18 Why Computer Assisted Instruction?

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> Tell me, I forget.
> Show me, I remember.
> Involve me, I understand.
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> —Ancient Chinese Proverb

Students involved in Computer Assisted Instruction (CAI) are learning the truth of this age-old adage. Software that runs the gamut from avoiding fragments to writing complete and well-structured sentences, from outlining procedures to writing multi-paragraph papers, and from simplified word study and spelling to preparation for a Scholastic Aptitude Test (SAT) challenge and encourage students at their individual achievement levels. In "The Write Place" at Mt. Lebanon Senior High School, students discover how CAI helps to eliminate weaknesses and build strengths in their written communication. [Note that, in all cases, the CAI complements the work done by the classroom teacher and/or the writing center/lab person.]

Computer Assisted Instruction merits applause first for its positive approach to helping students overcome weaknesses in their use of the English language. Built into every software program are plaudits for work done correctly; and, if students fail to answer correctly, the computer neither castigates nor demeans them in any way. Rather, the software encourages students to try again, soldering the relationship between the operator and the computer and serving as a centrifugal force that encourages achievement. Therefore, the fear of failure is eradicated from the students' minds when they use CAI for remediation, reinforcement, or enrichment.

CAI's capability to give program users immediate feedback adds still another dimension to students' willingness to be challenged; and this often proves not only challenging but also enjoyable. Several students who had difficulty with sentence fragments used Sentences

and Fragments, which arrived about the time of the opening baseball game in Pittsburgh. The students were ecstatic when they heard the melodious strains of "Take Me Out to the Ball Game" every time they had a correct answer! Although this was a very basic lesson on the subject and predicate of a sentence and on the sentence fragment, nevertheless it caused the students to exclaim, "All right! Hey, that's pretty neat!"

In addition, CAI helps when I work with groups of students with varying levels of ability on "noodle networking," my name for a frugal kind of networking practiced in "The Write Place." Working with four students at each computer or an entire class grouped around the lab's four Apple IIe computers, I start a discussion on a single- or multi-paragraph paper that has been saved on the computer. Students then consider the merits of the paper, the questions that arise from lack of clarity or completeness of thoughts, and the suggestions for improvement. Frequently, I need do little, if anything, to get them to consider the plaudits of the paper first and to keep our discussion progressing. "Student Activities" in the user's handbook of The Bank Street Writer includes simplified lessons that can be modified for more advanced students and used with this kind of critical analysis. In addition, the activities include practice in using transitional elements, striving for clarity, combining sentences, developing standards for writing, studying verb tense, examining logical sentence order, and so forth. One time, for example, when students from a modified composition course visited the writing lab to learn about the use of the active voice, I had previously programmed a paragraph into the computer, based on a lesson in the "Student Activities" section, that included "blah verbs" (forms of the verb "to be") and the passive voice. After students were grouped around the Apple IIe computers, the four operators retrieved the file and then all of the students read the entire paragraph before the discussion began. Although some students were a little reticent and reluctant to comment when the discussion started, all students became actively involved during the session. The comments they made as they left the lab proved the impact CAI had on them. They expressed an interest in returning to the lab during their study halls or before or after school to work on software that would help them to improve their skills in the writing process. For their more advanced students, teachers can select passages for CAI that challenge these students.

CAI also provides reinforcement for students who need supplementary aids to develop particular skills in written communication. This is true of Computer Assisted Writing (CAW), which offers students assistance in writing a business letter of complaint, a report, and a persuasive

composition. The tutorial part of the software that deals with a persuasive composition, for example, begins with a sentence-by-sentence breakdown of a model introductory paragraph, giving the specific purpose of each sentence. Students read the model paragraph and then answer the questions about the "intended" audience and the "opinion" of the paragraph. Next, students choose a topic from a "Topic Menu" and write an introduction. Prompts encourage the students to be sure that each sentence serves its defined purpose. Students also can have their completed paragraphs analyzed in order to make additions or corrections. Once students have completed their own introductory paragraphs to their satisfaction, they follow similar tutorial steps for writing two body paragraphs and a conclusion. In this way, the students gain self-confidence while writing a persuasive composition.

