Many reading teachers, cognizant of the creative opportunities for skill development allowed by new reading-writing software, are choosing to use microcomputers in their classrooms full-time. Adventure story creation programs capitalize on reading-writing integration by allowing children, with appropriate assistance, to create their own "choose-your-ending" stories using the computer. These stories present to the child a series of options through which the story develops. "Story Tree" is a good example of this software. "That's My Story" and "The Playwriter Series" are similar, but are designed for younger children and need less teacher monitoring, while "The Writing Adventure" and "AdventureWriter" are more educationally sophisticated programs. A successful plan for teaching the use of complex adventure story creation software might include (1) training teacher aides in advance to use the program, (2) introducing the program to the class in a large group demonstration, (3) assigning group writing experiences for increased peer feedback and interaction, (4) establishing a disk library of stories as part of the regular classroom program, and (5) copying the file disks that contain students' created stories and trading them with other classes. An increasing variety of software which focuses on reading-writing integration, particularly "meaning-centered" software, is being offered to teachers. (A list of adventure story creation programs, publishers, and prices is included.) (JD)
MICROCOMPUTER ACTIVITIES WHICH ENCOURAGE
THE READING-WRITING CONNECTION

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Paper presented at the Keystone State Reading Association,
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An example of a new genre of software which capitalizes on these principles is called the adventure story creation program. This software is based on the choose-your-ending adventure story which has been popular with children for the past several years. In a choose-your-ending story, the child reads a page, then is presented with a variety of options. For example, in a story about pirates, the page might end with the following:

Suddenly, a voice cried out, "Ship ahoy! She's flying the skull-and-crossbones!"

Readers are then presented with several options. For each option choice, they are directed to turn to a different page which describes the outcome of the choice.

What should the captain do next?
1. Raise more sail and try to run away. (Turn to page 50.)
2. Turn about and arm the cannons. (Turn to page 51.)
3. Raise the white flag to surrender. (Turn to page 52.)

From these pages, different options are again presented. Children usually look through each of the options as they read the book, exploring the variety of possible outcomes. Many choose-your-ending books are available in bookstores. If your children are not familiar with the style of such books, it would be helpful to buy some for the classroom library before using the microcomputer activities.

Adventure creation software allows youngsters to create their own choose-your-ending stories with the help of the computer. The packages often include several sample stories. All stories created by the children can be stored on blank disks and read as often as desired. In addition, children should be encouraged to expand on stories they or others have already created, adding new plot elements and characters in an on-going project.

Children cannot be expected to be able to simply turn the computer on and independently figure out how to work an adventure creation program. Close attention to the printed directions is required. Ten or eleven-year-olds will need an adult to teach them how to use most programs. Younger children will need a constant adult presence in order to use the program. The best idea with very young children is to have them dictate their stories as an adult types. Computer-literate students in secondary grades are able to study the documentation and learn to
use these programs with minimal teacher instructions.

**Story Tree** serves as a good example of this software. The top of the screen display is allotted to the story. The bottom of the screen page describes the options.

As the morning wore on, the wind picked up, filling the sails and increasing our speed westward. The crew went about its daily routine, scrubbing decks and making the dozens of necessary small repairs to sails and woodwork. The captain strolled about the deck, inspecting the boat and its crew.

Suddenly a voice cried out, "Ship ahoy! She’s flying the skull-and-crossbones!"

What should the captain do next?
1. Raise more sail and try to run away.
2. Turn about and arm the cannons.
3. Raise the white flag to surrender.
   [Press 1, 2, or 3]

Student story writers build their stories in screen pages. Each page contains some text. Most also contain options. The writers are able to direct the program from each option choice to specific screen pages. That is, when the reader chooses option one, the program moves to a specific screen page which will describe what happens if the ship tries to sail away from the pirates. If the reader chooses option two, another screen page is displayed and the story moves in a different direction.

**That’s My Story** and **The Playwriter Series** are similar adventure creation programs that can be used with younger children and with less teacher monitoring due to increased simplicity of design. After each frame in **That’s My Story**, children are prompted to complete "What if...?" questions: "What if the pirates attack?" "What if the wind suddenly dies down?" From these nodes within the organization tree structure, the students then write frames describing each possible action. The program is so easy to use that a computer user experienced in word processing can figure out most of the directions without referring to the manual. Increased simplicity involves decreased flexibility in terms of story arrangement, however. Both programs allow students to start off with some prewritten story starter frames or to write their own story beginnings.

