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WRITING ACROSS THE CURRICULUM: AN OVERVIEW OF ITS MOVEMENT
IN AMERICAN COLLEGES AND UNIVERSITIES

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Writing Across the Curriculum: An Overview
of Its Movement in American
Colleges and Universities

Carolyn H. Hopper

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Writing Across the Curriculum: An Overview
of Its Movement in American
Colleges and Universities

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Abstract

Writing Across the Curriculum: An Overview of Its Movement in American Colleges and Universities

by Carolyn H. Hopper

The Writing Across the Curriculum (WAC) movement is rapidly spreading in American colleges and universities. However, writing across the curriculum is not a quick fix for a literacy crisis, nor is it a back-to-basics movement. The basic assumption of the movement is that writing is a central way of learning in all subject areas. The teaching of writing is a responsibility shared by all faculty. The WAC movement implies significant criticism of the pedagogy, the goals, and the educational outcomes of many of our contemporary educational institutions. There are, therefore, many obstacles in implementing a successful writing across the curriculum program. This dissertation examines the concept Maxine Hairston calls the paradigm shift, the importance of considering writing as process rather than product, writing as a way of learning and various modes of writing. It traces the roots of WAC from England, looks

Carolyn H. Hopper

at existing WAC programs, examines philosophical and pedagogical implications inherent in WAC and attempts to draw some conclusions about the use of WAC programs at colleges and universities. After reading this analysis, an administrator, department head, or individual instructor should understand what WAC requires of a faculty, student body, and curriculum and be able to determine if WAC will work within a given setting or situation.

Table of Contents

Chapter	Page
I. Introduction	1
II. The Roots of Writing Across the Curriculum . . .	3
III. Writing Across Curriculum Programs in American Colleges and Universities	12
IV. Pedagogical Implications Inherent in Writing Across the Curriculum	33
V. What Goes on in Classrooms with Writing Across the Curriculum	75
VI. Conclusion	88
Appendix	113
Bibliography	120

Chapter I

Introduction

One significant problem in higher education is the decline in literacy of students. In the last 10 to 15 years both the public and professionals have become increasingly aware of this literacy problem. This consciousness has caused schools and state and local governing agencies to respond in several ways. They have required higher scores on entrance examinations, required more courses in English composition at high school and college levels, offered remedial courses, required competency tests at exit and even at the junior year in some colleges, given more difficult entrance tests for candidates for teacher education programs, and offered in-house courses and workshops for persons in business and industry.

One of the most rapidly spreading responses to this crisis is the Writing Across the Curriculum (WAC) movement in undergraduate colleges and universities which is designed to increase the use of writing assignments in all disciplines. In such programs all faculty, not just the English composition faculty, share responsibility for improving the writing ability of the students. Writing in

such programs is viewed as central to the learning process in all fields.

This dissertation will trace the roots of WAC from England, look at existing programs, examine its inherent philosophies and pedagogical implications, and attempt to draw some conclusions about the use of WAC programs at colleges and universities. After reading this analysis, an administrator, department head, or individual instructor should understand what WAC requires of a faculty, student body, and curriculum, and be able to determine if WAC will work within a given setting or situation.

Chapter II

The Roots of Writing Across the Curriculum

Writing across the curriculum (WAC) has its roots in the London School Projects which took place in the mid-1960s. Although the series of books and pamphlets which grew out of the Writing Research Unit and the WAC Project at the London Institute of Education deal with secondary schools, they are the natural place to begin any discussion of WAC.

The work began with an examination of the role of talking in the English class but eventually extended throughout the secondary school curriculum. This research is discussed in a series of three essays published in 1969 and revised in 1971 as Language: The Learner and the School.

The first essay by Douglas Barnes reports his findings in observing the interaction of a group of eleven-year-olds through twelve lessons in the first term of secondary education. He examined in detail the difference in the language of instruction in math, history, physics, English, and religious education, and found that most of the teachers' questions focused on facts and sought a single right answer. In example after example it was clear that teachers were

using language in ways that limited pupils' participation and learning.

In the second essay, James Britton carries this argument further by examining transcripts of children "talking to learn." He concludes that pupils' talk can be a powerful instrument in carrying them forward to new understanding of their experiences and that seemingly unstructured talk may have an overall pattern that fosters such understanding and leads toward more sophisticated language.

Finally, Harold Rosen's essay, "A Language Policy Across the Curriculum," is an early statement of beliefs about the roles of talking, writing, and reading in the learning experience across the curriculum. Rosen asserts that "language is inextricably bound up with all learning that goes on in school" (160). This includes talking, writing, and reading. Through improvised talk, Rosen believes, a student "can shape ideas, modify them by listening to others question, plan, express doubt, difficulty and confusion, experiment with new language, and feel free to be tentative and incomplete" (162). He therefore suggests that schools should be organized so that pupils are able to use this talking to their full advantage. The written language, Rosen adds, has the advantage of "permanence, completeness and elaboration" (166). However, it is also often the most difficult for students. Rosen asserts

that the types of writing assigned are at fault. He finds that "tasks frequently seem to lack a clear function, nor do they seem to leave room for expression of the writer's own ideas and his way of seeing things" (164). He adds that students are asked to "copy" notes rather than "make" notes. He challenges teachers to assign writing tasks which engage students in abstracting and verbalizing the essence of what they have learned. Reading is also a vital part of the learning experience across the curriculum. The books made readily accessible by teachers not only provide an inexhaustible supply of material by which students can teach themselves and supplement what has been taught but also represent a means by which they can learn the varied "adult forms of discourse" and when they should be used (166). Rosen concludes that the role of the teacher in using language should be changed so that teachers encourage students to develop a confidence in their own use of language (167).

These essays became the basis for the main concern of the London group: the development of writing abilities. This work had two separate phases: (1) a large-scale research study analyzing the development of writing ability in all subject areas in the secondary school, and (2) the writing across the curriculum project, which sought

to apply the significance of the research findings through working closely with teachers in individual schools.

James Britton and his colleagues documented the results from the first major segment of research study in The Development of Writing Abilities (11-18). The study was based on 2,122 pieces of writing by students between the ages of 11 and 18 in sixty-five secondary schools and in twenty-one curriculum subjects. Arthur Applebee reports, "One goal of the study was to develop and validate a method of describing children's writing that would allow comparisons among writing tasks undertaken in different subjects and at different grade levels." Thus much of the report discusses the system of analysis that emerged from detailed consideration of the scripts. The system is oriented toward the kinds of writing encountered by teachers and to this pragmatic concern Britton "has added a vigorous philosophical and linguistic underpinning" (82).

The project team dealt with both the audience for whom the student wrote and the function or purpose the writing served. The analysis of audience specified three major types of relationships: the writer to self, writer to teacher, or writer to a known or unknown wider audience. The London team found that teacher audiences accounted for about 95 percent of the examples. The functions or uses of writing were divided between discursive or informational

and literary uses of language. Applebee explains,

In the first case they argued that the writer adopts the role of participant looking for direct outcomes in the world of action. . . . In the second case the writer adopts the role of spectator who suspends concern with immediate or direct outcomes in order to consider the experience as a whole. (82)

The distinction between spectator and participant roles is a major step in classifying the uses of language, but within each role there is considerable diversity. Applebee explains how the Writing Research Unit dealt with this diversity:

In the participant role, we can write a continuum that begins in the relative informality of dinner table conversation, moves through the increasingly formalized modes of writing adapted in various professions, and ends (at the extreme) in propositional logic. The Writing Research Unit labeled this a continuum of transactional uses of language; here, meaning is made increasingly precise through the use of what we usually call "logical" or "analytical" techniques.

In the spectator role, there is a parallel progression from the loose structure of the anecdote to the internal complexity and layered meaning of sophisticated poetry. Rather than relying upon logical or analytic techniques, meaning along this dimension of language use seems to arise out of the work. . . . Because poetry seems to exemplify meaning shaped in this way, the Writing Research Unit labeled this continuum the "poetic." They realized, however, that similar poetic techniques underlie all of our literary or spectator role experiences whether in dramatic, narrative or poetic genres.

This model can be diagrammed very simply:

Poetic	Expressive	Transactional
(Spectator Role)	(Participant Role)	

At the center of the model, the Writing Research Unit added a mode of language they labeled the expressive. This is best illustrated by informal talk between friends. . . . Given the value which the project came to place on such talk when they examined the talk in school contexts, it is not surprising that the project also looked for written examples of similar form and function.
(82-83)

When the functional categories were applied to the writing samples, the team found that 63 percent fell into the transactional category, and there was a steady increase in percentage of transactional writing in the writing of older children. Given the researchers' theory that expressive writing is most apt to promote learning, their findings were disappointing.

This is a brief summary of the research findings. The task of discovering what their implications for teaching writing were was the task of the WAC Project, directed by Nancy Martin. The project began in September of 1971 with a team of three teachers and the theory based on the earlier research. By working with teachers they hoped to discover "how writing might contribute to learning in various subjects" (Martin, Writing 1).

An outgrowth of this working with teachers was a series of six pamphlets, published individually, but now combined in Writing and Learning Across the Curriculum, 11-16, edited by Nancy Martin. In the first pamphlet, "From Information to Understanding," the project team

began to explore what children do with ideas in various subject areas. The pamphlet consists of examples of children using talk and writing to understand the new ideas met in lessons. A commentary of these transcripts identified their errors of understanding as the errors became apparent in what the children said and pointed up how their thinking was restricted as they talked. The team discovered that some classroom situations actually prevented students from undertaking the exploration needed to make new concepts. The team also explains in this pamphlet the matter of expressive writing, and two points seem particularly important. They argue that the learning situation must allow students to undertake relatively unsystematic explorations of new ideas without fear of censure, and it must allow them to communicate what they have to say when they most want to say it. They must be free of the demand of polished performance--even if such performance is the ultimate goal. Subsequent pamphlets take up the issues of "genuine communication, not dummy runs"; of the importance of a sense of audience to writing; of different kinds of writing according to purposes; of the relation of talking to writing; and of keeping the writers' own option open (individual concerns and intentions) "as students move toward the information-crammed examination years" (Martin, Writing 2). The last two pamphlets in the series focus separately on writing in the

sciences and writing in the humanities. Martin says, "The notion that writing can be an instrument of learning, of reflection, of discovery, rather than merely a means of recording or testing is well understood by writers, but hardly understood at all by teachers, students, or parents" (Martin, Writing 3).

The theory and research resulting from the Writing Research Unit of the Schools Council Project has received widespread attention. In response to that attention, and because the ideas of "Writing Across the Curriculum" developed in the project are now not always fully understood, Jeanette Williams undertook a critical analysis of the whole WAC project. Even though her analysis of the project is essentially negative, she concludes that the project's intrinsic value appears to be that its position on language provides a powerful heuristic that teachers might use in the classroom and for the purpose of research.

Richard Bailey has written an informative article pointing out the differences in the British educational programs and those in America. In "Writing Across the Curriculum: The British Approach," he examines the British Schools Projects reports and notes how their findings would and would not be applicable to schools in the United States. He concludes that while there are major differences, "writing across the curriculum remains as an important priority for educational reform and renewal" (31).

While there is not an entirely comparable survey for schools in the United States, preliminary findings in Applebee's study of writing in American schools (1981) indicate a pattern similar to the 1967-1970 British study: "informational" (transactional) writing dominated the composing tasks in all disciplines; "imaginative" (poetic) writing was limited largely to English classes; "personal" (expressive) writing was virtually nonexistent in the sample. Applebee examines one additional category, "mechanical writing" which the Britton study did not consider in detail. Applebee describes mechanical writing as any writing activity which does not involve significant composing on the part of the writer--filling in the blanks, translating, computing, copying, and taking notes. This category, it turns out, is by far the most frequently assigned writing in American classrooms (Bailey 30).

Chapter III

Writing Across Curriculum Programs in American Colleges and Universities

Elaine Maimon dates the beginning of the writing across curriculum movement in United States colleges to 1974 and 1975 when Carleton College, under the leadership of Harriet Sherridan, instituted faculty workshops for WAC. These workshops ultimately led to curricular revisions that resulted in college-wide responsibility for writing at Carleton. The Carleton program inspired other programs, including the program Maimon began at Beaver College (Smith, "Interview" 11). WAC in one form or another has spread rapidly: prestigious institutions like Harvard and Yale, large state universities like Michigan and Maryland, large private institutions like Brigham Young, small liberal arts institutions like Beaver College in Philadelphia or Grinnell College in Iowa, community colleges in many states, and high school systems have adopted some version of the practice. The WAC programs in practice are indeed varied. They vary both in why they are instituted and how they are administered. Although the literature about such

individual programs is sketchy at best, a review of the major types of programs is in order.¹

The major issues in the establishment of any WAC programs involve both the why and the how. Because programs are so varied and because similar objectives are met in different ways, these issues need to be examined separately. An analysis of the objectives of approximately 30 comprehensive writing programs in American colleges and universities reveals four distinct, yet overlapping, reasons for establishing such programs: (1) improvement of student writing, (2) a decentralization of writing from the English department to all areas of study, (3) provision for writing experience beyond freshman composition, and (4) commitment to the belief that writing is a way of learning.

The objectives of the writing programs at the University of Michigan, Yale, and St. Edwards are primarily to improve students' writing. In the article "Comprehensive Writing Programs," published in The Forum for Liberal Education, Daniel Fader states: "Recognizing that both student and faculty were dissatisfied with the quality of student writing, the faculty from the University of Michigan College of Literature, Science and the Arts voted to create

¹ A list of program directors is included in the appendix. The April 1981 issue of Forum for Liberal Education contains a description of many of the leading programs. Current Issues in Higher Education, 1983-84, has dedicated this entire issue to WAC.

an English Composition Board (ECB) in 1976" (8; hereafter Forum). In the same year Yale University received a grant from the Pew Memorial Trust which applied "to the improvement and expansion of freshman writing curriculum." And, "believing that proficient writing is the mark of a college graduate," St. Edwards University has implemented a comprehensive writing program that includes interdisciplinary course work and basic skills requirements" (Forum 3).

Although the underlying objective of the improvement of student writing is certainly important, the stated objectives of the writing programs at Grinnell College, Wheaton College, and Central College focus on the responsibility of the entire faculty to share in the teaching of writing. Grinnell's writing program has developed "on the assumption that responsibility for teaching clear, concise English prose does not belong to the English faculty alone" (Forum 5). Faculty and administration at Wheaton College have expressed a renewed interest in helping students "learn to write clearly in all courses" (Forum 12).

The focus of the objectives of the writing programs at the University of Maryland and the Gonzaga University is not only on writing in all areas but also on writing at various levels of the students' career. Surveys of student writing development in all five undergraduate divisions of the University of Maryland over the past decade revealed a sharp

decline in students' writing abilities several semesters after they completed English 101, freshman composition. To remedy this situation, the English department has experimented with a program in which all students at the junior level receive supplemental instruction in composition; "assignments in these courses relate directly to students' majors and encourage development of practical writing skills they may expect to use as employed professionals" (Forum 9). An objective of the writing program at Gonzaga University "is to provide juniors and seniors with formal writing instruction using assignments related to their major field at a time when the students are beginning to recognize inadequacies in their composition skills" (Forum 7).

