ABSTRACT
        In the field of composition instruction, word
processors can provide a new writing environment and a wealth of
teaching possibilities. Integrating portfolio assessment and its
benefits into computer-assisted composition instruction, however, is
not easy. Recently implemented at Yavapai College (Arizona),
portfolio assessment allows instructors to respond to student work
that is still in progress without the pressure of applying a grade.
Second, portfolios offer proof of learning by showing changes in
skill levels as students move from one project to another. To test
computer applications for the new portfolio assessment approach,
three students from a composition class taught in a computer lab were
chosen. They turned in their assignments on disks, with files
indicating the various drafts of each assignment. The
instructor/researcher then put his comments on the disk also. This
arrangement also allowed the instructor to assign additional
activities, such as sentence and paragraph review exercises and style
analysis tasks to be completed on the disk. The project was not
without difficulties, however. Continuous transfer and handling of
disks can at times create record-keeping problems. Also, because
students are required to keep a copy of the disk, the handing in of
the most current disk can sometimes be a problem. New innovations in
computer technology, such as electronic mail and other network
systems, should address these problems. (Appended are a sheet on
common characteristics of portfolios and a file index--sample student
electronic portfolio.) (TB)

Portfolio Assessment and Computerized Composition Instruction: Combining the Best of Both Worlds

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Portfolio Assessment and Computerized Composition
Instruction: Combining the Best of Both Worlds

In the field of composition instruction, word processors can
provide a new writing environment and a wealth of teaching
possibilities. In this paper, I would like to discuss one such
possibility which I have been researching--that is, how to
integrate portfolio assessment into computer-assisted composition
instruction. In this presentation I will summarize my attempts
at combining the best of both of these educational areas at
Yavapai College, a two-year community college in Prescott,
Arizona.

The portfolio can, of course, be described as a student
folder containing assignments and essays that best represent that
student's writing abilities (Arther, Bolin). As an assessment
tool, such a collection demonstrates both the communication
skills that a student has acquired and the progress that he or
she has made toward achieving academic goals (Anson and Brown
253). I have found that the word processor, as it is used in
the composition classroom, can be a convenient means for
accomplishing these two valuable aims of portfolio processes. By
using a word processor, the individual student is able to easily
maintain and work on different versions of papers that are
required during the semester in a composition class (Purvis et
al 23). In addition, he or she can maintain that electronic
portfolio from class to class, from semester to semester, and
from school to school. Evidence of growth can be demonstrated
within individual classes, within the school or college itself,

or even between institutions if the student uses the portfolio process as a means of transfer placement to a post-secondary school.

In terms of portfolio use in the computerized composition classroom, two interesting things have occurred at Yavapai College in Prescott, Arizona during the past few years. Both of these incidents contributed to the creation of this program for merging computers and portfolio assessment. The first was the creation of a new computed-enhanced composition classroom on the campus; the second was a campus-wide shift in the focus of outcome assessment. I was able to incorporate both of these (new features) into a program of computerized portfolio assessment.

During the 1993/1994 academic year, the college's composition program saw the creation of a new electronic classroom, where about one-third of the department's freshman composition classes were taught. The classroom is equipped with computer terminals with which students compose and revise in-class and out-of-class writing assignments. This innovation in itself was a drastic shift to the newer forms of technologically mediated composition instruction.

At the same time, college-wide efforts were being made to more clearly define and express the institution's goals for student assessment. Through Yavapai College's Committee on Student Outcomes and Institutional Effectiveness, two major institutional goals for assessment were identified. The first goal involved the need to assist students in overcoming basic

skill deficiencies. The second involved the need to determine that graduates of the college possessed skills commensurate with their level of education.

In support of these efforts, the English Department at Yavapai College began incorporating portfolio assessment into the existing composition curriculum. The first phase involved the clear articulation of what the department's goals were in adopting portfolios in the assessment process. Within the department, the individual instructors that were in favor of using portfolios identified some of the desirable characteristics of portfolio assessment (see Appendix A).

Several of these characteristics are especially relevant to computer-assisted classroom instruction. The first is that instructors respond to student writing that is still in progress. With such an approach, instructors suspend grades until students have had time to master skills and develop their writing abilities. The second characteristic is that the portfolio offers proof of learning by showing changes in skill levels from beginning to end in the writing process. The third is that the portfolio procedure is a more realistic approach to the development of writing skills because all writers may encounter problematic assignment for which they have little aptitude or interest. The fourth is that the portfolio leads students to a better understanding of their progress as writers. The last related point is that the instructor can be intimately involved in the writing process because the portfolio reduces his or her

role as evaluator, even though the instructor does not relinquish that role (Spendal 13-16). All of these qualities were key points in my project of integrating portfolio assessment and computer-enhanced writing processes.

