A review of the literature on writing across the curriculum (WAC) programs indicates that most such programs have four components. First, the programs require that students complete one of the following before graduation: (1) a timed writing test, (2) a departmental endorsement system, (3) a quota of regular content courses designated "writing intensive," or (4) a professional writing course. Second, WAC programs contain faculty development workshops, in which faculty from all departments cooperatively consider strategies for effectively incorporating writing into their courses. The literature in this area covers workshop structure, objectives and activities, audience, and general guidelines. Third, the programs include in-class seminars offered by the writing faculty to help the remaining faculty integrate writing into content courses. Finally, programs include a writing center, in which trained peer tutors help students with their writing assignments. Research shows that if the administration and faculty are strongly committed to WAC programs, then such programs can be successfully implemented in a variety of colleges and universities. However, faculty development workshops must be followed up, preferably by a college obligation to help students write better. (A bibliography is included.) (JD)
Since the mid 70's, many colleges across the country have been coming to grips with the problem that some of their graduates cannot write competently. While the most direct way to attack this problem might be to require students to take more writing courses, staffing costs make this an expensive option. More importantly, requiring more writing courses reduces the content courses students can take and fosters the erroneous notion that writing is something one does apart from the thinking, problem-solving, and discovering that go on in regular content courses. For these reasons many colleges have developed writing across the curriculum (WAC) programs, and these programs have been described in numerous papers and journal articles. Here I report on what a review of this literature on writing across the curriculum reveals about these programs and how they might work at Babson.

WAC programs usually have one or more of the following components, so I have organized my report around these:

1. A competency requirement in writing which students must pass before they can graduate (pp. 2-5);

2. Faculty development workshops, in which faculty from all departments consider strategies for effectively incorporating writing into their courses (pp. 5-13);

3. Consultants from the writing faculty available to help faculty integrate writing into content courses (p. 13-14);

4. A Writing Center and trained peer tutors available to help students do the writing asked of them (pp. 14-15).

My conclusions (p. 15) and a bibliography of works cited (pp. 15-19) appear at the end.
1. Competency Requirements

Competency requirements usually take the form of any of the following: 1) a timed writing test; 2) a departmental endorsement system; 3) regular content courses designated "writing intensive," of which students are required to take a certain number before they graduate; 4) a required professional writing course (usually junior year).

Timed Writing Test: In the literature, of the three alternatives the least is said about timed writing tests. I am aware that such a test is used at U Mass Boston and at Old Dominion in Norfolk, and that it is being considered at the U. of Louisville where they are currently conducting a thorough survey of such programs nationwide. I would guess that such a device, which essentially tests whether students can organize and write a short analytical essay in Standard Written English, is useful primarily at institutions which admit a large number of basic writers or underprepared students. In the places I am aware of where a writing test is used, it is usually administered before the junior year and is required before students may take courses in their majors. Since most Babson students enter with at least minimal competence in writing, I doubt that Babson needs this sort of filtering system.

Although there doesn't seem to be a movement to create a timed writing exam to measure writing competence at Babson, some faculty and administrators have expressed dismay over the fact that students can survive the English 100 course with a "D," meaning they are not competent writers, and never have instruction in writing again. Some people may, therefore, be interested that Canuteson at William Jewell College reports using the English department staff-graded final exam for freshman composition (consisting of two different essays written at two different times) as the competency test requirement. Students who fail this test do not necessarily have to retake English 100, but they do have to take the exam again the following semester. Presumably they would thus be motivated to get help with their writing in the meantime.

A Departmental Endorsement System: Again in the literature very little is said about such a system. I am aware only that this system operates at Central College in Iowa (which received NEH money to develop their WAC program). However, even though I have so far found only that Central has formally adopted a system
whereby each major department establishes the exit requirements in writing, this is the de facto system at many institutions, where departments establish certain writing course requirements as necessary for graduation - such as major courses designated "writing intensive," or English department courses in professional writing.

