

Writing-Intensive Courses

Tools for Curricular Change

CHRISTINE FARRIS
RAYMOND SMITH

While many writing across the curriculum programs began as quick-fix projects the mission of which was the overall improvement of student writing, the programs that have managed to become permanent fixtures are likely to be those that have moved from "writing crisis" management in the direction of curricular change springing from faculty experimentation with a variety of uses of writing. The original WAC vision (e.g., different components of the unified liberal arts curriculum using writing to solve similar "tough problems") is complemented at some institutions by a growing local knowledge of how thinking, reading, and writing are different under different disciplinary and pedagogical conditions.

RATIONALE FOR WRITING-INTENSIVE COURSES

Ask most of the founding mothers and fathers of WAC programs just what ideas sparked the program at their institution and they are likely to give you two answers: (1) students' writing skills will diminish if not reinforced and practiced between freshman

composition and graduation and (2) students' writing improves most markedly if they write while they are engaged by their major subject. The WAC program at the University of Missouri-Columbia, for example, is predicated on the notion that freshman composition courses cannot do the whole job of improving student writing, while La Salle University's Writing Emphasis Course guidelines stress that "professionals in the field (instructors) should evaluate advanced writing in the major since they are more familiar than faculty in the English department with the content and stylistic conventions of writing in their fields." (Margot Soven: unpublished handout) These two notions are hardly irreconcilable—some universities demand general education writing-intensive courses as well as a capstone writing-intensive course.

But the WAC programs that have had the most durable (and in our view most felicitous) effect on curricula owe those efforts to yet another premise held by faculty practitioners: writing disrupts the conventional lecture/test/lecture pattern almost ineluctably associated with large research-based universities. Especially in WAC's more recent history, the mainspring of many programs has become the intent to improve on what Freire calls the "banking model" of education in which students passively receive, record, and return the teacher's deposits of knowledge. Guided by work in cognition and critical thinking (Bloom; Perry), some faculty recognize writing-intensive (WI) designations not as an administrative obligation to demand the requisite number of pages and revisions but as opportunities to encourage in their students intellectual abilities that cannot be engendered through conventional courses.

The cognitivist perspective, of course, is not the only one that informs practice and shapes WAC programs. Programs like Georgetown University's, which include in their mission a "rhetorical" awareness of writing *within* disciplines, not just *across* disciplines, hope that students will achieve an understanding of "the relationship between writing (the writing in the assigned texts and the writing prepared by students) and what it means to become members of that discipline's intellectual community" (Slevin et al. 13). This concomitant cultivation of students' awareness of disciplinary ways of knowing, their critical thinking, and their writing abilities represents, quite obviously, a real change in the curriculum, especially at large research universities. In brief, pedagogy informed by the WAC movement has galvanized curricular change

when the use that is made of writing has intellectual and social consequences for both students and instructors. However, if WI courses are to endure as more than a prefix in a catalog, faculty need to retain full ownership of the changes that come about after they attend workshops, consult with WAC program staff, and incorporate writing in their courses.

DEVELOPING WRITING-INTENSIVE COURSES IN THE DISCIPLINES

Faculty ownership of writing-intensive courses is often difficult to reconcile with the administrative mandates, requirements, and criteria that often permit large-scale WAC programs to prosper. But, as Susan McLeod has pointed out, some central administrative setup is needed to monitor and nurture genuine curricular changes ("Writing" 342). In making the decision to require a course with a substantial amount of writing beyond freshman composition, schools are faced with either placing greater demands on the English department to teach advanced writing courses emphasizing various disciplines or involving all departments in the teaching of writing. If the latter route is taken, a number of policy questions need to be resolved: Who will determine criteria for WI courses? Who will approve courses as fulfilling the WI requirement? In anticipation of the demand for courses that will fulfill the WI requirement, guidelines need to be developed that strike a balance between rubber stamping any course with a required term paper and an insistence on criteria, workload, or pedagogy too restrictive for some faculty members.

What Makes a Course "Writing-Intensive"?