The fourth type of objective that is common to WAC programs most resembles the conclusions of the British project. This objective states that students need not only to learn to write but also to write to learn. The two programs whose objectives best illustrate this philosophy are those at Beaver College and Michigan Tech University. Elaine Maimon states that at Beaver College "writing is viewed as an essential element in the learning process regardless of which discipline is being explored" (Forum 6), and Toby Fulwiler asserts that at Michigan Tech the programs have grown from the notion "that writing is

as central to learning as reading, observing and thinking" (Forum 7).

Perhaps more varied than the reasons for establishing a WAC program are the ways of implementing it. However, all programs seem to fall into one of two basic organizational structures: (1) those schools in which the business of writing is carried out within various departments such as government, physics, history, and sociology--the single subject approach, and (2) those schools which retain the notion that all students should write prose about the concerns of their discipline, but which centralize the responsibility of training in individual writing departments, usually English or rhetoric--the centralized writing department approach. Administrative factors which seem to cross these basic organizational lines freely are faculty workshops (faculty development), writing centers or labs, and a concern for a vertical sequence of writing (throughout the student years at college) in addition to the horizontal sequence implied in any across curriculum program.

The University of Michigan is typical of the single-subject approach. In 1976 faculty from the University of Michigan College of Literature, Science and the Arts voted to create an English Composition Board (ECB) which is made up of faculty from various departments. The departments of chemistry, English, Far Eastern languages and literature,

journalism, and psychology were represented. The ECB chairman reported that "The Graduation Requirements Commission charged the board with proposing a plan that would guarantee the literacy of all students before graduation." The program which the ECB devised centers around the existing introductory composition course. The writing program uses a writing assessment exam to place students in a freshman writing program. The program also includes an upper-class writing requirement. The ECB chairman explains:

Based on their assessment rating, the students are placed in five categories of competence which correspond to their freshman writing requirement. The categories are exemption from introductory composition, exemption plus writing workshop, introductory composition, introductory composition plus writing workshop, and tutorial. . . .

 The workshop staff (853 members) provides students with developmental rather than remedial aid. The difference is the focus of attention given to each student. While remedial aid concentrates on motivation for writing and creation of writing topics, developmental assistance focuses on problems encountered in the writing process. The staff never hands out assignments; papers prepared in other classes are reviewed. (Forum, 8-9)

Students are taught to organize the writing process into three stages: composing, shaping, and editing. They begin by dealing with the essays as a whole, identifying audience, and preparing drafts, and end by concentrating on

the conventions of standard English and learning to recognize their own errors.

Students who rated lowest on the assessment exam must take tutorials before taking introductory composition. The tutorials are taught by ECB faculty members and extend for seven weeks. After this intensive personalized instruction, the students write another assessment essay.

In addition to the freshman program, all students are required to enroll in an upper-level writing course, preferably in their major. According to the ECB chairman, "Faculty in the advanced writing classes present writing as a process of organization and argument rather than a collection of skills. . . . This allows faculty who do not know much about diction and syntax to concentrate on the mode of writing in their discipline" (Forum 9). Nineteen teaching units in the college developed upper-level writing courses, including anthropology, art history, biological sciences, English, philosophy, and women's studies. The courses, after being approved by the board, are carried out by the teachers of various subjects, usually with the help of a teaching assistant from that department who has been given some training in the teaching of composition by teachers designated by the board (Kinneavy, "WAC" 14). In most departments, one course, selected from several which are classified as upper-level writing, satisfies the advanced

writing requirement. Other departments, such as geology and mineralogy, require their majors to participate in a comprehensive program. During the fall of 1980, 44 courses were offered. By 1983, over 144 such courses were offered. The ECB offers faculty workshops for the creation of upper-level writing classes. The workshops focus on the methods for teaching the skills and processes of composition, organization, and argumentation in each discipline (Forum 9).

Yale's writing program also can be categorized as a single-subject approach, but there are some basic differences from the Michigan program. Although Yale has no specific composition requirements, writing courses appear at all levels of the curriculum. Composition at Yale is governed by the Committee on Expository Writing, a group of faculty representatives from departments ranging from philosophy to physics (Forum 2).

Yale's Committee on Expository Writing decided that a curriculum change was in order since the school was providing "almost no systematic training in writing outside the English department." The committee decided to concentrate on revising courses being offered, and that led to new training and new responsibility for graduate students. Joseph Gordon and Linda Peterson explain this aspect of Yale's activities:

At the beginning of the program, most of the courses available for adaptation offered little practice in writing and even less instruction than practice. A typical lecture course in the social sciences, for example, required only a single paper, due at the end of the term, produced with little guidance except as to length. Many of these courses, however, broke into sections for one hour each week. Systematic instruction in writing might go on in these sections, if frequent short assignments that grew out of and led back into the lectures could replace the term paper and if students could have sufficient opportunity for rewriting and for individual conferences.

Normally, the advanced graduate students who conducted these sections as teaching fellows were paid out of departmental funds. For budgetary reasons, the average size had swollen to thirty--far too large for close work on writing. So the Committee on Expository Writing designed a program of "Writing Intensive" sections and offered to pay the salaries for teaching fellows at the ratio of one TF to every fifteen students. To qualify for this help, the lecturer would agree to increase and redesign his writing assignments and allow time both in class and on conferences for instruction in writing.

Changes such as more frequent assignments and increased attention to finished papers would be merely mechanical if the assignments were poorly designed and attention untrained. To avoid such problems, the Committee sponsors a series of training workshops every semester for TF's, who must attend the workshops or forfeit their salaries. The workshops take up both practical matters and theoretical issues in the teaching of writing: design and variety of assignments, approaches to paper comments, procedures for revision and group discussion of drafts, techniques for conferences, and the like. (Graham 22)

Since the stipends TFs receive for their work are paid by the Committee on Expository Writing rather than by the department that offers the course, there is incentive for instructors to develop such classes. In 1983 the Committee for Expository Writing supported about 90 sections in more

than 30 different courses, including Galaxies and Cosmology (astronomy), Evolution (biology), German Cinema and the Language of Film (German), the Keynesian Revolution (economics), Developmental Psychology (psychology), and Religion in America (religious studies). In cases where a lecture class is fairly small, e.g. 40-50 in art history, all sections may be Writing Intensive. Where lecture classes are very large, only designated sections are Intensive, and the instructors decide who should enroll in them--perhaps all majors or all sophomores. The university also offers upper-level special courses in writing "which provide students with the opportunity to produce detailed writing projects in their major field of study." At the beginning of the course instructors hand out diverse material which the students synthesize into long papers which often occupy the entire semester. The Committee on Expository Writing sees Special Courses in Writing being offered in all departments and eventually required of all majors who intend to write a senior thesis (Forum 3).

Another interesting independent writing project at Yale is English 410B, Daily Themes, which requires that enrolled students attend weekly lectures on writing and writing theory and complete daily writing assignments of approximately 300 words for the 12 weeks of the course. Student writing is individually critiqued by writing tutors

in weekly sessions. Remedial assistance for students having trouble with Daily Themes or writing assignments in any course is provided by writing tutors assigned to each resident hall. The tutorial staff includes freelance writers, lawyers, retired teachers, and part-time college instructors who are hired to help students with compositions.

One further example of the single subject approach is the writing program of Grinnell College. During the past decade, virtually all instructors from every department of the college have taught at least one basic writing course. The director of WAC explains, "These courses for the most part integrate writing supervision with introductory material in a particular field" (Forum 4). He adds,

The basic elements of the writing program are the freshman tutorials, a selection of seminars conducted by faculty members across the college curriculum. Although each tutorial is devoted to a specific disciplinary topic, their common focus is on student's acquisition of research and writing skills that might be applicable to any discipline. Course formats may vary, although most instructors favor open discussion based on assigned reading. (Forum 4)

In addition to tutorials, the faculty at Grinnell attempts to inject composition instruction into regularly offered courses in various departments. These courses are designated in the college catalog as writing courses and may require up to three more major writing assignments than regular sections of the courses. Grinnell also established a writing lab in 1972 to provide remedial assistance to

"students who display problems with writing." In addition to noncredit individual instruction, the lab staff offers a one-credit course.

Since 1974 Grinnell has offered summer workshops in the teaching of writing for interested faculty members. The workshops meet four hours each day for a week. Faculty participants are asked to bring examples of "interesting" writing to the first session. Throughout the workshop, these samples are systematically critiqued by the group as a whole. Grinnell also offers an advanced workshop for interested faculty members (Forum 4).

Another way of administering an across the curriculum program is the centralized writing department approach, exemplified by the courses offered at Brigham Young University and the University of Maryland. According to James Kinneavy,

The Brigham Young program grew out of the success of the university's technical writing classes organized under the direction of John S. Harris. He extended the technical writing classes to courses in writing for all science and engineering students. ("WAC" 16)

He then extended these to social sciences and the humanities. The department of business offers its own courses, but the first three sets of courses are offered by the English department (Kinneavy, "WAC" 16).

Brigham Young's approach is built on programs pioneered by Mills and Walton at Texas. These authors of

college texts "have moved away from the early emphasis on individual subjects to considerations of rhetorical principles that transcend departments such as careful description, explanation and proof, and problems of definition and classification--and to some considerations of style and audience" (Kinneavy, "WAC" 16). They feel that with a knowledge of these logical or rhetorical concerns anyone can train writers in various disciplines as long as the subject matter does not get too esoteric. Brigham Young has a semester of freshman English not committed to any particular subject, then a semester of junior English offered in four generic areas (Kinneavy, "WAC" 16).

The program at the University of Maryland is similar to that at Brigham Young. Surveys of student writing development showed a deterioration of writing abilities several semesters after students completed freshman composition. In answer to this situation, the English department experimented with a program during the 1979-80 academic year in which all students at the junior level received supplemental instruction in composition; assignments in these courses relate directly to students' majors and encourage development of the practical writing skills they may expect to use as professionals. The program has now been expanded. Basically, junior composition consists

of two courses, English 391, Advanced Writing, and English 393, Technical Writing. Most of these are taught by the English department, though sections are offered in various schools. Generally, students select courses that enable them to write within the bounds of their natures. Twenty-seven different types of junior composition courses have been developed. For example, English 391A is advanced composition for Fine Arts majors, whereas English 391L is for pre-law students.

The junior composition program offers a variety of "support" services to both students and instructors. Maryland has a junior composition center, a writing lab staffed by paraprofessionals, to assist students who need help with assignments. Faculty workshops are beneficial in preparing faculty to teach such courses. They involve both lectures on theory and practice on composition and intensive practical training such as formulation of assignments, grading papers, and construction of syllabi. In addition, there is a resource center for faculty (Forum 9-10).

Although the actual writing programs at Beaver College and Michigan Tech University are administered as a centralized department, the faculty workshops at these schools have encouraged the use of writing within individual disciplines as well. According to Elaine Maimon, writing program director at Beaver,

Writing is viewed as an essential element in the learning process regardless of which discipline is being explored. Students are first exposed to Beaver's writing theories in required cross-disciplinary freshman composition courses taught by members of the English department. During the next three years, the undergraduates refine their writing skills in every class they attend and learn, through a collaborative process involving both instructors and peers, how to communicate effectively all disciplines.
(Forum 6)

At Beaver, a placement exam is given to each freshman. If necessary, the student is then placed in a basic writing course designed to raise students' writing skill to at least the level of the average incoming freshman. The freshman composition classes, Thought and Expression I and II, are primarily run as writing workshops. Although the class as a whole is introduced to writing processes, collaborative learning procedures, and a set of common cross-disciplinary readings,² much time is given to individual writing projects, including some assigned in other courses. Attendance in the composition courses is required, and each student must produce at least 1,000 words per week. Only four major pieces of writing are graded each semester, one of which must be in response to an assignment made in another course.

The weekly 1000 words serve as preliminary drafts, revised drafts, and final edits of the required papers and must be submitted with

² Elaine Maimon has written a cross-disciplinary text, Reading in the Arts and Sciences (Boston: Little, Brown, 1984).

the final product. Instructors stress the basic problems and conventions of writing and assist students in the writing and editing of their drafts. The freshmen also learn how to review each other's papers and works-in-progress. (Forum 6)

The writing program director believes that

. . . the required rewrite procedures are essential to the teaching of writing and thinking. The drafts are not graded but serve as a basis for identifying problems in composition and for concentrating on various elements of the final papers. By allowing students to express themselves in ungraded 'messy first drafts,' the director has found that students take more risks in their writing, learn to think by writing, and avoid cliches and undergraduate versions of what the instructor wants. (Forum 6)

This philosophy carries over to all courses at Beaver.

Maimon "views writing as a mode of scholarship, thus all college instructors are responsible for teaching apprentices how scholars behave in their discipline" (Forum 6). Papers in most classes are assigned in stages with grading reserved for the final product. Many instructors use in-class writing assignments in regular classroom routines. For example, a professor might ask students to summarize the lecture material or write down some thoughts on a challenging question.

In keeping with the centralized program, the English faculty may offer an adjunct writing course designed to accompany a particular lecture offering in a subject discipline (Graham 24). Students may receive supplemental assistance from Beaver's writing center, coordinated by a

rotating staff of English department faculty members who employ student consultants. The center also offers late night dormitory consultants.

The faculty has been trained through a series of workshops designed to help its members improve their own writing and their responses to student writing. They stress that they were "not just teaching writing, they were teaching proper social behavior and communication modes in their discipline." Building on their experience with writing, faculty members are developing a new program aimed at extending critical thinking and problem solving across the curriculum (Forum 6).

The university-wide communications skills program of Michigan Tech "has grown from the notion that writing is as central to learning as reading, observing and thinking." The Division on Humanities staff believes that the best way to accomplish its goal is to change faculty attitudes on the functions of writing assignments (Forum 6). Program director Toby Fulwiler says that writing across the curriculum at Michigan Tech is based on principles "that are second nature to most college writing teachers: (1) people learn to write by writing frequently; (2) writers need critical feedback to improve their writing; (3) writers need to understand the audience they write for; (4) writers should not be punished for experimenting or

taking risks; (5) writers need to distinguish between writing as heuristics and writing as communication." Fulwiler also adds that "we do not believe there is 'one best way' to teach writing" (Writing Program Administrator 15).

At present the university requires all students to take a three-semester writing sequence taught by the English faculty. The first semester's assignments focus on the development of individual expression, "on the theory that personal narrative and opinionated writing form the necessary foundation for both informative and creative writing modes." The second semester of freshman writing introduces the student to techniques of research and to writing that is strictly informative. The last semester combines writing supervision with the study and criticism of literature. Most departments require majors to complete at least one upper-level course in business, technical, or critical writing. Remedial work is handled through the writing lab.