Writing Intensive Courses: One one of the most common results of a WAC program is that some faculty from across the curriculum volunteer to teach their regular content courses with an additional, strong writing component. These courses are frequently designated "writing intensive," and many institutions or departments require that students take a certain number of these courses before they graduate. The number may be fixed, such as two courses, or the number may vary per student, depending on interim assessments of the students' writing abilities. Other institutions never establish a formal requirement, but try to make writing intensive courses such a regular part of the curriculum that students cannot graduate without having had a number of them.

Writing Intensive Courses at the Freshman Level: A popular approach seems to be to target general education requirements in the student's freshman year, perhaps coordinating these courses with the freshman composition course. At Drew University, for example, volunteer faculty prepare to teach a writing-intensive freshman seminar, restricted to 14 students and requiring eight papers per semester (Nochimson). The topic of the seminar is up to the instructor. (Interestingly, the instructor also serves as the students' academic advisor and with such a set-up "the advising system has improved tremendously.") Stanford offers a similar option to teachers of its Freshman Seminar Program (Nold).

At Lewis and Clark, faculty who teach the three-term freshman core course, know as "Society and Culture," are trained to teach a series of writing assignments that move logically to make increasingly sophisticated demands and capitalize on students' previous experience (Graham). And at Yale, trained graduate Teaching Fellows can opt to teach a "Writing Intensive" section of a course, with only fifteen students rather than the usual thirty.

Rather than training non-English faculty to teach writing intensive courses at the freshman level, a more conventional approach is to coordinate the regular freshman composition course with a freshman level content course. At USC, for example,
freshman comp students are pre-sorted, pairing specific comp sections with sections, for example, of history, sociology, or biology. The collaboration between courses is left entirely to the discretion of the instructors (Holzman). At UC Davis and the University of Washington the freshman course is similarly linked with humanities or natural science courses (Graham).

Writing Intensive Upper Level Courses: At the more advanced course level, trained faculty from various disciplines volunteer to make their regular courses writing-intensive, and a certain number of such courses may be required for graduation. The University of Texas at Austin probably has the most thorough-going writing requirement. In addition to freshman composition, all students must take a junior level professional writing course and two additional courses in their majors which are designated writing-intensive (Kinneavy). At the University of Alabama two such courses are also required of majors.

Finding it difficult, for whatever reasons, to get content-area faculty to volunteer to teach writing intensive courses, some colleges simply provide TA's or peer tutors to assist faculty in teaching writing in their courses. Such courses will feature workshops on the writing assignments required in the course and will focus primarily on prewriting and revision techniques (Reiff). At Stanford, peer tutors offer workshops, read rough drafts, and evaluate the final papers; and they are given the power to determine anywhere from 10 - 50% of the paper's grade (Nold).

Professional Writing Courses: A more conventional approach at the upper division level is to require that all students take a professional writing course (business writing, technical writing, writing for engineers, etc.). These courses are usually taught by the English department, so that student/specialists must learn how to write about their specialties to an audience of generalists. Kinneavy makes a great deal of the importance of this requirement at Texas:

These are the three types of thinking [scientific, persuasive, and aesthetic, known in the liberal arts tradition as logic and dialectic, rhetoric, and grammar] that it is the duty of the university to get each student to engage in for a full mental life. If writing emphasizes only the logical and the exploratory, and never focuses on the persuasive, we alienate rhetoric from the university and narrow the writer's conceived audience down to peers or superiors and separate ethical and moral responsibilities
from scientific concerns. . . . Once the scientist-teacher no longer feels a duty to address the populace in rhetorical genres and can pursue scholarly interest untrammeled by the intervention of religious or moral beliefs, he or she can perform amorally in the laboratory and in the classroom as a scientist-teacher. . . . Yet it does seem immoral for a discipline as a whole to disavow the responsibility for its creations.