Guidelines for WI courses at different institutions are strikingly similar; most include at least some of the following elements or something like them.

1. *Class size or instructor/student ratio.* Most guidelines insist that WI classes include no more than 15 to 25 students. In programs with

larger classes, teaching assistants may be provided to reduce the instructor's workload.

2. *Who teaches?* Many guidelines insist that WI courses be faculty taught rather than taught by teaching assistants (Indiana, Missouri, Michigan).
3. *Required number of papers or words.* Some guidelines indicate a total of, say, 5,000 words, which may include some combination of formal and informal writing, in-class and out-of-class writing, drafts, and journals, though guidelines may specify the number of formal papers (minimum of four at Indiana) or, like Missouri, that "2,000 words should be in polished papers."
4. *Revision.* Some guidelines specify how many papers should go through a complete revision process. Guidelines may indicate that drafts may be read by the instructor, peers, and teaching assistants or readers. Some guidelines make clear that feedback and revision must involve more than pointing out and correcting surface errors.
5. *How writing will affect final grade.* Guidelines may stipulate or recommend that grades on written work make up a certain percentage of the course grade. This is a point sometimes not easily negotiated in WI courses taught by disciplinary faculty. A total of 70% of the grade devoted to writing would be good; 20% is probably too low. At Indiana, students wishing to take a course for WI credit sign up for an adjoining course number and receive S (satisfactory) or F (fail) for the writing component of the course, which instructors are free to separate from the rest of the course.
6. *Types of assignments.* Guidelines may require or recommend that writing be spread throughout the course in a sequence of related assignments rather than concentrated in a large term paper. Guidelines may specify that a certain number of papers engage students in particular tasks, e.g., summary, analysis, integration of sources. Departments or individual instructors may be asked to generate assignments that discuss ethical issues of the discipline, or expose students to a disciplinary problem to be solved, or to a question on which experts disagree.
7. *Assignment-related instruction and evaluation of papers.* Guidelines may suggest, require, or provide teaching techniques demonstrated in workshops, for example, collaborative work, directed lessons on research techniques, checklists for feedback on drafts, and minimal marking.
8. *Support services.* Guidelines may suggest or require that WI course instructors make use of available consultation with the WAC staff, or that their students use the tutoring services in the campus writing center.

Role of the WAC Program in the Development of WI Courses

On various campuses, WAC specialists and WAC programs play very different roles in the development and maintenance of WI courses. If a WI requirement is established apart from or prior to the creation of a WAC program, and courses meeting minimum specifications are designated "WI" by the administration or departments, WAC personnel may have the advantage of functioning independently (perhaps consulting with WI and non-WI course instructors alike), without the direct responsibility for incorporating writing in a hundred or so courses. At the University of Washington, for instance, a part-time WAC consultant is on the staff of the campuswide Center for Instructional Development and Research. If WAC staff have the opportunity to intervene during the creation of a WI course, they must ensure that faculty maintain final control over the shape of the course. While the WAC consultants may acquire expertise in how writing functions in, say, history or business, it is the faculty member teaching the course who should identify the disciplinary ways of knowing that writing might enhance or reflect.

To that end, writing specialists instrumental in initiating a WI requirement on their campuses may find themselves, willingly or unwillingly, eventually relinquishing or sharing authority over WI courses. When La Salle University began its WAC program, the Writing Emphasis Course Advisory Committee, appointed by the deans and composed of faculty representing different disciplines, was available to consult with departments who were responsible for developing courses according to the approved guidelines for the upper-division writing requirement. However, the committee had no formal authority to veto the department's choices. After the courses were developed, the advisory committee was dissolved, and the deans, in consultation with department chairs, assumed responsibility for periodic review of the upper-division writing requirement.

At SUNY-Albany, where a two-course WI requirement (one lower-division and one in the major) has replaced freshman composition, the writing center staff runs workshops and roundtable discussions and consults only when asked with faculty members who submit their WI course applications to the dean, not to a WAC

committee or program. Departments are responsible for offering as many seats in approved WI courses as there are students majoring in the field.

