WANDAH: IMPLICATIONS FOR WRITING EVALUATION AND ASSESSMENT

Speakers: Lisa Gerrard, University of California, Los Angeles
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Designed to be used in conjunction with a writing course, WANDAH (Writer's Aid AND Author's Helper), renamed *HBJ Writer* by Harcourt Brace Jovanovich, is a comprehensive software package developed for the IBM Personal Computer by the UCLA Word Processor Writing Project. Lisa Gerrard, WANDAH's Design Analyst, began the session with an explanation of the package's three main divisions, which mirror the composing process: prewriting aids, a word processor, and reviewing and revising aids.

WANDAH's prewriting aids include (1) a freewriting exercise which helps students generate ideas by having them write continually without stopping to edit or to evaluate the text; (2) an invisible writing exercise which allows them to compose without seeing what they are writing, thus helping them to overcome an initial preoccupation with correctness and preventing premature editing; (3) a nutshelling exercise which prompts students to type in a nutshell a paper's purpose/theme, audience, and argument; and (4) a planning exercise which results in an organizational outline. The user-friendly word processor facilitates composing by allowing students to concentrate on the writing process itself rather than on computer intricacies, which can reduce the benefits of composing on the machine. The word processor's full screen and windows allow students to see two parts of the same paper, two different papers, or a paper and an outline simultaneously. Gerrard concluded her basic overview of WANDAH with a discussion of the program's reviewing and revising aids, which include organizational and stylistic reviews as well as a mechanics review that helps students spot possible punctuation and spelling errors but does not make corrections. A final aid in this set of programs encourages reader response by enabling a student (or an instructor) to comment on another student's paper.

Michael Cohen, WANDAH's Principal Programmer, continued the joint presentation with slides illustrating the program's computer screen exercises. After noting that the students who contributed to WANDAH's design were also its target audience, Cohen explained that WANDAH is menu-driven: everything appears as a menu, and the user simply presses one key to move to the next stage. On the Main Menu, for example, the user can access all of the prewriting programs by pressing *P*, word processor functions by pressing W, reviewing and revising by pressing *R*, and *Q* for quit if he or she has finished. From anywhere inside the program, pressing a special escape key labeled *Back* on the keyboard will take the user back one level, making it very easy to move around the system. In those situations in which pressing *Back* would cause harm, however, a special screen has the user make a decision before backing all the way out. In the word processor, for example, the user cannot accidentally lose a paper by pressing *Back* because it will take him or her to a screen asking that the paper be saved. Pressing *Back* again will take the user into the word processor. There is no way out unless the user either saves the paper or decides to throw it away. According to Cohen, WANDAH has been designed in such a way that most students do not have to read the manual beyond the first few pages but rather can learn from the screen.

Next, Cohen provided a history of WANDAH in order to explain how the project has been involved in assessment and evaluation from the beginning. While developing science educational software, Ruth Von Blum, WANDAH's Project Director, used word processors and began to notice that her writing style was changing. Feeling it would be useful to do a pure research study to evaluate just what it is that word processors do to writers, she wrote a grant and submitted it to the EXXON Educational Foundation. The Foundation, however, wanted more development, not just pure research. Joined by Cohen, and Morton Friedman, a Principal Investigator, Von Blum decided to add various writing aids to a word processor and then evaluate the effect on the writing process. After reviewing existing word processors for a year, Von Blum realized that developers would have to write their own programs because commercial word processors, being business oriented, are not written for student writers composing on line. Much initial evaluation was done about what was suitable for such a system, and instructors explained what they felt would and would not work.

Gerrard, one of the first to use WANDAH in the classroom, was able to observe how students used the computer program; she asked students and instructors to fill out questionnaires. Both groups, therefore, provided anecdotal profiles of their reactions to WANDAH. Since the program was used in several test sites including a K-12 private school, a high school, and several junior colleges and universities as well as at UCLA, developers gathered a wide range of writer response. They found that WANDAH's success depended on how it was used—whether it was integrated into classroom use or simply made available in a lab for students. It was least successful in an advanced technical writing course at the University of Minnesota. Given a choice of word processors, students who used WANDAH liked it initially because it was easy to learn and to use. They used it only as a word processor, however, although WANDAH is not a word processor but a writing aid that contains a word processor. As a word processor, it is much slower than some others on the market, which also have fancy features that WANDAH doesn't have. Having to choose between making WANDAH extremely easy to use or making it complex yet able to do more, developers decided on the former. This group of students soon became dissatisfied with WANDAH's slow speed and began to use *WordStar*.

According to Gerrard, WANDAH was not used effectively at the University of Minnesota because of inadequate classroom instruction in the use of computers. In all of the other courses which have included WANDAH, in particular the basic writing and regular freshman composition classes at UCLA, it has been an integral part of the curriculum. Gerrard was able to maintain the same goals and to use the textbooks she had planned to use; but instead of requiring students to do prewriting and revising on paper, she designed exercises to accompany WANDAH's prewriting and revising routines. Gerrard, as well as other instructors working with WANDAH, found that basic writers—those who had the least confi-

dence in their writing — experienced significant attitudinal changes as they became adept at using the computer. Because the word processor made revision easy, students began to consider writing as a process and to realize that changes could be made. Since a reader would not have to see an unsatisfactory effort, WANDAH liberated these basic writers. In addition, WANDAH socialized the class and stimulated peer editing as students began to look at each other's papers. Another instructor found that her developmental students wrote more and for longer periods of time.

Because administrators required an evaluation of WANDAH based on some kind of test, developers have devised a limited test for a class of five students. As students type, the special version of WANDAH they use records every key stroke, providing statistical output about the writing process, and the screen is videotaped. Afterwards, students are interviewed by their instructor and their comments are recorded as they look at the videotape and try to recall the writing process — to explain what they were doing or thinking about as they worked. Results are not yet available, however.

Finally, in response to a question about research which proves that the computer helps students write better Cohen addressed the problem of accountability. If institutions allocate funds for computers, administrators expect statistical proof both that writing has been improved and that the funds were well spent. Administrators, therefore, tend to want a unit of measurement of writing quality, what Cohen called the writon, so that it can be said, for example, that the writing of students who used WANDAH has improved five writons over the writing of students who have not. Although average sentence length, grammatical errors per paper, misspellings, etc., can be counted, none of these is the writon itself. To build a statistical model resulting in something resembling a writon, Cohen noted, one must already know what writing quality is, a subject about which writing instructors have varying opinions. Cohen also explained that while holistic scores are good placement instruments, they cannot give the fine measurements needed to determine how much computers have affected writing. Thus, Cohen stated that when requesting funding in the future, he would not make the general statement that computers improve writing but instead would select specific curricular goals that can be measured and ask for computers to enable instructors to meet those goals; then a study could be done to show whether or not the project has been successful. Throughout the session, Cohen and Gerrard stressed that the computer is a tool, an enhancer, but not a teacher replacement. ■