Such an argument offers an important rationale for making sure students know how to write to generalists as well as specialists. Yale, on the other hand, offers Special Courses in Writing, small seminars for juniors and seniors in their major field, which examine modes of exposition and argument peculiar to their disciplines (Graham).

Rather than requiring a professional writing course completely independent of courses in the students major, UCLA offers two-credit Writing Intensives in conjunction with upper division lecture courses, provided at the instructor’s request. And some UCLA departments are requiring their majors to take Intensives attached to their courses (Graham).

2. Faculty Development Workshops

Almost all of the above attempts to ensure that graduates are competent writers depend on the faculty recognizing that writing cannot be taught in a one-semester composition course, that all faculty are responsible for developing student writing ability, and that faculty need to explore ways to incorporate more writing into their courses. Thus most institutions wanting to develop student writing abilities have at the core of their WAC program faculty development workshops. Although the length and structure of these workshops, and the incentives provided faculty to attend, differ widely among institutions, there is a surprising unanimity about what the workshops should accomplish, their problems, and their benefits. Also, several articles made very specific suggestions about articles and research in writing that have been found useful to workshop participants.

Workshop Structure: Workshops may last anywhere from three hours to three weeks and maybe designed for anywhere from six to thirty-five participants; and incentives offered to faculty for participation range from a free meal to $1200.
Whether workshops last for half a day or half a month, the most common pattern seems to be to offer summer or between-term workshops. At the College of New Rochelle twenty participants attended a two-week workshop and received $500 stipends (Nochimson). At Drew, faculty attended a three-week summer workshop and were compensated $1200. At Montana State the workshops were month-long for thirty-five participants, and in addition every department was offered two-day workshops [funded by FIPSE] (Ferlazzo). At Michigan Tech, a pioneer in this area, three different four-day workshops are offered twice a year and faculty receive a stipend of $200 to attend one [grant from the General Motors Foundation] (Fulwiler WPA).

The structure which seems to me to provide the most helpful introduction and follow-up to developing faculty asks twelve participants to attend a one-week summer workshop, and for the following two semesters to attend monthly meetings. Each participant agrees to redesign one course so that writing is incorporated to help students meet course objectives. For these efforts participants are awarded one course release (Herrington).

Some colleges shun large faculty workshops because for large institutions they prove unwieldy and too costly (Hartman, Raimes). For them the seminar format works best. For one semester 14-20 faculty are granted one course release to meet in a weekly seminar to discuss writing in courses. Participants leave the seminar with a written plan for spreading the gospel in their departments.

Workshop Objectives and Activities: The literature offers generous accounts of the plans, activities, and outcomes of faculty development workshops, and there is considerable agreement as to what these should be.

Although workshop designers may phrase their objectives differently, most agree that the fundamental objectives of the faculty workshops are to convey the understanding

1) that writing is not only a means of communicating but a necessary part of learning, i.e., a way of knowing;

2) that writers go through stages in the writing process, and that teachers can help students by building stages of exploration, drafting, and revising into every extended writing project they assign;
3) that the rhetoric and sequencing of assignments can help students understand the complex forms of social behavior that are manifested in the rhetoric of each discipline, and can enable students better to meet course objectives;

4) that the techniques of peer critiquing and a variety of valuable, ungraded writing assignments (e.g., asking students to write before they speak, to write a one-paragraph summary of the lecture's main points, to write informal letters or reaction sheets that express responses to academic material) can enable students to do more writing while instructors grade fewer papers. (Maimon WPA. See also Weiss and Freisinger for more detailed lists of objectives)

As for specific workshop activities, Fulweiler, Weiss & Peich, Graham, Ferlazzo, Nold, Thomas, Sedgwick, and Dick (in order of utility) all provide fairly detailed outlines of the activities that can go into workshops lasting from two hours to five days. These activities include writing (either personal or professional pieces), reading and discussing the theory and pedagogy of composition, designing assignments, peer-critiquing sessions, brainstorming, and paper evaluation exercises. Almost all recommend the use of outside consultants to create stronger credibility for the program.