For students intent on improving cognitive and analytic skills, Improving College Admission Test Scores—Verbal Series uses CAI to ease the pain of preparing for the Scholastic Aptitude Test. It provides practice in choosing antonyms, in seeing the relationship among parts of a sentence, in recognizing and judging the relationship between words (analogies), in reading comprehension, in grammar and usage, and in sentence correction. Although some students often review the entire program or parts of it several times, all students admit that this CAI has helped to raise their scores on the SATs.

Still another CAI package is the Microcomputer Courseware Package. Four programs help students in writing complete sentences, expanding sentences, using outlining skills, and writing complete paragraphs. Typical of the comments from students who use these instructional aids is, "I'm beginning to understand the correct construction of a paragraph." This student used the package called Final Assembly: Writing Complete Paragraphs.

After students have completed CAI on the use of parallel structure or punctuation in a package entitled The Writing Lab, I ask them to write a paragraph (or paragraphs) on a topic of their choice to see that they have mastered, or at least have a very good understanding of, both principles. Perhaps the gorilla logo fascinates the students at first, but their willingness to continue with The Writing Lab lessons and their performance when working on their own show that they have strengthened their writing techniques, such as in sentence combining, using correct pronoun reference, and avoiding run-on sentences and misplaced modifiers.

Some discerning students recognize what their English teachers will be stressing, which prompts them to come to the lab on their own for CAI exercises. Practice with the materials helps them to understand a

particular technique before it is introduced and studied in the classroom. One student came to the lab for advance help on how to recognize and use noun clauses correctly. He had employed noun clauses in his writing, but he did not understand how or why he had used them. After he completed Noun Clauses, we discussed papers in which he had used some noun clauses.

If students praise the worth of CAI, who could ask for more? Although the clinician, tutor, or director of a writing lab must still be present to encourage and assist students as they achieve mastery of writing skills, CAI helps immeasurably toward arriving at that goal.

COMPUTER SOFTWARE AT THE WRITE PLACE
Mt. Lebanon Senior High School

Bank Street Writer—Word Processor
Broderbund Software
17 Paul Drive
San Rafael, CA 94903

Complete Writer for the Bank Street Writer
Learnco Incorporated
128 High Street
Greenland, NH 03840

Apple Writer II
Apple Computer, Inc.
20525 Mariani Avenue
Cupertino, CA 95014

Link It All Together: Writing Complete Sentences
Sentence Helpers: Expanding Sentences
Final Assembly: Writing Complete Paragraphs
Essential Study Skills: Using Outlining Skills
Media Materials, Inc.
2936 Remington Avenue
Baltimore, MD 21211

Peter Funk's Wordskill
Bede Software, Inc.
Princeton, NJ 08540

Sentences and Fragments
Micro Power & Light Co.
12820 Hillcrest Road
Suite 224
Dallas, TX 75230

The Writing Lab from Gorilla Software
Simpac Educational Systems
Gainesville, FL 32602

Computer Assisted Writing
Writing Competency
Capitalization—Uses of the Capital Letter
Punctuation
Quotation Marks
Educational Activities, Inc.
Microcomputer Programs
Freeport, NY 11520

All about Commas
Microcomputer Software by Milton Bradley Co.
Education Division
443 Shaker Road
East Longmeadow, MA 01028

Logical Reasoning
Noun Clauses
Practical Composition Package
Punctuation Review
Sentences
Intellectual Software
798 North Avenue
Bridgeport, CT 06606

Improving College Admission Test Scores—Verbal Series
Analogies, Opposites, Sentence Completion
Reading Comprehension
Standard Written English
NASSP
1904 Association Drive
Reston, VA 22091

Vocabulary Adventure I
Vocabulary Adventure II: The Labyrinth
Queue
5 Chapel Hill Drive
Fairfield, CT 06432

Vocabulary Series—24 Programs
MicroEd, Inc.
P.O. Box 444005
Eden Prairie, MN 55344

Whole Brain Spelling—Main Word List
Sublogic Communications Corp.
713 Edgebrook Drive
Champaign, IL 61820