropriate adjacent box. When the subject is run by the student then the options will take effect.

If the student has no previous file then some options are pre-selected (default) for you and are suggested since they are most consistent with the In-Context! Comprehensive Reading Method. If the student has a previous file, then his or her last set of options are displayed. A red letter is displayed in these white default boxes. If you want to change the default for a specific option then click the appropriate box. Generally, clicking the box will cause the option's opposite state to be displayed. If you want to see all possible legal options for this subject then select 's' - SHOW DEFAULT OPTIONS. If you want to return to the student's option then select 's' - SHOW STUDENT'S OPTIONS.

a) Frame All Words - during the student's lesson, when the lesson sentence is being displayed, only the lesson word(s) is (are) normally framed within the sentence. This option will cause the framing of all of the sentence words during the lesson.

b) Spell Lesson Words - when the lesson word is displayed after the lesson sentence, the entire word is normally displayed and spoken. This option will cause the word to be spelled, one spoken letter at a time, during the lesson. You may control the time delay between each letter as it is displayed and spoken. The range of time delays between each letter goes from 0.1 seconds to 2.0 seconds, inclusive.

'LETTER DELAY:' - If the delay which is displayed is correct then *return*, otherwise type in any number in the range 0.1 to 2.0, (no *return*). The leading 0 is necessary in the case of a delay of less than 1.0 seconds.

c) Mouse/Keyboard Entry - during the lesson, the student may use the mouse to locate the lesson word when requested. Alternatively, the student may type in the word from the keyboard, with the exception of Subject 1a, since it deals with pictures of nouns rather than the nouns themselves. The In-Context! Comprehensive Reading Method encourages the use of the keyboard for the more advanced subjects (4b and above), therefore this is the default option for these subjects. There is also a feature whereby the student may type in the lesson sentence(s) in addition to the lesson word(s). Clicking the KEYBOARD box selects the mouse instead of the keyboard for this subject. Clicking the MOUSE ENTRY box selects the keyboard as the input device.

'ENTER W or S:' - Type W (no *return*) if you want the student to type in the lesson word only. Type S(no *return*) if you want the student to type in both the lesson sentence and the lesson word.

d) Lessons - In-Context! encourages the student to run all of the lessons in a subject. However, this option allows the teacher to specify a range of lessons. The keyboard is used to enter the beginning and ending lesson numbers of the range. Refer to Appendices C, D and E for a summary of lesson sentences and words.

'FIRST(n-m):' Type in the first lesson number *return*.

'LAST(n-m):' Type in the last lesson number *return*.

Where 'n-m' is the valid range of lessons for this subject and m is equal to or greater than n.

e) Box Expansion - For the younger students and for those students with coordination difficulties, we have included the option to expand the graphic area of an acceptable answer when clicking on the lesson word (or picture) during the lesson or on the word (and picture) during the subject test.

'ENTER 1-2: '

1(no *return*) - expands the box by 1/4 inch on each edge.

2(no *return*) - expands the box by 1/2 inch on each edge.

f) Story - Lessons - A story or poem will be presented to the student after the last lesson of the subject. The words will be displayed, without voice, with a selected delay between each word. There is a delay after each page which must also be selected.

'WORD DELAY:' - If the delay which is displayed is correct then *return*, otherwise the range of delays between each word goes from 0.1 seconds to 2.0 seconds. Type in any number in the range 0.1 to 2.0, inclusive (no *return*). The leading 0 is necessary in the case of a delay of less than 1.0 seconds.

'PAGE DELAY:' - If the delay which is displayed is correct then *return*, otherwise the range of delays between each page goes from 1 second to 9 seconds. Type in any number in the range 1 to 9, inclusive (no *return*). If 0 (zero) (no *return*) is entered, then the storybook page will remain on the screen until *return* is pressed.

g) Story - No Lessons - the teacher may opt to have the student view the storybook without running any lessons. Also, the teacher may review a previously saved student's story synopsis.

'ENTER S or T:' - S will select the student story option. The same delays apply as in f. If the T(eacher) option is selected then the teacher may review the student's own story page.

h) Review - Lessons - In-Context! encourages the student to review the lesson words immediately after completing the last lesson, therefore this is the default option. The Subject Review is described later.

i) Review - No Lessons - the teacher may opt to run the subject review without running any lessons.

j) Test - Lessons - The Subject Test is discussed later.

k) Test - No Lessons - the teacher may opt to run the Subject Test without running any lessons.

l) Workbook - Lessons - After the lessons, the student may mark up each workbook page and save it in his or her directory on the floppy disk. The workbook is discussed in more detail later.

m) Workbook - No Lessons - the teacher may opt to run the Workbook without running any lessons. If the S(tudent) option is selected then the student may draw on the workbook page then save it in the student's directory. If the T(eacher) option is selected then the teacher may review the student's workbook pages.

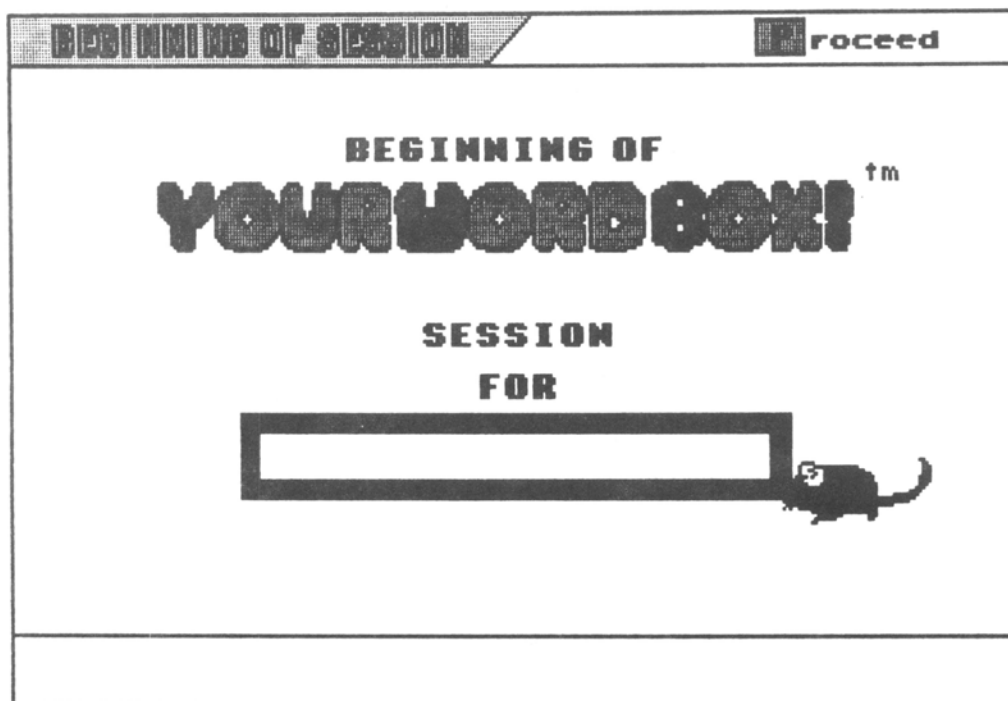
'ENTER S or T:' - S will select the student workbook option. T will select the teacher's review option.

n) SAME AS LAST - the same options that you selected for the previous subject will carry over to this subject.

o) SAME FOR REST - all of the rest of the subjects that you have scheduled after this one will have the same options as the one currently being displayed. These features relieve you of the burden of re-selecting the same options over and over again. The SAME FOR REST selection is the only case where P(roceed) does not have to be selected to go on to the the next screen. If there is a potential conflict in options then the program will automatically figure out the legal options for the remaining subjects.

When you are finished determining the options select P(roceed). The option screen will reappear for the next subject until all of the scheduled subjects are completed. R(eset) will negate the entries for the current subject only.

Figure 7 - BEGINNING OF SESSION Screen



BEGINNING OF SESSION Screen

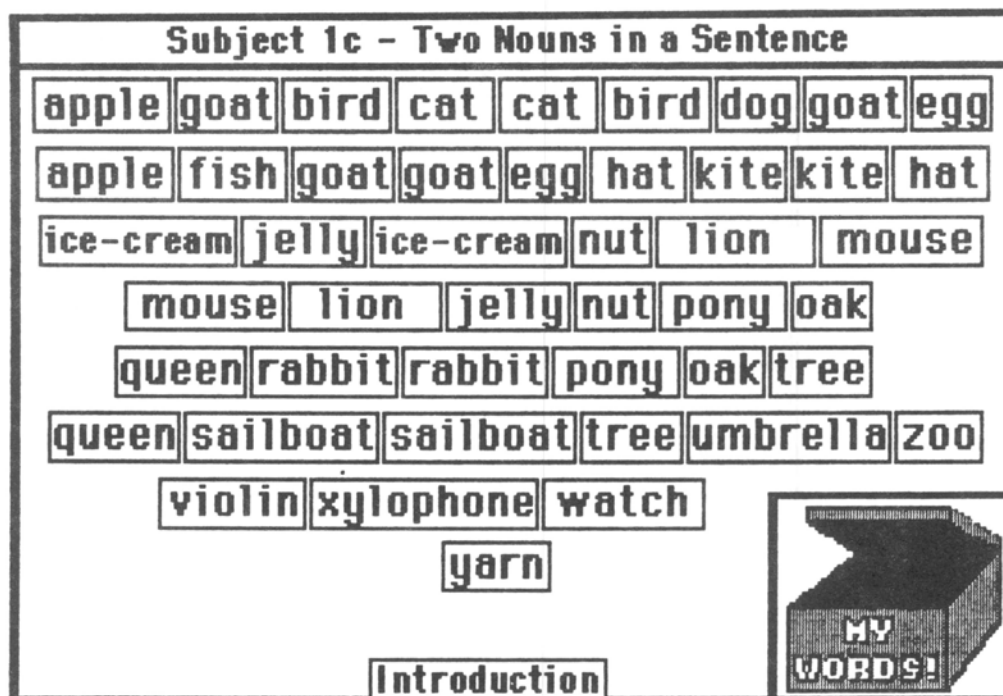
Refer to Figure 7. This is the simplest screen of all. Its purpose is to wait until the student is in position to begin the Reading Session. Select P(roceed) when the student is ready.

Note: The discussion of the remaining teacher's screens will resume after the section on the Student's screens, since this is the processing sequence.

STUDENT'S SCREENS

The other two types of screens are used by the students; one is used for the subject-level material such as the subject introduction, review, test, workbook, and storybook; and the other is used for the lessons themselves.

Figure 8 - SUBJECT INTRODUCTION Screen

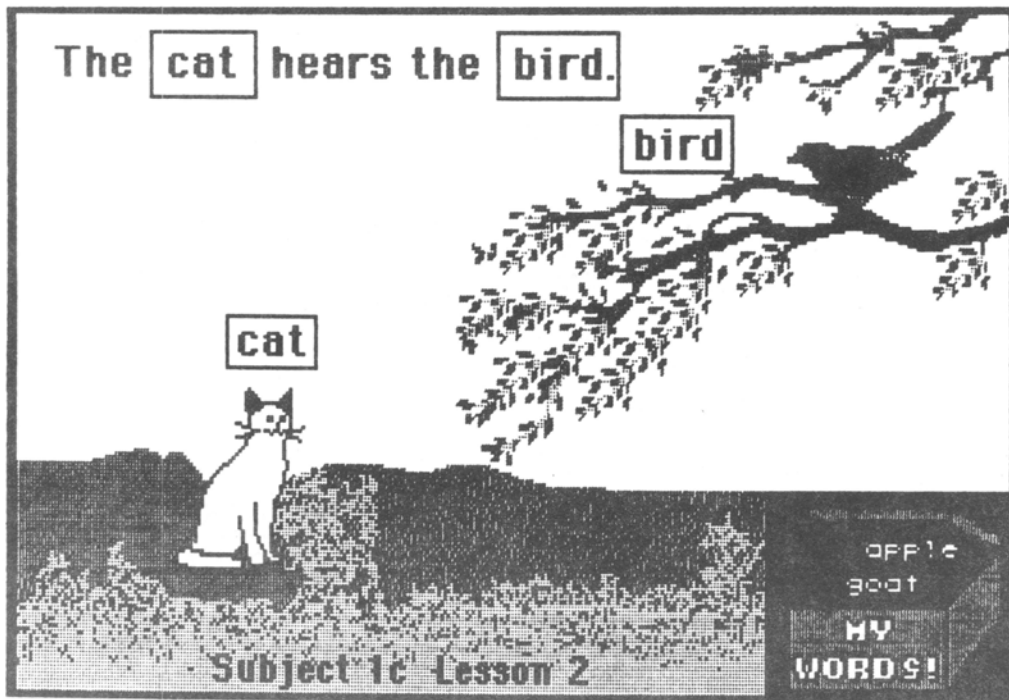


SUBJECT Screens

INTRODUCTION Screen

The student's subject introduction screen appears after the BEGINNING OF SESSION screen. Refer to Figure 8. There are 28 possible subject introduction screens, a unique one for each subject. It indicates the Subject's name at the top and the words which will be learned for that subject in the body of the screen. The screen is presented prior to entering the first lesson and the student is encouraged to study it before the first lesson. The student is directed to begin the first lesson. The discussion on SUBJECT screens will be continued after the LESSON screen, since that is the order of processing.