Workshop Audience: Several articles emphasize the importance of knowing well the predispositions of the faculty whom the workshops are intended to serve. Robertson at the University of Oregon notes that her preliminary interviews with faculty about their attitudes toward writing show that the connection many see between intellectual ability and written expression is only a negative connection.

1) They assume that if an essay is badly written, the student is not very bright.

2) Some faculty separate writing from thinking or analytical abilities; they define writing as having to do with errors in grammar, punctuation, spelling, and paragraphing.

3) Some faculty said they thought their students' writing was fine, or even exceptional, while at the same time complaining their students wrote boring, unimaginative prose and did not seem engaged with their material.
4) Most faculty misperceive the function of writing specialists, assuming they deal exclusively with grammar, punctuation, and spelling. Many resented the suggestion that a writing specialist might be concerned with invention, logic, and argumentation, because these have to do with "thinking," which is the exclusive concern of the faculty member teaching a given course.

Graham notes the Brannon & Knoblauch article which identifies the danger that faculty will fail to recognize or capitalize on the value of writing as a tool of thought:

The trouble is, many teachers preserve notions about the nature of knowledge and learning which limit their ability to recognize the heuristic value of composition. Instructors both in English and other fields often assume that knowledge is a stable and bounded artifact, a collection of information, a set of facts and ideas to be delivered to students through lectures and course readings. The goal of instruction is to "cover" a subject by enumerating its relevant data. The teacher as knower recalls the body of facts and conveys it to students, learners, who passively receive and store it, perhaps for later retrieval in term papers or examinations. "Learning" means receiving information; "knowing" is the condition of having retained it, which can be measured by students' ability to report it in writing at a teacher's discretion. Teaching means turning learners into knowers by passing on to them the substance of knowledge.

These assumptions are venerable and deep-seated — and wrong. A more plausible argument, substantiated over three hundred years of insight and research, is that knowing is an activity, not a condition or state, that knowledge implies the making of connections, not an inert body of information, that both teachers and students are learners, that discourse manifests and realizes the power to learn, and that teaching entails creating incentives and contexts for learning, not a reporting of data. Specifically, learning is the process of an individual mind making meaning from the materials of its experience.

Dick notes the mutual suspicion with which composition teachers and faculty in other disciplines view each other, and Freisinger discusses the theoretical underpinnings for the assumption that language for learning is different from language.
for informing. He notes that when workshop participants ask, "What empirical evidence is there to prove that a student who engages in expressive writing [writing to learn] will produce better transactional writing [writing to inform]," there is no real answer except the self-evident implication that a good product is only possible if a good process produced it. The stage of "explaining the matter to oneself" and getting the information "right with self" (Britton's terms) is crucial. Freisinger warns that a workshop staff must be prepared for resistance to this emphasis on writing for learning.

Articles and Findings Helpful to Workshops: Simmons's Guidebook to Writing Across the Curriculum (The Shortest Distance to Learning) is an excellent example of written materials that could help support workshop activities as well as guide faculty when the workshops are over.

Lupack suggests that a preliminary step before instituting any program is to assess student needs and faculty concerns and perceptions of student literacy, and she provides samples of a student and faculty survey form. Robertson says NCTE has developed an objective survey of the faculty to find out their attitudes and concerns about writing, and that Elaine Maimon at Beaver College has a modified version of this.

For their workshops, Weiss & Peich opened by using the Daly-Miller survey of writing apprehension, and then followed up with a discussion of four typical problem students, as profiled in Wm. J. Linn's "Psychological Variants of Success: Four In-Depth Case Studies of Freshmen in a Composition Course." He also found Donald Murray's "Teach Writing as a Process Not Product" very useful.

For faculty who are skeptical about holistic grading and would prefer to mark every error on a paper, Hartman suggests referring them to Sommers' article.