The cross-disciplinary program at Michigan Tech, however, is primarily teacher focused. Program directors Toby Fulwiler and Art Young feel that requiring one more writing course is not enough or is not effective, for that matter, and the aim of the program is to encourage the faculty to use writing in each course. In Language Connections: Writing and Reading Across the Curriculum,

the Michigan Tech faculty discusses the theory, philosophy, and approach it uses. In the introduction, Fulwiler and Young say that the aim of the book (and their program) is not to make every teacher an expert in writing and reading. They believe that English teachers have unique and specialized contributions to make in the education of students. "However, teachers in disciplines other than English can draw on general language skills to enhance student learning and, at the same time, reinforce the more specific language skills taught by reading, writing, and speech teachers" (x). A writing across the curriculum program places some responsibility for language instruction with every teacher. Fulwiler and Young say:

We believe that a comprehensive program must start from certain pedagogical premises: (1) that communication education (primarily writing but including reading, speaking, and listening) is the responsibility of the entire academic community, (2) that such education must be integrated across departmental boundaries, and (3) that it must be continuous during all four years of undergraduate education. Furthermore, a comprehensive language program must incorporate the several roles language plays in education: to communicate, to learn, and to form values. While these roles are not mutually exclusive or exhaustive, we have found it useful to distinguish them in order to better understand and talk about them.

Writing to communicate--or what James Britton calls "transactional writing"--means writing to accomplish something, to inform, instruct, or persuade. This has been the traditional emphasis of most rhetorical texts on expository writing, where audience and purpose define our voice and determine our tone. Communicating information to a particular audience involves all of the writer's

skills from invention through revision. Expository writing of all kinds falls into this category: essays, reports, and term papers in school settings; letters, memos, and proposals in work settings.

Writing to learn is different. We write to ourselves as well as talk with others to objectify our perceptions of reality; the primary function of this "expressive" language is not to communicate, but to order and represent experience to our own understanding. In this sense language provides us with a unique way of knowing and becomes a tool for discovering, for shaping meaning, and for reaching understanding. For many writers this kind of speculative writing takes place in notebooks and journals; often it is first-draft writing, necessary before more formal, finished writing can be done.

Finally, writing is a value-forming activity, a means of finding our voice as well as making our voice heard. The act of writing allows authors to distance themselves from experience and helps them to interpret, clarify, and place value on that experience; thus, writers can become spectators using language to further define themselves and their beliefs. This value-forming activity is perhaps the most personally and socially significant role writing plays in our education; this role must not be forgotten or lost as we also attempt to produce careful, clear, and correct prose.

Given that writing has several functions, teachers in all disciplines can provide opportunities for individuals to explore through writing their relationship to knowledge, articulate it, and scrutinize its value. When students begin to understand and appreciate the full potential of written language, their respect for the conventions of writing increases as well. (x)

Michigan Tech conducts off-campus workshops to expose faculty members from all disciplines to ways of using writing in their classrooms. In addition to four-day summer workshops, there are many follow-up seminars (Fulwiler, Writing Program Administrator 16).

Because all the contributors to Language Connections have participated in one way or another in the interdisciplinary writing program at Michigan Tech, it is a good source to examine a WAC program in depth." Randall Freisinger introduces the conceptual framework for WAC programs. He asserts that "attention to composing process and to inquiry-oriented learning serves the goals of liberal education" (xi). Toby Fulwiler and Carol Berkenkotter explain the uses of expressive writing in learning, idea generation, and problem solving. Fulwiler suggests journal writing in all disciplines and Berkenkotter addresses ways in which traditional problem-solving models can be applied to composing. Robert Jones and Fulwiler discuss assignments and evaluation. Jack Jobst focuses on the role of audience in writing. These and other issues discussed in this book are inherent in any WAC program and are a good source for those considering a WAC program.

The attention given to WAC in major publications, the growing number of textbooks with WAC orientation, and the amount of current research on WAC indicate that these are not isolated programs. The number of colleges and universities with WAC programs is increasing. WAC is not just a fad; instead, it should be considered one of the real issues in contemporary higher education.

Chapter IV

Pedagogical Implications Inherent in Writing Across the Curriculum

Laurence Behrens in his article, "Writing, Reading and the Rest of the Faculty: A Survey," reminds us that it is difficult to determine whether students are less literate than they were several decades ago, since we really have no "valid and consistent criteria" to measure literacy by:

What's certain is that students today are widely believed to be more illiterate--not only by the general public, by boards of education, by Edwin Newman and by just about everyone who buttonholes English teachers at cocktail parties, but also by their college professors. (54)

He bases this assertion on a survey he conducted at the American University in Washington, D. C. "This survey revealed that whatever concern the lay public has about students' reading and writing skills is fully matched by the dismay of their college instructors" (54).

William Coles, Jr., in "The Literacy Crisis: A Challenge How?," suggests that the problem the public perceives as the literary crisis is not the real crisis. Cole asserts that many people, including professionals, consider that:

Writing is communication, a matter of product rather than process, the simple mechanical transfer of information, which the student can be trained to manage in the same way they can be taught to use adding machines or learn to pour concrete. Hence the activity of writing is totally covered by the use of a term like skill. Writing itself is a tool. Or just a tool. (17)

To see writing as a mere tool or product or to see literacy as correctness perpetuates the problem. Coles says,

What I would call true literacy, the ability to make sense of what one reads and with what one writes, is really the ability to conceptualize, to build structures, to draw inferences, to see implications, to generalize intelligently--in short to make connections, to make relationships between words and other words, sentences and other sentences, this idea and that idea, language and experience, what is being said and who one is. (22-23)

Though Behrens' survey shows that faculty responded that the most frequent writing problems which occur on students' papers involve usage, punctuation, and spelling, it also reveals that the faculty was concerned with the frequency of vagueness, disorganization, poor quality of thought or logic (56). Jack Meiland tells of his experience in teaching a freshman seminar called "Introduction to the University" at the University of Michigan. He found in an informal survey of other faculty members teaching the same course

That the most serious faculty complaints were not, by and large, about grammar or writing style. Instead, the most frequent complaints were that

the students did not know how to develop and organize their ideas. They did not know how to formulate their ideas clearly, argue for their ideas, develop replies to possible objections, uncover hidden assumptions, discover implications and consequences of a position, and so on. The student's problem was not a problem in writing in a narrow sense of that expression; instead, it was a problem in thinking. (252)

Meiland continues,

Colleges are simply not providing students with what they need. . . . One cannot teach students to think and to argue merely by telling them what mistakes or reasoning to avoid. . . . Students need to be taught intellectual skills directly and explicitly. (253)

He identifies some of these as "identification of issues or problems; specifications of what is problematic about an issue--why it needs to be discussed; why it is important; why obvious or easy solutions won't work (thus bringing out the full and essential nature of the problem); description of various alternative positions or theories; eliciting of hidden assumptions, and so on" (253).

These, he says, should be taught to college students as early in their careers as possible, so that they may use this critical thinking in the rest of their college work as "conscious and deliberate practice of those skills." This, proponents of WAC say, is best achieved through writing. They view writing as a process which fosters critical thinking--writing as a way of learning.

Meiland has made some strong statements about what colleges should and should not do. What are the implications

of his position? What assumptions does he make about our colleges and universities? Obviously, anyone who is considering implementing a WAC program must first examine this perception of what colleges should do. What business are colleges and universities about? And what crisis is being responded to? As Nancy Martin says, "The truth is that when we make statements about language we often expose the heart of our educational philosophy" ("Language Across the Curriculum" 214).

The pedagogical implications of Writing Across the Curriculum are more far-reaching than a response to the "literary crisis." Barbara Leigh Smith states that WAC programs are also a

. . . response to the fragmentation of curriculum, the frequent separation of skill and content teaching, as well as the localization and denigration of responsibility for teaching writing and other essential abilities that should permeate all of the disciplines. And they are based upon the recognition that too much teaching is directed at getting students to learn content and the moral reward structure of the teacher rather than the essential skills they need to become life-long learners in a rapidly changing world. ("WAC" 1)

Smith further points to a decreasing emphasis of writing over the past fifteen years. This is caused by "increasing diversity of students and institutions, specialization in disciplines with dominant emphasis on content learning," and the relegation of writing responsibility solely to English departments.

This localization has perpetuated the problem. Students "learn to write" in courses which have little content or context, and therefore there is low student motivation and involvement. Students fail to see the connection with or importance of writing and the curriculum as a whole. In addition, a number of studies describe the resulting deterioration of students' writing abilities over the course of their college careers and attribute it to the fact that writing skills have not been continually practiced (Smith, "WAC" 1-3).

There are today, and historically have been, two distinct ideas about the ends of education. These ideas deal with whether education should be utilitarian, dealing with the concepts of application, the learning of facts and skills, or whether education has to do with the search for principles of knowledge--whether education is instrumental to the development of the individual and the society as a whole or whether education is essentially job training--whether education is a means to an end or a focus on the potential for learning. Smith says, "James Kinneavy and James Britton stress the value of writing as a means of active learning to build the individual responsibility and judgment." Ed Corbett argues that the WAC movement is an important effort to restore the most enduring features of liberal arts to the nation's college. Elaine Maimon says

"participation in the academic conversation means more than attaining a diploma. Learning how to articulate ideas for oneself and then for others prepares students for public discourse in the society at large" ("Interview" 15).

WAC is not a simple-minded back to basics reform, nor is it based on the remediation model of composition. At its core is a fundamental thesis about the meaning and importance of writing to the educational enterprise. It argues that writing is a central basic skill, but is even more important as a central learning skill in all fields and at all levels. The educator who seeks information about writing as a response to a need should be aware that WAC can best be fostered in a liberal arts atmosphere where critical thinking is encouraged across the curriculum.

Whatever the literacy crisis is perceived to be--the decreasing in quality and quantity of writing or the lack of critical thinking--the furor has spawned much-needed research in the teaching of writing. It is this research that needs to be surveyed in order to understand the pedagogical implications of a WAC program.

Maxine Hairston refers to a book written by Thomas Kuhn in 1963. In The Structure of Scientific Revolution,

Kuhn hypothesizes about the process by which major changes come about in scientific fields,

and conjectures that they probably do not evolve from patient orderly inquiry by established investigators in the field. Rather he suggests revolution in science comes about as the result of breakdowns that occur when old methods won't solve new problems. He calls this kind of revolution a paradigm shift. (76)

Hairston, Donald Stewart, Richard Young, and others believe that we are currently at the point of such a paradigm shift in the teaching of writing. They cite various developments in the past 25 years that have brought about such a paradigm shift. Young uses paradigm here to mean a "disciplinary matrix" which

. . . describes a system of widely shared values, beliefs and methods which determines the nature and product of a discipline. A paradigm determines among other things what is included in the discipline and what is excluded from it, what is taught and not taught, what problems are regarded as important and unimportant and by implication what research is regarded as valuable in development the discipline. (31)

In order to understand the nature of a paradigm shift one must first examine the old paradigm--that which has ceased to ask the right questions--that which cannot eliminate the literacy crisis and may even have helped cause it.

Richard Young says its principle features are quite obvious:

Emphasis on the composed product rather than the composing process; the analysis of discourse into words, sentences, and paragraphs; the classification of discourse into description, narrative, exposition and argument; the strong concern with

usage (syntax, spelling, punctuation) and with style (economy, clarity, emphasis); the pre-occupation with the informal essay and the research paper. . . . (31)

Underlying what Young calls the "current traditional paradigm" is the "vitalist" attitude that writing is a unique, creative act which really cannot be taught (31).

Based on an analysis of four well-known and commercially successful rhetoric texts, James Berlin and Robert Inkster insist that, in addition to Young's observations, the traditional paradigm stresses expository writing to the "virtual exclusion of all other forms, that it posits an unchanging reality which is independent of the writer and which all writers are expected to describe in the same way regardless of the rhetorical situation, that it neglects invention almost entirely, and that it makes style the most important element in writing" (Hairston 78).

The research of James Britton confirms this.

Hairston makes three other important points that adherents of the traditional paradigm believe:

1. Competent writers know what they are going to say before they write; thus their most important task when they are preparing to write is finding a form into which to organize their content.
2. The composing process is linear; that is, proceeds systematically from pre-writing to writing to re-writing.
3. Teaching edition is teaching writing. (78)

She further emphasizes that the traditional paradigm

. . . did not grow out of research or experimentation. It derives partly from the classical rhetorical model that organizes the production of discourse into invention, arrangement, and style, but mostly it seems to be based on some idealized and orderly vision. It is a prescriptive view of the creative act, a view that defines the successful writer as one who can systematically produce a 500-word theme. Its proponents hold it a priori; they have not tested it against the composing processes of actual writers. (Hairston 78)

Hairston acknowledges that there are those who do "teach process--not product," but a look at the textbooks selected for the majority of freshman composition courses³ seems to be enough to confirm that although those in

. . . the vanguard of the profession have by and large adopted the process model for teaching composition and are now attentively watching the research on the composing process in order to extract some pedagogical principles from it, the overwhelming majority of college writing teachers in the United States are not professional writing teachers. They are trained as literary critics first and as teachers of literature second. Yet, out of necessity, most of them are doing half or more of their teaching in composition. And they teach it by the traditional paradigm, just as they did when they were untrained assistants ten or twenty or forty years ago. (78-79)

³ A study I did in 1981 on the philosophical differences in Freshman Composition texts suggests that many, though certainly not all, rhetoric texts are discipline and product oriented and based on the strategies of classical rhetoric. The central metaphor running through these texts is linear and mathematical. Donald Stewart's study (May 1978) concurs that standard texts primarily focus on style, usage, and argumentation. He "found that only seven out of the thirty-four he examined had any awareness of current research in rhetoric." Berlin and Inkster's study (1980) and Fulkerson's essay dealing with philosophies of composition (1979) also corroborate this.

She continues that frequently they use methods which have been largely discredited by research (79). Anomalies in the product-centered approach have become apparent.

Timothy Donovan points out:

. . . the weak correlation between grammar instruction and writing ability; the conflict of social, ethnic, and regional dialects with standard dialect; the limitation of negative criticism and editorial marginalia; the frustration of dedicated teachers; and the alienation of students. (Introduction x)

Hairston sites several external conditions which she sees as contributing to what she calls "the crisis in teaching writing": open admissions policies, the return of the veterans to school, other groups of older students who are less docile and rule bound than traditional freshmen, the national decline in conventional verbal skills, the increasing number of high school graduates going on to college as "our society demands more credentials for economic citizenship." She contends "any instructional system would come close to collapse under such a strain, and our system for teaching writing has been particularly vulnerable because it has been staffed largely by untrained teachers who have had little scholarly interest in this kind of teaching" (82). Many lists, finding fault and placing the blame on any number of causes, could be made. Pinpointing the blame, however, is not the problem. The problem is that students cannot write, or is it that they are not being taught to write?

As the old traditional prescriptive and product-centered paradigm has become ineffective, a new paradigm is emerging. The forces contributing to this paradigm shift, Hairston says, "are both theoretical and concrete and come from both inside and outside the profession" (81). The changes in theory probably began in the middle of the 1950s from intellectual inquiry and speculation about language and language learning that was going on in several fields, notably linguistics, anthropology, and clinical and cognitive psychology (81).