Figure 9 - LESSON Screen



LESSON Screen

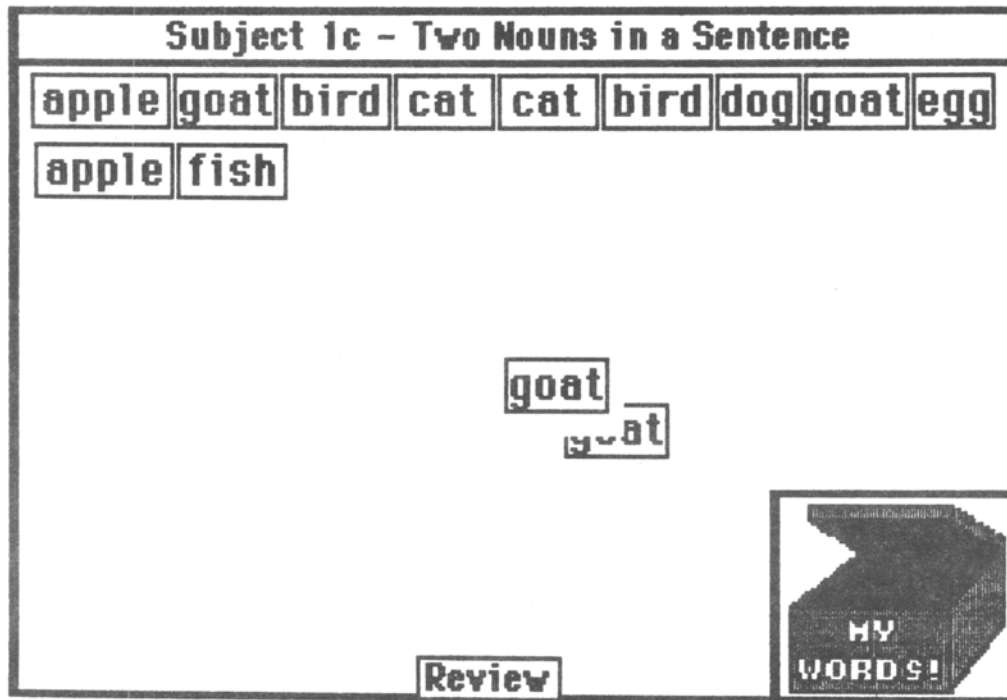
A different lesson screen is displayed for each lesson. There are 701 unique lesson screens in all three Volumes. They are displayed throughout the lesson and provide the learning space for the student. Refer to Figure 9. The lesson screen is presented simultaneously with the following sequence of events:

1. The lesson story is spoken. The story describes the screen.
2. The student is asked to move an object around the screen with the mouse and click when she or he is finished. This movement is accompanied by a verbal description of the object and another related sound or voice alternately for the duration of the movement.
- 3a. The lesson sentence is displayed in white text and the sentence is spoken at a normal speaking rate.
- 3b. The lesson sentence is displayed in black text left to right, one word at a time, simultaneously with each spoken word. The lesson word(s) is (are) framed within the sentence. If the frame option had been selected then each word in the sentence would be framed. The student is asked to read the sentence as it is re-displayed in white text one word at a time. The sentence is not spoken the second time.
4. A spoken reward is given.

-
5. If the keyboard 'S' option had been selected for the keyboard then the student is asked to type in the sentence. An appropriate verbal reward is given at the end of typing.
 6. The lesson word is displayed in black text simultaneously with the spoken word. The student is asked to read the word as it is re-displayed in white text. The computer does not speak the word the second time. If the spell option had been selected then the word is spelled.
 7. A spoken reward is given.
 8. The student is asked to click on the word(s) or type in the word(s) if the keyboard option had been selected.
 9. A spoken reward is given, and a short animation sequence, usually with sound, is presented. The animation sequence will run six times or until it is terminated by clicking the mouse. For reinforcement, the lesson word(s) is(are) repeated.
 10. The student is asked to move the word(s) to his or her wordbox and click. This movement is accompanied by the spoken word for the duration of the movement.
 11. The word is repeated, the box closes and the student then "owns" the word. For reinforcement, the words are repeated at a muffled volume after they are in the box.
 12. The next lesson is presented until all lessons are run.
 13. The next subject is presented until all subjects are run.

SUBJECT Screens (continued)

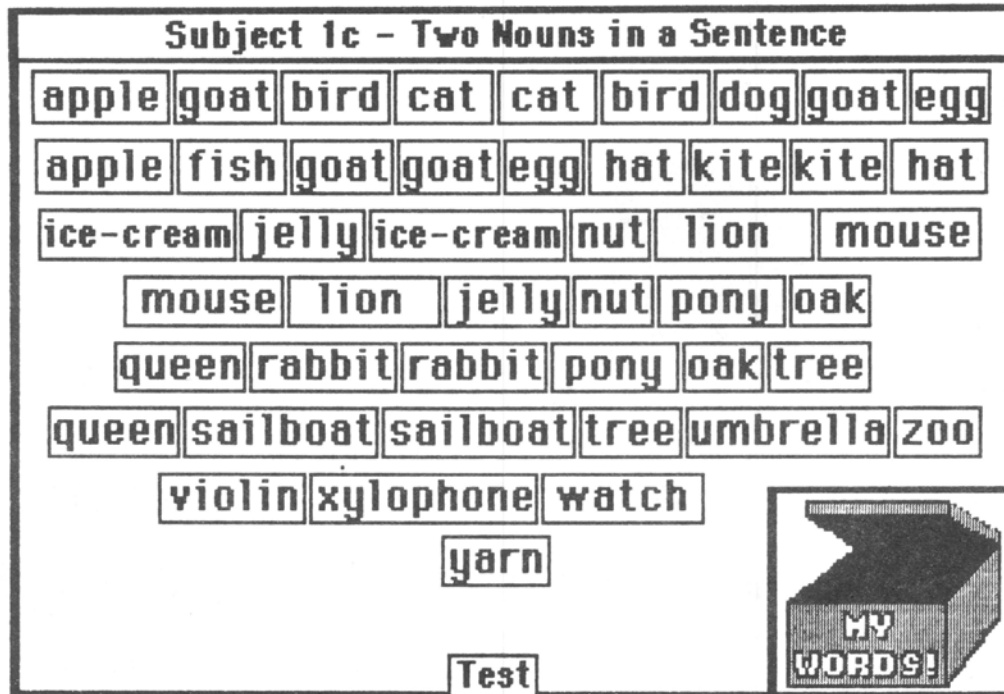
Figure 10 - REVIEW Screen



REVIEW Screen

The Review screen is displayed at the end of the subject after all of the lessons have run or it may be run without lessons. Refer to Figure 10. It is basically the same as the Subject Screen. All of the subject's lesson words are displayed and spoken in the same order and frequency in which they were learned. The word box opens and each word flies out, one word at a time, as it is spoken.

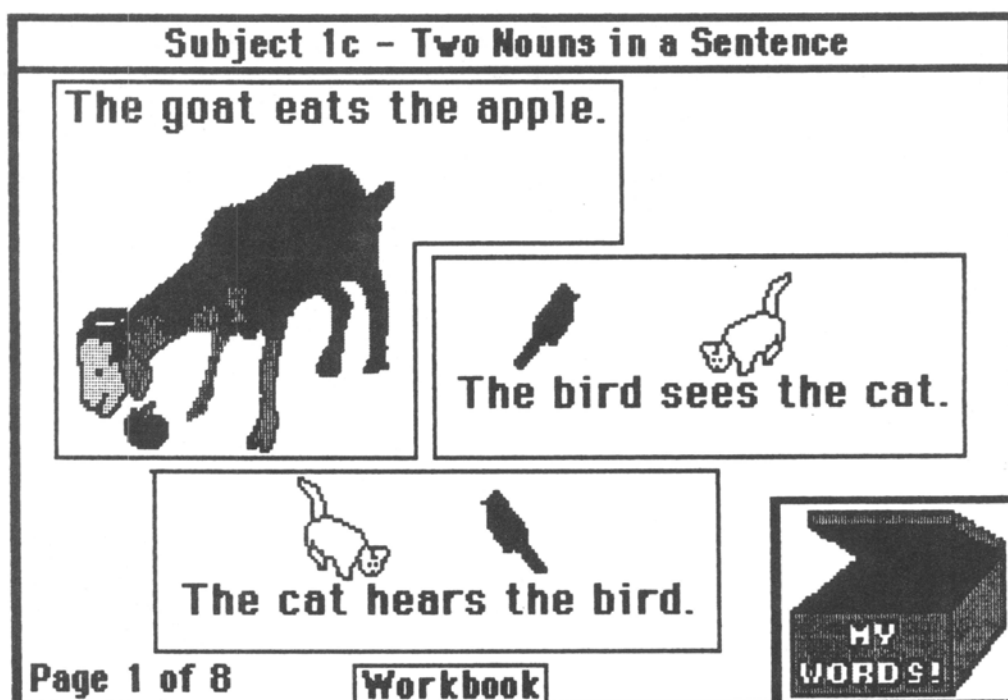
Figure 11 - TEST Screen



TEST Screen

The Test screen is presented at the end of the subject or it may be run without lessons. Refer to Figure 11. It is basically the same as the Subject Screen. Each word is spoken in random order and the student clicks the appropriate word. A "correct" or "incorrect" spoken message is given immediately. At the end of the test, the test results and score are displayed at the top of the screen with an appropriate verbal reward. The test results are also recorded in the Student's Performance Report. Click to proceed.

Figure 12 - WORKBOOK Screen



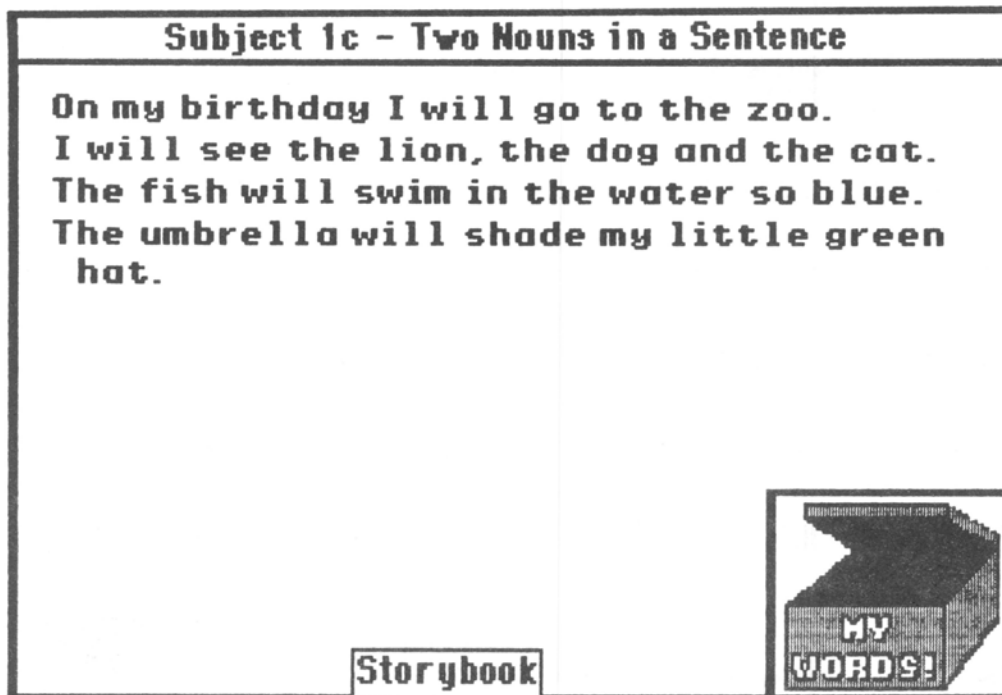
WORKBOOK Screen

Each subject contains its own workbook. Refer to Figure 12. Each workbook contains several pages which the student may mark up in a variety of ways. These include circling pictures and words, matching pictures and words, and underlining nouns, verbs, adjectives, and adverbs. Specific verbal instructions are given to the student.

The mouse is used to draw lines and ovals by clicking once to begin, drawing, then clicking again to terminate the drawing. When the student is finished with each page she or he saves the page on the student's floppy disk by pressing *return*. The student may clear the entire screen of his or her marks by pressing *delete*.

The teacher may recall each page at a later date by using that student's disk, if the 'T' option had been selected. Press *return* to scan through the workbook pages. After all of the pages have been scanned a screen will appear which asks the teacher to enter an evaluation code (0-9). This code may be defined to mean anything you want it to mean. It will be saved in the Student's Performance Report.

Figure 13 - STORYBOOK Screen



STORYBOOK Screen


Every subject has a storybook associated with it. Refer to Figure 13. The story or poem is a textual review of all of the words which were learned for those subjects. Additionally, some new words are introduced which may be learned from the context of the story. The story is displayed and the student reads along with it one word at a time. The time between each word may be varied by the teacher. The student may suspend the story by pressing the space bar. Re-pressing the space bar will resume the story. Each page of the storybook ends with a complete sentence. The page will remain on the screen for a period of time which the teacher had selected or until the student types CR, depending on the option which had been pre-selected. After the story is presented the student is asked to type in a synopsis of the story. One page of text is permitted. During typing, the delete key will erase the last character that was typed. An alarm will sound when the end of the line is near, similar to a typewriter. The student clicks when he or she is finished typing and the page is saved on the student's disk for review by the teacher at a later date.

The teacher may re-call the one-page synopsis at a later date by using that student's disk, if the 'T' option had been selected. Press *return* when finished and a screen will appear which asks the teacher to enter an evaluation code (0-9). This code may be defined to mean anything you want it to mean. It will be saved in the Student's Performance Report.

TEACHER'S SCREENS (continued)

Figure 14 - SELECT *esc* DESTINATION Screen

SELECT <i>esc</i> DESTINATION		<input type="checkbox"/> <i>reset</i>	<input type="checkbox"/> <i>proceed</i>
<input type="checkbox"/> a RESTART SESSION	<input type="checkbox"/> f GO TO REVIEW		
<input type="checkbox"/> b RESELECT SUBJECTS	<input type="checkbox"/> g GO TO TEST		
<input type="checkbox"/> c RESELECT OPTIONS	<input type="checkbox"/> h GO TO WORKBOOK		
<input type="checkbox"/> d SELECT NEXT SUBJECT	<input type="checkbox"/> i GO TO STORYBOOK		
<input type="checkbox"/> e SELECT NEXT LESSON	<input type="checkbox"/> j TERMINATE SESSION		



SELECT *esc* DESTINATION Screen

YourWordBox! provides a method for changing the normal processing sequence. This is done at any time by pressing the *esc* key. At the next logical point the SELECT *esc* DESTINATION screen is presented. *It may take a few seconds to finish what it is doing.* Refer to Figure 14. The teacher then selects how to proceed. A list is presented and the appropriate box is selected to proceed. The list contains only those destinations which make sense given the point at which the program was interrupted.