Weiss & Walters conducted a study to determine whether subject-related writing tasks assigned in college courses 1) increased the amount and clarity of student learning, 2) led to improved student writing performance, and 3) changed levels of student apprehension about writing. The greatest significant differences resulted from comparisons between clarity of concepts learned by writing and clarity of concepts learned without writing. Subjects assigned writing tasks had significantly
higher gains in learning content subject area. Differences in apprehension and in writing performance were not significant.

Dick suggests that workshop participants receive, in informative packets, these three scholarly articles with the request to read them and to bring them to the conference:

Janet Emig, "Writing as a Mode of Learning,"

Linda S. Flower and John R. Hayes, "Problem-Solving Strategies and the Writing Process," and

Elaine P. Maimon, "Talking to Strangers."

Dick also suggests using Ken Bruffee's *A Short Course in Writing* as background for teaching workshop participants collaborative techniques for the classroom. And he suggests getting a copy of a Hayes research protocol which is a transcription of a student writer's thinking aloud as he composes. It shows dramatically how overconcern for spelling and punctuation at the stage of generating written discourse causes an overload of short-term memory and effectively blocks writing. This transcription should give conference participants a vivid example of the "sense of desperation" which paralyzes many student writers.

And I suggest Herrington, Odell, and Brostoff & Beyer for good examples of writing assignments developed through workshop collaborations.

As for workshop follow-up, several programs initiated a monthly or bi-monthly newsletter, and Robertson notes that the Honors College at Oregon initiated the formation of the Pacific Northwest Writing Consortium, made up of six colleges and universities in the Pacific Northwest each of which has a WAC program. In winter of 1980 they began publishing a bi-monthly newsletter, and in July, 1981, the Consortium was awarded $380,00 by NEH for a three-year project to develop WAC programs in the region.

Griffin at Virginia Commonwealth explains that to supplement their faculty workshops, writing faculty are working on developing materials to explain paper assignments, to be handed out to students or put in the library for references, e.g., on writing book reviews, essay tests, papers about literature, argumentative papers, and abstracts. And other colleges are writing handbooks as guides to writing at the college.
But perhaps we should be wary of expecting unanimity and handbook standards and guides to writing. Graham notes the "somewhat ironic result of an effort to get a whole faculty to use the same vocabulary for commenting and grading. . . . During a four-year series of faculty seminars and workshops, California State College at San Bernardino tried to arrive at "campus-wide uniform terminology," and agreement was finally reach on just four words: Substance, Organization, Mechanics, and Evidence. Those words, known as the SOME Criteria, are now used as headings for categories in commenting on students' work. The quest for shared terms served to provoke important discussion among the San Bernardino faculty, and the limited result is in fact a good sign, for it shows that they seriously explored their own expectations. Furthermore, it preserves for students the prospect of receiving comments that are appropriately specific to their intentions.

As a summing up of both the problems and the benefits of faculty workshops, Fulweiler (1984) is excellent and I paraphrase him here at length. In reviewing his eight years experience with WAC at Michigan Tech, Fulweiler discusses the following problems and benefits.

Workshop Problems:

Terminology - to describe writing for learning, don't use the term "expressive" (to some faculty it connotes dangerous freedom of language and educational license); substitute "exploratory" or "speculative." But, "the concept of informal, personal, or journal writing is of questionable value to faculty outside the humanities and no matter what language you describe it in, you must be prepared for some unsettling questions."

Resistance: Workshops, because they involve a lot of "participant risks, such as reading aloud one's own writing to colleagues or generating consensus ideas or writing in a personal journal," cannot work for unmotivated, inflexible, or highly-suspicious faculty members. Participants must volunteer with an open mind and be willing to share ideas.

Turf: philosophers and English teachers ask the most skeptical questions: "How do you know Britton's theories are correct?" "What empirical evidence proves that journal writing facilitates learning." So stay closer to ideas verifiable by personal experience.
Translation: Mathematics teachers seem to have the hardest time figuring out how workshop ideas apply to their teaching.