Programs for younger children usually offer more structure than **Story Tree**. **That’s My Story** includes 40 prewritten story starter frames, and students can also write their own story beginnings. **The Playwriter Series** involves even greater structure, as students create stories according to predetermined formats. Much of the work is done by choosing options (such as key events) from a multiple choice listing which automatically
inserts prewritten sentences in the students' stories.

Perhaps the most educationally sophisticated, yet easy-to-use adventure creation program available commercially is The Writing Adventure. The program allows for a great deal of student independence from teacher supervision as it guides students through each of the major stages of the writing process. Basic plot outlines are presented in high resolution pictures and text. Students type notes of ideas for their own stories, which are stored on disk for later reference.

They then use a simple word processor included in the program to write and edit the story itself. A unique style and grammar checking program analyzes the students' stories for possible weaknesses and errors. This checker program informs the students as to the location of possible problems (for example, who-whom confusions or overuse of "to be" verbs), presents the relevant grammar or stylistic rule, and allows the students to make any necessary changes in their stories. A final draft can be printed in hard copy.

Another adventure creation program is called AdventureWriter. Far more complex and flexible than even Story Tree, AdventureWriter is actually designed for the serious adult computer gamer. It takes several hours to learn to use, with a 115-page manual, and hours more to actually create a story.

An "interpreter" is the heart of the program. It structures the information within a student-written database to actually create and carry out the game. It also deals with input from the game players. It can recognize one- and two-word phrases, such as "Run" and "Walk west." The interpreter will also search longer inputs to find words or phrases it can identify.

One of the advantages of AdventureWriter is that the stories and illustrations can be stored on disks and run at any time without the actual master disk. A high school class project using the program must involve a major commitment of time, however. A small group of highly interested students might be willing to put in the amount of effort required. Perhaps the best approach to using such a program with an entire class is to assign a few highly interested students the task of actually entering material into the database and arranging it into a cohesive, workable format. The bulk of students could be assigned the task of writing the necessary scenarios.
Organization for Instruction

Careful planning is crucial to success when using complex software such as the story-creation programs. Care must be taken to choose programs sufficiently complex to provide students with a challenge but easy enough for the age group not to be overly confusing. A five-step plan of action might include the following:

1. Train 2 or 3 student assistants or a teacher aide to use the program before using it in class. Teacher-time should be spent on monitoring and providing feedback on writing style and content, not on low-level operation mechanics. Be very careful about confusing your students by using more than one of these complex programs. The different sets of commands for each can create havoc.

2. Introduce the program to the class in a large-group demonstration. Provide exact written directions on handouts, instruction manuals, or posters for later reference. Insist that students carefully study written directions. Introduction of a program like this would be an ideal time to review following directions skills. Wagner, O'Toole and Kazelskis (1985) have found that instructor demonstration of word processing program operation to classes resulted in more writing and better motivation than either independent study of manuals or lecture.

3. Assign group writing experiences for increased peer feedback and interaction. Allowing students to work in small groups also results in students working together to solve low-level "how-to-do-it" problems.

Do not assume that simple use of word processing technology will automatically improve language skills. The teacher's critique and constant monitoring of production remains vital. Graves' (1983) work with the development of the writing process has shown that adults must work with students during writing rather than waiting until after the writing is finished.

If computer time is scarce due to lack of facilities in your classroom, have students write out the stories in long-hand first, then type them into the computer. This helps avoid confusing students by overloading them with demands for typing ability, knowledge of word processor commands, and creativity all at the same time.

4. Establish a disk library of stories and make this reading part of the regular classroom program. When the assignments are based on children's reading of printed books, keep copies of the books available in the classroom library. Encourage students to make additions to stories created by other students. By chaining together story disks (for example, including directions at points within the story to go on to other
disks which continue the story). Teachers can make the creation of a super-large story into a year-long project.

Allow those students who develop deep interest to continue using the program indefinitely—in place of other projects or for extra credit. Teachers may well find that the excitement about writing will result in better achievement than turning students’ attention back to grammar and spelling drills.

5. Copy the file disks which contain student-created stories and trade with other classes and other schools through the mail. One interesting project is to have older students create story disks for younger children, then visit the youngsters’ classrooms to read the stories. Local and state reading councils, as well as the International Reading Association’s Special Interest Group on Microcomputers in Reading, can act to put teachers using the same software in touch with one another.