A complete list of the destinations follows:

- a. Restart Session,
- b. Reselect Subjects,
- c. Reselect Options,
- d. Select Next Subject,
- e. Select Next Lesson,
- f. Go To Review,
- g. Go To Test,
- h. Go To Workbook,
- i. Go To Storybook,
- j. Terminate Session.

The information/alert box contains the same list of subjects that were presented with the SELECT SUBJECTS screen. A set of brackets indicates the place in the list that was being

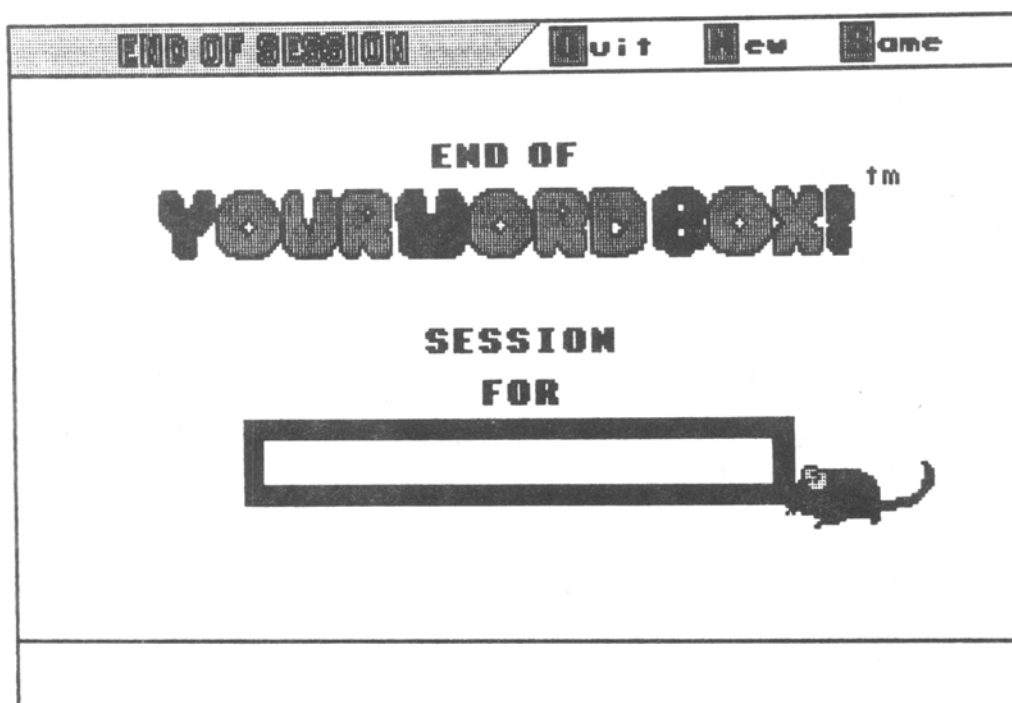
processed when *esc* was pressed. It has a format similar to this: 1b [1c/1] 2a. This indicates that Subject 1c, Lesson 1 was in session when the teacher interrupted and that 1c/2 would be the next lesson or 2a would be the next subject, depending on where the teacher wanted to go from here. This lets the teacher know where he or she was at the time *esc* was pressed and where he or she can legally go. This is especially handy if the teacher wants to end a session earlier than planned.

For "d. Select Next Subject" - type in any subject that has been scheduled or "n" for the next one in the schedule. If you type in the subject and if that subject had been scheduled more than once then the last one in the schedule will be selected.

For "e. Select Next Lesson" - type in any lesson that has been scheduled or "n" for the next one in the schedule.

If the program is currently in the middle of a lesson, then to assure that the student's performance report is accurate, press *esc* just prior to the student's moving the lesson word(s) to his or her wordbox. Please see the subsection on the Student's Performance Report for further advice on this.

Figure 15 - END OF SESSION Screen



END OF SESSION Screen

After the student has completed all of his or her subjects this screen is displayed. Refer to Figure 15.

Select Q(uit) to terminate YourWordBox!. The program will terminate and a list of alternatives will be presented to you.

Select N(ew) if you want to begin a new session with a new student.

Select S(ame) if you want to begin a new session with the same student.

STUDENT'S PERFORMANCE REPORT

YourWordBox! monitors the student's performance during the Reading Session. It saves the results as an Appleworks spreadsheet report in a file called PERF on the floppy disk in the '/kidsdisk/(student name)' directory. The following is a sample report which was printed by the 'print.report' program in the 'bonus.programs' folder. The report may also be printed with the Appleworks program. The format will be slightly different if you use Appleworks, however. For example, no page headers after page 1 will be printed. An explanation of the report header follows.

Figure 16 - Student's Performance Report

YourWordBox!(tm)																
Student Performance Report										Page:		1				
For: J.P.JONES																
Date/Time	Sb	No	Word Responses				Test			Options					Es	
		of	Avg	Max	Act	Min	Cor	Pos	Scr	F	S	K	R	T	S	W
	Ls	Sec														

APR. 17, 1990 8:20A	4b	1	1	3	1	1	0	0	0	N	N	W	N	N	N	N
	1c	23	3	69	23	23	46	46	100	N	Y	N	Y	Y	Y	N
	1a	26	5	78	30	26	25	26	96	N	Y	N	Y	Y	Y	N
	1b	26	1	78	26	26	26	26	100	N	Y	N	Y	Y	Y	N
APR. 19, 1990 8:03A	1a	0	0	0	0	0	0	0	0	N	N	N	N	N	N	O
	1b	0	0	0	0	0	0	0	0	N	N	N	N	N	N	O
	2c	26	1	78	26	26	52	52	100	N	Y	N	Y	Y	Y	N

The student's report is formatted so that there is one line for the results from each subject. Each new date and time indicates a different session for this student.

Reading the report from left to right we find:

Date/Time the date and time at which the subject terminated,

Sb the subject number,

No of Ls the number of lessons which were run for that subject,

Word Responses Performance during the lessons:

Avg Sec the average number of seconds it took the student to identify the lesson word,

Max the maximum number of attempts allowed to identify the lesson word,

Act the actual number of attempts it took the student to identify (click or type in) the lesson word.

Min the minimum number of attempts allowed to identify the lesson word,

Test	Performance on the test:
Cor	the number of actual correct answers that the student made for the test,
Pos	the number of possible correct answers that the student made for the test,
Scr	the test score.
Options	The options which were selected for the subject. From left to right they are Frame (F), Spell (S), Keyboard (K), Review (R), Test (T), Storybook(S) and Workbook (W). The following codes will be displayed in these columns:
F(rame)	Y(es), the option was selected, N(o), the option was not selected.
S(pell)	Y(es), the option was selected, N(o), the option was not selected.
K(eyboard)	N(o), the option was not selected, W(ord), the 'type word only' option was selected, B(oth), the 'type sentence and word' option was selected.
R(eview)	Y(es), the option was selected, N(o), the option was not selected, O(nly), no lessons were run.
T(est)	Y(es), the option was selected, N(o), the option was not selected, O(nly), no lessons were run.
S(torybook)	Y(es), the option was selected, N(o), the option was not selected, O(nly), no lessons were run, 0-9, indicates the teacher's evaluation code if the T(eacher) option had been selected.
W(orkbook)	Y(es), the option was selected, N(o), the option was not selected, O(nly), no lessons were run, 0-9, indicates the teacher's evaluation code if the T(eacher) option had been selected.

Es

indicates whether the teacher escaped from the subject at any point.

Y(es), *esc* was pressed,
N(o), *esc* was not pressed.

Notes: (a) If you want a logical breakpoint at the end of a lesson then press **esc** just prior to the student's moving the lesson word(s) to his or her wordbox. Otherwise, one would not want to use the performance data for a subject that was not run to logical completion, that is, one for which the *esc* key was pressed prior to the student completing a lesson. That data point should be discarded in any subsequent statistical analysis.

(b) If you escape and terminate the session prior to running all of the subjects in the schedule then the subjects which were not run will appear in the performance report with all zeros and N's on the subject line.

Warning!: Neither the subdirectory nor the files on the volume *'/kidsdisk'* should be altered under any circumstances. The *YourWordBox!* program expects the files to be in a specific format when it retrieves them. If you want to perform further statistical analyses on the data in the performance report or if you want to reformat the report, then copy the file to a separate volume and then manipulate it with the *Appleworks* program.

BONUS PROGRAMS

We have included several programs for your enjoyment and for your use as teaching aids. They typically perform a subset of the main YourWordBox! program functions. There are eight programs in the folder /ywb/bonus.programs/. When you select the Desktop the contents of this folder are displayed. You may then select one of the eight programs by double clicking the relevant icon. The program will load and, after the introductory screens, the SELECT SUBJECT Screen will appear with the exception of 'print.report'. Select the subjects in the normal way. The BEGINNING OF SESSION Screen will have the program name in the Student Name Box. Click to proceed. *esc* will terminate the program.

1. 'tell.stories' - each lesson screen for the selected subject(s) will appear sequentially and the relevant story will be spoken.
 2. 'speak.text' - each lesson screen for the selected subject(s) will appear and the lesson sentence(s) and lesson word(s) will be displayed and spoken as in a lesson.
 3. 'show.pictures' - you will be asked to select whether you want to see the Lesson(L), Subject(S) or Workbook(W) picture. Type in the corresponding letter (L, S or W). The picture will then be displayed. Clicking advances to the next screen. When the picture is being displayed typing 'I' will cause the picture to be printed on the ImageWriter II. Two screens will appear sequentially. They will allow you to select various printing options. Select 'OK' for the first of these screens and click the "color" box in the lower left corner then 'OK' of the second screen for normal color printing. Press Open-Apple period(.) to cancel the printing at any time.
- Please be aware of the copyright restrictions which apply to this bonus program. Refer to the Trademark and Copyright Notice in this manual and to the YourWordBox! Licensing Agreement which you read when you opened the program.*
4. 'run.animation' - each lesson screen for the selected subject(s) will appear. The lesson animation will run two times then will proceed to the next lesson.
 5. 'story.anim' - this program combines the 'tell.stories' and 'run.animation' programs.
 6. 'story.text' - this program combines the 'tell.stories' and 'speak.text' programs.
 7. 'spell.text' - this program performs the same as 'speak.text' and additionally, the lesson word(s) will be spelled and spoken as in a lesson.
 8. 'print-report' - prints a copy of the student's performance report on the the screen(S) or the ImageWriter II(I). It reads from the 'kidsdisk' floppy disk volume and displays the name(s) of the student(s) on that volume. If there is more than one student then type in the student's name exactly as it appears (*return*). Type in S or I (*return*) when asked Screen or ImageWriter?

Please be aware of the copyright restrictions which apply to this bonus program. Refer to the Trademark and Copyright Notice in this manual and to the YourWordBox! Licensing Agreement which you read when you opened the program.

The END OF SESSION screen will ask you to select (Q)uit or (M)ore. (Q)uit will return you to the desktop. (M)ore will return you to the SELECT SUBJECTS screen.

The best way to terminate the desktop environment is to pull down the "Special" menu and select "Shut Down" then "Restart ." "YourWordBox!" will then be re-booted.

ERROR CONDITIONS

Expected Errors

Error messages are displayed in the red alert box at the bottom of the screen. They are usually self-explanatory and direct you as to how to correct the error and proceed.

However, there are two conditions under which you will need to insert a new student's disk when an error message appears. These are the procedures which you should follow:

1. Full disk - this usually will occur when the student is saving a workbook or storybook page to his or her floppy disk. Remove the full disk and insert an empty 'kidsdisk'. Student options, the performance report and subsequent workbook and storybook synopsis pages will be saved on the new disk. If you want to review the student's workbook or storybook synopsis pages then you will need to look at two disks during this transistional period. Use the new disk for the student's next reading session.

2. The maximum number of subject lines in a Student's Performance Report is 400. This should be sufficient for a school year. There are two times when this maximum will be detected:

a) During the execution of the print.report bonus program you will be warned when this maximum is being approached. It is recommended that you use a new disk for the student's next reading session.

b) During the execution of the main YourWordBox! program when the program is saving the performance report you may receive an error message. Simply follow the directions in the alert box and insert a new disk.

Unexpected Errors

If your computer is malfunctioning or if you run out of memory (see the Technical Section for the reasons why this would happen) then a "Fatal Error" message will appear across the screen. Press return for more information. If you feel that the machine is not malfunctioning and that you have the required amount of memory and have the machine configured properly, then copy all of the information on the screen and send it to The WordBox! Company along with a precise description of the computer configuration, how you set up the reading session, and where in the sequence it failed. We will investigate the problem and will notify you after our investigation and tell you what the remedy is, if possible.

Notes:

Appendix A - YourWordBox!

Hierarchy of Courseware

Volume - This is the highest level category of courseware. There are three YourWordBox! Volumes, I, II, and III. Each Volume is contained on a separate CD-ROM.

Topic - This is the second highest level category of courseware. There are eight topics in YourWordBox! as follows:

VOLUME I

- Topic 1. Nouns
- Topic 2. Verbs
- Topic 3. Adjectives

VOLUME II

- Topic 4. Alphabet
- Topic 5. Phonics

VOLUME III

- Topic 6. Word Suffixes
- Topic 7. Adverbs
- Topic 8. Apostrophe

Session - Each execution of the program for the student is called a session. The session is comprised of one or more subjects which are scheduled by using the SELECT SUBJECTS screen.

Subject - Each topic has three, four or five subjects. There are twenty-eight subjects. Each subject contains from 17 to 26 lessons. See Appendix B for a list of the subjects.

Lesson - There are 701 lessons contained in the three Volumes. Each lesson has a unique lesson story, one or two lesson sentences, and one, two, three, or four lesson words.