One of the most significant developments to affect the development of a new paradigm comes from the field of linguistics. The publication of Noam Chomsky's Syntactic Structures in 1957 brought about a major shift in focus from a prescriptive or descriptive analysis of language as a product to a study of the generative process of language. Hairston contends, "Francis Christensen's essays on the generative rhetoric of the sentence and the paragraph in the early 1960's also stimulated new interest in the process by which writers produce texts" (81)

The heuristic approach used by Kenneth Burke in the late sixties led him to view "writing as a generative process, as investigation, as probing, as learning in action" (Irmscher 241). Tagmemics such as that found in Richard Young, Alton Becker, and Kenneth Pike's Rhetoric,

Discovery and Change (1970) encouraged a fresh view of the writing process. Although a writer usually considers a subject from only one point of view, the authors urge writers to generate ideas by considering the same subject from three angles: as a static entity, as a dynamic process, and as a system. They say language can be thought of as a very complex coding behavior for interpreting and recoding experience. One of the most significant features is that the same basic meaning can be represented in several different forms. Young, Becker, and Pike also propose in this text a strategy derived from the work of psychotherapist Carl Rogers. Just as Chomsky had criticized the behaviorist theories in language, Rogers challenged behaviorist psychology. Rogerian strategy has contributed considerably to the shift away from product response evaluation of writing. Hairston sees the report from the 1966 Anglo-American Seminar on Teaching of English held at Dartmouth College as major in the advancement of the paradigm shift. The report "deemphasized the formal teaching of grammar and usage in the classroom and emphasized having children engage directly in the writing process in a non-prescriptive atmosphere" (81)

The emerging paradigm does not say that grammar and usage (correctness) are unimportant, but that the emphasis in the old paradigm is misplaced. The focus of the

emerging paradigm is on "fluency" and "clarity," then "correctness" (Mayher, Lester, and Pradle 4).. There is little point in having a correct paper if it is not clear. In fact, studies done by Sondra Perl in 1978 discovered the "premature attention to form" is actually detrimental to students' writing process. Their anxiety about correctness actually stymies their thought process and their ability to create meaning (Mayher, Lester, and Pradle 45).

One of the fundamental responses to the breakdown of the old paradigm was that of Mina Shaughnessy. She is considered somewhat of a pioneer in searching for an answer to what went wrong with the old paradigm, why the old system did not work. In 1970 when City University of New York adopted an open admissions policy, Shaughnessy says the faculty members found themselves faced with "a wider range of students than any college had probably ever admitted or thought of admitting to its campus" (1-2). As a part of placement procedures, each student wrote an essay. The placement evaluation, Shaughnessy explains, divided the students into three basic groups:

- (1) Those who met the traditional requirements for college work, appeared from their tests and their school performances to be competent readers and writers with enough background in the subjects they would be studying in college to be able to begin at the traditional starting points;

- (2) those who have survived their secondary school but not thrived on it, whose reading was seldom voluntary and whose writing reflected a flat competence, by no means error-free but limited more seriously by its utter predictability--its bare vocabulary, safe syntax and platitudinous tone, the writing students who had learned to get by but who seemed to have found no fun or challenge in academic tasks;
 - (3) those who had been left so far behind the others in their formal education that they appeared to have little chance of catching up, students whose difficulties with the written language seemed of a different order from those of the other groups, as if they had come, you might say, from a different country, or at least through different schools, where even very modest standards of high-school literacy had not been met.
- (2)

The college teachers were of course familiar with the first group and even the second group, but the shock of the third group forced them to ask some real questions--

If these students had come through schools in which writing had been taught with standard methods, then one had to conclude that the method did not work, at least not for a substantial and important group of students. The question was "Why?" (Hairston 33)

Shaughnessy's study is based on 4,000 essays written between 1970 and 1974 by freshmen entering City University. Her conclusions about the problems of the basic writer are, she says, based on:

. . . my students and the explanations they have given me, directly or indirectly, of their difficulties with written English; my colleagues, who have shared insights with me over their years in many different settings, both formal and informal;

and my own experience as someone who writes and therefore understands the pressure and peculiarities of that behavior. (5)

She is convinced that "basic writers write the way they do, not because they are slow or non-verbal, indifferent to or incapable of academic excellence, but because they are beginners and must like all beginners learn by making mistakes" (5). The errors are not the result of carelessness but of thinking. It is the work of those who teach writing to understand not only what the errors are but "why this is so" (6). Though Shaughnessy's work deals mainly with the basic writer, Hairston maintains that her conclusions are applicable to all writers.

We cannot teach students to write by looking only at what they have written. We must also understand how that product came into being and why it assumed the form that it did. We have to try to understand what goes on during the internal act of writing and we have to intervene during the act of writing if we want to affect its outcome. We have to do the hard thing, examine the intangible process, rather than the easy thing, evaluate the tangible product. (84)

Michael Cowley, editor of Writers at Work (New York: Viking, 1958), and Donald Murray, A Writer Teaches Writing (Boston: Houghton, 1968), were also working on the composing process about this same time, but they primarily deal with professional writers. However, Cowley and Murray and the later works of Janet Emig, "The Composing Process of Twelfth Graders," and James Britton and his colleagues in Great Britain's School Council Project (The Development of

Writing Abilities, 11-18), laid the foundation for future studies. Although they differ in method, terminology, and number of subjects, they basically agree on what the process entails. This process may be labeled as involving prewriting, writing, and rewriting. These are parts of a process, not steps, and do not occur in a linear manner. An explanation of what goes on during each of these is helpful, however, in understanding writing as process.

During prewriting, individuals prepare themselves to write. In The Development of Writing Abilities, Britton says that these are essential stages in which the mind engages in every kind of writing: defining the nature of the operation, devising ways of tackling it, and explaining its meaning and implication to oneself (90). Lindemann says, "Prewriting helps us examine what we know, we recall ideas, relate old and new information, assess what the reader expects of us and generally explore the problem from many angles" (24). The preparation serves at least two functions; first, facts or information is gathered; second, the feelings about that information are considered. Britton claims that "an essential part of the writing process is explaining the matter to oneself" (28). Murray calls this stage "rehearsing" (Write to Learn ix); Mayher, Lester, and Pradle call this "percolating," involving anything that happens apart from the actual

putting of marks on the paper. "Percolate" seems to be an appropriate term to describe this stage, because percolating takes place throughout the process (5).

Sooner or later one begins the central stage of the writing process, the physical act of writing. However, Murray contends "drafting" is probably a more accurate term "since it implies the tentative nature of our written experiments in meaning" ("Writing as Process" 5). The act of writing essentially involves expressing in words what is meant to be said. One of the constraints on the composing process involves a person's short-term memory. People hold only five to seven items in their short-term memory and find themselves juggling what they have written and what they intend to write until they have determined what meaning has been expressed (Lindemann 26). Britton emphasizes:

The fluent writer . . . can hold not only whole words and phrases, but meaning as well, and possibly even general intentions (which can scarcely be thought of as items), so that it is much easier for what is written to have coherence. If, on the other hand, the teasing out of the thought becomes partially difficult, all the resources of the short term memory may have to be concentrated on a few words. That is when a writer may lose track of his thoughts, omit or repeat words, misconnect or blunder in some way. (Development 45)

Britton also says that some writers are "taken over" by their material. Murray asserts,

The writing process is a process of writing finding its own meaning. While the piece is being drafted, the writing physically removes itself

from the writer. Thus, it can be examined as something which may eventually stand on its own before the reader. ("Writing" 5)

While this may seem to refer to the product, the emphasis is on the process of several complex operations working simultaneously, for the second stage combines writing with pre-writing and rewriting. In the process of expressing their ideas, writers also reshape them and plan the next brief sketch of discourse.

Having actually written something down, writers begin what Emig calls "reformulation," Murray calls "revising," and is usually called rewriting. This involves interacting with the writing, Murray says, "to find out what the writing has to say and then to help the writing say it clearly and gracefully" ("Writing" 5). Rewriting involves both revision and editing. In rewriting, writers must shift their perspective, which up to this point has focused on generating the text, and become "alternatively a detached reader," substituting for their audience and an involved reader, discovering how well they said what they hoped to (Lindemann 28). Writers such as Peter Elbow and Murray would argue that the essence of writing is discovery--discovery of meaning and how to say it.

Murray stresses that the danger in naming parts of the process is that these parts may be regarded as "a prescriptive sequential order, creating a new kind of terrifying

rhetoric which [much like the old paradigm] 'teaches well' but 'learns poorly'" ("Writing" 4). He further points out that he is "talking about a process of interactions, not a series of logical steps." The stages blend and overlap, but are also distinct ("Writing" 5). Sondra Perl, who has done work tape-recording students' oral reports of the thoughts they have as they write and of the choices they make, found:

Composing does not occur in a straightforward linear fashion. The process is one of accumulating discrete words or phrases down on the paper and then working from these bits to reflect upon, structure, and then further develop what one means to say. It can be thought of as a kind of "retrospective structuring"; movement forward occurs only after one has reached back, which in turn occurs only after one has some sense of where one wants to go. Both aspects, the reaching back and the sensing forward, have a clarifying effect. Rereading or backward movements become a way of assessing whether or not the words on the page adequately capture the original sense intended. But constructing simultaneously involves discovery. Writers know more fully what they mean only after having written it. In this way the explicit written form serves as a window on the implicit sense with which one began. (Qtd. in Murray, "Writing" 7)

Writing involves not just one process but several, and because these processes are primarily mental, they are difficult to reconstruct. Making exact models of the process is further complicated because the process changes even within an individual with age, experience as a writer, situations, and kind of writing done. Although there is no complete model of the writing process, like Perl, John Hayes and Linda Flower have done significant work recording

writers' thoughts. By using the technique of protocol analysis used by cognitive psychologists, they have identified the basic moves or strategic elements that writers use in written composition. This technique is described in "Identifying the Organization of Writing Process" and other articles such as "Problem Solving Strategies and the Writing Process" and "The Cognition of Discovery, a Rhetorical Problem." Carl Bereiter reports that E. W. Nold "has attempted to sort out different levels of processing that go on in revising, levels that clearly have their counterpart in composition" (78). He adds that M. Scardamalia has examined "how immature writers adapt writing tasks to fit within their limited information processing capacities" (78). Sharon Pianko has done a study in which she "matched groups of traditional and remedial writers, men and women writers, and 18 year olds and adult writers and compared their composing habits" (Hairston 85). Nancy Sommers has done a case study of college writers and experienced adult writers (diss., Boston U 1978). Other studies can be found in Cooper and Odell's Research on Composing: Points of Departure, Gregg and Steinberg's Cognitive Processes in Writing, and Donovan and McClelland's Eight Approaches to Teaching Composition.

The important point here is not a detailed model, but the fact that research is being done, and there is

a basis for the new paradigm which is emerging. From these and other studies we are beginning to discover what goes on in the minds of people when they write and to document the rhythm of their writing, to find out what constraints they are aware of when they write, and to observe what physical behaviors are involved in writing and how they differ from writer to writer.

Writing is an act of discovery. Most writers are not entirely aware of what they want to say before they write; it is in the process of writing that their ideas develop. This process is not linear following a sequence of steps from start to finish; rather there is a constant movement from planning and thinking and writing and rewriting. As Murray says, "an explosion of elements is simultaneous action and reaction. Meaning is made through a series of almost instantaneous interactions" ("Writing" 4). This should come as no surprise to any practicing writer, yet these findings contradict what we have been teaching in the old paradigm.

Hairston gives the emerging paradigm twelve principle features. Her order has been rearranged to relate to the discussion of writing across the curriculum of this study. The first five deal with points just discussed:

1. It views writing as a disciplined creative act that can be analyzed and described; its practitioners believe that writing can be taught.

2. It is based on linguistic research and research into the composing process.
3. It is informed by other disciplines, especially cognitive psychology and linguistics.
4. It views writing as recursive rather than a linear process; prewriting, writing, and rewriting are activities that overlap and intertwine.
5. It is holistic, viewing writing as an activity that involves intuitive and non-rational as well as the rational faculties.

The next five features seem to deal with what goes on in the classroom, how writing should be taught once a commitment to writing is made, and seem to imply that perhaps writing is too complicated and time-consuming to relegate it to just one course or department. These are important features and will be discussed in detail later.

6. It focuses on the writing process; instructors intervene in students' writing during the process.
7. It is rhetorically based; audience, purpose and occasion figure prominently in the assignment of writing tasks.
8. It teaches strategies for invention and discovery; instructors help students to generate content and discover purpose.
9. Instructors evaluate the written product by how well it fulfills the writer's intention and meets the audience's needs.
10. It stresses the principle that writing teachers should be people who write.

The remaining two features seem to address the questions: Why write? Why should writing be a part of the total curriculum?

11. It emphasizes that writing is a way of learning and developing as well as a communication skill.
12. It includes a variety of modes, expressive as well as expository.

The point that language is a way of learning and developing as well as a communication skill is the crux of Toby Fulwiler's article "Why We Teach Writing in the First Place" (273). He begins his article by emphasizing that the "back to basics" trend in education and makes an essential observation that what these basics (reading, writing, and arithmetic) are basic to is thinking.

The basics the public always wants to get back to are really the primary language skills which make systematic articulate thought possible. Reading provides us access to information and ideas. Writing and arithmetic provide general tools for manipulating and expressing ideas and information. (Fulwiler, "Why We Teach Writing" 273)

Of the three R's, the role of writing in learning--and in the curriculum--is, he says, least understood. People generally assume that reading is the basic skill and consider that mathematical languages are the foundations for scientific and technical knowledge, but few realize that writing is basic to thinking about and learning knowledge in all fields as well as to communicating that knowledge. The emphasis on reading, Fulwiler says, may contribute to the neglect of writing ("Why We Teach Writing" 274). Donald Graves even suggests that the dominance of reading in the curriculum discourages "active self-sponsored learning."

He asserts,

. . . we have substituted the passive reception of information for the active suppression of facts, ideas, and feelings. We now need to right the balance between sending and receiving. We need to let them write. (27)

Graves sees reading as the passive receiving of knowledge and writing as the more active generation of knowledge. Fulwiler contends that while the difference is not quite as severe as Graves would have people believe, reading and writing are "interdependent, mutually supportive skills, both of which are basic to an individual's capacity to generate critical independent thinking" ("Why We Teach Writing" 274). Few courses of study seem to recognize the importance of both, and while reading is assigned in virtually every academic area as the best way to impart information, introduce ideas, and teach concepts, no such imperative exists with regard to writing ("Why We Teach Writing" 275).

Fulwiler says that in order to understand the importance of writing, the correlation between thought and language needs to be understood. He points to the studies of George Gusdorf (1953) on the "double and often contradictory role" language plays in the development of individuals. He says that humans use language to communicate ideas and information to other people, but they also use language "to express themselves and to develop their own

articulate thought. These two functions, the 'communicative' and 'expressive' often work in opposition to each other" ("Why We Teach Writing" 276). Gusdorf observes, "the more I communicate, the less I express myself; the more I express myself, the less I communicate" (128). While Gusdorf's observation seems obvious, Fulwiler and others (Britton, Applebee) have found that schools generally promote the communicative to the neglect of the expressive ("Why We Teach Writing" 276).

James Britton argues that "knowledge is the process of knowing rather than a storehouse of the known." Fulwiler observes that much of this "process of learning" takes place through language.

Not only is it the symbol system through which we receive and transmit most information, it is the necessary medium in which we process or assimilate that information. We see and hear language, we explain experience and sensation through language, and we use language to identify the world. ("Why We Teach Writing" 276)

He points to Gusdorf, who proposes, "To name is to call into existence, to draw out of nothingness. That which is not named cannot exist in any possible way" (48). By naming objects and experience, Fulwiler says the world is represented through symbols.

