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In an age of mass advertising, when everything "new" is supposedly "improved," too, instructors should beware of claims of education made "new and improved." Whenever adopting new technology, they should consider their old purpose: promoting study. An English instructor, for instance, can justify computer use only insofar as students can use it for purposeful reading and writing.

ADDING TO STUDY AND DISCUSSION

For millennia, independent study has led students to knowledge. From Pythagoras to Picasso, from Confucius to Shakespeare, from the self-made scholar King Alfred to Martin Luther King, independent thinkers have searched for truths. Since the Renaissance, scholars have stressed "research." Now the computer extends "research-oriented" activity (Cotton, 1996). On their own modest searches, students now can access online libraries, museums, databases, and indices for primary sources of histories, biographies, records, reports, statistics, quotations (Gordin et al, 1995). As researchers, they become analysts, not consumers, of information. They analyze information relevant to their studies and pursuits--their "real lives" (Cotton, 1996). Thus they discover not just information, but knowledge.

Through independent study, students become doers, as well as thinkers. At some colleges, students now use computer networks to arrange their own education. For instance, in Vanderbilt University's "asynchronous learning" program, students access lectures and assignments across a campus-computer network (Wyatt, 1997). In these online classes, students meet only for final exams. Yet, by course's end, online students tend to learn more than students in regular classes (Shoemake, 1996).

During an impasse in independent study, collaboration often clears the way to knowledge. Then thinkers want some response or counsel from others. The American philosopher Emerson, for example, would clarify his thought through correspondence with Thoreau and Hawthorne. Electronic mail, or e-mail, now extends letter writing. Through school computer networks, students now can correspond directly and instantaneously with distant students, as single partners, or as entire classrooms (Cotton, 1996). They also can apprentice themselves, long distance, to on-the-job professionals, and thereby learn the practices of an occupation (Gordin et al, 1995). Meanwhile, in reading and writing these electronic messages, they rehearse 21st-century communications (Cotton, 1996).

Through collaborative study, students also learn cooperative attitudes. At Vanderbilt University, the online students, sending e-mail to one another, form small study-groups (Wyatt, 1997). At Indiana University, For his philosophy class, President Myles Brand supplements study and discussion through a "listserv," or e-mail network limited to his students--he does so not only to make assignments and answer queries, but also to urge classmates to communicate outside class (Gress, 1997).

During either independent or collaborative study, interdisciplinary work broadens perspectives. Like the versatile Renaissance artists and scholars, including Leonardo DaVinci, creative thinkers stretch their studies across many subjects. Traditionally in education, interdisciplinary courses combining the humanities and sciences, arts and mathematics, sciences and physical education, arts and physical education, and other combinations, seem feasible. Even in a single-subject course, students now can extend their research across various Internet "domains," or server-computers allowing access to formerly inaccessible information from commercial businesses (.com), government services (.gov), nonprofit organizations (.org), educational institutions (.edu), artistic and

cultural groups (.arts). Ultimately, students would benefit most from a domain providing interdisciplinary, instructional services (Gordin et al, 1995).

SUPPLEMENTING STUDY IN ENGLISH

In English, the computer can definitely add to mass media studies. Not only can students now read electronic newspapers and magazines, they can also respond: they can activate "links," or electronic transfers, to related reports and related sites on the Internet, and take news quizzes with immediate answers. CNN Interactive, for example, offers a curious mixture of print journalism, TV pictures, and computer interaction. Meanwhile, students pursue old-fashioned independent, collaborative, and interdisciplinary study, writing about political, social, and economic events, and practicing "informed conversation" on issues (Cotton, 1996).

Used selectively, the computer also can strengthen writing itself. In expository writing, in supporting their ideas, students need reference sources for evidence; now they can extend their research through online indices and libraries. At reputable Internet sites, they also can peruse "information articles," online documents prepared for an Internet audience (Sellers, 1993). Meanwhile, they maintain the practice of expository writing: explaining results of studies or experiments in a research paper, an issue in a position paper, a problem and its solutions in a proposal, trends in a speculative essay, cultural or social events in a commentary, products or performances in a critique. Likewise, in creative writing, in attempting to express their thoughts, intuitions, and emotions through literary techniques, students can extend their collaborations: through e-mail, they now can correspond with authors and illustrators, as well as experts on themes important to their writing. Also, in revising an already well-established piece of writing, whether expository or creative, students now can use a computer's word processor to make instantaneous on-screen changes--to insert, delete, reorder. Plus, as they revise, the instructor now can respond more like an editor than a critic, since the large computer screen makes the writing mutually legible (Simic, 1996).