Notes:

Appendix B - List of Your WordBox! Courseware

The Topics, Subjects, and Lessons are shown as follows with the number of sentences and words for each lesson.

VOLUME I

<u>Subject</u>	<u># Lessons</u>	<u># Sentences</u>	<u># Words</u>
<u>Topic 1 - Nouns</u>			
1a Pictures of Nouns	26	1	1
1b One Noun in a Sentence	26	1	1
1c Two Nouns in a Sentence	23	1	2
<u>Topic 2 - Verbs</u>			
2a Verbs	26	1	1
2b Verbs - Reinforcement	26	1	1
2c Verbs & Nouns	26	1	2
<u>Topic 3 - Adjectives</u>			
3a Adjectives	26	1	1
3b Adjectives & Nouns	26	1	2
3c Adjectives, Nouns & Verbs	26	1	3

VOLUME II

<u>Subject</u>	<u># Lessons</u>	<u># Sentences</u>	<u># Words</u>
<u>Topic 4 - Alphabet</u>			
4a The Alphabet	2 6	1	3
4b Learning To Use Keyboard	2 6	1	2
4c Capital Letters	2 6	1	4

Topic 5 - Phonics

5a Consonants	2 6	1	2
5b Consonants & Vowels	2 6	1	2
5c Two Consonants Together	2 3	1	4
5d Vowels	2 6	1	4
5e The Effect of Final "e"	2 6	1	2

VOLUME III

Topic 6 - Word Suffixes

<u>Subject</u>	<u># Lessons</u>	<u># Sentences</u>	<u># Words</u>
6a Pluralization	2 6	2	2
6b Past Tense	2 3	2	2
6c Comparative & Superlative	2 5	1	3
6d Adding "ing"	2 6	2	2

Topic 7 - Adverbs

7a Adverbs	2 4	1	1
7b Adverbs & Verbs	2 6	1	2
7c Adverbs & Adjectives	2 4	2	4

Topic 8 - Apostrophe

8a Apostrophe	2 4	2	2
8b Apostrophe with Verb "Do"	2 4	2	2
8c Apostrophe with Verb "Have"	1 7	2	2
8d Apostrophe - Other Uses	2 6	1	3

Appendix C - YourWordBox! Word List for Volume I

Note: Although the demonstration disk contains all of the lessons for one Volume and one lesson for the Demo subjects, we have provided the sentences and words for each of the 701 lessons. This will give you an idea of the content of all three YourWordBox! Volumes. The manual which comes with Volume III contains a list of the wordbox words and the sentence words sorted alphabetically and cross-referenced to the subjects.

Topic 1 - Nouns: Subject 1a - Pictures of Nouns

<u>Lesson</u>	<u>Word</u>	<u>Lesson Sentence</u>
1	apple	The sweet apple is red.
2	bird	The red bird sings sweetly.
3	cat	The white cat plays.
4	dog	The red dog barks loudly.
5	egg	The green egg is right.
6	fish	The blue fish swims slowly.
7	goat	The goat eats the flower.
8	hat	The girl likes the blue hat.
9	ice-cream	The boy eats ice-cream.
10	jelly	I like red jelly.
11	kite	The wind blows the kite.
12	lion	The lion is happy.
13	mouse	The little mouse runs away.
14	nut	The nut is hard.
15	oak	The oak is green.
16	pony	The black pony runs.
17	queen	The queen is pretty.
18	rabbit	The rabbit hops fast.
19	sailboat	The wind blows the sailboat.
20	tree	The tree is green.
21	umbrella	The red umbrella is small.
22	violin	The violin makes music.
23	watch	The watch tells time.
24	xylophone	The xylophone makes music.
25	yarn	The yarn is green.
26	zoo	The birds fly in the zoo.

Topic 1 - Nouns: Subject 1b - One Noun in a Sentence

<u>Lesson Word</u>	<u>Lesson Sentence</u>
1 apple	The green apple is sour.
2 bird	The green bird sings a sour song.
3 cat	The black cat plays.
4 dog	The dog barks softly.
5 egg	The red egg is hard.
6 fish	The green fish wins.
7 goat	Little goat eats paper.
8 hat	The hat makes a shadow.
9 ice-cream	The boy buys ice-cream.
10 jelly	I like jelly.
11 kite	The wind blows the kite.
12 lion	The lion is asleep.
13 mouse	The little mouse is quiet.
14 nut	A nut is on the birthday cake.
15 oak	The oak looks red.
16 pony	The pony pulls a cart.
17 queen	The queen is pretty.
18 rabbit	The rabbit can hop.
19 sailboat	The red sailboat is pretty.
20 tree	The Christmas tree is green.
21 umbrella	The umbrella makes shade.
22 violin	The violin makes music.
23 watch	The watch tells time.
24 xylophone	The xylophone makes music.
25 yarn	The yarn is red.
26 zoo	The baby goat is in the zoo.

Topic 1 - Nouns: Subject 1c - Two Nouns in a Sentence

Lesson Words

Lesson Sentence

1	apple/goat	The goat eats the apple.
2	bird/cat	The cat hears the bird.
3	cat/bird	The bird sees the cat.
4	dog/goat	The goat hears the dog.
5	egg/apple	The egg and apple are in the cake..
6	fish/goat	The goat sees the fish.
7	goat/egg	The goat eats the egg.
8	hat/kite	The hat is by the kite.
9	kite/hat	The kite is near the hat.
10	ice-cream/jelly	We eat ice-cream and jelly.
11	ice-cream/nut	I eat a nut on ice-cream.
12	lion/mouse	The lion and mouse are friends.
13	mouse/lion	The mouse likes the lion.
14	jelly/nut	I eat jelly and a nut.
15	pony/oak	The pony is near the oak.
16	queen/rabbit	The queen sees the rabbit.
17	rabbit/pony	The rabbit and the pony run.
18	oak/tree	The oak is a pretty tree.
19	queen/sailboat	The queen likes the sailboat.
20	sailboat/tree	The sailboat is near a tree.
21	umbrella/zoo	The umbrella is in the zoo.
22	violin/xylophone	I hear a violin and xylophone.
23	watch/yarn	See the watch and the yarn.

Topic 2 - Verbs: Subject 2a - Verbs

Lesson Word Lesson Sentence

1	ask	A goat will ask for an apple.
2	bake	We bake apple cake.
3	catch	The boys catch the ball in the game.
4	dig	Squirrels dig holes in the ground.
5	eat	The goats eat the eggs.
6	fly	The kites fly.
7	grow	Nuts grow on trees.
8	hop	The rabbits hop on their feet.
9	is	The hat on my head is blue.
10	jump	The dog can jump with his legs.
11	kick	The boy can kick all the way.
12	look	The lion can look with his eyes.
13	make	Toy xylophones make music.
14	nod	The pony can nod his head.
15	open	I can open the jar with my hand.
16	pat	I can pat the kitty cats.
17	quack	The ducks quack in the garden.
18	run	The mouse can run down the street.
19	see	I see the sailboats on the water.
20	tell	I can tell time in the morning.
21	use	We use jars.
22	visit	We will visit the zoo after school.
23	wag	The dogs wag tails to say good-by.
24	x-ray	The doctor will x-ray
25	yawn	The dogs yawn at night.
26	zip	I can zip my coat.

Topic 2 - Verbs: Subject 2b - Verbs (Reinforcement)

Lesson Word Lesson Sentence

1	ask	Children ask mother for milk.
2	bake	I can bake a cake for a party.
3	catch	Brother and sister catch the ball.
4	dig	The dog can dig for the wood.
5	eat	I like to eat jelly at the table.
6	fly	The birds fly back.
7	grow	The apples grow on trees.
8	hop	The rabbit and the robin can hop.
9	is	The snow hat is red.
10	jump	The boy can jump.
11	kick	The girl can kick the ball to the window.
12	look	The mouse will look.
13	make	The birds make a nest.
14	nod	The goat will nod.
15	open	I open the umbrella.
16	pat	I will pat the dog.
17	quack	The ducks quack.
18	run	See the squirrels run.
19	see	I see the fish.
20	tell	I tell the queen in the letter.
21	use	I use the violin.
22	visit	I will visit the zoo to see the bear.
23	wag	The dog can wag.
24	x-ray	The dentist will x-ray.
25	yawn	The children yawn in the chairs.
26	zip	I can zip the money bag.

Topic 2 - Verbs: Subject 2c - Combining Verbs and Nouns

Lesson Words

Lesson Sentence

1	ask/apple	I ask for an apple.
2	bake/apple	I can bake an apple.
3	catch/bird	The bird can catch.
4	dig/cat	The cat can dig.
5	eat/egg	I will eat the egg.
6	fly/fish	The fish can fly.
7	grow/goat	The stick shows the goat did grow.
8	hop/hat	I hop over the hat.
9	is/ice-cream	The ice-cream is good.
10	jump/kite	I jump to the kite.
11	kick/mouse	The mouse cannot kick.
12	look/nut	I will look at the nut.
13	make/jelly	I can make jelly.
14	nod/lion	The lion will nod.
15	open/sailboat	Sails open on the sailboat.
16	pat/pony	I can pat the pony.
17	quack/rabbit	A rabbit cannot quack.
18	run/tree	They run up the tree.
19	see/oak	I can see the oak.
20	tell/queen	I will tell the queen.
21	use/violin	I use the violin.
22	visit/zoo	I will visit the zoo.
23	wag/umbrella	I can wag the umbrella.
24	x-ray/watch	I can x-ray the watch.
25	yawn/xylophones	The men yawn by the xylophones.
26	zip/yarn	I can zip the bag of yarn.

Topic 3 - Adjectives: Subject 3a - Adjectives

Lesson Word

Lesson Sentence

1	awake	The rabbit is awake.
2	blue	The blue birds fly.
3	creamy	The clouds are creamy.
4	dark	The sky is dark.
5	early	It is early in the zoo.
6	funny	The clown is funny.
7	green	The ball is green.
8	happy	The clown is happy.
9	icy	The ice-cream is icy.
10	jolly	The clown is jolly.
11	kind	The lion is kind.
12	little	The little goat grows.
13	merry	The clown is merry on Christmas.
14	new	Here is a new hat.
15	orange	The hat is orange.
16	pink	The flower is pink.
17	quiet	The bird is quiet.
18	red	The balloon is red.
19	small	Get the small red ball.
20	tall	The man is tall.
21	unhappy	Help the unhappy clown.
22	violet	The color is violet.
23	wet	The tree is wet.
24	x-ray	I see the x-ray picture.
25	young	The goat is young.
26	zig-zag	I see the zig-zag line.

Topic 3 - Adjectives: Subject 3b - Adjectives and Nouns

Lesson Words

Lesson Sentence

1	green/apple	The apple is green.
2	blue/bird	The bird is blue.
3	creamy/cat	The cat is creamy.
4	awake/dog	The dog and the chicken are awake.
5	dark/egg	The egg is dark.
6	funny/fish	The fish is funny.
7	early/goat	The goat is early.
8	new/hat	The hat is new.
9	icy/ice-cream	The ice-cream is icy.
10	jolly/jelly	The jolly man eats jelly.
11	merry/kite	The merry kite can fly.
12	kind/lion	The lion looks kind.
13	happy/mouse	The mouse is happy.
14	little/nut	The little nut is a seed.
15	orange/oak	The oak is orange.
16	small/pony	The pony is small.
17	pink/queen	The queen likes pink.
18	quiet/rabbit	See the quiet rabbit hide.
19	red/sailboat	The sailboat is red.
20	tall/tree	The tree is tall.
21	violet/umbrella	I see the violet umbrella.
22	unhappy/violin	The violin is unhappy.
23	x-ray/watch	See the watch and the x-ray machine.
24	young/xylophone	The xylophone is young.
25	zig-zag/yarn	The yarn is zig-zag.
26	wet/zoo	The zoo is wet.

Topic 3 - Adjectives: Subject 3c - Adjectives, Nouns and Verbs

Lesson Words

Lesson Sentence

1	awake/apple/ask	The goat is awake and will ask for an apple.
2	blue/bird/bake	We can bake a seed cake for the blue bird.
3	creamy/cat/catch	The creamy cat can catch a crazy mouse.
4	dark/dog/dig	The dark dog can dig down.
5	early/eggs/eat	The early goat will eat the egg.
6	funny/fish/fly	The funny fish can fly.
7	green/goat/grow	Little goat eats green grass to grow.
8	happy/hat/hop	The happy boy can hop over the hat.
9	icy/ice-cream/is	The ice-cream is icy.
10	jolly/jelly/jumps	The jolly clown jumps over the jelly beans.
11	kind/kite/kick	The kind pony did not kick the kite.
12	little/lion/look	The lion will look at the little mouse.
13	merry/mouse/make	The mouse will make merry music.
14	new/nut/nod	The boy will nod under the tree with the new nut.
15	orange/oak/open	It can open the nut from the orange oak.
16	pink/pony/pat	I will pat the pony with the pink hat.
17	quiet/queen/quack	The quiet ducks did not quack at the queen.
18	red/rabbit/run	The red fox can run after the rabbit.
19	small/sailboat/see	I see the small sailboat.
20	tall/tree/tell	The tall tree can tell time.
21	unhappy/umbrella/use	The unhappy boy will use the umbrella.
22	violet/violin/visit	I will visit the player of the violet violin.
23	wet/watch/wag	See the boy wag the wet watch.
24	x-ray/xylophone/x-ray	We x-ray the xylophone with the x-ray machine.
25	young/yarn/yawn	See the young girl yawn and catch the yarn.
26	zig-zag/zoo/zip	The ducks in the zoo zip a zig-zag line.