At Indiana University, the intensive-writing requirement in the College of Arts and Sciences has been in place since 1980, when a collegewide committee recommended which already-existing courses in each department might incorporate a writing component. The Campuswide Writing Program, instituted in 1990, has no obligation to produce WI courses or to administer the requirement: Our mandate is to assist faculty in all schools and colleges within the university with their teaching of writing, not just those in arts and sciences. While we do not need to devote our energy to course generation and approval, what passes for intensive writing in some courses, is, as we say in the Midwest, "not our pig." We found, as did the writing center staff at SUNY-Albany, that writing-intensive guidelines, originally developed and passed by an administrative or legislative body on campus, typically say more about the WI requirement for students than they do about pedagogy conducive to writing.

Our experience tells us that writing does not necessarily go all the way across the curriculum. Not all departments feel obliged to offer WI courses, despite calls from administrators and other departments bearing most of the load. English departments, not surprisingly, often find themselves teaching the lion's share of WI courses; after all, chairs of other departments quite often maintain that "the English department has more experience teaching writing, and we cannot imagine how writing could be used within our courses."

FACULTY-CENTERED CONTROL OF THE WRITING-INTENSIVE REQUIREMENT

To ensure that the concerns and conventions of disciplines across the entire campus are reflected not only in the original guidelines but also in how WI courses are monitored, some WAC programs manage to be essentially faculty driven by maintaining a permanent advisory committee that meets regularly with the support of WAC personnel. Courses that fulfill a WI requirement can be developed by individual faculty members with WAC pro-

gram guidance and approved by the advisory committee made up of faculty from a variety of departments and colleges on campus.

At the University of Michigan, faculty members design their junior-senior WI courses and present them to the English Composition Board (ECB)—the writing center for the College of Literature, Science and the Arts (LS&A)—for review and approval. The ECB Policy Committee, made up of the ECB director, seven LS&A faculty and two ECB faculty, advises the ECB director on all matters related to writing at Michigan and reviews for approval all new WAC course proposals. Although most of the course descriptions submitted to them by faculty include a minimum of 30 pages of writing and emphasize revision and sequences of assignments, there are no central program guidelines for course approval (Hamp-Lyons and McKenna 258).

At the University of Missouri-Columbia, faculty also design their own WI courses following the Campus Writing Program guidelines and submit their applications to the program's Campus Writing Board, made up of faculty from all disciplines. Unlike some advisory committees, the role of which is to recommend courses for WI designation or to assist departments in doing so, the chief function of Missouri's board is the approval in disciplinary subcommittees (e.g., humanities, social sciences, and so on) of applications and reapplications. At Missouri, faculty must apply or reapply each semester to have their course designated WI; no course or instructor is anointed "WI" for life.

Applicants provide as much information as possible about their intentions or their past use of the writing component in their courses by attaching syllabi and examples of writing assignments. Committee members, knowledgeable about particular fields, courses, and reasonable disciplinary expectations for student writing, may suggest that guidelines be altered on an ad hoc basis when strict observations of the guidelines would do violence to the course. One of the Missouri guidelines, for example, suggests that "each WI course should include one paper that addresses a question on which reasonable people can disagree." Faculty in the natural and applied sciences pointed out that in some courses students were not yet able to question the central axioms of the discipline.

In a faculty-driven WAC model, the WAC director and program staff are able to function as "agents" of the approval committee rather than as missionaries, informing applicants of the committee's

concerns and working closely with them on a WI course design that better meets program guidelines or disciplinary needs. The WI application and review/approval process, however, should not become a WAC program's *raison d'être*, replacing informal opportunities for the exchange of ideas among colleagues. Other pitfalls to avoid in the WI course approval process include the tendency to err in one of two directions: either to approve any course that comes down the pike in an effort to respond to the demands of a WI requirement or to make approval criteria so stiff that the committee in its zeal infringes on the academic freedom of colleagues or makes the curricular changes required by WI not worth faculty effort. Liz Hamp-Lyons acknowledges that "a loose hand on the reins of the curriculum is an essential corollary" of WAC at Michigan, for too many restrictions on the junior-senior WI course would make faculty at a research university less willing to teach those courses (Hamp-Lyons and McKenna 266).