In order to think in the first place, human beings need to symbolize, for in using language they represent, come to know, and understand the world. We actually do much of our learning through making language; or, another way of

saying the same thing: language makes thinking and learning, as we know them, possible.
 ("Why We Teach Writing" 276)

Fulwiler turns to psychologist Lev Vygotsky for a better understanding of the process by which we think and learn; what happens to sense data information, ideas, and images when we receive them; and how we manipulate them in our minds, make them our own, and do something with them. Vygotsky describes "inner speech" as the mediator between thought and language, portraying it as "a dynamic, shifting, unstable thing, fluttering between word and thought" (149). He argues that "thought is born through words . . . thought unembodied in words remains a shadow" (153). Fulwiler adds,

The key to knowing and understanding lies in our ability to internally manipulate information and ideas received whole from external sources and give them verbal shape or articulation. . . . We think by processing; we process by talking to ourselves and others.
 ("Why We Teach Writing" 277)

This point is important.

James Britton, drawing on the work of Gusdorf, Vygotsky, and others, asserts that "the primary task for speech is to symbolize reality: we symbolize reality in order to handle it" (Language and Learning 20). Speech, considered in this way, is as important to the speaker as it is to the listener. Britton says that "expressive" speech is used more to shape one's own experience than to communicate to others. "The words give concrete form to thought and so make it more

real" (Language and Learning 53). In other words, a conversation is often carried on with others in order to explain things to oneself. This same intersection, Fulwiler maintains, helps explain the role of writing in learning ("Why We Teach Writing" 277).

By identifying writing simply as a technical communication skill necessary for the clear transmission of knowledge, many teachers, Fulwiler says, take no account of the process of composing, "the mental activity which may be said to characterize our very species" ("Why We Teach Writing" 277). Writing, however, is more than a frozen record of thinking. Ann Berthoff describes composing as the essence of thinking:

The work of the active mind is seeing relationships, finding forms, making meanings: when we write, we are doing in a particular way what we are already doing when we make sense of the world. We are composers by virtue of being human. (12)

William Irmischer refers to the study on the effect of verbalization on problem solving by Robert Gagne and Ernest Smith. They observed significant differences between verbalizers and nonverbalizers. Verbalizers were clearly superior in problem solving, particularly as tasks grew more complex. Verbalization takes more time, but it forces thinking that leads to fuller understanding (241). James Britton reports similar findings in an interview with Rosen (Language and Learning 51). Writing as a form of

verbalization requires even more time. When people speak, they compose. When they write, they compose even better--usually because they can manipulate their compositions on paper, in addition to holding them in their heads. "We can review them, revise them, and rewrite them because they are now visible and concrete" (Fulwiler, "Why We Teach Writing" 279).

Janet Emig agrees that "writing represents a unique mode of learning--not merely valuable, not merely special, but unique." In "Writing as a Mode of Learning," she asserts, "writing serves learning uniquely because writing as process--and product--possesses a cluster of attributes that correspond uniquely to certain powerful learning strategies" ("Writing as a Mode" 122).

Emig says the notion of the role of writing as heuristic is confirmed by such noted psychologists as Jerome Bruner, Lev Vygotsky, and A. R. Lunia, who have all pointed out that "higher cognitive functions such as analysis and synthesis, seem to develop most fully only with the support system of verbal language--particularly . . . written language" ("Writing as a Mode 122).

Emig first explains the uniqueness of writing among verbal languaging processes, listening, talking, reading, and writing. Traditionally, linguists have divided the processes into first-order (listening, talking) and

second-order (reading, writing) processes. "First-order processes are acquired without formal or systematic instruction; second-order processes . . . tend to be learned initially only with the aid of formal and systematic instruction" ("Writing as a Mode" 122). Emig divides the processes by distinguishing between "creating" and "originating." She says, "Writing is originating and creating a unique verbal construct that is graphically recorded. Reading is creating or re-creating but not originating a verbal construct that is graphically recorded" ("Writing as a Mode" 122). Listening creates or re-creates but is "not creating a verbal construct that is not graphically recorded. Talking is creating and originating a verbal construct that is not graphically recorded" ("Writing as a Mode" 123).

Because talking seems most closely to resemble writing, Emig further distinguishes it from writing. Linguists and psychologists, she says, assert that talking and writing "may emanate from different organic sources and represent quite different, possibly distinct language functions." The differences between the two are important.

What are these differences?

- (1) Writing is learned behavior; talking is natural, irrepressible, behavior.
- (2) Writing then is an artificial process; talking is not.

- (3) Writing is a technological device--not the wheel but early enough to qualify as primary technology; talking is organic, natural, earlier.
- (4) Most writing is slower than most talking.
- (5) Writing is stark, barren, even naked as a medium; talking is rich, luxuriant, inherently redundant.
- (6) Talk leans on the environment; writing must provide its own context.
- (7) With writing, the audience is usually absent; with talking, the listener is usually present.
- (8) Writing usually results in a visible graphic product; talking usually does not.
- (9) Perhaps because there is a product involved, writing tends to be a more responsible and committed act than talking.
- (10) It can even be said that throughout history, an aura, an ambience, a mystique has usually encircled the written word; the spoken word has for the most part proved ephemeral and [been] treated mundanely (ignore, please our recent national history).
- (11) Because writing is often our representation of the world made visible, embodying both process and product, writing is more readily a form and source of learning than talking. (Emig, "Writing as a Mode" 123-24)

Emig explains some unique correspondences between learning and writing. She says learning can be defined in many ways but that most definitions

. . . include the importance of the classical attribute of re-enforcement and feedback. In most hypotheses successful learning is also connective and selective. Additionally, it makes use of propositions, hypotheses, and other elegant summarizers. Finally, it is

active, engaging, personal, and more specifically self-rhythmed--in nature. ("Writing as a Mode" 124)

Bruner, building on Piaget's descriptions, postulates three ways in which one represents and deals with actuality: 1) enactive--we learn by doing; 2) iconic--we learn by depiction in an image; 3) representational or symbolic--we learn by restatement in words" (11).

That is, the symbolic transformation of experience through the specific symbol systems of verbal language is shaped into an icon (the graphic product) by the enactive hand. If the most efficacious learning occurs when learning is re-enforced, then writing through its inherent re-enforcing cycle involving hand, eye, and brain marks a uniquely powerful multi-representational mode for learning. (Emig, "Writing as a Mode" 125)

Emig postulates further that writing is integrative even organically because it uses both left and right hemispheres of the brain. Also because information from the process is immediately available as product, there is a feedback and re-enforcement necessary for revision. She emphasizes that the importance of visual "re-scanning and review" cannot be overstated ("Writing as a Mode" 125).

The total process emphasizes deliberate structuring and connection. Such structuring is necessary because

. . . writing centrally represents an expansion of inner speech . . . which is 'maximally compact.' . . . Written speech is a mode which is maximally detailed and which requires explicitly supplied subjects and topics. . . . Clear writing signals without ambiguity the nature of conceptual relationships, whether they be coordinate,

subordinate, causal or something other. (Emig, "Writing as a Mode" 126)

Successful learning, Emig says, is also personal, engaged, and committed; impersonal learning may in fact be an anomalous concept. The learner must "steadily and actively engage in making and re-making his hypotheses" about the nature of the universe.

Explaining writing as self-rhythmed, Emig refers to a comment from Luria and Yudovich as the "most powerful paragraph rationale ever supplied for writing as heuristic."

Luria maintains:

Written speech is bound up with the inhibition of immediate synpractical connections. It assumes a much slower, repeated mediating process of analysis and synthesis, which makes it possible not only to develop the required thought, but even to revert to its earlier stages, thus transforming the sequential chain of connections in a simultaneous, self-reviewing structure. Written speech thus represents a new and powerful instrument of thought. (Luria 118)

Luria and Yudovich define synpraxis as "concrete-active" situations in which language does not exist independently but as a fragment of an ongoing action "outside of which it is incomprehensible" (50). "Writing, unlike talking, restrains dependence upon the actual situation. Writing as a mode is inherently more self-reliant than speaking" (Emig, "Writing as a Mode" 127). Writing, then,

. . . typically is a "much slower" process than talking. . . . This slower pace allows for--indeed encourages--the shuttling among past, present, and future. Writing, in other words,

connects the three major tenses of our experience to make meaning. And the two major modes by which these three aspects are united are the processes of analysis and synthesis: analysis, the breaking of entities into their constituent parts; and synthesis, combining or fusing these, often into fresh arrangements or amalgams.
(Emig, "Writing as a Mode" 127)

Finally, Emig asserts that writing is epigenetic "with the complex evolutionary development of thought steadily and graphically visible and available throughout as a record of the journey, from jottings and notes to full discursive formulations" ("Writing as a Mode" 127). Then she summarizes the correspondence in this chart.

Unique Cluster of Correspondence between
Certain Learning Strategies and Certain
Attributes of Writing

Selected Characteristics of Successful Learning Strategies	Selected Attributes of Writing, Process and Product
(1) Profits from multi- representational and integrative re-inforcement	(1) Represents process uniquely multi- representational and integrative
(2) Seeks self-provided feedback:	(2) Represents powerful instance of self- provided feedback:
(a) immediate	(a) provides product uniquely available for <u>immediate</u> feed- back (review and re-evaluation)
(b) long-term	(b) provides record of evolution of thought since writing is epigenetic as process-and-product

(3) Is connective:

(a) makes generative conceptual groupings, synthetic and analytic

(b) proceeds from propositions, hypotheses, and other elegant summarizers

(4) Is active, engaged, personal--notably, self-rhythmed

(3) Provides connections:

(a) establishes explicit and systematic conceptual groupings through lexical, syntactic, and rhetorical devices

(b) represents most available means (verbal language) for economic recording of abstract formulations

(4) Is active, engaged, personal--notably, self-rhythmed

Emig lays the groundwork for further investigations.

William Irmischer says implicit in Emig's remarks is that writing is a way of learning and also developing. Peter Elbow makes a similar distinction. He defines learning as "getting new information, ideas, skills or behavior"; developing as "moving on to a newer, more complex stage of organization in the organism's growth" ("Why" 67-68).

This distinction, however, is certainly not hard and fast, nor is it linear, but Irmischer says it is useful to think of writing

. . . as a process of growing and maturing, in which we move from a stage of first learning the form of behavior that writing represents and, then, by exploring new connections and new combinations, developing new potentialities for knowing. When we move beyond writing as skill, beyond writing as habit-formation, we can see writing as a way of promoting the higher intellectual development of the individual. . . . (242)

Once students move beyond certain levels of proficiency, they see new dimensions of expressiveness, inventiveness, and intellectual growth that are, Irmscher says, accessible only to someone personally engaged in composing, whether in acting, painting, dancing, or writing (241).

In order to pursue further the idea of writing as a way of learning and developing, Irmscher refers to Lev Vygotsky, who says that all of the higher functions in the cultural development of the individual have three things in common: awareness, abstraction, and control. Irmscher considers writing in these three terms. First, he says, through writing we learn by becoming aware of ourselves.

Although we commonly think of writing as a way of connecting with the larger social order, as a form of communication, as an externalizing process, we need to see it also as a way of connecting with ourselves, an internal communication. In writing, this externalizing and internalizing occur at one and the same time. . . . Further we are all trying to make some sense out of life. . . . Writing brings thought into consciousness making it available both for us and others to see. (242)

Irmscher further posits that writing creates more awareness of purpose, approach, and strategy (243).

Writing by its very nature encourages abstraction "and in the shuttling process from past to present, from particular to general, from concrete to abstract we seek relationships and find meaning" (Irmscher 243). Kenneth Pike suggests, "Meaning does not occur in isolation, but only

in relation to form" (87). Writing is different from the experience because in order to verbalize the experience we must transcend it by seeing it in a larger frame of reference. As James Moffet says, "The subject becomes less and less matter and more and more idea" (246). He feels one reason we teach exposition so badly is that we do not allow students time to abstract "from the ground up" (247).

Irmscher affirms,

Writing is a way of engaging the world by becoming aware of how our minds perceive it. Even though other modes represent ways of perceiving and structuring the world around us, writing is readily accessible to all of us because words are its vehicle. (243)

Writing finds structure in words and structure represents control. "Learning," he says, "is observing the patterns of things that otherwise seem confused and unrelated, mastering the 'syntax of thought.' . . . Learning is seeing relationships that become the basis of discovery and development" (244). Thus, it seems, we need diversity to learn more. "We need the broad emphasis of an interdisciplinary conference to provide the basis for analogy" (244), a point that seems particularly important to proponents of writing across the curriculum.

Learning through writing is also "achieving a controlled synchrony of parts into whole. . . . We cannot use isolated information unanchored to anything else but . . . it becomes meaningful in terms of its new frame,

and by interaction, it prompts new insights" (244).

Irmscher explains that our cognitive structure determines our potential for learning and writing. If that cognitive structure is clear, stable, and organized, it facilitates learning. On the other hand, if it is ambiguous, chaotic, and fragmented, it inhibits learning. Writing is a way of "fashioning a network of associations and thereby increasing our potential for learning" (244).

Finally, Irmscher proposes, the control that writing represents makes it possible for a person to say precisely what is intended. Often a subject is talked around, but writing forces one to be explicit.

Writing places on us the ultimate demand for precise and accurate expression. To this end, writing is both learning and relearning. Rehearsing the thought again and again. Rephrasing it. Reconceiving it. Clarifying it. Settling finally on a configuration of meaning. (244)

If, Irmscher asserts, education is thought of as being concerned with "learning to know, finding meaning by association, organizing knowledge, and finally, developing our capacity to use that knowledge in new situations," then writing serves as a way of learning and developing basic to all disciplines (244).

The premise that writing can be a tool for learning depends on a very broad understanding of writing. Mayher, Lester, and Pradle contend writing "occurs anytime one's

mind is engaged in choosing words to be put on paper" (2). It includes a variety of modes, expressive as well as expository. James Britton admits that it is more difficult to convince teachers that writing is a learning process because so often teachers "use writing as a way of testing. They use it to find out what students already know rather than a way of encouraging them to find out" (Rosen 53).

Too often the obvious is overlooked. Different kinds of writing are used for different purposes. Recording, reporting, classifying, and generalizing as well as interpreting, reflecting, imagining, and speculating--all include uses of writing. Different kinds of writing assignments should be used within the classroom to fulfill different needs. Certain kinds of writing are used to meet certain kinds of goals. This is the heart of WAC in practice, and therefore an examination of various types of writing is needed.

James Kinneavy in A Theory of Discourse proposes that there are four types of writing growing from the four elements in a communication act, writer/encoder, reader/decoder, reality, and language/signal. He names these types: (1) expressive discourse, (2) persuasive discourse, (3) reference discourse, and (4) literary discourse.

It seems fairly clear that language can be used as the simple vehicle of expression of some aspect of the

personality of the writer/encoder. Such use Kinneavy calls expressive use of language; the expressor (writer/encoder) dominates the process.

Secondly, the discourse may be focused primarily on the reader/decoder, the other person involved in the process. In this type of discourse, the writer/encoder, reality, and language all become instrumental to the achievement of some practical effect in the reader/decoder. Such use of language Kinneavy calls persuasive discourse.