Notes:

Appendix D - YourWordBox! Word List for Volume II

Topic 4 - Alphabet: Subject 4a - The Alphabet

Lesson Words

Lesson Sentence

1	apple/ask/awake	Apple, ask, and awake begin with "a."
2	bird/bake/blue	Bird, bake, and blue begin with "b."
3	cat/catch/creamy	Cat, catch, and creamy begin with "c."
4	dog/dig/dark	Dog, dig, and dark begin with "d."
5	early/eat/egg	Early, eat, and egg begin with "e."
6	funny/fish/fly	Funny, fish, and fly begin with "f."
7	goat/green/grow	Goat, green, and grow begin with "g."
8	happy/hop/hat	Happy, hop, and hat begin with "h."
9	ice-cream/is/icy	Ice-cream, is, and icy begin with "i."
10	jolly/jump/jelly	Jolly, jump, and jelly begin with "j."
11	kind/kick/kite	Kind, kick, and kite begin with "k."
12	lion/look/little	Lion, look, and little begin with "l."
13	mouse/make/merry	Mouse, make, and merry begin with "m."
14	nod/new/nut	Nod, new, and nut begin with "n."
15	open/orange/oak	Open, orange, and oak begin with "o."
16	pat/pony/pink	Pat, pony, and pink begin with "p."
17	quiet/quack/queen	Quiet, quack, and queen begin with "q."
18	red/run/rabbit	Red, run, and rabbit begin with "r."
19	see/small/sailboat	See, small, and sailboat begin with "s."
20	tall/tree/tell	Tall, tree, and tell begin with "t."
21	unhappy/use/umbrella	Unhappy, use, and umbrella begin with "u."
22	visit/violet/violin	Visit, violet, and violin begin with "v."
23	watch/wet/wag	Watch, wet, and wag begin with "w."
24	x-ray/xylophone/xerox	X-ray, xylophone, and xerox begin with "x."
25	yarn/young/yawn	Yarn, young, and yawn begin with "y."
26	zoo/zip/zig-zag	Zoo, zip, and zig-zag begin with "z."

Topic 4 - Alphabet: Subject 4b - Learning to Use the Keyboard

Lesson Words

Lesson Sentences

1	Queen/quiet/quack	Queen is quiet. Queen cannot quack.
2	Watch/wet/wag	Watch is not wet. Watch cannot wag.
3	Egg/early/eat	Egg is not early. Egg is to eat.
4	Rabbit/red/run	Rabbit is not red. Rabbit can run.
5	Tree/tall/tell	Tree is tall. Tree can tell time.
6	Yarn/yellow/yawn	Yarn is yellow. Yarn cannot yawn.
7	Umbrella/up/use	Umbrella is up. Umbrella cannot use wind.
8	Ice-cream/icy/is	Ice-cream is icy. Ice-cream is not black.
9	Oak/orange/open	Oak is orange. Oak cannot open.
10	Pony/pink/pat	Pony is not pink. Pony cannot pat.
11	Apple/awake/ask	Apple is not awake. Apple does not ask.
12	Sailboat/small/see	Sailboat is small. Sailboat does not see.
13	Dog/dark/dig	Dog is dark. Dog can dig.
14	Fish/funny/fly	Fish is funny. Fish can fly.
15	Goat/green/grow	Goat is not green. Goat can grow.
16	Hat/happy/hop	Hat is happy. Hat cannot hop.
17	Jelly/jolly/jump	Jelly is jolly. Jelly cannot jump.
18	Kite/kind/kick	Kite is kind. Kite cannot kick.
19	Lion/little/looks	Lion is not little. Lion looks at mouse.
20	Zoo/zig-zag/zip	Zoo is not zig-zag. Zoo cannot zip.
21	Xylophone/x-ray/xerox	Xylophone is not xray. Xylophone cannot xerox.
22	Cat/creamy/catch	Cat is creamy. Cat can catch.
23	Violin/violet/visit	Violin is violet. Violet does not visit.
24	Bird/blue/bake	Bird is blue. Bird cannot bake.
25	Nut/new/nod	Nut is new. Nut cannot nod.
26	Mouse/merry/makes	Mouse is merry. Mouse makes music.

Topic 4 - Alphabet: Subject 4c - Capital Letters

Lesson Words

Lesson Sentence

1	Al/Amy/Ann/Art	Al, Amy, Ann, and Art begin with capital "A."
2	Ben/Babs/Betty/Bob	Ben, Babs, Betty, and Bob begin with capital "B."
3	Cal/Cathy/Cher/Chris	Cal, Cathy, Cher, and Chris begin with capital "C."
4	Dan/Debbie/Dick/Dot	Dan, Debbie, Dick, and Dot begin with capital "D."
5	Ed/Ellie/Emma/Ernie	Ed, Ellie, Emma, and Ernie begin with capital "E."
6	Fae/Flo/Ford/Fred	Fae, Flo, Ford, and Fred begin with capital "F."
7	Gail/Gert/Greg/Gus	Gail, Gert, Greg, and Gus begin with capital "G."
8	Hal/Hans/Holly/Honey	Hal, Hans, Holly, and Honey begin with capital "H."
9	Ian/Irving/Iola/Ila	Ian, Irving, Iola, and Ila begin with capital "I."
10	Jan, Jack, Jill, Jim	Jan, Jack, Jill, and Jim begin with capital "J."
11	Ken/Kim/Kit/Kip	Ken, Kim, Kit, and Kip begin with capital "K."
12	Lassy/Lil/Lew/Lon	Lassy, Lil, Lew, and Lon begin with capital "L."
13	Mab/Max/Meg/Moe	Mab, Max, Meg, and Moe begin with capital "M."
14	Nan, Nat, Ned, Nell	Nan, Nat, Ned, and Nell begin with capital "N."
15	Olaf/Olga/Olive/Otto	Olaf, Olgo, Olive, and Otto begin with capital "O."
16	Pam/Pat/Paul/Peg	Pam, Pat, Paul, and Peg begin with capital "P."
17	Queenie/Quentin/Quincy/Quinn	Queenie, Quentin, Quincy, and Quinn begin with capital "Q."
18	Ray/Rex/Rob/Rose	Ray, Rex, Rob, and Rose begin with capital "R."
19	Sal/Sam/Sid/Sonny	Sal, Sam, Sid, and Sonny begin with capital "S."
20	Ted/Tessie/Terry/Toots	Ted, Tessie, Terry and Toots begin with capital "T."
21	Uncas/Ursula/Uriah/Uncle	Uncas, Ursula, Uriah, and Uncle begin with capital "U."
22	Val/Vera/Vick/Vince	Val, Vera, Vick, and Vince begin with capital "V."
23	Ward/Wendy/Will/Win	Ward, Wendy, Will, and Win begin with capital "W."
24	Xenia/Xavier/Xeres/Xanthe	Xenia, Xavier, Xeres, and Xanthe begin with capital "X."
25	Yetta/Yolanda/Yancey/Yogie	Yetta, Yolanda, Yancey, and Yogie begin with capital "Y."
26	Zach/Zane/Zelda/Zoe	Zach, Zane, Zelda, and Zoe begin with capital "Z."

Topic 5 - Phonics: Subject 5a - Consonants

<u>Lesson Words</u>	<u>Lesson Sentence</u>
1 cask/mask	I ask to see the cask and mask.
2 cake/rake	Can I bake a cake with a rake?
3 bat/rat	The cat can bat the rat.
4 pig/wig	A pig in a wig can dig.
5 lark/park	A lark is in the dark park.
6 meat/seat	I can eat meat on my seat.
7 wish/dish	Can a fish in a dish wish?
8 bunny/sunny	I see a funny bunny on a sunny day.
9 boat/coat	The goat in a boat has a coat.
10 mop/top	Can a top hop on a mop?
11 holly/polly	The jolly polly sees the holly. Hello!
12 bump/pump	I can jump on the bump and the pump.
13 book/cook	The cook will look at the book.
14 berry/ferry	I will eat a berry on the merry ferry.
15 house/louse	The mouse sees the louse in the house.
16 pod/rod	A pod will nod on the rod.
17 hut/rut	I see a nut in a rut by the hut.
18 bed/Ted	I see Ted on the red bed.
19 gun/sun	I run in the sun with a gun.
20 bee/tee	I see a bee on the tee.
21 ball/wall	A ball is on the tall wall.
22 bell/well	I can tell a bell from a well.
23 bag/tag	I can wag a bag and a tag.
24 pet/net	The wet net is on the pet.
25 lip/sip	The lip can sip with a zip.
26 coo/moo	I hear the coo and the moo in the zoo.

Topic 5 - Phonics: Subject 5b - Changing Consonants

Lesson Words

Lesson Sentence

1	ark/auk	I ask if the auk is in the ark.
2	bale/base	I cannot bake a bale or a base.
3	cab/cap	The cat in a cab has a cap.
4	dog/dip	The dog did dig in the dip.
5	eat/ear	I can eat an ear of corn.
6	goat/goal	The goat is at the goal.
7	grew/grow	The tree grew yesterday and can grow today.
8	hag/ham	The hag has a ham.
9	hog/hot	The hog can hop over the hot fire.
10	it/in	I see it is in the box.
11	jolly/jelly	The jolly clown will eat jelly.
12	mare/mane	The mare can make the mane shake.
13	merry/marry	A merry bride will marry.
14	not/nob	I will not nod my nob.
15	nut/net	I see the nut in the net.
16	oar/oat	I can see an oar and an oat near the oak.
17	pad/pan	I will pat the pad and the pan.
18	queen/queer	The queen feels queer.
19	red/rod	I see a red rod.
20	run/rug	I can run on the rug.
21	small/smell	The small nose can smell.
22	tall/tell	The tall boy can tell time.
23	wag/wig	I can wag the wig.
24	wee/web	The wee web is wet.
25	yarn/yard	The yarn is a yard long.
26	zig/zag	The zipper can zig or zag.

Topic 5 - Phonics: Subject 5c - Digraphs and Blends

Lesson Words

Lesson Sentence

1	black/block/blip/blot	Black, block, blip, and blot have the sound "bl."
2	bran/brag/bread/brim	Bran, brag, bread, and brim have the sound "br."
3	chin/chop/chip/chap	Chin, chop, chip, and chap have the sound "ch."
4	clam/clap/clog/clue	Clam, clap, clog, and clue have the sound "cl."
5	crab/crib/cream/crow	Crab, crib, cream, and crow have the sound "cr."
6	draw/drip/drop/drum	Draw, drip, drop, and drum have the sound "dr."
7	flag/flat/flee/flog	Flag, flat, flee, and flog have the sound "fl."
8	free/frog/from/front	Free, frog, from, and front have the sound "fr."
9	grab/grass/green/grow	Grab, grass, green, and grow have the sound "gr."
10	knee/knife/knit/know	Knee, knife, knit, and know have the sound "kn."
11	plan/plop/plow/plum	Plan, plop, plow, and plum have the sound "pl."
12	press/prim/prop/prune	Press, prim, prop, and prune have the sound "pr."
13	scan/scar/score/scow	Scan, scar, score, and scow have the sound "sc."
14	she/shell/ship/shoe	She, shell, ship, and shoe have the sound "sh."
15	slam/sled/slip/slot	Slam, sled, slip, and slot have the sound "sl."
16	span/spell/spot/spill	Span, spell, spot, and spill have the sound "sp."
17	star/step/stop/stub	Star, step, stop, and stub have the sound "st."
18	swan/sweep/swell/swim	Swan, sweep, swell, and swim have the sound "sw."
19	the/that/this/them	The, that, this, and them have the sound "th."
20	thank/thick/thin/thing	Thank, thick, thin, and thing have the sound "th."
21	trap/tree/trim/trot	Trap, tree, trim, and trot have the sound "tr."
22	tweet/twig/twin/twist	Tweet, twig, twin and twist have the sound "tw."
23	what/when/where/white	What, when, where, and white have the sound "wh."

Topic 5 - Phonics: Subject 5d - Vowels

Lesson Words

Lesson Sentence

1	gate/day/name/base	Gate, day, name, and base have the sound "a."
2	nail/rain/bait/tail	Nail, rain, bait, and tail have the sound "ai."
3	hay/day/may/say	Hay, day, may, and say have the sound "a."
4	mare/bare/care/fare	Mare, bare, care, and fare have the sound "a."
5	fairy/hair/lair/pair	Fairy, hair, lair, and pair have the sound "ai."
6	hat/cab/ham/pan	Hat, cab, ham, and pan have the sound "a."
7	arm/farm/tart/dark	Arm, farm, tart, and dark have the sound "a."
8	bed/pet/red/ten	Bed, pet, red, and ten have the sound "e."
9	key/me/he/she	Key, me, he, and she have the sound "e."
10	jeep/beef/feed/see	Jeep, beef, feed, and see have the sound "ee."
11	meal/bead/heat/team	Meal, bead, heat, and team have the sound "ea."
12	chief/niece/ brief/piece	Chief, niece, brief, and piece have the sound "ie."
13	kite/bite/dice/tile	Kite, bite, dice, and tile have the sound "i."
14	hill/bit/lip/miss	Hill, bit, lip, and miss have the sound "i."
15	pony/open/bone/cold	Pony, open, bone, and cold have the sound "o."
16	top/cop/doll/nod	Top, cop, doll, and nod have the sound "o."
17	goat/boat/coat/toad	Goat, boat, coat, and toad have the sound "oa."
18	auto/audio/cause/naughty	Auto, audio, cause, and naughty have the sound "a."
19	coin/boil/noise/point	Coin, boil, noise, and point have the sound "oi."
20	boy/ahoy/loyal/foyer	Boy, ahoy, loyal, and foyer have the sound "oy."
21	boot/cool/moo/soon	Boot, cool, moo, and soon have the sound "oo."
22	book/cook/look/took	Book, cook, look, and took have the sound "oo."
23	mouse/foul/house/pout	Mouse, foul, house, and pout have the sound "ou."
24	flute/duke/cute/tune	Flute, duke, cute, and tune have the sound "u."
25	blue/glue/clue/true	Blue, glue, clue, and true have the sound "ue."
26	cup/fun/but/pup	Cup, fun, but, and pup have the sound "u."