Numbers: Professors who teach courses with enrollments larger than fifty or sixty, often several hundred, report major difficulties in including more writing in their classes, even though, in theory, there are ways to do this.

Trust: "Perhaps the most difficult practice for teachers across the curriculum to use is peer reviews, where students read (aloud or silently) and critique each other's papers in draft stage and then revise them for the instructor's review. Peer review works when you return to the process more than two or three times during the term in the same groups of four or five. Use small groups less often than that, and "students simply do not have the time to develop trust in each other or to develop that critical, skeptical eye so important to good revision."

Dabbling: If we only try peer reviews a few times they will fail; if we don't keep a journal ourselves the journals will seem like busywork; if we don't carefully plan papers to come in at different draft stages, they'll all come in at once at the end of the term. The point is that lots of good ideas fail because we don't fully commit ourselves to make them work.

Location: At large, research-oriented universities where teaching is not a high priority, WAC programs don't get too far.

Overselling: No idea will work for absolutely everyone every time. For example, Fulweiler notes that he oversold the idea of journals at earlier workshops.

Follow up: Short-term attitude changes do not guarantee long-term pedagogical changes. Try alumni reunions, winter workshops, guest speakers, discipline-specific seminars with individual departments, and informational mailings. Follow-up activities must continue no matter how difficult it becomes to find something new to do or how discouraging when no one shows up.

Carrots: Competing movements push faculty in opposing directions - on the one hand, they are asked to spend more time assigning and evaluating student writing, while on the other hand they are asked to research and publish more of their own work.

Workshop Benefits:
Community of Scholars: As one colleague put it, "The support of colleagues has been magnificent."

Environment: Michigan Tech President Stein told Fulweiler that recruiters had been telling him recently the MTU graduates were better at both writing and speaking than in former years. Stein firmly believed that an attitude shift had occurred which elevated writing to serious business in the campus community and that this was reflected in the communication skills of graduating seniors. But it remains difficult to prove.

Teacher Writing: Many participants gained confidence in their own writing ability.

Cohesion: The project inspired collaborative writing and research amongst colleagues.

Fulweiler concludes by saying, "the empirical measures that are sought by my statistically trained colleagues may eventually demonstrate conclusively that the program is a howling success - or they may not. As I said at the outset, the program we have conducted is amorphous, hard to pin down, and impossible to keep track of. As my dissertation advisor, Merton Sealts, used to say when I wanted to try something off-beat or experimental: 'What works, works.' To which I add, 'But not all the time, nor for everyone, and sometimes better than we guessed.'"

3. Writing Faculty as Consultants to Help Faculty

As an alternative to providing content-area faculty with workshops and course releases to develop their abilities to work with writing in their classes, or as a supplement to workshops and course releases, some WAC programs make writing faculty available (by means of course releases) to offer in-class seminars on writing for courses in various disciplines.

Griffin explains that at Virginia Commonwealth University five English faculty were given a course release to work with content area colleagues in teaching students to write the kinds of papers assigned. Usually the English faculty used two to three class sessions to teach the papers to students, one when the paper is assigned and the other just before it is due. In the first class English faculty help with ways to discover ideas and organize - brainstorming, free writing, tagmemics, outlining. The second class works on style - clear sentences, choosing words, readability formulas, style in the particular discipline.
(e.g., Does scientific discourse require passive voice? How much jargon is permissible?). A third class might work on revising and proofreading, having students hand in drafts of their papers prior to a particular class and showing the class how to look for ways to improve them and how to find typical problems or errors. Usually, in addition to preparing in-class workshops, the English faculty spent four to eight hours outside class talking about writing with each content area colleague.

According to Ferlazzo a collaborative effort between English and content faculty at Montana State resulted in such reasoning and writing components in the classes as "thesis formulation and support work in a finance course, pre-writing activities and other writing assignment materials in an introductory nursing course, and the use of microthemes to teach thinking skills in an introductory mass-lecture course in Physics. A Sociology course includes tutorial assistance for students, and a large introductory business course includes weekly peer-graded short writing assignments."