At the beginning of this project my main interest was in applying these very important principles to computer-assisted instruction and evaluation. I began by selecting one of the classes that I was teaching in the newly completed electronic composition classroom during the fall semester. This class was to use the portfolio process, as outlined in the department's guidelines, for the majority of the students' writing assignments. However, I selected a volunteer group of students whose portfolios were to be 3.5 inch computer diskettes. I explained to them that most of their writing would be maintained solely in "cyberspace."

As the project developed, each individual student's computer file became the basis for his or her own portfolio (see Appendix B). The diskette file index for each student's electronic portfolio listed the various writing assignments that the student was working on, and the different stage of completion that each assignment was at. Also listed on the index were the files containing my comments and responses to the different writing assignments, as well as other reading and writing activities.

The following are some of the specific procedures that I implemented with the computerized portfolio. In responding to writing assignments, the individual students created and revised

consecutive drafts. They then gave each subsequent major draft a new file name or version number. For example, the first writing assignment might have three versions or drafts, which would be labeled WA#1/V1, WA#1/V2, and WA#1/V3. At various stages of the writing process, I collected the students' diskettes and responded to the different assignments, depending on the point of completion that each assignment was at. Having the students' diskettes allowed me to create a separate response file on each diskette where I could make my comments about the various drafts. After making my responses, I would then give the file a related file name that corresponded with the writing assignment. My response file on their disketts would read, for instance, WA#1/COM. Throughout the project I also attempted to conference with each student on a regular basis; during these conferences we discussed his or her writing diskette portfolios. These conferences allowed me to answer specific questions and to fill in any areas that were not covered in my diskette comments. When both the student and I were satisfied that a specific writing assignment had been completed, the student printed out a hard copy of the assignment or writing task, which was put into an actual portfolio for a final grade.

The use of a separate diskette by each student allowed me to assign them additional activities, such as sentence and paragraph review exercises and style analysis tasks. These extra assignments were directly related to any problems that the students were having in their writing and were designated "SENT

EX" or "PARA EX" or "STYLE EX." Additionally, students were also able to keep their reading journal entries on the computer diskette as well. These entries were labeled "JOURNAL 1," "JOURNAL 2," etc., which made tracking of the entries easier.

The project has not without difficulties, though. The entire process can be extremely time consuming; I feel that I will need to refine the process extensively for use in future classes. Continuous transfer and handling of diskettes can at times create record keeping problems. Also, because students are required to keep a number of backup diskettes, the handing in and returning of the most current version of the electronic portfolios can be troublesome for both the student and the teacher.

But I foresee that several innovations in the electronic classroom format will eliminate the extra handling of student diskettes, as well as several other problems. The development of a local area network (LAN) will provide a more direct connection between me and the students during and after each class session. This connection will enable me to interact directly with different students during class time by using a split-screen interface from the instructor's terminal within the classroom. In addition, through the Internet connection that can be provided by the college's E-mail and Telenet communications systems, I will have more direct access to student's computer files and electronic portfolios from my office. As this project develops further, both of these features will be invaluable in providing a

more effective system for continuous student feedback and ongoing, positive assessment of each student's developing work.

The initial student response to the electronic portfolio project seems to be largely positive. The reason for this, I believe, is that the portfolio system ties in so nicely with the use of computers in teaching the writing process. Increased accessibility to word processors at our school has enabled students, for the most part, to more easily revise and rewrite various writing assignments. In close relation to this, the electronic portfolio allows students to defer evaluation of their writing until they are able to fully expand and develop their ideas.

Having begun to use computer-assisted portfolio assessment, I feel that I can more adequately predict the future direction of such courses. At Yavapai College continued use of the computer diskette as an electronic portfolio will facilitate one-on-one instruction through local area and college-wide computer networks. The local area network will allow for the delivery of assignment criteria and for the closer questioning and reexamining of the requisites of individual writing assignments. Also, I am looking into computer programs that will allow me to use an overlay screen; I will then be able to apply comments and suggestions directly onto student texts without changing the original context. This feature will enable me to comment more effectively on student work in progress. All of these features will do a good deal in accomplishing the English Department's

goal of fully integrating portfolios into the composition program.