Like Michigan's, Georgetown's WAC program considers one of its strengths to be its "commitment to the integrity and independence of individual faculty" (Slevin et al. 26). Program administrators there are generally confident that by making writing the central concern in a course, "instructors can only improve on what they do best." They admit, however, that one of WAC's major principles, "writing as a way of learning," has not especially caught on at Georgetown. They conclude that many of the faculty who incorporate writing do not view it cognitively but rather actively and rhetorically—as a response to prior writing, as persuasion in sociology, or an exchange among biologists. What follows from writing, they surmise, is more important to most faculty than what precedes it: the novice writer beginning to construct meaning and join that disciplinary dialogue that faculty value. Georgetown's efforts to rebalance the direction their WAC program has taken include follow-up discussions with WI faculty that emphasize how texts are produced in the discipline, especially how students struggle to produce their texts (27).

FACULTY INCENTIVES

Stipends. Faculty stipends are only one way to encourage faculty to volunteer to teach a WI course in programs where they have a

choice. The English Composition Board at the University of Michigan awards both outstanding course proposals from faculty and contributions made by graduate teaching assistants. At the University of Massachusetts-Amherst, faculty receive additional salary for teaching a WI course. Workshops, of course, provide an excellent means of attracting prospective WI teachers and rewarding veterans. In addition to honoraria for first-time attendance at a workshop, WAC administrators might also consider honoraria (\$200 to \$400) for faculty attending their second workshop, for it is here, undistracted by the necessarily hortative nature of first workshops, that they will have the luxury to reflect on the exigencies of using writing in their courses. We recommend, by the way, that every workshop agenda include presentations by faculty who have taught WI courses. Local faculty, as opposed to itinerant WAC revivalists, speak with an authority that can seldom be matched. Money might also be set aside or procured from a university faculty development fund for summer stipends to faculty members who wish to spend time with WAC personnel seriously redesigning their WI course after teaching it for one term. In our experience, this has been money well spent.

Teaching Support. A big incentive for some faculty to teach a WI course can be teaching assistant (TA) or grader support provided by the WAC program to relieve the student paper workload. Georgetown University's Writing Program, for instance, provides TAs with special training in the teaching of writing so that even large lecture courses may be taught as WI, with TAs leading WI discussion sections. TAs meet in discipline-specific groups with WAC program staff to formulate methods for integrating writing, reading, and speaking experiences in the discussions and conferences for which they are responsible (Slevin et al. 17).

At the University of Missouri, quarter-time TA support is provided for every 20 students in a WI course after the first 20 (a course enrolling 40 students would receive, for example, one quarter-time TA, a course enrolling 60 would receive half-time support, and so on). The course application process requires the instructor to indicate how TAs and graders will be used, trained, and supervised. It may be necessary for WAC program personnel to monitor the TA/faculty work relationship at first to be sure that everyone's interests are best served. The WAC program director may

wish to run (or be a significant participant in) the WI instructor's meetings and training sessions with TAs, to ensure that TAs are indeed responsible for tasks related to student writing (conferences, commentary on drafts, and supervised grading) and not shouldering all the WI burden. Consulting services offered by the WAC program to WI faculty can include "norming" sessions in which program staff guide the process by which a course instructor and TAs reach consensus on writing assignment goals and criteria.

The pitfall to avoid here would be a sort of mutual exploitation on the part of the WAC program, departments, and faculty: the creation of huge WI courses that fill the requirement, employ TAs, relieve faculty of extra work, but are not, because of their size, conducive to productive use of student writing. Large WI courses can be successful in every important respect (we have learned a great deal, for example, in working with an enviable 375-student WI journalism course). But faculty considering taking on such a task should keep in mind that their duties will become increasingly managerial. Our experience has been that critical mass for graduate student-assisted WI courses—that is, genuinely writing-intensive courses as defined above—would appear to be about 80 students.

