ABSTRACT
        The approach to computer-based instruction for third
and fourth grade elementary students which is sketched teaches
component placement, capitalization, and punctuation skills of
addressing envelopes within the context of a simulated envelope. Part
of a larger design for a complete program of composition instruction,
this program comprises a set of materials for use on a microcomputer
which can be used as a discrete unit of instruction. The skills
taught are identified, i.e., placing the address and return address
in the correct space on an envelope; capitalizing persons' names;
capitalizing personal titles; capitalizing the names of streets,
cities, and states; and using a comma to separate city and state.
Then, the orientation procedures students undertake after they have
loaded the program disk are discussed, the mainline instruction and
practice is outlined, and the corresponding branching that occurs in
response to students' performance on the tasks is described. The
reporting system that provides information for teachers on the
progress of all students using the program is also explained.
(Author/LMM)

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COMPUTER-BASED INSTRUCTION ON SKILLS FOR ADDRESSING ENVELOPES

Ann Humes

ABSTRACT

An approach to elementary-school computer-based instruction is
presented for teaching students component placement, capitalization,
and punctuation skills of addressing envelopes within the context of a
simulated envelope. The skills taught are identified, and the initial
orientation procedures are discussed. Then instruction and practice
are outlined, and the corresponding branching for students' responses
is described. A reporting system that allows the teacher to follow
student progress is also described.

COMPUTER-BASED INSTRUCTION ON SKILLS FOR ADDRESSING ENVELOPES

.Ann Humes

Several microcomputer programs are available that deal with math and science. However, relatively few are available for teaching students to write. Yet computers can serve a vital function in composition instruction. One approach is to use the computer to provide appropriate primary instruction and practice and appropriate supplementary practice on skills that would otherwise require considerable teacher time.

This paper sketches instruction for third and fourth grade elementary school students. The instruction teaches a set of related skills in a relevant context. The set is part of a larger design for a complete program of composition instruction that includes a set of materials for use on a microcomputer. The context of instruction is an envelope, and the skills are those needed to place the address and return address correctly on an envelope and to capitalize and punctuate the addresses.*

In the first section, this paper notes the skills taught and discusses the orientation procedures students undertake after they have loaded the program disk. It also outlines the mainline instruction and practice, describing the corresponding branching that occurs in respone to students' performance on the tasks they are presented. The next section describes the reporting system that provides information for teachers on the progress of all students using the program.

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*U.S. postal abbreviations (e.g., CA for California) are not taught; zip codes are not included because of space constraints imposed by screen design that would preclude practicing capitalization for a variety of cities and states.

INSTRUCTION AND PRACTICE

The following skills are taught and reviewed:

Skills	Taught	Reviewed
Places the address and return address in the correct space on an envelope.	Lesson 1	Lesson 2
Capitalizes the names of persons	Lesson 1	Lesson 2, 3
Capitalizes personal titles (e.g., Mr.)	Lesson 1	Lesson 2, 3
Capitalizes the names of streets, cities, states.	Lesson 2	Lesson 3
Uses a comma to separate city and state.	Lesson 3	

At the beginning of each session, students type their first and last names. The computer stores the first name to use in responses to students. It stores data on students' performance under their first and last names so that (1) teachers can review students' performance and (2) the computer can place students at the proper point in the instructional sequence. If students do not respond when asked for their names, the computer requests an answer. If students still do not respond, the computer terminates the program.

When students input their names, the computer checks for the first and last names in the file. If the exact names are located, the computer places the students in Lesson 1, 2, or 3, depending on students' recorded success in the program. If students do not push the return key here or wherever this behavior is necessary to continue the program, the program reminds students to push the return key. If students still do not respond, the computer terminates the lesson.

For the first session, the computer informs students that it is waiting for their response whenever it displays their first name followed by a question mark. For subsequent sessions, the computer reminds students of this signal for input.

When a new skill is presented, the computer displays a simulated envelope with address and a return address, The computer provides instructions on the skill. After a delay for reading the rule, the computer flashes the examples of correct use to focus students' attention. When the skill is address placement, the instruction is followed by two consecutive screens with addressed envelopes, and the computer requests students to identify first the return address and then the address by typing either number one or number two. When capitalization and punctuation are taught, the instruction is followed by two consecutive displays with errors to be corrected. Throughout the program, all keys are disabled except the keys for the correct answers. Thus, students can input only correct answers.