Other Types of Software

Adventure story-creation software is only one of an increasing variety of high-interest word processor-based programs which lend themselves to reading-writing integration.

For beginning readers, programs such as Story Machine and Kermit’s Electronic Storymaker provide animated on-screen action to illustrate sentences typed into the computer. Tinker Tales provides a highly structured approach to children’s story creation, with a format much like the choose-your-own-ending adventure stories described earlier but with topics more appropriate to younger children.

Programs such as Bank Street Story Book and Story Maker allow students to type text on the screen pages, then illustrate each page using a high resolution graphics subprogram. Story Maker: A Fact and Fiction Tool Kit allows the students to insert pre-drawn high resolution figures for increased ease of illustration.

The Playwriter’s Theater uses a voice synthesizer to allow students to create on-screen dramas in which characters actually speak their lines. Software such as The Newsroom, designed to make professional-looking classroom newspapers, is another exciting application of the computer to the language arts. Print Shop is yet another popular program which allows students to create banners, cards, signs and stationery.

In conclusion, teachers are offered an increasing variety of meaning-centered software which encourages students to see the close relationship between reading and writing development.
These programs require more study and planning for successful classroom application than the typical computerized drill software. But many microcomputer-using reading teachers, having once seen the creative opportunities for skill development allowed by these newer programs, are abandoning their drills and are now devoting their microcomputers full-time to this reading-writing software.
REFERENCES

Graves, Donald H.  Writing: Teachers and Children at Work.  
Exeter, NH: Heinemann, 1983.

Wagner, William G., O’Toole, William M., and  
Richard Kazelskis.  "Learning Word Processing Skills  
with Limited Instruction: An Exploratory Study with  

SOFTWARE

AdventureWriter  
Codewriter Corporation, 1983  
5605 W. Howard St.  
Niles, IL 60648  
With graphics: Commodore 64, Apple II series ($50.00)  
Without graphics: Atari, IBM-PC ($40.00)

Bank Street Story Book  
Mindscape  
3444 Dundee Road  
Northbrook, IL 60062  
Apple, IBM-PC, Commodore 64  
$39.95

Kermit’s Electronic Storymaker  
Simon & Schuster  
Simon & Schuster Building  
1230 Avenue of Americas  
New York, NY 10020  
Apple I series ($34.95); Commodore 64 ($29.95)

The Newsroom  
Springboard Software  
7807 Creekridge Circle  
Minneapolis, MN 55435  
Apple II series, IBM-PC, Commodore 64  
$49.95

PlayWriter Series  
Woodbury Software  
127 White Oak Lane  
Old Bridge, NJ 08857  
Apple II series  
$39.95 each for Adventures in Space, Tales of Me,  
Mystery!, and Castles and Creatures

Playwriter’s Theater  
Jostens Learning Inc.  
600 West University Drive  
Arlington Heights, IL 60004  
Apple II series (requires Ufonics Voice System)  
$98.00

Print Shop  
Broderbund Software
17 Paul Drive  
San Rafael, CA 94903  
Apple II series ($49.95), Commodore 64, Atari ($44.95)

Quill  
D.C. Heath  
125 Spring Street  
Lexington, MA 02173  
Apple II series  
$150.00

Story Machine  
Spinnaker Software  
215 First Street  
Cambridge, MA 02139  
Apple II series, IBM-PC  
$34.95

Story Maker  
Sierra On-Line  
Coarsegold, CA 93614  
Apple II series  
$34.95

Story Maker: A Fact and Fiction Tool Kit  
Scholastic  
PO Box 7502  
2931 East McCarty Street  
Jefferson City, MO 65102  
Apple II series  
$95.00

Story Tree  
Scholastic  
Apple II series, IBM-PC, Commodore 64  
$99.95

That's My Story  
Learning Well  
200 South Service Road  
Roslyn Heights, NY 11577  
Apple II series  
$59.95

Tinker Tales  
Compu-Teach  
240 Bradley Street  
New Haven, CT 06510  
IBM-PC  
$49.95  
1985

The Writing Adventure  
Formerly, AdventuWrite  
DLM Teaching Resources  
One DLM Park  
PO Box 4000  
Allen, Texas 75002  
Apple II series  
$59.95