Topic 5 - Phonics: Subject 5e - Effect of Final 'e'

Lesson Words

Lesson Sentence

1	bit/bite	The horse will bite the bit.
2	bar/bare	The bare hand can bend the bar.
3	can/cane	Grandfather can use a cane.
4	car/care	The man gives care to his car.
5	cut/cute	We will cut the cute plant.
6	din/dine	We dine with no din, please.
7	hat/hate	I hate that ugly hat.
8	her/here	I hold her here.
9	hid/hide	You hid. You did hide.
10	hop/hope	I hope he can hop.
11	far/fare	The train ride is for a far ride for a fare.
12	fir/fire	The fir tree is near the warm fire.
13	fin/fine	The fish has a fine fin.
14	kit/kite	The boy has a kit and a kite.
15	mad/made	The paint made the lion mad.
16	man/mane	The man keeps the mane clean.
17	not/note	I will not write the note tonight.
18	pin/pine	They pin a secret note on the pine.
19	rat/rate	The rat runs a faster rate.
20	rid/ride	Get rid of your work before you ride.
21	Sam/same	Sam went to the same store to shop.
22	sir/sire	Sir and his sire and mare are beautiful horses.
23	tam/tame	The tame horse has a yellow tam.
24	tot/tote	The tot can tote food for dinner.
25	twin/twine	These twin boxes are tied with twine.
26	us/use	Let us make use of a sign to the cave.

Appendix E - YourWordBox! Word List For Volume III

Topic 6 - Word Suffixes: Subject 6a - Pluralization

Lesson Words

Lesson Sentences

1 apple/apples	I see one red apple. I see two green apples.
2 bird/bird	One green bird flies. Two red birds fly.
3 cat/cats	One white cat runs. Two black cats run.
4 dog/dogs	One blue dog jumps. Two red dogs jump.
5 egg/eggs/	I see one blue egg. I see two red eggs.
6 fish/fishes	One red fish swims. Three green fishes swim.
7 goat/goats	One black goat eats. Three white goats eat.
8 hat/hats	I see one orange hat. I see two blue hats.
9 ice-cream/ice-creams	I see one red ice-cream. I see two green ice-creams
10 jelly/jellies	I see one blue jelly. I see three red jellies.
11 kite/kites	One red kite flies. Three blue kites fly.
12 lion/lions	One little lion runs. Three big lions run.
13 mouse/mice	One black mouse hops. Two white mice hop.
14 nut/nuts	I see one big nut. I see four little nuts.
15 oak/oaks	I see one brown oak. I see four green oaks.
16 pony/ponies	One brown pony jumps. Four black ponies jump.
17 queen/queens	I see one white queen. I see four black queens.
18 rabbit/rabbits	One black rabbit hops. Five red rabbits hop.
19 sailboat/sailboats	One green sailboat sails. Five orange sailboats sail.
20 tree/trees	I see one brown tree. I see five green trees.
21 umbrella/umbrellas	I see one orange umbrella. I see six blue umbrellas.
22 violin/violins	I see one brown violin. I see six cream violins.
23 watch/watches	One big watch tells time. Six small watches tell time.
24 xylophone/xylophones	One big xylophone plays. Two small xylophones play.
25 yarn/yarns	I see one red yarn. I see two green yarns.
26 zoo/zoos	I see one big zoo. I see two little zoos.

Topic 6 - Word Suffixes: Subject 6b - Past Tense

Lesson Words

Lesson Sentences

1	ask/asked	I ask for an apple. I asked for an apple.
2	bake/baked	I see the baker bake the cakes. The baker baked the cakes.
3	bark/barked	I hear the dog bark very loudly. The dog barked very loudly.
4	bump/bumped	I see the car bump a tree. The car just bumped a tree.
5	coo/cooed	I hear the bird coo. The bird cooed.
6	cook/cooked	I see father cook the eggs. Father cooked the eggs.
7	fish/fished	I see the boy fish in the lake. The boy fished in the lake.
8	hook/hooked	I see the boy hook a big fish. The boy hooked a big fish.
9	jump/jumped	I see the dog jump up. The dog jumped up.
10	kick/kicked	I see the boy kick the ball. The boy kicked the ball.
11	look/looked	I see the lion look at the mouse. The lion looked at the mouse.
12	open/opened	I open a jar of jelly. I opened a jar of jelly.
13	pump/pumped	I pump the tire. I pumped the tire.
14	moo/mooed	I hear the cow moo. The cow mooed.
15	quack/quacked	I hear the duck quack very loudly. The duck quacked very loudly.
16	use/used	I see the boy use a foot to kick. The boy used a foot to kick.
17	smell/smelled	I smell the cake. The cake smelled good.
18	till/tilled	I see the boy till the farm. The boy tilled the farm.
19	wax/waxed	I see the girl wax the floor. The girl waxed the floor.
20	wish/wished	I wish for a pony. I wished for a pony.
21	visit/visited	We visit the zoo. We came and visited the zoo.
22	x-ray/x-rayed	I see the doctor x-ray the foot. The doctor x-rayed the foot.
23	yawn/yawned	I see the lion yawn. The lion yawned.

Topic 6 - Word Suffixes: Subj. 6c -
Comparative/Superlative Degree

Lesson Words

Lesson Sentence

1	bare/barer/barest	It is bare, barer, barest.
2	big/bigger/biggest	The balls are big, bigger, biggest.
3	blue/bluer/bluest	It is blue, bluer, bluest.
4	creamy/creamier/creamiest	The clouds are creamy, creamier, creamiest.
5	dark/darker/darkest	It is dark, darker, darkest.
6	early/earlier/earliest	The birds are early, earlier, earliest.
7	funny/funnier/funniest	The clowns are funny, funnier, funniest.
8	green/greener/greenest	The grass is green, greener, greenest.
9	happy/happier/happiest	The pigs are happy, happier, happiest.
10	hot/hotter/hottest	The days are hot, hotter, hottest.
11	icy/icier/iciest	The roads are icy, icier, iciest.
12	jolly/jollier/jolliest	The first Santa is jolly, the second is jollier, the third is jolliest.
13	kind/kinder/kindest	The boys are kind, kinder, kindest.
14	little/littler/littlest	The goats are little, littler, littlest.
15	merry/merrier/merriest	The clowns are merry, merrier, merriest.
16	messy/messier/messiest	The cats look messy, messier, messiest.
17	new/newer/newest	The hats are new, newer, newest.
18	pink/pinker/pinkest	They are pink, pinker, pinkest.
19	quiet/quieter/quietest	The birds are quiet, quieter, quietest.
20	red/redder/reddest	The kites are red, redder, reddest.
21	small/smaller/smallest	They are small, smaller, smallest.
22	tall/taller/tallest	The trees are tall, taller, tallest.
23	unhappy/unhappier/unhappiest	They are unhappy, unhappier, unhappiest.
24	wet/wetter/wettest	They are wet, wetter, wettest.
25	young/younger/youngest	The goats are young, younger, youngest.

Topic 6 - Word Suffixes: Subject 6d- Adding 'ing' to a Verb

Lesson Words

Lesson Sentences

1	ask/asking	She will ask the children. She is asking the children.
2	blow/blowing	The wind will blow the kites. The wind is blowing the kites.
3	bark/barking	The dogs will bark. The dogs are barking.
4	bump/bumping	The car will bump the trees. The car is bumping the trees.
5	catch/catching	The girls will catch the ball. The girls are catching the ball.
6	coo/cooing	The birds will coo. The birds are cooing.
7	cook/cooking	Mother will cook the eggs. Mother is cooking the eggs.
8	eat/eating	The pony will eat the grass. The pony is eating the grass.
9	fish/fishing	The girl will fish. The girl is fishing.
10	fly/flying	They will fly closely. They are flying closely.
11	grow/growing	Art will grow taller. Art is growing taller.
12	hook/hooking	The girl will hook a big fish. The girl is hooking a big fish.
13	jump/jumping	The cat will jump on the bed. The cat is jumping on the bed.
14	kick/kicking	The boy and girl will kick the ball. The boy and girl are kicking the ball.
15	look/looking	Mother goat will look for little goat. Mother goat is looking for little goat.
16	moo/mooing	The cow will moo by the gate. The cow is mooing by the gate.
17	nail/nailing	Father will nail the doghouse. Father is nailing the doghouse.
18	open/opening	She will open the big box. She is opening the big box.
19	pump/pumping	The boy will pump the tires. The boy is pumping the tires.
20	quack/quacking	The ducks will quack. The ducks are quacking.
21	sail/sailing	The sailboats will sail fast. The sailboats are sailing so fast.
22	tell/telling	Grandfather will tell the children. Grandfather is telling the children.
23	visit/visiting	The children will visit grandmother. The children are visiting grandmother.
24	watch/watching	The boy will watch TV. The boy is watching TV.
25	x-ray/x-raying	The x-ray machine will x-ray father. The x-ray machine is x-raying father.
26	yawn/yawning	Little goat will yawn. Little goat is yawning.

Topic 7 - Adverbs: Subject 7a - Adverbs

<u>Lesson Word</u>	<u>Lesson Sentence</u>
1 angrily	The lion roars angrily.
2 badly	The lion hurts badly and he has a bad pain.
3 closely	All the birds fly closely.
4 deeply	The squirrel digs deeply.
5 evenly	She ices the cake evenly.
6 fast	The rabbit runs fast.
7 greatly	The boy grows greatly.
8 happily	The girls hop happily.
9 indeed	It is good indeed.
10 joyfully	The boy jumps joyfully.
11 kindly	The queen nods kindly.
12 lightly	He can kick lightly.
13 mildly	It is raining mildly.
14 nearly	The rabbit is nearly home.
15 only	He is only a little goat.
16 partly	The sky is partly dark.
17 quickly	The dogs wag quickly.
18 correctly	The watch tells time correctly.
19 sadly	I look sadly at the dog.
20 today	I eat ice-cream today.
21 up	The kite will fly up.
22 very	I like it very much.
23 well	He plays the xylophone well.
24 yesterday	I did bake yesterday.

Topic 7 - Adverbs: Subject 7b - Combining Adverbs and Verbs

Lesson Words

Lesson Sentence

1	asks/angrily	The mouse asks angrily.
2	bake/evenly	The cake will bake evenly.
3	catch/badly	The boy will catch badly.
4	digs/deeply	The squirrel digs deeply.
5	eats/fast	The goat eats fast.
6	fly/closely	The birds fly closely.
7	grows/greatly	The girl grows greatly.
8	hop/happily	The boys hop happily.
9	is/indeed	It is indeed a sunny day.
10	jumps/joyfully	The girl jumps joyfully.
11	kick/lightly	The girls kick lightly.
12	looks/mildly	The mother looks mildly.
13	makes/nearly	The rabbit makes nearly five hops.
14	nods/kindly	The queen nods kindly.
15	opens/partly	Mother opens the door partly.
16	pats/only	The boy pats only the brown pony.
17	quack/sadly	The ducks quack sadly.
18	runs/quickly	I call and the pony runs quickly.
19	sees/correctly	He sees correctly.
20	tell/today	I can tell the day today.
21	uses/well	He uses the rake well.
22	visited/yesterday	They visited the zoo yesterday.
23	wag/very much	The dogs wag very much.
24	x-ray/well	He can x-ray well.
25	yawns/very	The lion yawns very wide.
26	zip/up	He can zip up the zipper.

Topic 7 - Adverbs: Subject 7c - Adverbs and Adjectives

Lesson Words

- 1 am good/play well
- 2 are good/play well
- 3 is good/plays well
- 4 is good/plays well
- 5 is good/plays well
- 6 are good/play well
- 7 are good/play well
- 8 are good/play well
- 9 am quick/run quickly
- 10 are quick/jump quickly
- 11 is quick/eats quickly
- 12 is quick/hops quickly
- 13 is quick/wags quickly
- 14 are quick/dig quickly
- 15 are quick/pat quickly
- 16 are quick/fly quickly
- 17 am happy/bake happily
- 18 are happy/eat happily
- 19 is happy/hops happily
- 20 is happy/nods happily
- 21 are happy/jump happily
- 22 are happy/visit happily
- 23 are happy/quack happily

Lesson Sentences

- I am good. I play well.
You are good. You play well.
He is good. He plays well.
She is good. She plays well.
It is good. It plays well.
We are good. We play well.
You are good. You play well.
They are good. They play well.
I am quick. I run quickly.
You are quick. You jump quickly.
He is quick. He eats quickly.
She is quick. She hops quickly.
It is quick. It wags quickly.
We are quick. We dig quickly.
You are quick. You pat quickly.
They are quick. They fly quickly.
I am happy. I bake happily.
You are happy. You eat happily.
He is happy. He hops happily.
She is happy. She nods happily.
We are happy. We jump happily.
You are happy. You visit happily.
They are happy. They quack happily.

Topic 8 - Apostrophe: Subject 8a - Apostrophe

Lesson Words

- 1 I am/I'm
- 2 are not/aren't
- 3 is not/Isn't
- 4 is not/Isn't
- 5 is not/Isn't
- 6 are not/aren't
- 7 are not/aren't
- 8 are not/aren't
- 9 I am/I'm
- 10 are not/aren't
- 11 is not/Isn't
- 12 is not/Isn't
- 13 is not/Isn't
- 14 are not/aren't
- 15 are not/aren't
- 16 are not/aren't
- 17 I am/I'm
- 18 are not/aren't
- 19 is not/Isn't
- 20 is not/Isn't
- 21 is not/Isn't
- 22 are not/aren't
- 23 are not/aren't
- 24 are not/aren't

Lesson Sentences

- I am not young. I'm not young.
You are not young. You aren't young.
She is not young. She isn't young.
He is not young. He isn't young.
It is not young. It isn't young.
We are not young. We aren't young.
You are not young. You aren't young.
They are not young. They aren't young.
I am not tall. I'm not tall.
You are not tall. You aren't tall.
She is not tall. She isn't tall.
He is not tall. He isn't tall.
It is not tall. It isn't tall.
We are not tall. We aren't tall.
You are not tall. You aren't tall.
They are not tall. They aren't tall.
I am not funny. I'm not funny.
You are not funny. You aren't funny.
She is not funny. She isn't funny.
He is not funny. He isn't funny.
It is not funny. It isn't funny.
We are not funny. We aren't funny.
You are not funny. You aren't funny.
They are not funny. They aren't funny.