Reference discourse stresses the ability of the language to designate or reproduce reality, in a manner of speaking. If the reality is conceived as known and facts about it are simply relayed to the decoder, there is an informative use of language. If this information is systematized and accompanied by demonstrative proof of its validity, there is scientific use of language. If the reality is not known, but being sought, there is an exploratory use of language. Many times this kind of discourse is called expository writing.

Finally, the product or the text or the work itself may be the focus of the process as an object worthy of being appreciated in its own right. In this use of language, language calls attention to itself, to its own structures--not as references to reality or expressions of personal aspirations or as instruments of persuasion,

but as structures worthy of contemplation in their own right. Of course, reference, author personality, and persuasion may be and usually are involved. They are not, however, rigidly relevant. Examples of each of these are found on the chart for Writing Classification (Lindemann 19) shown on the following page.

Also presented on this diagram is an explanation of Roman Jakobson's theory posited in 1960 in "Linguistics in Poetics." Where Kinneavy names four modes, Jakobson names six functions. The National Assessment of Education Process labels three types of writing growing out of the three communicative elements: expressive (self-centered), expository (world-centered), and persuasive (reader-centered) (Fulkerson 346). James Britton makes distinctions between transactional language, "language to get things done"; expressive language, language "that might be called thinking aloud"; and poetic language "language as an art medium" (Britton et al. 88-90).

While one can see that misconceptions may occur when thinking about discourse in highly schematized ways, it seems the authors simply attempt to clarify by making distinctions, by fudging a bit about the actual borders between "kinds" of discourse. Most serious discussions of "types" of discourse, including Kinneavy's and Britton's, begin by acknowledging what Kinneavy calls "overlap."

Writing Classification

When the focus is primarily on the	the purpose or aim is to	which Jakobson calls the	which Kinneavy calls the	which may also be known as	which has examples in
↓ writer/ addresser	↓ express the self (individual or group)	↓ emotive function	↓ expressive aim	↓ "creative" writing	↓ diaries creeds manifestoes
reader/ addressee	persuade the reader	conative function	persuasive aim	persuasion argument rhetoric (narrowly defined)	propaganda debates editorials sermons
reality/ context	explain the world	referential function	referential aim	exposition scientific or technical writing	lab reports textbooks directions manuals
message	create a text which can be appreciated in its own right	poetic function	literary aim	narration description "imaginative" literature	movies jokes songs literary genres
contact	keep lines of communication open	phatic function			"In this paper I . . ."
code	use language to discuss language	metalingual function		metalanguage	dictionaries grammars usage guides underlining words for emphasis

As he explains, "We have to separate the aims in order to study them. . . . But it is palpably clear to anyone who takes a look at actual discourse that very few pure aims of discourse exist" (Theory 60). From the different names and number of types pointed out, it should be obvious that these functions of writing are neither mutually exclusive nor exhaustive; many or all functions may operate together in any piece of writing. It is important to be aware of the types of discourse because they figure prominently in making assignments to meet the goals of courses and in the response we offer to each distinct piece of writing.

Chapter V

What Goes on in Classrooms with Writing Across the Curriculum

So far the discussion of writing across the curriculum has focused on theories inherent in the movement: writing as a composing process and writing as a way of learning which includes various modes. These theories must be put into practice in the classroom, however.

After a decision has been made to use WAC, a discussion of what actually goes on in classes where this writing takes place will be helpful in understanding the program. The principle features parallel those of the "emerging paradigm" Hairston talks about and can be categorized under the broad practical headings of assignments and evaluation. The principle features involved are that writing teaches strategies for invention and discovery; instructors help students to generate and discover purpose. Audience, purpose, and occasion figure prominently in the assignments of writing tasks. Writing is viewed as a process; instructors intervene in students' writing during the process. Instructors evaluate the written product by how well it fulfills the writers'

intention and meets the audiences' needs. And finally, teachers should be people who write.

WAC expands the notions of what writing is and what kind of writing assignments are possible. In WAC, functions of writing figure prominently both in writing assignments to meet certain goals and in the response teachers offer to each distinct piece of writing, not to mention the guidance given during the process. Though various functions of writing have been discussed, Art Young's categorizations of these functions seem particularly suited to application in the classroom. He states:

I assign tasks that require students to use writing in the following ways: 1) to communicate information to a particular audience, 2) to learn about certain subjects, 3) to express themselves and order their experiences, and 4) to assess values in relation to material they are studying. . . . When the primary function of writing is to communicate, then the writer has the dual obligation of arriving at a coherent understanding of the material and presenting it in an attractive, efficient way. . . . When the primary function is to learn--to reach a secure understanding of new information, either for no immediate pragmatic end or as a step to mastering information in preparation for a formal paper or test--then the writer is free to discover ideas and to play with language without the constraint of pleasing a demanding reader. . . . When the primary function of writing is to express the self's perceptions of reality and to order experience, then the primary goal of the writer is to personalize knowledge--that is to make it his or her own. . . . When the primary purpose of writing is to access values, writers engage in discovering what they believe about a particular experience or piece of information. (240-244)

While these four functions of writing are neither mutually exclusive nor exhaustive, it is useful to segregate them as a way of examining what we want to happen as a result of our assignments.

Anne Herrington says, "The writing as learning approach implies that students . . . have something to say and that the process of writing provides at once a way for them to discover and communicate it" (379). This approach underscores a responsibility all teachers share--"creating situations that stimulate student learning" (380). When the purpose of using writing is to help students learn, it is only logical that assignments be linked to the course objectives, preferably those which emphasize rather than those which just recall facts. The writing assignments should be used as opportunities to learn, to use the particular patterns of inquiry as a discipline, whether they be processes of observation and generalization or a problem-solving process of applying a general principle to a specific situation. Sadly, there are many teachers whose only course objective is to cover the course content.

Fulwiler says we are all familiar with student writing problems "due to poor composing skills, insufficient knowledge, immature thinking, and lack of interest" (Language Connections 47). But he suggests that there are many problems caused by teachers who are teacher-centered rather than student-centered.

We're thinking here about vague or poorly explained directions on a writing assignment; exam questions which make false assumptions about what students know or should know; assignments which do not challenge students and are perceived as dull, repetitious, or tedious; incomplete or harmful responses by teachers to student writing; and poor planning, timing or sequencing of assignments. These are but some of the ways that teachers, without malice and with good intentions, may affect the quality of student writing by poor assignment and ill considered response to that writing. (47)

Writing assignments not only must be pertinent to the learning objectives of the teacher and content of the course, but must also be sensitive to the writing ability of the student. The conceptual activities and intellectual demands of each assignment must be considered. (See Lee Odell's "The Process of Writing and the Process of Learning" and Anne Herrington's "Writing Across the Disciplines.") In other words, the instructor must know why he is giving the assignment and what he is requiring his students to do. Very often assignments are not successful because they require tasks that neither the teacher wants nor the student can perform. There are various practices that may help both students and teachers. Kiniry suggests sequencing writing, a recursive approach (191-202). William McCleary and others have suggested a case approach to assure that the student is aware of purpose and audience (203-212). Cris Madigan suggests improving writing assignments with the communication theory, and also mentions several articles

which offer criteria for good writing assignments (183-190). My point is that the writing assignment is a central activity in WAC and that teachers need to be aware of its importance and willing to treat it as such.

Lee Odell cautions that we need not equate writing with long expository essays and research papers, although these are also important. There are several ways in which the process of discovery may take place, among them the act of writing ("Teaching Writing" 150).

Peter Elbow offers several means to ask students to write by focusing their attention on the uses of writing instead of upon the writing itself. He suggests that "when you care more about the mental event than the writing, the writing suddenly gets much easier" ("Teaching Writing" 234). His are not the only methods to use in WAC, but are indicative of ways that can be effective in various classrooms across the curriculum. He sees writing as a means of input and offers these practical suggestions:

1. Students will receive more benefit from any lecture if it is shortened by ten minutes and that time given to "freewriting." They will get much more out of reading if they freewrite at the end of each section or chapter or freewrite after a film. Note-taking will not be so important because students will "remember" ideas and conclusions and reflections they have worked out for themselves (235).

"Freewriting," he says, "is writing without stopping, writing whatever comes, writing no matter what. . . ."

"Focused freewriting" is probably a better term since the writing is about the lecture, reading, or film. Students are assured with freewriting that they will not be required to show what they have written, although some may want to share (235).

2. Discussions might be started with ten minutes of freewriting. One reason so many discussions are tiresome or useless is that students have not thought about the subject being discussed. Freewriting can help students "assimilate the material and reach some exploratory conclusions." It can get minds "warmed up." Freewriting helps separate two very different activities needed for a good discussion: "figuring out what you think and saying what you think." With freewriting, even if a student does not take part in the oral discussion, he has expressed himself (235).

3. Similarly, five or ten minutes of freewriting might be used after a hard question arises in a discussion--before anyone responds. The writing gives students a chance to jot down ideas, collect their thoughts, and/or find a safer position for responding without fear of saying something silly. Thus everyone interacts with the question, not just the person who talks (235).

4. Freewriting may be used at the end of a seminar or class period. "The object here is for people to reach some

closure, some conclusion, so that they can actually carry away with them some benefit of the discussion" (236).

Again, this freewriting is not judged, evaluated, handed in, or even shared, unless a student chooses to read some of what he wrote as part of an ensuing discussion, although one variation of this type of assignment is to have students exchange papers and write comments on their peers' writings. There are many variations that may be adopted to the goals and objectives of a course.

In this type of writing-to-learn, the teacher's concern is changed from dispersing knowledge to stimulating conceptual involvement and investigation in order to encourage the growth of the students' intellectual capacities. Elbow also suggests writing as a means of getting other tasks done, such as informal bits of writing between student and teacher for evaluation purposes--of specific points, of the student, of the course, and of the teacher (236-239).

Susan McLeod tells of a biology professor who asks her students to write anonymously in class on a few questions concerning an idea she is about to introduce, both to pique their interest and also to determine what sort of knowledge and conceptualizing skills she can assume as she lectures. She recently found that in a large lecture class in Biology 100, only one student out of 120 could explain on paper what causes a rainbow. She took a flashlight and a prism

to the next lecture and demonstrated the phenomenon to a very interested class (616-617).

Most teachers are familiar with the usefulness of requiring students to keep a journal of thought and reactions to reading, classes, and other class activities. Fulwiler says some also look suspiciously at journal writing. They feel it too personal, unstructured, or informal to assign in the classroom; for others it is too difficult to measure; and still for others journal writing serves no practical pedagogical purpose. It is his premise, however, that "the journal can be both a formal rigorous assignment and at the same time a place for students to practice imaginative and speculative thinking" ("WAC" 15). Journal writing has been advocated by many, including Britton, Emig, and Fulwiler, as an interdisciplinary learning tool with a place in every classroom. In Language Connections, Fulwiler's chapter on journal writing across the curriculum points out that journals can be used as a way of starting class, summarizing, focusing, problem solving, homework, and progress reports (Fulwiler and Young, 15-33).

There will also be writing which is graded, writing to which teachers and students do pay attention to matters of convention. Elbow makes these important observations about graded assignments:

Two or three short papers produce more learning and improvement than one long one--even if the

total time spent is the same. . . . It is possible to get most students to take writing through stages--to get them not just to revise but to actually rethink. I like to require that they hand in a careful draft well before a final draft is due. . . . Learning is minimized when there is only a term paper due at the end. This means feedback is treated only as evaluation. (230-240)

No matter what kind of writing is assigned, audience purpose and occasion should figure prominently in the assignment of writing tasks. Middleton and Reiff state that "the student must write with some sense of the real or hypothetical readers of the finished product." Without contrary information, most students assume that they are writing for what James Britton calls the "teacher as examiner" and are put in the position of a novice trying to impress an expert reader who reads to discover errors (232). They add, "The student must write with some rhetorical purpose in relation to the reader." Students who write to the "teacher-as-examiner" write "to measure up, not to inform or convince" (232). And finally, they assert,

The student must write with some goal in relation to the academic learning situation. Students can write with three goals: to demonstrate mastery of course content, to communicate a portion of that content to an uninformed or unconvinced reader, or to discover--to use the writing to formulate rather than communicate insight about content. (232)

Most school and college writing overlooks the latter two and focuses on mastery.

Anne Herrington asserts that regardless of whether one, three, or twelve different assignments are used in a course,

each assignment should include defining the assignment in full rhetorical context and identifying its intellectual demands. First, the assignment should be constructed to specify not only the topic, but also the purpose and audience. This specificity will help the writers understand what is required of them and "usually will challenge them to something more than restating information for no purpose" (383).

In addition to clear and relevant criteria for assignments, a teacher should stress that writing is a process of discovery. "As a means of communication, it is more than a one step act of writing a finished copy; and as an intellectual process, it is more than merely putting down on paper what is already known" (Herrington 386). The process begins by defining what the task requires, moves through formulating one's ideas and shaping these ideas by writing successive drafts and concludes with stating them coherently in the final written product. Beyond constructing the assignment to minimize misinterpretation, the teacher can help the student learn to use this process by structuring opportunities to intervene in the process before the written, or even the final draft, is received (Herrington 386) and designing back-up exercises that support the students through difficult stages of the writing process (Middleton and Reiff 234).

Not only should audience and purpose be clear in making assignments; instructors should evaluate the written product by how well it fulfills the writer's intention and meets the audience's needs. Lee Odell makes the point that even academic audiences vary widely.

Teachers of business courses frequently give students a set of facts about a company and ask students to recommend policies that the company should adopt. In evaluating students' papers, these instructors seem concerned with matters of practicality: Have students identified one or more specific courses of action for the company to follow? Given the information at hand, does it seem likely that the company in question could and would follow the writer's recommendations? In economics courses, instructors seem most concerned with how accurately students apply economic theory to new sets of data. In at least one political science course, the instructor places great emphasis on the imaginativeness of students' synthesis of material studied. ("How English Teachers" 271-272).

Practicality, accuracy, and imaginativeness are not the only criteria by which instructors judge the "quality of ideas" in students' writing, but these criteria do suggest the different values held by audiences for which the students will write. This, then, is a reminder that we must be sure that both writer and evaluator are aware of all that is entailed in an assignment.

In an interview James Britton commented, "The way the teacher received what the child writes is highly influential in the attitude the child has in the next piece of writing" (Rosen 55). If the teacher treats the students' writing as important to the course and as worthy of substantive

response, then the student can be expected to feel more positively about future assignments and invest more in them. Of course, the opposite is true of a negative response. Anne Herrington agrees that specific ways teachers respond to writing affect the degree to which students perceive writing as a means of learning. She says it is important that a teacher evaluate a writing in terms of a limited number of criteria which evolve from the task, purpose, and audience of the assignment. These criteria should be established when the assignment is designed and given to the student as part of the assignment. And she says a teacher should also create opportunities to share writing in class.