Discipline-Specific Tutorial Services. The establishment of a writing laboratory or component of a writing center specifically for students enrolled in WI courses and staffed by tutors from the disciplines can be not only one of the key incentives for faculty involvement in the program but also one of the chief sources of data for the eventual improvement of how WI courses are developed and taught.

One important source of data for our consultation with faculty on the best use of writing in their courses comes from the course-specific tutors and the taping of tutor-student conferences on drafts. Because we see assignments and papers in flux, we have, through the operation of the laboratory, been given a view of the program we are administering perhaps unavailable to us through a more conventional program assessment scheme. Course-specific tutors who have worked with students grappling with the demands of assignments can tell instructors a great deal, for example, about the ambiguities of their assignments and the conceptual difficulties that those students encounter.

Reflection on Teaching Practice. It may seem odd to assert that the opportunity to reflect on one's pedagogy is a benefit of teaching WI courses; in fact, some instructors grumble that the struggle with the paper load makes reflection unlikely. WAC programs, however, often become something like a haven, particularly at universities where the gravitational pull of research is unremitting. Faculty development programs based merely on the exchange of "teaching tips" have little effect on individual pedagogies and, consequently, on the curriculum at large. A WAC program, on the other hand, can bring together faculty from disparate disciplines and modify teaching praxis, effecting, as one dean of our acquaintance has said, " 'subcutaneous' faculty development." At every university at which we have worked—and this has more to do with the nature of discovering writing as a tool for teaching than it has to do with our efficacy as consultants—WAC faculty participants have recognized that courses, like student papers, are in need of revision. And we should all know now what is meant by revision: not scrubbing away cosmetic difficulties, but rather examining the premises implicit in our pedagogies. Faculty willing to engage in this sort of reflection are the agents of curricular change at universities. These same faculty very often find their professional lives changed in meaningful ways—and for the better. They frequently win teaching awards for all the right reasons. WAC programs seem to breed the only tolerable form of elitism.

EVALUATING WI COURSES: HOW RESEARCH CAN INFORM PRACTICE AND CHANGE

For all the interest in the uses of writing in disciplinary courses, there has actually been relatively little formal inquiry into what happens in such courses once writing has been incorporated. Research on WAC often takes the form of investigation of the effectiveness of WAC on student learning (Applebee; Newell). The WAC movement seems to just now be reaching the stage where more formal studies are being directed at the various claims made for the value of writing in disciplinary classrooms. A growing number of ethnographies or case studies of how writing is taught in conjunction with how the subject matter is taught (Faigley and

Hansen; Herrington; North; Swanson-Owens; Walvoord and McCarthy) are taking into consideration important widespread differences as well as similarities across disciplines, courses, course levels, and perhaps most important, across students and instructors.

To accomplish both the *cognitive* (writing to learn) and *rhetorical* (learning to write) goals of WAC programs, English-trained staff often find a need to place themselves inside the other academic disciplines, to learn about their subject matter, about their methods of study, and about what is valued in their writing. Without this immersion in other disciplines, WAC personnel run the risk of imposing their English-based perceptions on another field, perceptions that may not be all that conducive to producing WI courses that stimulate inquiry in disciplines other than their own. WAC consultants will find very quickly that they require more knowledge of the full context in which students' writing is produced and evaluated if they are to do more than help faculty reword assignments or make fewer red marks on papers.

One WAC assumption that often goes unexplored is that the dialogue Barbara Walvoord proposes will result in a transformation of pedagogy. Who knows whether two days of talk about WAC's cognitive and rhetorical aims will change the way faculty approach student writing the following semester? Some WAC programs have chosen to take their curiosity about follow-through or their anecdotal evidence of disciplinary differences in the way writing is used to a more formal level of inquiry, not as much for policing purposes as for what they will learn by looking at WAC *in practice*.

