

MICROCOMPUTERS

and Basic Skills in College

Applications in Reading, Writing,
English as a Second Language,
and Mathematics

Spring, 1984

Editor

Geoffrey Akst

Associate Editors

Ruth Davis

Virginia Slaughter



The Instructional Resource Center
The City University of New York
535 East 80th Street
New York, N.Y. 10021

CONTENTS

Preface	MARIE JEAN LEDERMAN	1
Introduction	GEOFFREY AKST	2
GENERAL		
Redefining Basic Skills in a Computer Culture		5
BRUCE VOGELI		
Questions Concerning Computer-Assisted Instruction		8
RITA TERDIMAN and MAX KIRSCH		
Micro-CAI for Basic Skills: A New Tool and a New Setting		13
ELLEN K. LEAHY and ANNETTE PERETZ		
Computerized Testing in College Basic Skills Instruction		17
LINDA J. ALLRED and BERT F. GREEN, JR.		
Reflections on Microcomputers		20
JAN ZANGENBERG and GEOFFREY AKST		
LANGUAGE		
Word Processing in the Classroom		22
JOAN BAUM		
Word Processing: A Catalyst for the Basic Writing Student		24
MARIAN ARKIN, BRIAN GALLAGHER, JOAN GREENBAUM, DANIEL LYNCH, KAREN PEARL, and ESTELLE C. SCHNEIDER		
Visual Aid for the Writing Teacher: Into the Classroom with a Word Processor		27
CAROLE McALLISTER		
Word Processing in Freshman Composition: One Teacher's Experience		30
D. TERENCE LANGENDOEN		
The Importance of the Teacher in Computer-Assisted Basic Writing Skills Review		32
WILLIAM R. OATES		
SEEN: A Computer Program for Hypothesis Testing in Prewriting		35
HELEN J. SCHWARTZ		
Sentence Logic		38
MARVIN KUSHNER and ROBERT LATZER		
Teaching Sentence Structure by Microcomputer		43
ROBERT G. GILLINGHAM		

The Potential of Computer-Assisted Instruction in College Reading Programs ANNE BRADSTREET GRINOLS	46
Adapting a Vocabulary Development Program for Use on the Microcomputer REINHART G. KUSSAT	49
College Reading Programs: Instructors Can Design Their Own ALICE F. RANDALL	51
ESL Computer-Assisted Research and Individualized CAI GERARD M. DALGISH	55
An ESL/Computer-Based Project CLARA VELAZQUEZ, ELIE LOWIE, and JUAN VEGA	58
 MATHEMATICS	
How Microcomputers Can Be Used to Help Teach Basic Mathematical Skills HENRY AFRICK	60
<u>Descartes' Delight</u> : A Language for Computer-Inspired Learning in Mathematics JOHN C. MILLER	64
Basic Mathematics in Colleges and Universities: Computers as a Solution ALFRED BORK	69
Some Mathematics Software I Have Known--And Hope to Know ELWYN H. DAVIS	72
Microcomputer Features for Teachers LAWRENCE SHER	75
Computer-Enhanced Learning in Algebra and Trigonometry: An Eclectic Approach JO AN COMITO, MERYLE KOHN, and ANNA SILVERSTEIN	77
Relearning Mathematics through LOGO IHOR CHARISCHAK	83
 DISSENT	
Earth's Full Colors JOHN BELL	91
 GLOSSARY	 92
 LIST OF CONTRIBUTORS	

D. Terence Langendoen

WORD PROCESSING IN FRESHMAN COMPOSITION: ONE TEACHER'S EXPERIENCE

In Spring 1983, I taught a special section of English Composition I at Brooklyn College. The class was equipped with 24 Apple II Plus microcomputers and 5 Epson MX-70 dot-matrix printers. Each terminal had its shift key modified to work as a normal typewriter shift key, and each was equipped with a 12-inch Zenith ZVM-121 "green" monitor and one Disk II disk drive. The class met from 8:00 to 9:15 a.m. twice weekly but I kept the room open after class from 9:15 to 11:45 to allow students extra practice.