Just as the role of writing is no longer just for a test, the role of the teacher in WAC is not just as an examiner who judges the writer's retention of information or mastery of formal principles, but rather the teacher becomes an intellectual guide whose concern is to lead the writer in the process of discovery.⁴

⁴ For the purposes of this paper the discussion of responses to student writing has been general. For more specific information, see Barbara C. Mallonee and John R. Breihan, "Responding to Students' Drafts: Interdisciplinary Consensus," College Composition and Communication 36 (1985): 213-231; Donald M. Murray, "What Can You Say Besides Awk?" Learning by Teaching: Selected Articles on Writing and

If teachers are to be this intellectual guide, however, then they should also be writers. Fundamentally, if we believe writing is a way of learning (and having written this dissertation, I am sure it is so), then teachers of writing or students of the world should write in order to learn. Moreover, if they are to teach others how to write, they should constantly engage in the process of writing. If they are to know what demands an assignment makes on students, they should first actually write the assignment themselves. This will assure better writing assignments and will make the teachers better guides because they have been along the same path they ask their students to tread.

Teaching (Upper Montclair, NJ: Boynton/Cook, 1982), 151-156; Peter Schiff, "Responding to Writing: Peer Critiques Teacher-Student Conference, and Essay Evaluation," Language Connections: Writing and Reading Across the Curriculum, ed. Toby Fulwiler and Art Young (Urbana, IL: NCTE, 1982), 153-165.

Chapter VI

Conclusion

WAC is not a quick fix for the so-called literacy crisis. It is not a back to basics movement. Those who propose to use it as such have failed to understand its basic premise. One of the ironies of the WAC movement is that it is flourishing now in the prevailing back to basics climate. In fact, according to Janet Williams, who is probably a little too critical of the movement, "what the project is really concerned with reveals a . . . distinct coolness about spelling and punctuation. Nor does it approve a 'skills' approach or 'standards,' at least in the sense that they worry employers and some parents" (and probably teachers and administrators) (12).

By its own admission, the WAC movement is not the standard-bearer for skills and standards, though many would have it so. The success of the WAC movement may depend on everyone's understanding that "correct writing" is not the movement's core. The core of the movement is that writing is a way of arriving at learning in all subject areas. To relegate writing solely to the English

department or to use writing solely as a means of testing in other disciplines is to severely limit its usefulness.

This is not to suggest that proponents of WAC care nothing for writing skills. By writing more often and in more situations, one does, in fact, improve fluency, clarity, and correctness. But the clarion call of the WAC movement is for schools to broaden the view of the function of writing. WAC sees as paramount the process of writing as a powerful learning strategy that is often overlooked by a product-oriented faculty or university.

The WAC movement, in fact, reflects significant criticism of the organizational structure, the pedagogy, the goals, and the educational outcomes of many of our contemporary educational institutions. As Barbara Smith emphasizes, the WAC programs are not so much a response to the lack of writing skills our students exhibit as they are a response to "the fragmentation of the curriculum, the frequent separation of skill and content teaching, as well as to the localization and denigration of responsibilities for teaching writing and other essential abilities that should permeate all disciplines." WAC programs recognize that too much teaching is directed at getting students to learn content and the reward structure of the teacher rather than "the essential skills they need to become lifelong learners in a rapidly changing world" ("WAC" 2).

If those charged with implementing a WAC program view it simply and solely as the standard-bearer for back-to-basics, as the latest weapon against "bad" writing--and the movement is often passed off as such--then it is very possible that "we'll throw out the baby with the bath water" the next time back-to-basics is out. The idea of writing as a means of learning is simply too important to lose that way.

The value of WAC is apparent; writing should be taught as process, and it is a powerful instrument for learning in all disciplines. As Mayher, Lester, and Pradle state:

If we're to be in the business of education rather than that of schooling, one of our long-range goals must be to help students become lifelong learners. Developing their ability to use writing-to-learn and their confidence and enjoyment in the process and its results should then be one of the highest educational priorities. (92)

However, examination of programs in progress demonstrates that the problems for implementing a WAC program are many and sometimes insurmountable.

Even when the goals of a WAC program are clearly stated and are compatible with the principles inherent in the WAC movement, such as the goals at Beaver College or Michigan Tech, it is difficult to determine an approach (structure) to meet these objectives, and it is difficult to measure whether or not the objectives are met. However, it may

be even more difficult to embody the principles in a university-wide program.

An examination of current programs reveals two basic approaches or structures to a WAC program--the individual subject approach and the centralized department approach. James Kinneavy points out that some theoretical and practical results follow from what seems simply an administrative decision to adopt one program or the other ("WAC" 15). There are both advantages and disadvantages to each approach.

When writing is the responsibility of individual departments, the most obvious advantage is that the teacher is an expert in the field in which the writing is being done. He knows the subject, vocabulary, methods of reasoning, and major genres of the field. Since the "specialist" teacher is the immediate audience for students' writing, then students can be as technical as they want, and the accuracy of their statements can be checked by an expert in the field. Students can feel comfortable that the subtleties of the vocabulary and methods of reasoning of that field are both understood and valued by the expert reader. However, students also need to learn to address the general public about their field. There is a danger of becoming too specialized and not seeing how their specialty fits into the total picture.

A further disadvantage of the individual subject approach is that the individual instructors seem to be virtually unmonitored. They are not responsible to a central authority. This may lead to carelessness and neglect or total disregard for the program.

However, the drawback cited most frequently by teachers in these classes is that they are not trained to teach students to write (Kinneavy "WAC" 16). This is a very real issue. The systematic analysis of the processes and products of writing constitute a very real discipline, and if teachers are to become writing instructors, they should learn something about the discipline and the research going on within it.

The obvious advantage of a centralized writing department, then, is that there are experts in rhetoric teaching rhetoric. However, these experts in writing are probably only generally knowledgeable in such subject areas as chemistry and physics. This means that the student will now have to write to a general audience--something already mentioned that he needs to do--however, he will lose the sophistication, subtlety of argumentation, and methodology of his specialty. He will have to translate the vocabulary in his specialty into language that can be understood by a generalist.

An advantage of the centralized department is that the university does not have to train an entire faculty to

be experts in teaching writing. And with the lines of communication that this type of program seems to open, it has the possibility of uniting the fragmented departments of the university into an academic community.

The purpose of writing changes with the use of either approach. A commitment to one approach or another is a commitment to different kinds of writing. Ideally, students should engage in both kinds of writing--writing to the general public or to the university community as a whole as well as writing to a specialist in their field. The two approaches or structures need to be combined in some way. The program at Michigan Tech comes close to doing this. However, the situation at Michigan Tech is unique in that there are few English majors. This frees English faculty to devote attention to enriching writing in other fields. Apparently no other program comes close to this ideal.

James Kinneavy is correct when he asserts that whatever structure one chooses, the final program needs to have some sort of vertical sequence: training for teachers of writing whether specialist or generalist, an opportunity for the advanced student to explain his subject to the general reader, an opportunity for the student to write in his specialty to a specialist, and a system of accountability to assure that these levels of writing are in fact going on ("WAC" 17).

Whatever structure is chosen for a WAC program, there will also be a problem of the difficulty of measuring the results of the program. If the program is to be funded, there will have to be some sort of accountability to those who fund it, and there must be commitment on the part of the participants. In such a program, however, it is very difficult to measure results. For example, one goal of the Michigan Tech program is to make the entire faculty sensitive to the role of writing in learning as well as the relationship to other communicative skills--reading, speaking, listening. One can inform the entire faculty, but can one make the entire faculty sensitive or measure sensitivity? The principles at the heart of the WAC movement are simply not measurable in ways which are generally demanded by those who handle the purse strings or by those who are the least bit skeptical of its value. WAC encourages the use of writing as a way of learning--not correctness of product, but process of learning.

Nancy Martin, one of the pioneers of the British movement, even questions the measurability of the British project. She wonders if the children who responded positively were possible exceptions who were already "committed to learning" ("LAC" 213). Because we cannot separate language from subject matter, it is impossible to measure one without the other. A student may have

learned a concept, but documenting how he learned it is difficult, if not impossible.

Joan E. Hartman, director of WAC at the College of Staten Island, says that the school has paired classes, one with writing and one without. She reports, "The comparisons indicated that writing benefited students, but did not demonstrate its benefits; too many variables were at play" (41). A participant in Hartman's WAC seminar pointed out that the very fact that writing concentrates the mind will invalidate the experiment of pairing unless there are alternative modes of actively engaging the minds of the non-writing students the same number of hours each week (41).

It is generally agreed that writing is valuable. But how can its value be demonstrated to those who are accountable? Jay Robinson says, "We should be mindful that ours is a society that has sanctioned a back-to-basics movement, that is enamored with competency tests, and presently values vocational over liberal education" ("Social Context" 6). James Britton says WAC is a challenge to all teachers to consider the process of learning both in their own subject and in the whole curriculum, and a challenge to make a distinction between rote learning and genuine learning. He says this distinction is little heeded, however, because

policies for school organization and pupil evaluation tend to blur that distinction (Language and Learning 221).

Given the difficulty of measurability, what sanctions can the institutions apply to make WAC succeed? If class size is limited, do all instructors assign writing? Are writing assignments required or just recommended? Will evaluation of the volume of the writing or the quality of the writing in the assignments be made? Research shows that many assignments ask the wrong kinds of questions and may, in fact, limit learning. So what assignments will be made? What can be shown those who demand evidence for funding or those who will not participate in the program because they cannot see results?

Teaching writing either in or out of the English department is still more art than science. Very little is known about what happens at the moment of insight or inspiration. Nor are predictable routes of faithful translation from thought to language, from pen to paper known (Fulwiler, "How Well" 114). So in every attempt to "teach" others to teach writing more often and more thoughtfully in their classes, problems arise with pedagogy, philosophy, personality, and situation.

James Britton asserts that the most powerful ideas are relatively general and relatively unformulated. They are starting points from which we constantly reformulate

(Martin, "LAC" 209). One problem in implementing a WAC program is that teachers are forced to solidify the ideas into policy so that they can be administered across the curriculum. Freezing reformulation so that policy can be made hampers the flexibility and growth which are essential to the ideas.

If a WAC program is to be successful, then the administrators and participants must be trying to accomplish the same objectives and should agree on goals and develop a consistent philosophy of both education and composition. This will be difficult even within a department and would be considerably more so for an entire faculty and administration.

Joan Hartman says of the program at Staten Island:

Had we simply argued that command of written English is an asset to students in college and beyond and that this command cannot be ensured by the English department alone, we should have achieved easier assent. Instead we asked them to use writing to teach their discipline; consequently we asked them to reconsider their students' learning and implicitly to revise their teaching in response to what they discovered. . . . [This] created a number of dramas, the greatest heat and often the least light. (40)

Teachers of writing must explain why they are teaching writing, how writing is linked to learning, how people learn to improve writing, and what classroom methods are effective. Only then can teachers develop a coherent approach to a college-wide writing program. Students should not be

forced to jump from one philosophy to another--from free writing in one course to Harbrace Handbook in another. Even in, or maybe especially in, the English departments, there is no consistent value system or no consistent philosophy for teaching composition (see Fulkerson 343-348; and Berlin 765-777). This may prove to be the greatest obstacle to a successful WAC program.

If the principles inherent in the WAC movement are going to work, that is, if a WAC program is to be successful, the participants must be committed to Britton's belief that knowledge is a process of knowing rather than a storehouse of knowledge. Instructors must believe that all courses have the same subject matter--the world, and that different disciplines provide varying perspectives for exploring this common subject matter.

Besides agreement on these larger issues, educators must agree on other factors inherent in WAC. Knowing how to use language involves knowledge of many kinds; among them Robinson says there are at least three:

. . . knowledge of the meaning of functions of words and of word parts such as derivational and inflectional endings; knowledge of formal structures such as those for construction of words, phrases, and sentences; and knowledge of strategies for using words and sentences to make language meaningful and to organize and communicate meaning in a way that is both purposive and effective. ("Basic Writing" 116)

The first two kinds he calls grammatical knowledge and the third, knowledge of discourse. Too often when people speak of writing across the curriculum, they mean only the grammatical knowledge, only surface features of writing. Many treat writing (correct grammar) as an end, a goal to reach. WAC sees writing as a means. The focus is on its potential for learning. No matter how long and hard teachers talk, they may never convince some of their colleagues that the priorities are not backwards.

Often programs may be bogged down in terminology. Michigan Tech's WAC is based on the theories of James Britton, and the program was designed around his ideas and the assumption that the entire academic community shared the ideas. Fulwiler candidly states, however, that sometimes terminology was misunderstood. For example, Britton's scheme for explaining the functions of writing: "expressive" (personal informal writing to yourself to find out what is on your mind); "transactional" (writing to inform, instruct, or persuade someone about some matter); and "poetic" (writing used as art, where form, structure, and style may be more important than content), was often misunderstood ("How Well" 114). However, "expressive" to many connoted a dangerous freedom of language and suggested all sorts of educational license. Some faculty thought that the team wanted

transactional writing to be replaced by "expressive writing, poor sentence structure and no concern for spelling." And a number of faculty would never accept the idea that informal writing had anything to do with formal communication to someone else--teachers, for instance ("How Well" 114).

As the Michigan Tech experience suggests, in trying to implement a WAC program one can expect problems with participants, such as resistance, turf, trust and backsliding. In discussing the Michigan Tech experience, Fulwiler immediately admits the obvious. "We learned right away that writing workshops cannot inspire or transform unmotivated, inflexible, or highly suspicious faculty members ("How Well" 115). In order for a program to work, the participants must be volunteers who must at least suspend disbelief. Participants who are forced by department heads or administration are detrimental to a program. Teachers who are committed to content as the major objective of a course, who must cover their material will almost always resist. And English teachers trained in literature are no more willing or even able to teach writing than those in other departments (Maimon, "Writing" 10). It will be difficult to convince some teachers that writing is a learning process because they so often use it as a way of testing. And many teachers, or departments, do not want to take on

the added responsibility of teaching writing because of the time involved in grading compositions.

Joan Hartman says resistance in her program sounded something like this: "Yes, they could incorporate more writing, but the gains as they saw them would be offset by losses. Why indeed should writing be such a preferred mode of learning? Were not other modes equally effective?" (40). These comments came from volunteers who were committed to the program! The lines between teaching and learning are often blurred.

Problems with turf are inherent in any across the curriculum program. Anyone who has participated in a university-wide endeavor is aware of the fierce loyalty to discipline and fragile egos involved. There are obvious problems with turf in a WAC program. Writing across the curriculum is seen as a threat by many because it is not an accustomed part of their turf. They may be afraid that their course may be eliminated or displaced. English teachers may feel that they are the only ones who know how to teach writing. Other disciplines do not want the English department interfering in what or how they teach. Some will claim academic freedom is threatened, or "This is not the

way things are done in our department!" Inevitably egos will be crushed and tensions arise.

While proponents of WAC see the theory as translating into all subjects, many disagree and are unable to translate the theory to practical use in their classes. Proponents may also tend to oversell one aspect of the program. No ideas will work for absolutely everyone every time. Professors who teach courses with enrollments larger than 50 or 60 generally report major difficulties in including more writing in their classes. Even though in theory there are ways of doing this (non-graded assignments, for instance), realistically numbers are a deterrent to the program.

Although the principles inherent in WAC should work anywhere, a WAC program will not get far at a large research-oriented school. Or, if it does, as at the University of Michigan, one committed teacher per discipline is the solution. At the University of Michigan, no attempt is made to have most teachers pay attention to writing.