Topic 8 - Apostrophe: Subject 8b - Apostrophe
with the Verb "Do"

Lesson Words

Lesson Sentences

1	do not/don't	I do not catch fish. I don't catch fish.
2	do not/don't	You do not dig deeply. You don't dig deeply.
3	does not/doesn't	She does not eat fast. She doesn't eat fast.
4	does not/doesn't	He does not kick softly. He doesn't kick softly.
5	does not/doesn't	It does not hop fast. It doesn't hop fast.
6	do not/don't	We do not look happy. We don't look happy.
7	do not/don't	You do not run quickly. You don't run quickly.
8	do not/don't	They do not quack very much. They don't quack very much.
9	do not/don't	I do not bake today. I don't bake today.
10	do not/don't	You do not grow fast. You don't grow fast.
11	does not/ doesn't	He does not jump up. He doesn't jump up.
12	does not/ doesn't	She does not see you. She doesn't see you.
13	does not/doesn't	It does not tell time. It doesn't tell time.
14	do not/don't	We do not visit the zoo. We don't visit the zoo.
15	do not/don't	You do not use the umbrellas. You don't use the umbrellas.
16	do not/don't	They do not fly closely. They don't fly closely.
17	do not/don't	I do not x-ray today. I don't x-ray today.
18	do not/don't	You do not zip the bag. You don't zip the bag.
19	does not/ doesn't	He does not ask. He doesn't ask.
20	does not/ doesn't	She does not bake very much. She doesn't bake very much.
21	does not/doesn't	It does not wag its tail. It doesn't wag its tail.
22	do not/don't	We do not yawn. We don't yawn.
23	do not/don't	You do not nod. You don't nod.
24	do not/don't	They do not pat hard. They don't pat hard.

Topic 8 - Apostrophe: Subject 8c - Apostrophe
with the Verb "Have"

Lesson Words

Lesson Sentences

- | | | |
|----|---------------------|---|
| 1 | have no/haven't any | I have no umbrella. I haven't any umbrella. |
| 2 | have no/haven't any | You have no yarn. You haven't any yarn. |
| 3 | has no/ hasn't any | He has no hat. He hasn't any hat. |
| 4 | has no/ hasn't any | She has no hat. She hasn't any hat. |
| 5 | has no/ hasn't any | It has no fish. It hasn't any fish. |
| 6 | have no/haven't any | We have no apples. We haven't any apples. |
| 7 | have no/haven't any | You have no watches. You haven't any watches. |
| 8 | have no/haven't any | They have no eggs. They haven't any eggs. |
| 9 | have no/haven't any | I have no ice-cream. I haven't any ice-cream. |
| 10 | have no/haven't any | You have no jelly. You haven't any jelly. |
| 11 | has no/ hasn't any | He has no dog. He hasn't any dog. |
| 12 | has no/ hasn't any | She has no cat. She hasn't any cat. |
| 13 | has no/ hasn't any | It has no bird. It hasn't any bird. |
| 14 | has no/ hasn't any | He has no reindeer. He hasn't any reindeer. |
| 15 | has no/ hasn't any | She has no coat. She hasn't any coat. |
| 16 | has no/ hasn't any | It has no house. It hasn't any house. |
| 17 | have no/haven't any | We have no violins. We haven't any violins. |

Topic 8 - Apostrophe: Subject 8d - Apostrophe - Other Uses

Lesson Words

- 1 you are/ you're
- 2 he is/he's
- 3 it is/it's
- 4 we are/we're
- 5 they are/they're
- 6 was not/wasn't
- 7 were not/weren't
- 8 was not /wasn't
- 9 did not/didn't
- 10 could not/couldn't
- 11 should not/shouldn't
- 12 would not/wouldn't
- 13 will not/won't
- 14 I will/I'll
- 15 he will/he'll
- 16 we will/we'll
- 17 I have/I've
- 18 you have/you've
- 19 we have/we've
- 20 will not/won't
- 21 that is/that's
- 22 was not/wasn't
- 23 what is/what's
- 24 let us/let's
- 25 there is/there's
- 26 cannot/can't

Lesson Sentences

- You are a fine worker. You're a fine worker.
He is an old king. He's an old king.
It is a hungry tiger. It's a hungry tiger.
We are coming together. We're coming together.
They are everywhere. They're everywhere.
Everyone was not outside. Everyone wasn't outside.
The bikes were not inside. The bikes weren't inside.
The bear was not tall. The bear wasn't tall.
The sheep did not roar. The sheep didn't roar.
The kitten could not walk fast. The kitten couldn't walk fast.
They should not miss breakfast in the morning. They shouldn't miss breakfast in the morning.
The window would not open. The window wouldn't open.
The horse will not be hungry. The horse won't be hungry.
I will stand on my feet. I'll stand on my feet.
He will move the truck. He'll move the truck.
We will wait for the bus. We'll wait for the bus.
I have a big family. I've a big family.
You have lost the game. You've lost the game.
We have lived in the city. We've lived in the city.
I will not cry. I won't cry.
That is a surprise. That's a surprise.
Your room was not clean. Your room wasn't clean.
What is everyone making for lunch? What's everyone making for lunch.
Let us say good-by. Let's say good-by.
There is snow on the ground. There's snow on the ground.
That snake cannot hurt you. That snake can't hurt you.

Notes:

Appendix F - Theoretical Foundation of In-Context!

Note: This paper was originally written in October 1979 by Dr. Dorothy M. Loar as an answer to the questions which were arising in the educational community at that time concerning the use of computers in education, specifically for teaching young children how to read. The paper has been subsequently modified to show connections between the theory and its implementation in the Apple IIGS. Note that Topic 8, the Apostrophe, was added after the original writing. Dr. Loar felt that there was such wide misuse and misunderstanding of the apostrophe by students that it should become a part of this first implementation of the reading method.

Problem Statement

Why have reading instruction for pre-schoolers? Why not wait until the child has reached a later grade? Why introduce reading learning skills at such an early age? Why use the computer? There are four primary reasons for doing this:

1. We want to capture the attention of the child at his earliest stages for optimal development.
2. We want to satisfy the child's innate curiosity.
3. Organization in verbal material should be discovered at an early age.
4. It has been found that even three year olds can distinguish between graphic displays depicting objects and those containing letters.

We will cover these four reasons in more detail in the following sections.

1. The computer can be used to capture the child's attention because it is intriguing in its capability to combine pictures, human voice, and text. The mouse and keyboard allow the child to actively participate with his hands and the computer encourages him to make verbal responses.

At three years of age the child has the capacity to direct his behavior. His movements come under the control of his own verbal behavior. (DeCecco, p. 330) He responds not only to environmental stimuli but also to words and symbols which these stimuli evoke. (DeCecco, p. 331) Children's attention span can be stretched, their powers of concentration and perception can be enhanced. Henderson states that being read to in a variety of settings and being told stories are an incalculable advantage for the young child. (p. 2a)

It has been found that pictures presented with words facilitated the rate of learning of sight words. The best conditions appear to be the presentation of a picture plus a word followed by voice feedback. (RRQ p. 645) Donaldson explains this by stating that children's listening is chiefly directed at making sense of what is happening, what the speaker intends or wants them to do. (Child Ed. p. 7)

Gibson & Levin states that auditory perceptual analysis of words is an important skill for learning to read and that training in it helps and does show transfer, at least at the initial stages of learning to read. (Gibson & Levin, p. 260)

DeCecco adds: "The reading of words becomes inseparable from the hearing of words." (DeCecco, p. 377) "One learns to read by reading, by exercising the will to understand and to communicate." (Henderson, p. 5a)

Children need ongoing, systematic development of concepts and broadening of experiences - with each concrete experience children should be encouraged to talk, write, act out, or in some other way express what they are experiencing. (Reading T. p. 921) Eye-hand coordination

problems in a child may be prevented if the chance to manipulate the computer and express himself is presented early enough.

2. The child is curious about things and happenings in the world and has intrinsic motivation to get information about people, places, things, and events. (Gibson & Levin, p. 33) He can be further rewarded in reading because he finds out something. He can be further motivated because he can discover order and predictability. Word knowledge is bound to meaning and syntax. (Henderson, p.7a)

3. The ability to perceive order and abstract a simple rule can be attained with proper repetition. The child's internal regulation abstracts invariants and induces rules because of his intrinsic motivation to know, to find things out, to get what is ambiguous clear, and what is amorphous orderly. (Gibson & Levin, p. 264) The orderly presentation and development of rules in the computer reading program makes the attainment of these perceptual and cognitive abilities possible at an early age.

4. Three year olds can classify writing because of their learning of the component feature contrasts, then follow the differentiation of individual letters as unique shapes. (Gibson & Levin, p. 281) This sensitivity to difference in graphic materials comes about by having an abundance of graphic displays, comes from using the computer reading program, which because of its uniqueness, keeps the interest of the young child going. Henderson states that being read to in a variety of settings and being told stories are an incalculable advantage for the young child. (p. 81)

In addition to the computerized learning to read situation and the use of a workbook, there is a storybook which may be read after certain subjects. The vocabulary is enhanced by new words which challenge the child in interpretation and in using his imagination.

Bettelheim stresses repeatedly that the material used for beginning reading should be meaningful to the child. Meaning should take preference over all technical considerations, although these, too, have a significant place in reading instruction. (p. 191) Even young children know that the word itself is not important, but the meaning it has for them is. (p. 199)

Interesting and meaningful texts should be used. The learner will strive for word recognition so that he can get at the meaning of what he is reading. What are needed are beginning texts that fascinate children, and convince them that reading is both delightful and helps one to gain a better understanding of oneself and others. (p. 263)

Solution

Given those four reasons for using a computer to teach young children to read, then how would one theoretically implement a reading method on a computer? To answer that question, we now present eight design guidelines for YourWordBox! which have their roots in this theoretical foundation.

1. The connection between the sound of language and the printed look of language must be made in a way that is meaningful to the child. He hears the structure of language, the logical subject, verb, object sequence. He realizes (without being burdened with definitions too frequently) that nouns are names of things, that verbs are the actions involved, that adjectives describe nouns and adverbs describe verbs. "Our studies suggest so clearly that word knowledge is bound to meaning and syntax." (Henderson, p. 81)

The child hears a sentence that is related to something meaningful in his environment and can visualize the things named, the action taken, the description of the things, and actions that make them unique.

Meaningful grammatical sentences are powerful considerations for young readers, who operate under the assumption that the sentences they read should make sense. (Gibson & Levin, p. 334) One of the major effects on verbal learning is meaningfulness, that is, the number of different associations elicited by a verbal unit. (DeCecco, p. 334) In order to introduce in a meaningful way new vocabulary or different usage of familiar vocabulary, the computer presents a visual background in conjunction with the spoken language. Colors, shapes, actions, and modes are closely related to the vocabulary so that no ambiguity occurs. Then the child can

relate the printed word to the sound and to the visual image to which it is associated. The more frequently the words are experienced the more available they are as responses in new associative connections. The computer increases the speed of the learning and retention by use of repetition of meaningful vocabulary. Occurrences of these words in natural language is clearly sufficient to insure their early mastery on a recognition basis. (Henderson p. 51)

2. The computer is able to assist in that it has another major effect on verbal learning in the process of verbal mediation. (DeCecco, p. 337) The child talks to himself in a relevant way, sometimes inaudibly or unconsciously, when faced with something to be learned or a problem to be solved. The computer provides for this verbal mediation in allowing the child time to think about the solution and then finally audibly verbalizing it. Pictorial mediators also are important in verbal learning, so the computer provides these mediators simultaneously with the attempts at solutions.

3. The child's logical understanding of the structure of language, his knowledge of rules, is indicated by consistent and orderly answers for grammatical structure. Children of three and four years are aware of parts of speech and use this knowledge as clues to the meaning of words. (DeCecco, p. 375) For this reason the computer presents the printed word as part of a whole unified concept. The printed word then is not only part of a bigger concept such as one contained in a paragraph or story, but also part of the concept in a complete sentence. The complete sentence is presented by the computer as part of the whole paragraph or story. "Children first must have an extended and supported experience with natural text." (Henderson, p. 86)

4. The flow of speech accompanies the presentation of the printed sentence so that the child grasps the idea of the flow of the sentence. The computer presents the speech simultaneously with the printed words so that the child can see the left to right progression across the line of

printing. A second flow of speech accompanies the printed sentence in its entirety before the child is asked to repeat the sentence. Words cannot be separated from the continuous flow of speech. (HER, p. 387) "The initial grasp of the word unit is achieved by the children tacitly. By slowing down the pace of 'talk' and speaking to the print, the temporal-spatial match between spoken and written word is made, the significance of space and pause emerges, and the concept of word gradually crystallizes. The store of tacit knowledge of the pre-reading child awaits release until that time that word boundaries are discerned and the concept of word is attained. The dividing line between nonreading and reading is crossed at a rush." (Henderson p. 88) "Reading does not emerge from a sight vocabulary - vocabulary emerges from reading." (Henderson, p. 13b)

5. The new vocabulary to be learned, the single word, either noun, verb, adjective, or adverb, is isolated from the sentence. It is necessary to present the word in a meaningful context. Some single words [are learned] by the settings in which they are found. (Hrwd. Ed. Rev. p. 387) The computer relates the new vocabulary to the visual presentation. It is pronounced and the child is asked to repeat it. To ensure the child's understanding of the repeated word, he is asked by the computer to identify the word which is presented in a small group of words. A method of measurement of the retention of verbal learning is the recognition which has the child select from a series of items those which are responses learned. (DeCecco, p. 356) Thus the repetition of the meaningful word in speaking and in identification hastens the learning and prolongs the retention of the word in the child's sight vocabulary.