In addition, future directions of the electronic portfolio lie outside of the English Department as well. Within the college itself, more instructors seem to be willing to use at least a modified version of the portfolio process. The English Department is interested in helping other teachers in adopting the portfolio as the central project in their courses. This is particularly true in the trades and technical areas, where such portfolios prove useful in students' occupational pursuits.

With regard to a closer connection between the high school and the four-year transfer college or university, the portfolio provides the means by which closer articulation can be accomplished. For example, in March of last year, the Department of English at Arizona State University hosted a day-long meeting on portfolios and assessment. In attendance were secondary school teachers from around the state, a number of representatives from various statewide community colleges, and representatives from the writing programs at the three state universities. Their discussion focused on how portfolios can and will, in the future, be used as a more adequate means for the effective placement of high school student in college-level composition courses. From our point of view, such a placement system will allow Yavapai College to connect closely with public schools and with the state's four-year colleges in establishing conversations on standards and in more closely tying teaching to

assessment.

These portfolio dialogues, both within and outside of the college, continue to call attention to the developing importance of portfolio assessment at Yavapai College. With the growing shift to computers in composition instruction, the electronic portfolio, with its responsive qualities and its facilitation of the writing process, will do much in assuring that these goals are met.

Appendix A: Common Characteristics of Portfolios

1.   Instructors respond to writing in progress and suspend grades until students have time to master skills.

2.   Marginalia consists of _formative_ comments, shaping future performance.

3.   The Portfolio offers proof of learning by showing changes in skill levels from beginning to end.

4.   The instructor can be intimately involved in the writing process since the portfolio reduces his or her role as evaluator.

5.   Portfolio development is a more realistic approach to the development of writing skills because all writers may encounter problematic assignments for which they have little aptitude or interest.

6.   The portfolio encourages a creative/experimental atmosphere.

7.   The portfolio allows the instructor to emphasize progress.

8.   For instructors, the portfolio eliminates grading frustrations over the lack of prerequisite skills.

9.   The portfolio leads students to a better understanding of their progress as reflection activities become integral to their work.

10.   For a department, the portfolio creates a community of writing teachers and, eventually, a consensus on standards.

> Department of English
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> Fall Semester, 1994

Appendix B: Sample Student Electonic Portfolio (File Index)

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>>INDEX                                    >>REMAINING
(84.7)

*NEW FILE              *MERGE              *FRAMING

WA#1/V1  (5.9)         PARA EX   (1.2)     JOURNAL 1 2/7   (2.2)
WA#1/V2  (6.2)         WA#1/COM  (1.5)     JOURNAL 2 2/9   (1.0)
                                           JOURNAL 3 2/15  (3.3)
WA#2/V1  (5.3)         WA#2/COM  (1.1)     JOURNAL 4 2/16  (1.4)
WA#2/V2  (7.5)                             JOURNAL 5 2/19  (2.2)
WA#2/V3  (7.6)                             JOURNAL 6 2/22  (1.2)
                                           JOURNAL 7 2/28  (3.2)
WA#3/V1  (6.1)         WA#3/COM  (.5)      JOURNAL 8 3/1   (1.0)
                                           JOURNAL 9 3/6   (2.5)
WA#4/V1  (2.9)         SENT EX   (.5)      JOURNAL 10 3/9  (.5)

                      STYLE EX   (1.9)
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Works Cited

Anson, Chris M., and Robert L. Brown, Jr. "Large-Scale Portfolio Assessment: Ideological Sensitivity and Institutional Change." Portfolios: Process and Product. Ed. Pat Belanoff and Marcia Dickson. Portsmouth, NH: Boynton, 1991.

Arter, Judith A. "Portfolios in Practice: What Is a Portfolio?" Paper presented at the Annual Meeting of the American Educational Research Association, San Francisco, California. 20-24 April 1992.

Bolin, Bill. "Go Refigure: Postructuralist Notions of Literacy and Portfolio Assessment." Paper presented at the Annual Penn State Conference on Rhetoric and Composition, University Park, Pennsylvania, 13-16 July 1994.

Purves, Alan C., Joseph A. Quattrini, and Christine I. Sullivan. Creating the Writing Portfolio. Lincolnwook, IL: NTC Publishing, 1995.

Spandel, Vickie, and Rick Stiggins. Creating Writers: Linking Assessment and Writing Instruction. White Plains, NY: Longman, 1990.