When I first agreed to teach the section, I had only a month's experience with word processing software of a type unusable with equipment at Brooklyn College. So, after consultation with various faculty members experienced in word processing, I chose for my course the software, Word Handler (Silicon Valley Systems, 1625 El Camino Real, Belmont CA 94002), designed for Apple II Plus microcomputers with one disk drive.

Once the master diskette that contains the Word Handler system has been booted, it may be removed from the disk drive and the student's slave diskette inserted. Word Handler permits the display of up to 11 lines and 66 characters on the screen at one time. The lines appear as they do on the printed page. Spacing between lines is indicated by a number which appears at the beginning of each paragraph. A short horizontal bar on the screen between the lines indicates where a page break occurs. Freshman composition students can quickly comprehend the relation between what they see on the screen and what will appear on the printed page. Moreover, the editing and formatting commands are not overwhelming in number and complexity. For all these reasons, this choice of software seemed appropriate for my course. On the other hand, the manufacturer's manual is unsuitable for classroom use; and when the master disk is booted, the screen does not provide information on how to use the system. There are no "menus." Thus I had to write my own set of instructions.

When the semester began, I distributed the first few pages of the training manual I had prepared and immediately got the students working on the microcomputers, entering and editing short paragraphs. At the beginning of each class, I booted the master Word Handler diskette at each terminal, and distributed the students' slave diskettes. After a few weeks, student volunteers were able to help with "start up" procedures.

D. Terence Langendoen, Professor of English and Linguistics at both Brooklyn College and The City University of New York Graduate Center, will have his most recent book, The Vastness of Natural Language, published by Blackwell (Basil) Publisher Ltd., in 1984.

After four class meetings, during which students learned only how to use the word processing system, I assigned a total of six essays (normally about ten essays are assigned in English I classes at Brooklyn College), each due in two-week intervals. The students had to submit a printout of each essay, using any of the classroom's printers and following my prescribed format. Each essay was to be double-spaced and right-justified, with a title centered on a separate line; each page was to include a "header" containing the student's name, the course and section number, the essay number, the due date, and the page number. The preparation of such headers is straightforward using this software. Finally, after I graded each essay, the author would correct and edit the essay and resubmit it within one week of getting it back. Two-thirds of the grade for each essay was based on the initial submission, one-third on the resubmission; and, if no corrections were required (this actually happened in a couple of instances!), the author automatically received "A" or "A+" for the resubmission, as appropriate.

The most difficult problem in teaching the course was providing time for students to use the equipment for assignment preparation. About half the students had classes during the two-and-a-half hours the room was available to them. As a result, I had to allow class time for this use. Because the class was limited to twenty students, I was able to offer each student considerable individual attention concerning matters of style, organization, grammar, spelling, and punctuation. In the Fall, when three sections of this course will be offered, the facility will be available to students for three hours a day, five days a week, and therefore regular class time will be used more effectively for the teaching of composition itself. The three of us who will be teaching the course also plan to develop exercises in grammar, spelling, punctuation, rhetoric, and editing, that we will store on the students' diskettes during the summer before the semester begins.

I had no great difficulty dealing with hardware and software problems during the semester. Apart from a few inexplicable "crashes," the terminals, disk drives, and software all proved reliable. Jamming of paper in the printers was the most common and annoying system-maintenance problem. Throughout the semester, I stressed the importance of "saving" developing essays on diskette. Moreover, short of turning the computer off or removing the slave diskette while an essay is being prepared, one cannot exit the Word Handler system without saving the text file. As a result of the system's design and my precautions, no student lost hours of work because of carelessness or computer failure.

To pass English I at Brooklyn College, a student must not only complete the course but must also pass a departmentally administered and graded exit examination. My students, therefore, had to write a final essay in two hours using pen and ink like everyone else who takes English I. I was gratified that of the thirteen students in my section who took the exit exam, ten passed. Of the three who did not pass, one was extremely erratic in attendance and had not turned in any of the assigned essays. Thus, while the no-show and dropout rate in my class was high compared with other English I sections, the ratio of students who passed the exit exam compared favorably with that of other English sections.