When students do not answer correctly in the practice displays, the computer responds in one of two ways, depending on the skills. For address placement, the computer gives the correct answer and then repeats the previous instruction and presents more practice. If students do not respond correctly by the third practice display, the computer terminates the lesson. For capitalization and punctuation, the computer first tells students that they have not found all the errors, so they should keep trying. If students still do not correct all the errors, the computer repeats the previous instruction and then presents another display. If students still do not respond correctly, the computer terminates the lesson.

When students respond correctly to the practice on a skill, the computer provides positive reinforcement and then presents the next rule. When an entire lesson is successfully completed, the computer provides positive reinforcement, and promises students that they will learn more "next time," and then terminates the lesson. When students have successfully completed all lessons, the computer provides positive reinforcement and suggests the user write a letter to a friend, address an envelope, and mail the correspondence.

For skills previously taught in the program, the computer reviews the rule and presents practice. Response to correct and incorrect answers is the same as for new skills, as described above.

REPORTING SYSTEM

The reporting system provides the teacher with data on individual students and on the whole class. It also allows the teacher to delete records for individual students or for an entire class so that the disk can be reused with subsequent classes.

The teacher enters the reporting system by typing "Reports" when the computer asks for the student's name. The computer then displays a menu of options. The first option is a command for the computer to list the names of the students in the file on the disk. When this option is selected, the computer displays an alphabetized list of users' names. The teacher can request a printout of this list.

Another option listed in the reporting system menu is a command for the computer to display student reports. When this option is selected, the computer displays a student-reports menu. Selections on this menu

allow the teacher (1) to review the performance of one student on the screen or on a hard copy, or (2) to obtain printed copies of all student reports. These copies can be distributed to students-as "Report Cards" on their performance in addressing envelopes. An example of an individual student report is displayed in Figure 1.

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┌─────────────────────────────────────────────────────────────┐
│                     ADDRESSING ENVELOPES.                    │
│                                                              │
│   BILL BURKE                                                 │
│                                                              │
│   LESSON 1:   completed                                      │
│      Address placement:          4 repeats                   │
│      Capitalizing titles:         perfect                    │
│      Capitalizing names:         2 repeats                   │
│                                                              │
│   LESSON 2:   completed                                      │
│      Address placement:           perfect                    │
│      Capitalizing titles                                     │
│         and names:                perfect                    │
│      Capitalizing streets,                                   │
│         cities, and states:      1 repeat                    │
│                                                              │
│   LESSON 3:   completed                                      │
│      Capitalizing titles                                     │
│         and names:                perfect                    │
│      Capitalizing streets,                                   │
│         cities, and states:       perfect                    │
│      Adding comma between                                    │
│         city and state:           perfect                    │
│      Review:                     2 repeats                   │
│                                                              │
└─────────────────────────────────────────────────────────────┘
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Figure 1.   Student Report

The third option on the Reporting System menu is a command to have the computer-print out a class record. This record summarizes the performance of all students in the disk file. This form is exemplified in Figure 2.

KEY: L = Lesson; C = Complete; I = Incomplete; P = Placement; T = Titles;
N = Names; St = Streets; Ci = Cities; Sa = States; Co = Commas;
R = Review

CLASS RECORD

No. of Repeats*

#	STUDENT	L1	P	T	N	L2	P	T/N	St/Ci/Sa	L3	T/N	St/Ci/Sa	Co	R
1	Joan Best	C												
2	Lisa Cook	C	4	2		C			1	C	4			2
3	John Clark	I	2											
4	Ann Drake	C	5											
5	Brad Egan	I		2										
6	Thomas Frame	C				C				I	3	2	5	2
7	Kathy Grant	I												
8	William Hall	C				C				C				
9	Carol Kane	C				C				C				
10	Stacy Salas	C		1		I	2		1					
11	Maria Sanchez	I	2											
12	Anthony Trent	C				C				C				
13	Charles Wilson	C	2			C	1			C	4			1

Figure 2. Class Record

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* Repeats exceeding the number allowed for the skills in a single session
indicate that the lesson was repeated.

Deleting a record is another option offered on the reporting system
menu. When the teacher selects this option, the computer asks whether
the teacher wants to delete records for an entire class. The teacher
types "yes" or "no" in response to this question. If the teacher types
"yes," the computer asks "Are you sure?" and waits for a "yes" or "no"
response before records are deleted. If the teacher does not wish to
delete all records, the computer asks the teacher to type the name of
the student whose record is to be deleted.

The final option offered on the reporting system menu is a command
to exit from the system.

This instruction has been programmed and is operating. Although it
can now be used as a discrete unit of instruction, it was designed and
developed as a component of a larger set of instructional materials to
teach composition.