4. Writing Center and Trained Peer Tutors

In the past decade, many, many colleges have established writing centers so that when they went on to develop a WAC program, the writing center already existed to back the program up by providing help for students whose writing requirements had increased. Babson has such a writing center, but it is currently working at capacity and could now use extra hours and more writing consultants. Should Babson begin a WAC Program, the Writing Center would almost surely have to expand its services. Many colleges have met similar demands by training student tutors to advise students on writing problems.

Graham notes that at Brown, tutors, called Writing Fellows, take a semester-long course on writing and responding to the writing of others; then they are attached to particular lecture courses and work with students on the writing assignments for that particular course. These Fellows are paid $300 per semester and competition for the positions is keen. Fellows attend lectures, read course material, and serve as first readers for students' papers. In most cases they work with large general education courses. Students include the draft on which the WF has written comments with the final version that is submitted to a faculty member. (Faculty members are now taking note of WF's comments and their own comments are improving.)
At Wellesley College an Academic Assistance Program selects and trains peer advisors and tutors who staff a drop-in Study Center, and are available at least one per dorm for student assistance and counseling. The program offers a Writing Lab, a Math Lab, and an Academic Assistance Center. Being a tutor or advisor is considered a prestigious position - 16 have been chosen from 55 applicants. Advisors and tutors are trained in learning and using study skills the week prior to Fall registration. They offer workshops for the student body throughout the year on a variety of subjects such as how to study for exams or hourlies, how to manage time effectively, note-taking, etc.

Conclusions

What the literature suggests about WAC programs is that they vary widely to accommodate themselves to a variety of colleges and universities. It also suggests that if such programs are to work, they require a strong commitment on the part of the administration and the faculty:

The college must show its support by providing workshops, courses releases, and perhaps stipends, as well as a well-staffed Writing Center and an incentive system that rewards those faculty who take the extra time to work with student writing.

Faculty must be open to learning more about and working more with student writing, to working with colleagues from across divisions, and to thinking about their assignments and courses in new ways.

Above all, some type of follow up to faculty development workshops is required, whether it be ad hoc meetings, or, and I think preferably, a more permanent graduation requirement such as a specified number of writing-intensive courses, or some other competency requirement that would obligate the college to help students produce good writing.

Bibliography of Works Consulted

3 ("Writing Across the Curriculum"), pp. 33-38.


Emig, Janet, "Writing as a Mode of Learning," College Composition and Communication, 28 (1977), 122-128.

Ferlazzo, Paul J., "Writing Across the Curriculum from the Point of View of a Department Chair," presented at the Annual Meeting of the College English Association, April 1982. ERIC ED 215 368.


---------"Interdisciplinary Writing Workshops," CEA Critic,
Fulweiler, Toby, and Art Young, Language Connections: Writing and Reading Across the Curriculum (Urbana: National Council of Teachers of English, 1982).


Lupack, Barbara Tepa, "Writing across the Curriculum: Designing an Effective Model," presented at the Annual Meeting of the Midwest Writing Center, Iowa City, October 1983, ERIC ED 238 025


--- "Writing in the Arts and Sciences: Getting
Started and Gaining Momentum," WPA: Writing Program Administration, 4.3 (Spring 1981), 9-14.


Nochimson, Martha, "Writing Instruction Across the Curriculum: Two Programs," Journal of Basic Writing 2.4 (Spring/Summer 1980), 22-35.


Raines, Ann, "Writing and Learning across the Curriculum: The Experience of a Faculty Seminar," College English, 41.7 (March 1980), 797-801.


Sedgwick, Ellery, III, "Faculty Development Program in Writing across the Curriculum," presented at the NEH/Beaver College Summer Institute for Writing in the Humanities, July 1982, ERIC ED 220 852.