Consequently, more WAC programs are incorporating a "research arm" (SUNY-Albany, Illinois-Chicago, Indiana-Bloomington) to investigate how discipline faculty assign, respond to, and evaluate writing and how they put into play the texts of their discipline, the texts with which students must interact. The aim of such research is not to catch faculty who are not carrying out WAC guidelines but to learn ethnographically what their pedagogy means on their terms, so that together WAC programs and faculty can use writing to make courses better.

WAC faculty and staff at SUNY-Albany's writing center, for instance, have conducted case studies of several WI courses (North; Cain), some of the results of which were used in consultation with WI instructors. While that project was internally funded by the

university, outside granting agencies like the Fund for the Improvement of Postsecondary Education (FIPSE) are still possible funding sources for WAC research. Internal funds set aside for assessment of departments and programs should not be overlooked. In the face of budget cuts, WAC programs that want to continue improving teaching and learning through writing may find they need to justify *how* they are accomplishing those aims. A proactive assessment of student writing performance in the full context in which that writing was assigned may head off the WAC program's forced participation in some form of standardized writing assessment mandated by administrators or legislators. Responsible attempts at assessment should after all make links between students' measured proficiencies and what has or has not happened to them in the full context of our courses and our classrooms, especially if, as we hope, assessment is to lead to reform in curriculum design. Contextual assessment can at the very least afford WAC programs and instructors opportunities to act together on their findings.

It was originally in response to a call for a standardized writing assessment of graduating seniors that we began investigating the disciplinary and classroom contexts in which WI courses are taught at University of Missouri-Columbia. A three-year study (Farris et al.) in collaboration with the WAC director and a professor in psychology enabled us to pursue questions we had as a result of tutoring sessions and interviews with WI instructors and, at the same time, interrogate one of the claims we and others have made for WAC—that it enables critical thinking. We combined ethnographic *thick description* of WI courses in journalism, art appreciation, and human and family development with two other lines of investigation, interviews with a sample of students before and after taking a WI course and those students' papers written in the course. Both the student interviews and the papers were rated on a scale of critical thinking derived from the work of William Perry and Karen Kitchener and Patricia King. Ethnographic thick description helped us determine why the level of critical thinking displayed in the writing was not consistent with the level students demonstrated in the oral interview.

We won't go into all our findings here, but just let us say that we are even more realistic WAC specialists for having done this research. We are able to say that the thinking students are able to

engage in their writing for WI courses is contextually determined and includes assumptions of the discipline, belief systems of the instructors, and the extent to which those instructors have reflected on these in constructing class assignments and activities. We have a much better understanding of how WI instructor's classrooms really function as "interpretive communities." We have observed on a daily basis the extent to which both professional and student writing is integrated with course goals in the way it is shared, modeled, analyzed, and evaluated. More important, perhaps, we have a much fuller sense of what those goals mean to the members of that classroom's and that discipline's "culture."

For instance, for a number of years, a journalism professor's use of an assignment that called for the objective reporting of two sides of an issue conflicted with our sense that students in such a WI course should instead generate a committed position that drives their analysis of an unsettled issue. As a result of the semester we spent in this professor's classroom, we now understand more fully the place of that assignment in terms of his world view and the profession into which he believes he is initiating his students. We found reflected in all of his assignments, as well as in lecture and class discussion, the firm belief that, in a democratic society, journalism is responsible for the presentation of truth that emerges from a balanced consideration of viewpoints. We did suggest to this professor that his TAs hold one-on-one conferences for invention purposes, so that students, rather than choosing from a stock list of "point/counterpoint" topics (e.g., "Should the names of rape victims be revealed in the press?"), might at least explore an unresolved issue in journalism that was of particular interest to them.

Studying WI courses at close range can reveal that WI instructors do not always view the relationship between inquiry and writing in the ways we had imagined or in keeping with the WAC mission as it was first conceived. But research can give WAC personnel a better sense of WI instructors' epistemologies and provide data useful in consulting with faculty on the changes they want to make in WI courses. These are changes, that, finally, in keeping with or in spite of our "interpretation," integrate writing with what they would like students to be able to do in their courses, with their personal theories of the role writing plays in the construction of knowledge in their discipline.