Although computer possibilities for grammar study remain experimental, futuristic computer tutorials might prove purposeful (McCarthy, 1994). Using computer functions such as Edit and Tools, students could conceivably experiment with phrase and sentence structure, to practice rhetorical grammar. Computer tutorials could offer them grammatical choices and then give immediate feedback on the rhetorical effects--on order, cohesion, transition, pause, stress, focus, rhythm. In this way, students would become aware of their "intuitive grammatical expertise" (Kolln, 1996). Roberts and Boggase (1992) conducted a study with findings that corroborate this opinion.

INTEGRATING TECHNOLOGY DELIBERATELY

Instructors can integrate the computer into a course gradually. A class of students with little computer experience can practice first through course-related assignments.

Acquiring basic computer skills, they later can carry out important coursework. In this way, the students not only master computer skills, but also prepare for advanced study. Before independent study, they could attempt mini-research assignments on the school computer network, searching subject-related indices for reference sources. Consequently, they could use the computer later during a research project. Similarly, before interdisciplinary study, students could do mini-research assignments and later graduate to a multiple-subject project. For example, a student might conduct science experiments and then interpret the results in a formal paper for English composition class; other students might incorporate their academic major and minor subjects into one project. Before collaborative study, students could send e-mail inquiries, corresponding with other students and with authorities on the subject. Later, they could attempt a collaborative project with one of the correspondents.

English instructors could prepare students similarly for course projects. In media studies, students could learn to browse an electronic newspaper, taking advantage of the electronic links to related reports and Internet sites, to write broad news summaries. Then they could augment the summaries by writing fully documented commentaries for a media-analysis project. In writing courses, the students could learn to use a word processor, beginning with simple exercises in editing and proofreading, and proceeding to an assignment in typing, saving, filing, and printing a previously written paper. Eventually, the students could revise their writing-in-progress on the word processor. To top off the study, they could make computer printouts of a perfected paper--for a target audience--as a publication project.

English instructors must know the right time when the computer helps, when the students benefit from searching the Internet, or word processing their writing, or trying a computer tutorial. Used judiciously, the computer does offer bonuses for research, collaboration, and experimentation. The Internet, in particular, may someday offer an exclusive educational-service domain--perhaps ".std," for study. Used for the age-old pursuit of knowledge, the computer will help send students on their academic and vocational ways.

REFERENCES

Cotton, Eileen Giuffre (1996). The Online Classroom: Teaching with the Internet. 2nd ed. Bloomington, IN: ERIC Clearinghouse on Reading, English, and Communication. [ED 400 577]

Gordin, D.L. et al. (1995). "Using the WorldWideWeb to Build Learning Communities. Northwestern University Magazine, April, 1-17.

Gress, R. (1997). "Reading over His Shoulder." Indiana Alumni Mini Magazine, 8-9, Spring.

Kolln, Martha (1996). Preface to Rhetorical Grammar: Grammatical Choices, Rhetorical Effects. 2nd ed. Boston: Allyn & Bacon.

McCarthy, Brian (1994). "Grammar Drills: What CALL Can and Cannot Do." Paper presented at the EUROCALL Meeting (Karlsruhe). [ED 382 022]

Roberts, Claudette M., and Barbara A. Boggase (1992). "Non-Intrusive Grammar in Writing." Paper presented at the Annual Conference on Computers and Writing (Indianapolis). [ED 348 684]

Sellers, J. (1993). "Answers to Commonly Asked School Internet Users' Questions." Internet School Networking, 1-3, June.

Shoemake, Barbara R. (1996). "Cyberspace Class: Rewards and Punishments." ERIC Digest. Bloomington, IN: ERIC Clearinghouse on Reading, English, and Communication. [ED 400 574]

Simic, Marjorie (1996). Computers and Writing. Hot Topic Guide. Revised Edition. Bloomington: Indiana University School of Education. [ED 392 055]

Wyatt, J.B. (1997). "A New Way of Teaching for a New Generation." Christian Science Monitor, February 28, 18.

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