Fulwiler says a WAC program is probably not needed at a well-endowed, small, liberal arts college with high SAT students and low teacher-student ratios, "because writing has been an integral part of instruction all

along: teaching was always valued and writing remained a natural way to teach well" ("How Well" 118).

The places where WAC programs seem most likely to be needed and which have a chance of success are the public schools "where faculty have fairly high teaching loads and medium to low research and publication pressure." But these same institutions, Fulwiler says, "work their teachers hard, and good ideas therefore need to be awfully practical and good teachers awfully dedicated to get writing back into the curriculum" ("How Well" 119).

If universities can ever decide on what they want to do and how and why to do it, the job is not over. A WAC program must have what Raimes calls "political commitment." This in reality is probably the most crucial issue. How committed is the institution as a whole to the writing needs of the student? How much is the institution willing to risk in order to ensure that those needs are met? Are there rewards for teachers? Does serve to the cause of writing, a time-consuming and energy-consuming service count in the "battle for tenure and promotion"? ("Comment" 21).

The program at Michigan Tech is frequently cited as a model of a successful program. Fulwiler says, however, that the very time Michigan Tech instituted its WAC

program with the strong encouragement of its deans and academic vice president,

. . . these same administrators were encouraging higher standards for tenure and promotion, asking for more research, more publications and the generation of more external money. . . . These competing movements have actually pushed faculty at our university in opposing directions, suggesting that they spend more time assigning and evaluating writing, on the one hand, while asking them to research and publish more of their own work on the other. Mixed messages. ("How Well" 119-120).

If a WAC program is to succeed, then, a long-term commitment from faculty, students, and administrators is required. Experience and the literature that has analyzed WAC suggest that a rigidly administered and enforced WAC program has little likelihood of succeeding. However, WAC is educationally attractive. Such a program has much to give educators and learners. Even as the fact is accepted that a WAC program may never be implemented as a formal program across the total curriculum, what can be done with this idea?

Many faculty members are not using writing as a way of learning, not because they will not, but because they do not realize its potential value or know how to implement it in their classrooms. One positive step is, through a faculty awareness program, to encourage as many as will to use ideas found in WAC.

Besides the obvious benefit to the students, Fulwiler points out some unexpected benefits from Michigan Tech's faculty awareness program and workshops.

We soon learned . . . that "writing ability" was related to all sorts of social, intellectual, and emotional domains which involved the entire campus community. As soon as the business of teaching writing, as well as the act of writing itself, was placed in the larger context, as soon as we decided to offer workshops as "explorations" rather than "conclusions" about the teaching of writing, we opened a much larger door than we ever expected. ("How Well" 120-121)

They first provided a means of interaction among the faculty. Workshops provided an opportunity to try to "understand each other's discipline and feel a common bond. . . . The workshops actually reminded some people why they became college teachers in the first place--before they retreated to separate buildings, isolated offices and competitive research" ("How Well" 121).

The program and workshop that went along with the program were an effective means of faculty development. They encouraged more writing by the faculty. They gave some faculty more confidence and enjoyment in writing and provided both a springboard and encouragement for further research and publication. Fulwiler says the Michigan Tech program showed some teachers that they could still learn something about teaching. "We suspect that, at the college level in

particular, teachers often assume they are talking to adults and that all they need to do is impart knowledge in some matter-of-fact way and it will be learned" ("How Well" 122). Few teachers, in fact, are trained as teachers. They are rather specialists in their individual fields. An across the curriculum program reminds us that we are teachers in an academic community and as such should have common goals.

There are two basic models for faculty development. The workshop-retreat model such as that used by Michigan Tech and the seminar during the school year such as that used by Hunter College. In either method the participants should be volunteers and the staff well-trained composition specialists who possess a great deal of diplomacy. The goals of the two models are similar and generally include something like this:

1. to explore writing as a learning activity,
2. to discuss the principles of good writing appropriate to a university community in general and to each discipline in particular,
3. to learn strategies for incorporating writing regularly in classes in every discipline,
4. to create an atmosphere of common understanding among faculty about communication instruction in the university community,

5. to generate new ideas for improving the writing, reading, and speaking skills of the university students (Fulwiler, "WAC" 17).

Proponents of the Michigan Tech model feel that the best way to do this is off-campus, overnight, in retreat-like workshops. (The Michigan Tech workshops last four days.)

A place where teachers are on neutral ground removed from mail boxes, telephones, students, classes, secretaries, and families. In this setting writing can be explored slowly, thoroughly, and experientially among colleagues who are interested because they are mutually concerned with the quality of student writing. (Fulwiler, "Showing" 56)

The workshop schedule looks like this:

Workshop schedule

First Day. Participants explore the complex nature of the writing process and discover, through discussion, that few simple solutions exist: the needs of a student who is poorly motivated to write well are quite different from the needs of a well-motivated student who doesn't understand how to use semicolons.

Session 1 (1:00-10:30 a.m.). "The writing crisis." Participants explore their own perceptions about student writing problems, discuss possible causes, and offer tentative solutions.

Session 2 (10:45-12:00 Noon). The composing process." Participants engage in a condensed exercise to duplicate several steps in the composing process: invention, freewriting, revision, reader response, and peer critiquing. Teachers re-experience firsthand the role of students who are asked to write on command and whose writing is evaluated by another person.

Session 3 (1:00-2:30 p.m.). "The function of writing." This is the only lecture session at

the workshop. We explain the functions of writing as delineated by James Britton in The Development of Writing Abilities 11-18 (NCTE, 1977). In particular we stress the importance of expressive writing, where oneself is the audience, making the point that such writing, in journals, notebooks, or first drafts, is close to thinking, and therefore permits the writer to speculate, invent, and clarify, concretely, on paper. Expressive writing, according to Britton, is commonly ignored by teachers who do not understand its relationship to more public (transactional) writing. We point out that writing expressively is important both as an aid to thinking and learning and as the matrix from which finished public writing emerges. Teaching teachers in all disciplines to use writing as a "thinking tool" is one of the most important lessons of the workshop.

Session 4 (2:45-4:00 p.m.). "Writing workshop I." Participants begin serious work on a piece of writing--personal experience or academic--which they will continue to revise and rewrite for the duration of the workshop. Permanent writing response groups of five or six participants are formed. (This exercise is borrowed directly from the Summer Institutes of the National Writing Project.)

Second Day. Participants are asked to explore in depth some aspects of the composing process, building on ideas introduced the previous day.

Session 1. "Inventory and discovery." Participants explore techniques for initiating a piece of writing. Writing is discussed as a problem-solving activity. The notion of heuristics is explained, and teachers create practice assignments requiring invention strategies pertinent to their particular discipline.

Session 2. "Journal writing." All members of the workshop are required to keep journals for the duration of the workshop. On the first day, participants write in journals, but do not discuss their possible use. This workshop session formally introduces the journal as a powerful educational tool with applications in all disciplines. It is one way all teachers can assign expressive writing.

Session 3. "Writing for an audience." Participants investigate the role of a reader in the

composing process. Exercises give teachers practice in varying their writing voice depending upon whom they are writing for. The importance of peer readers is discussed.

Session 4. "Writing workshop II." Teachers meet in small groups and read their writing to each other. Each group member receives a copy of the others' writing. Groups establish their own guidelines for discussion.

Third Day. Participants turn their attention from their own composing process to the problem of evaluating student papers. Materials for these exercises have been prepared in advance from pages submitted by workshop members.

Session 1. "Responding to student writing." Participants explore in small groups the strengths and weaknesses of sample student papers and are asked to generate a consensus about responses that would help the student writer improve his or her paper.

Session 2. "Sentence combining." Workshop members are introduced to simple techniques for improving the syntactic maturity of student writers. Ideas are explored for using such exercises in nonwriting classes.

Session 3. "Peer editing." Critique sheets serve as guides for participants to practice commenting on student papers. This exercise asks participants to take the role of students who must make helpful editorial suggestions to each other.

Session 4. "Writing workshop III." Participants read and discuss the latest revisions of each other's writing.

Fourth Day. Participants explore classroom practices that might work in their particular disciplines. In addition, the notion of reading and speaking across the curriculum is introduced.

Session 1. "Writing in specific disciplines." Participants divide into related disciplinary groups and discuss problems peculiar to social-science writing, scientific and technical writing, and humanities writing, respectively. At the conclusion of this session the workshop as a whole explores differences and similarities in the writing tasks in each area.

Session 2. "Reading in every classroom." A guest workshop leader with expertise in reading discusses methods for encouraging critical reading skills among students. Participants practice exercises, including the CLOZE test, designed to enhance their awareness of what skillful reading requires.

Session 3. "Speech in every classroom." A guest leader from the speech department explores the nature of the classroom "oral environment." Short exercises encourage participants to look more closely at acts of public speech as well as the causes of speech anxiety.

Session 4. "Working workshop IV." This is the last meeting of the workshop's writing practice groups. Participants read their finished products to each other and explore the kind of revision still needed to make each piece a publishable essay.

Session 5. "Conclusion and recommendations." This final meeting of the whole workshop explores possible writing-across-the-curriculum activities for the near future. Each participant is asked to make at least one concrete suggestion for using writing effectively in class.

(Fulwiler "WAC" 17-18)

Although the basic goals and subject matter covered were similar, Ann Raimés of Hunter College suggests a seminar approach during the school year. She says her faculty rejected the intensive workshop during the summer or weekends for both practical and fundamental reasons. First, the faculty members could not see themselves eagerly giving up a summer or even a weekend to devote time to discussing writing, but more fundamentally the members felt that retreat-like workshops deprived the participants of any "real" students. Members did not place the same value on faculty participating in writing that Michigan Tech did. Raimés felt what was gained in understanding of the writing

process was lost in the lack of real students and real situations. Through a grant, Hunter College was able to give one course release time to seventeen faculty members to participate in a weekly seminar throughout a whole semester. One crucial factor, it is felt, is that the seminar was initiated and backed not just by the English department, but by the administration, and was viewed as a college-wide project (Raimes, "Writing" 797).

Faculty members believed the idea of making their regular classroom experiences the focus of the seminar discussion was extraordinarily useful. Raimes states,

We did ask seminar members to read from theoretical literature in the field, prepare some papers, and listen to visiting lecturers. But most frequently we examined the writing of our own and each other's students. Throughout the discussions, we explained, argued, defended. ("Writing" 798)

Faculty members in the seminar rejected the idea that they should teach writing in the sense of teaching such fundamental skills. They felt basic material of acceptable writing should be handled by experts. But they did conclude that "the way to improve writing was not to teach it in all courses but to do it in all courses in order to foster the learning of the subject" (Raimes, "Writing" 799).

WAC, even used by a few, offers the student, university, and curriculum, the benefit of a powerful learning tool. Elaine Maimon suggests that the tenets which underlie

WAC affect the entire academic community. Writing, like learning, is not an entity, but a process. It is not merely communicating what has been mastered; it is a way to learn. It is a central instrument of invention and discovery in all disciplines. WAC is influenced by ideas about the importance of learning in groups. Because writing and learning are connected, interactive processes, students are encouraged to learn from one another. Writing within a discipline actually clarifies the fundamental precepts within the discipline and should therefore be the responsibility of every scholar in every field (Smith 13).

A Wellesley faculty member's reaction to a WAC workshop stresses the far-reaching implications of WAC. He said that he expected the workshop to be about writing but found it much more revolutionary. "What we have been talking about," he said, "is a way to revive the study of liberal arts and also a way to reanalyze our teaching so that we can help students to think and write instead of just expecting that of them" (Smith 14).

Even though a WAC program throughout the entire university may not be feasible, the benefits of even a few using its precepts are worth the effort.

Appendix

Appendix

Directors of Writing Programs

A list of the directors of writing programs which was gathered from various sources in my research is given in this appendix. Most directors of writing programs will be glad to share information with interested persons.

Beaver College

Elaine Maimon
Writing Program Director
Associate Professor of English
Beaver College
Glenside, PA 19038
(215) 884-3500

Central College

Walter W. Cannon
Director, Across the Curriculum
Central College
Pella, IA 50219

Clark University

Leone Scanlon
Director of Writing
Clark University
Worcester, MA 01610

Ferrum College

Peter Crow
Chairperson
Department of Language and Literature
Ferrum College
Ferrum, VA 24088

Gonzaga University

David J. Leigh
Associate Professor of English
Director of NEH Project
Gonzaga University
Spokane, WA 99258
(509) 328-4420

Grinnell College

Peter Connelly
Professor of English
Grinnell College
Grinnell, IA 50122
(515) 236-5140

Guilford College

Claire Helgeson
Department of English
Guilford College
Greensboro, NC 27410

Harvard University

Richard Marius
Director
Expository Program
Harvard University
Cambridge, MA 02138

Lewis and Clark College

Susan Hubbuch
Director, Writing Skills Center
David W. Savage
Associate Dean and Director
Society and Culture Program
Lewis and Clark College
Portland, OR 97219

Michigan Technological University

Toby Fulwiler
Director of Writing Programs, or
Art Young, Head, Humanities Division
Department of Humanities
College of Science and Arts
Michigan Technological University
Houghton, MI 49931
(906) 487-2007

New York University

Paula Johnson
Professor of English and Director
Expository Writing Program
New York University
New York, NY 10003

Ohio Wesleyan University

Ulle E. Lewes
Director of Writing Resource Center
Ohio Wesleyan University
Delaware, OH 43015

Pacific Lutheran University

Charles Bergman
Director, Writing Program
Pacific Lutheran University
Tacoma, WA 98447

Rose-Hulman Institute of Technology

Patricia Ann Carlson
Director, Writing Program
Rose-Hulman Institute of Technology
Terre Haute, IN 47803

St. Edward's University

Brother John A. Perron
Director, Freshman Studies
St. Edward's University
Austin, TX 78704
(512) 444-2621

Stockton State College

Christopher C. Burnham
Director of Writing
Stockton State College
Pomona, NJ 08240

Towson State University

H. F. Dowling, Jr.
English Department
Towson State University
Baltimore, MD 21204

University of Maryland, College Park

Michael Marcuse

Director

Junior Composition Program

2121 Taliaferro Hall

University of Maryland

College Park, MD 20742

(301) 454-0100

University of Michigan

Daniel Fader

Chairperson

English Composition Board

The University of Michigan

College of Literature, Science, and the Arts

1615 Haven Hall

Ann Arbor, MI 48109

(313) 764-0429

University of Minnesota

Terry Taranto

Coordinator

Composition Transition Program

University of Minnesota

Minneapolis, MN 55455

University of Tampa

Mary Jane Schenck

Director of Freshman Composition

University of Tampa

Tampa, FL 33606

West Chester State College

Robert H. Weiss

Writing Program Director

West Chester State College

West Chester, PA 19380

Wheaton College

Francis Shirley

Professor of English

Wheaton College

Norton, MA 02766

(617) 285-7722

Whittier College
William A. Geiger, Jr.
Chairperson
Department of English
Whittier College
Whittier, CA 90608

Yale University
Linda H. Peterson and Joseph Gordon
Co-Directors
Yale College Committee on Expository Writing
103 Connecticut Hall
Box 4431, Yale Stadium
New Haven, CT 06520
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