A research and follow-up component can be the appropriate tack to take at what McLeod calls the *third stage* of WAC: in an effort to get beyond the implied success of the institutionalization of any idea—to a true investigation of how the program could remain interesting and effective ("Writing" 342). We believe that the way to keep writing tied to thinking and learning and to changes in teaching is to deal with it as locally and as discipline- and professor-specifically as possible. Such local work and co-investigation with faculty also deals most effectively with any faculty resistance to "the colonizers." We strongly believe that the WAC programs that are most likely to last will be those that take their own advice on revision, those which are willing to continually re-see and adjust their claims, guidelines, and training materials in light of the instructor and student practices they encounter every day.

WORKS CITED

- Applebee, A. N. *Writing in the Secondary School: English and the Content Areas*. Research Monograph No. 21. Urbana: NCTE, 1981.
- Bloom, B. S., ed. *Taxonomy of Educational Objectives. Vol. 1: Cognitive Domain*. New York: McKay, 1956.
- Cain, Mary Ann. "Researching Language Practices in Other Disciplines: Seeing Ourselves as 'Other.'" Conference on College Composition and Communication. Boston, 1991.
- Faigley, Lester, and Kristine Hansen. "Learning to Write in the Social Sciences." *College Composition and Communication* 36 (May 1985): 140-49.
- Farris, Christine. "Trading Religion for Gold: Investigating Disciplinary Cultures and the Claims of Writing Across the Curriculum." In *Emerging Models of Language Cultural Studies*. Ed. Michael Vivion and James Berlin. Portsmouth, NH: Boynton, forthcoming.
- Farris, Christine, Phillip Wood, Raymond Smith, and Douglas Hunt. *Final Report on Critical Thinking in Writing Intensive Courses*. University of Missouri-Columbia, Office of the Provost, 1990.
- Freire, Paulo. *Pedagogy of the Oppressed*. New York: Herder, 1970.
- Hamp-Lyons, Liz, and Eleanor McKenna. "The University of Michigan." *Programs That Work: Models and Methods for Writing Across the Curriculum*. Ed. Toby Fulwiler and Art Young. Portsmouth, NH: Boynton, 1990. 255-72.
- Herrington, Anne J., "Writing in Academic Settings: A Study of the Contexts for Writing in Two College Chemical Engineering Courses." *Research in the Teaching of English* 19 (Dec. 1985): 331-61.
- Kitchener, Karen S., Patricia M. King, Phillip K. Wood, and Mark L. Davison. "Sequentiality and Consistency in the Development of Reflective Judgment:

- A Six-Year Longitudinal Study." *Journal of Applied Developmental Psychology* 10 (1987): 73-95.
- McLeod, Susan H. "Writing Across the Curriculum: The Second Stage, and Beyond." *College Composition and Communication* 40 (Oct. 1989): 337-43.
- Newell, George E. "Learning From Writing in Two Content Areas." *Research in the Teaching of English* 18 (Oct. 1984): 265-87.
- North, Stephen M. "Writing in a Philosophy Class." *Research in the Teaching of English* 20 (Oct. 1986): 225-62.
- Perry, William J., Jr. *Forms of Intellectual and Ethical Development in the College Years: A Scheme*. New York: Holt, 1970.
- Slevin, James, et al. "Georgetown University." *Programs That Work: Models and Methods for Writing Across the Curriculum*. Ed. Toby Fulwiler and Art Young. Portsmouth, NH: Boynton, 1990. 9-28.
- Swanson-Owens, Deborah. "Identifying Natural Sources of Resistance: A Case Study of Implementing Writing Across the Curriculum." *Research in the Teaching of English* 20 (Feb. 1986): 69-97.
- Walvoord, Barbara, and Lucille P. McCarthy. *Thinking and Writing in College: A Naturalistic Study of Students in Four Disciplines*. Urbana: NCTE, 1991.