6. The computer confirms correct responses to reinforce them. The feedback or knowledge of results increases his verbal learning. This confirmation is immediate to prevent incorrect learning and to encourage the child to progress toward greater success. The confirmation consists of verbal rewards and animated graphics.

7. "It is desirable that the text be in language that is semantically and syntactically honest." (Henderson, p. 90) The program introduces nouns as the beginning sight words which the child must identify [Topic 1]. Beginning sight words ought to be names of tangible, concrete, perceivable things or persons. Parts of speech other than nouns, however, become familiar because of repetition in the stories and in the printed sentences. Verbs as sight words to be identified are the next group of words to be learned.[Topic 2]. The actions are related to the nouns previously learned. Adjectives are the third group [Topic 3] of words and adverbs are the fourth group [Topic 7]. The computer presents and reinforces the relationship among the learned nouns, verbs, adjectives, and adverbs.

8. "Demanding auditory discrimination responses for phonemic elements of words before words themselves are conceptually stable is an example of very rigid inappropriate standards." (Henderson p. 89) Therefore, the alphabet is introduced after nouns, verbs, and adjectives [Topic 4] The alphabet is presented as initial letters in the lesson words. The sounds of letters and the sight of them can be associated because of continued practice. The alphabet is also used in the substitution of different letters to make new words. "Experience with written language, letters, words, sentences - will be necessary on a fairly extended basis before actual letter and word identification can occur. Letters may not be taught or learned at one time. The abstract meaning of a letter is the feature system derived from all letters and thus undeducible from a single exemplar. Once the distinctive features of letters are grasped, the association of the name to each letter is a simple, almost automatic and inevitable thing." (Henderson p. 83)

The repetition of the substituted letters in making various new words reinforces the association of the sound and the sight of the letters. The ability to recognize new words is increased because a tool has been provided. Phonetic analysis is painlessly introduced [Topic 5]. Gibson & Levin emphasize the importance of structure within the word and getting the child to

notice it. (Gibson & Levin, p. 297) Fries believes that the spelling pattern approach does develop the connections between alphabetic sign of reading and sound patterns of talk. (Gibson & Levin, p. 99) Learning to abstract spelling patterns involves active participation by the scholar, not memorizing a verbal rule or simply being shown. (Gibson & Levin, p. 301)

Conclusion

Using the computer provides the child an incentive for learning. The manipulation of controls which cause the appearance on the screen of words and pictures and the sounds of those words and sentences, makes the learning process enjoyable because the child appears to be controlling the process. His attention span is increased because of the interest generated. His powers of concentration and perception are also increased. Learning becomes a wonderful challenge as he becomes aware of more and more vocabulary and the relationships among words.

Individualization is possible by using the computer in learning because the child may begin independent use of the device at any step or level. Until the child develops facility in manipulation of the controls, he may be assisted by anyone else, a teacher, a teacher's aide, a peer, a more advanced student, and/or a parent. The urge to perform independently and to be successful will propel the child toward learning the operation on his own and to develop his vocabulary.

References

Bettelheim, Bruno & Karen Zelan (1982) On Learning to Read, Vintage Books, Random House, Inc. New York.

Child Education (July 1979).

DeCecco, John P. (1968) The Psychology of Learning and Instruction. Prentice-Hall, Inc. Englewood Cliffs, New Jersey.

Gibson, Eleanor J. and Harry Levin (1975) The Psychology of Reading. The MIT Press, Cambridge, Massachusetts.

Harris, Albert, and Sipay, Edward (1985) How to Increase Reading Ability, Longman, Inc., 95 Church Street, White Plains, New York 10601.

Harvard Educational Review (August 1977).

Henderson, Edmund H. (1981) Learning to Read and Spell, Northern Illinois University Press, DeKalb, Illinois Reading Research Quarterly (1978-1979) Volume XIV, No 4.

The Reading Teacher (May 1979).

Notes:

Appendix G - Self-Focused Attention and Learning to Read with YourWordBox!

Note: As the YourWordBox! program evolved over the years, much work was being done concurrently in psychology in the area of self-focused attention as it pertains to the encoding and retrieval processes. The notion of having the child "own" the lesson words (self-focus) is derived from this theoretical body of literature. The implementation of that notion is the "wordbox," a device which the child feels that he or she owns and in which he or she deposits the words which were learned during the reading session. During the review at the end of each subject the child's wordbox opens and the words fly out, one word at a time, as they are spoken. Thus, the child can see and hear the words that he or she owns and the sense of ownership is reinforced. The sense of ownership is also reinforced in four other ways. First, the child either selects the lesson words with the mouse or types in the words. By the time the child has finished one lesson he or she knows what is to come, that is, the words that are being identified or typed in will become his or her own at the end of the lesson. Second, prior to putting the words into the wordbox, the child actually moves the words around on the screen with the mouse and the words are spoken during this manipulation. Third, the wordbox becomes symbolic of the child's ownership of the words. The wordbox is, therefore, present in all of the student's screens in the same place (lower right-hand corner). Because of its consistency, the child also feels stability in his or her ownership. Fourth, the message "Now the word(s) ____, ____, ____, and ____ is (are) all yours" personalizes the learned word.

Terry W. Loar is the author of this paper. It is excerpted from several papers which he wrote in 1987 and 1988.

During the fetal stage of development the neuronal activity which occurs in our brains is exclusively self-focused. The encoding process does not know that any non-self organism exists. It has not yet learned, through its yet undeveloped sensory channels, that there is an outside world. It is very self-centered. As the organism develops in the post-natal environment the first several months continue to be self-centered and it is not until 7-36 months that the infant gradually begins to view himself or herself as being a part of a bigger whole (Osofsky, 1979).

Neuronal development will never accelerate at such a rapid pace as it did during these first few months, the months during which the organism is learning to learn (Papalia and Olds, 1978, pp. 58-62). It seems safe to conclude, then, that the organism and the learning process are, in very fundamental and natural ways, self-focused.

The point here is really very simple. If an organism learns to do something in a particular way it will tend to do similar tasks in the same way in the future because using the previously established neural associative links is the path of least resistance, that is, it is more efficient. If a new datum or concept is introduced, then that datum or concept will be encoded according to the learning structure that was previously laid down. If that material is self-referent then it will form more neural associations (links) within the naturally self-oriented structure. Likewise, if the material is learned when the organism is in a self-focused state then more neural associations will be made because the majority of the existing structure is also referenced to the self. If the material is non-self-referent or if it is learned in a non-self-focused state, then not as many neural associations will be established because during encoding the learning state and the material will not as easily "find" familiar "territory" with which to connect. Once encoded, the material which has more associative links which are more efficiently connected will be recalled more easily, that is, through the path of least resistance.

Associative Network Theory suggests that the greater the number of associative links that are formed for an encoding process the stronger the memory (Bower, 1981). Much of the recent research in this area and this body of knowledge is based on the work which Gordon Bower and his colleagues have done at Stanford University.

Self-theorists have proposed that one's self-schemata, consisting of general and specific information about the self and structured out of past experience, provides an organizing function in memory such that individuals selectively tend to learn and remember what is most

salient in the processing of social stimuli (Markus, 1977). It is generally assumed that, once formed, self schemata remain relatively stable with respect to the processing of self-referent information. Wells, et. al. (1984), base their research on the notion that self-schemata are cognitive structures that represent organized knowledge about the self. These structures serve to "influence the selective attention to information, to enhance memory for schema-relevant information, and to facilitate 'going beyond the information given' in making references and predictions, among other functions (p. 574).

Ferguson, et. al. (1983) hypothesized that the encoding and retrieval of trait adjectives are facilitated by rating them for the descriptiveness of familiar objects, the self or well-liked person. This rating would classify them by an evaluative process and they would be stored as well-organized schemata. They found, in their experiments, that evaluation was a significant factor in the encoding and retrieval of personal information and that the information was organized with respect to its evaluation. In addition, Rogers, Kuiper, and Kirker (1977) used self-reference as an encoding device and they compared self-referencing of information to several encoding processes. They demonstrated that when stimulus material was judged for its self-descriptiveness, trait adjectives were rated faster and were better recalled than when rated only for their structural, phonemic, or semantic characteristics.

Somewhat related, there is a "depth of processing" paradigm which proposes that information can receive varying degrees of elaboration where elaboration is thought to determine the cognitive depth of processing, referring to how completely the information is perceived, understood, and remembered. It describes a process for encoding information into memory in terms of different levels of complexity (Craik and Lockhart, 1972; Craik and Tulving, 1975). Empirical research has generally supported this cognitive model. Information processed on a structural level is less memorable when retrieval is measured on incidental recall tasks than

information that has been processed on the basis of meaning (Craik and Tulving, 1975). According to this model, the YourWordBox! lesson words which the student puts into his or her wordbox would have a more elaborate depth of processing than those which are contained in the lesson sentence but which do not get put into the wordbox. They would, in theory, be more easily retrieved.

Klein and Kilstrom (1986) interpret the current research to suggest that self-reference produces a "more elaborate memory trace" than semantic encoding. In fact, these traces are thought to be the most highly elaborated structures in memory (p. 26). They explain that there is a difference between elaboration and organization. Elaboration refers to encoding operations performed on a single word which transform it independently of other words by forming multiple connections between it and related material in memory. Organization is a process of grouping words that go together according to some semantic criterion. Bower (1981) discusses the intensity of the links in his Associative Network Theory.

In YourWordBox! we attempt to provide a congenial and positive environment for the child. We also provide many rewards, even for less than perfect responses. We run the animation sequence regardless of the child's response, for example. We did this intuitively, and an empirical study by Mischel, Ebbeson and Zeiss (1973) supports this. They found that when subjects experienced positive outcomes they attended for a greater period of time on personal assets than did those subjects who experienced failure. "Specifically, after a success experience subjects attended more to positive information about the self." Thus, success (positive feelings) has also been found to influence attention to self. Hopefully, hearing the rewards and seeing the animation will hold the child's attention in a positive way such that he or she will make more associative links on the encoding of the next set of words.

Conclusion

We have presented the theoretical foundation for using a self-focusing mechanism in YourWordBox!. This implementation seems to be well grounded in recent psychological research.

References

- Bower, G. H. (1981). Mood and Memory. *American Psychologist*, 36(2), 129-148.
- Craik, F. I. M., & Lockhart, R. S. (1972). Levels of processing: A framework for memory research. *Journal of Verbal Learning and Verbal Behavior*, 11, 671-684.
- Craik, F. I. M., & Tulving, E. (1975). Depth of processing and the retention of words in episodic memory. *Journal of Experimental Psychology: General*, 104, 268-294.
- Ferguson, T. J., Rule B. G. & Carlson, D. (1983). Memory for personally relevant information. *Journal of Personality and Social Psychology*. 44(2), 251-261.
- Klein S. B. & Kihlstrom, J. F. (1986). Elaboration, organization, and the self-reference effect in memory. *Journal of Experimental Psychology*. 115(1), 26-38.
- Markus, H. (1977). Self-schemata and processing information about the self. *Journal of Personality and Social Psychology*, 35, 63-78.
- Mischel, W., Ebbesen, E. B., & Zeiss, A. R. (1973). Selective attention to the self: Situational and dispositional determinants. *Journal of Personality and Social Psychology*, 27, 129-142.
- Osofsky, J. (ed.). (1979). *Handbook of infant development*. New York: Wiley.
- Papalia, D. E., & Olds, S. W. (1979). *Human development*. New York: McGraw-Hill.
- Rogers, T. B., Kuiper, N. A. & Kirker, W. S. (1977). Self-reference and the encoding of personal information. *Journal of Personality and Social Psychology*, 35(9), 677-688.
- Wells, G. L., Hoffman, C. & Enzle, M. E. (1984). Self versus other-referent processing at encoding and retrieval. *Personality and Social Psychology Bulletin*, 10, 574-584.

Additional Reading

This bibliography is presented for those who are interested in doing further reading in the area of self-focused attention and learning. It additionally addresses the affective and cognitive links in the encoding process. These works represent some of the root papers for the relevant research in this area.

Bower, G.H.; Monteiro, K.P., and Gilligan, S.G. Emotional Mood as a Context for Learning and Recall. *Journal of Verbal Learning and Verbal Behavior*, 1978, Vol. 17, 573-585.

Bower, G. H., Gilligan, S. G., & Monteiro, K. P. (1981). Selectivity of learning caused by affective states. *Journal of Experimental Psychology: General*, 110, 451-473.

Carver, C. S. & Scheier, M. F. Attention and self-regulation: A control-theory approach to human behavior. Chapter 6, *Focus on the self: Perception of self-aspects*, 95-116.

Exner, J. E. (1973). The self-focus sentence completion scale: a study of egocentricity, 37, 437-455.

Gilligan, S. G. & Bower, G. H. (1983). Reminding and mood-congruent memory. *Bulletin of the Psychonomic Society*, 21, 431-434.

Hilgard, E. R. (1980). The Trilogy of Mind: Cognition, Affection, and Conation. *Journal of the History of the Behavioral Sciences*, Vol. 16, 107-117.

Nasby, W., & Yando R. (1982). Selective encoding and retrieval of affectively valent information: Two cognitive consequences of children's mood states. *Journal of Personality and Social Psychology*, 43, 1244-1253.

Notes:

Appendix H - Critique Form

Name: _____

Date: _____

Organization: _____

Phone: (____) _____

Position: _____ Reply requested? _____

Address: _____

1. General Critique of YourWordBox!:

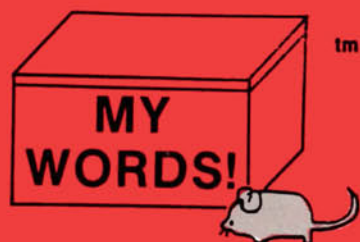
2. Please rank YourWordBox! with other reading software/courseware for ages 4-7.

3. Specific Criticisms, Comments, and Suggestions:

Mail to:

The WordBox! Company
P. O. Box 1115
Belmont, California 94002

Notes:



The WordBox!™ Company
P.O. Box 1115
Belmont, California 94002