

Book Reviews

The Electronic Text: Learning to Write, Read and Reason with Computers by William V. Costanzo, Englewood Cliffs, NJ: Educational Technology Publications, 1989. Hardcover ISBN 0-87778-208-3

Reviewed by Trevor J. Gambell

I usually find it difficult to warm to books or articles on computers in English language arts. Some authors are enamoured with the technology and lose sight of pedagogy, while others offer a narrow perspective of English language arts. Then there's the problem of contemporary relevance of the content; most books are outdated in terms of technological and pedagogical development before they even reach their intended readers.

I'll admit that I approached William Costanzo's book with some skepticism, but a quick reading of the table of contents promised a fresh and authoritative approach to the topic. That promise was upheld. This book deserves to be read by all English language arts educators who use, or would like to use, computers in the teaching of their subject area. As such books go it's quite lengthy at 300 pages, but it is also comprehensive and the content is well-organized into seven chapters with a foreword and afterword.

William Costanzo's credentials are quite impressive. He is a professor of English at a community college and director of the Commission on Media for the National Council of Teachers of English. His academic background is the study of English to the doctoral level. The author, then, comes to this book from the perspective of English teaching rather than that of technology, computer applications, or programming, although he clearly understands each of these fields.

Costanzo believes that word processing software embodies certain assumptions about the writing process. Therefore he has attempted in each chapter to seek "...to balance theory and research on the fulcrum of actual

practice.” (p.x) However, I found research evidence very scant in many chapters, simply because the research just isn’t there except for studies of student writing on computers and student attitudes toward writing. The theory base is well developed in the chapters. Most helpful to this reader was the inclusion at the end of each chapter of a bibliography separate from a listing of software mentioned or reviewed.

I couldn’t help but agree in Chapter 7 with Costanzo’s assertion that “no instructional software is likely to be truly effective unless it integrates our knowledge of three basic areas: subject matter, pedagogy, and technology.” (p.3) In this chapter also he puts into perspective the claims of those who see the almost limitless possibilities of developments in Artificial Intelligence for teaching English with computers. According to Costanzo “. . .the smartest machines still know less about English than an average two-year-old.” (p.18) Yet to be devised is a program that manages the complex ambiguities of English as competently as can users of the language.

The most disappointing chapter was the second, dealing with reading and electronic text. Costanzo sets up the dichotomy of the skills (decoding) versus strategies (comprehension) approach to reading, with Jeanne Chall representing the former and Frank Smith the latter. That is fair enough, but he makes some curious errors in his explanation of these two approaches. For one, Frank Smith hasn’t been at the Ontario Institute for Studies in Education at Toronto for years (p.28). Smith neither adopts a psychoanalytic view (p.29), nor does he use a communication theory approach to reading (p.29). The problem, I think, is that Costanzo’s source is Smith’s 1971 book which has been superseded by his revised *Understanding Reading: A Psycholinguistic Analysis of Reading and Learning to Read (1978)*. Newer books such as *Essays Into Literacy (1983)* and *Writing and the Writer (1982)* describe a shift in his thinking from a cognitive perspective toward a wholistic one, Costanzo really supports a psycholinguistic view of reading when he draws on Chomsky and Bever to support Smith’s “psychoanalytic view.”

At the end of this discussion of the two polarized theories of reading Costanzo tries to redeem himself in a summary statement.

Perhaps the most productive way to reconcile these views for pedagogical purposes is to think about the difference between learning to read and reading to learn. For children who are just learning how to read, it may be more important, to develop strong decoding skills. For mature reading, which is always reading for a purpose, the emphasis should shift to the strategies we use for understanding what we need. Neither emphasis should be exclusive. (p.40)

This middle-of-the-road stand may appease some members of both camps but it clearly ignores the evidence of wholistic language development, including reading-writing relationships, that is now becoming available thanks to naturalistic, case study, and phenomenological research initiatives.

Chapter 3 deals with interactive fiction, and here Costanzo provides some interesting insights into the possibilities for students' interactions with electronic fiction text. With interactive fiction the reader assumes an active role in shaping and exploring the world of fiction and imagination, and language becomes a tool whereby the reader investigates fictional environments. Costanzo notes that computer-assisted fiction typically is written in the second person singular, making the reader the main character. "The narrative evolves as a collaborative effort of the reader and the author." (p.71)

For me, Chapter 4 on writing with a word processor was the strongest part of the book, but that could be because it's my area of interest and expertise. Word processing helps writers to think of text as plastic, protean, manipulative. Writers become managers of prose; they are in a position of control. For young writers especially, word processors and computers free them from the tyranny of the text. Word processing has made it truly possible to incorporate a writing process approach in the teaching of composition.

In this chapter Costanzo has done his homework well in reviewing the research on writing and computers. We might well heed, in our enthusiasm for using computers in writing courses, research findings that point out that writing on computers does not necessarily lead to better writing. Also although students might make more changes to text on the computer such changes may be at a superficial (word or phrase) level, rather than at a deeper (ideational, organizational) level.

Costanzo is cautious of the benefits of grammar and style checker programs in Chapter 5. He calls such programs "writing aids," but warns that weak writers may be seduced by these programs, treating their advice as prescriptive medicine for ailing structures. The author admonishes that "for writers who lack confidence in their own judgment, such programs can be disastrous." (p.148)

There is much more in this book; there are chapters on natural languages and artificial intelligence, and programming for English. In the Afterword Costanzo discusses the most recent developments in computer technology with promise for English teaching such as interactive video, hypertext and hypermedia, CD-ROM, and computers sensitive to natural language. But lest we fear that the technology is getting ahead of us, he ends with these reassuring words:

. . .all these accountments of electronic texts remind you that reading means selecting from alternatives. As with reading, so with writing.
(p.234)

REVIEWER

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