The complex and comprehensive nature of writing across the curriculum programs makes them difficult to evaluate. Some measures, however, are easy to collect, and others are worth trying for.

Evaluating Writing Across the Curriculum Programs

Toby Fulwiler

Writing across the curriculum programs have been around for more than a decade—long enough, one would think, to know whether or not they work. However, a thorough review of the professional literature reveals remarkably little evidence one way or the other (1). A limited number of evaluations have been completed that assess the effect of specific strategies commonly associated with such writing programs (2). While numerous books on the assessment of student writing have been published recently, most of their attention is directed at composition activities within English departments and not at the special problems related to writing throughout the curriculum (3). At this time, no comprehensive evaluations of writing across the curriculum programs have been completed, though several books do examine particular components of such programs and provide models that might be useful in evaluating them (4).*

In other words, we don't have as much hard data on the success or failure of WAC programs as we would like—and with good reason. For one thing, these programs are relatively new, most having been established within the past decade, which is not a long time for developing reliable assessment instruments and trying them out. For another, WAC

*See Sources and Information on pages 73–74.

S. H. McLeod (ed.). *Strengthening Programs for Writing Across the Curriculum.*
New Directions for Teaching and Learning, no. 36. San Francisco: Jossey-Bass, Winter 1988.

programs by their very nature are extremely complex, multifaceted, and idiosyncratic—characteristics that make evaluation most difficult. There are also more subtle reasons why these programs are difficult to evaluate. In this chapter, I would like to look at some of these reasons and to examine the evaluation procedures most likely to tell us what's really going on in WAC programs.

The Nature of Writing Across the Curriculum

The paragraphs that follow address seven obstacles to evaluating WAC programs that are inherent in the programs themselves.

First, the term "writing across the curriculum" means different things at different institutions. For example, two of the earliest programs from the mid 1970s, those at Michigan Technological University and Beaver College, emphasize different aspects of composition, the Beaver model stressing the differences from discipline to discipline, the Tech model stressing the similarities. Of course, as you might suspect, each model includes elements of the other, and many schools design their programs with idiosyncratic elements all their own. The point is, however, that an evaluation model designed for one may not transfer easily to the other.

Second, writing across the curriculum programs are result oriented, not research oriented, and most of the people who run them are the same. Internal school budgets usually provide money for program operation but seldom for research and evaluation projects. Programs funded on "soft" money are usually required to include an evaluation component, but it is more often a quick and convenient one than a sophisticated and long-term assessment. These evaluations are intended to satisfy the minimal demands of the granting agency—usually, proving that the project was implemented as promised—and not to determine whether or not what was promised actually worked or for how long it will continue to work. Related to this result orientation is the status of program directors: At all but a few institutions, they have been so busy administering and managing that they have had little time for reflection and assessment. Nor have most had any special training as evaluators. The result is that programs are often long on data that are easily collected and anecdotal in nature, but short on either quantitative or qualitative data collected and analyzed methodically or over a long period of time.

Third, WAC programs grow, evolve, and mutate at alarming rates. Once begun, most programs change into something other than what they started out to be. Mutant programs create problems for evaluators who have collected baseline data: When it comes time to evaluate such programs, the evaluators sometimes find themselves comparing apples and oranges. For example, a program that has promised a granting agency that it will improve students' gross writing skills within three

years may collect samples of gross student writing from year one to compare with similar samples from year three. However, if, in the midst of this effort, the program begins to stress improved learning instead of improved writing, the initially collected data may be all wrong.

Fourth, the administration of writing across the curriculum programs varies from institution to institution. This means that it is difficult to lock onto a fixed design and study it from institution to institution. True, we may see common elements emerging as typical of WAC programs—collegewide writing assessments, a first-year required writing course, writing-intensive courses, and some form of requirement within the student's major—however, the modes of operating, implementing, funding, and monitoring these several requirements seem to be infinitely varied. Some programs are run by the English departments (University of Chicago), some through writing centers (Rhode Island College), some through interdisciplinary faculty committees (University of Michigan), and some through joint sponsorship by an interdisciplinary committee and either an English department (Georgetown University) or a writing center (Bucknell University). Some programs have provided generous amounts of time for program administrators (Tufts, University of Wisconsin–Stevens Point), some have not. Some have thrived because soft money was available (Beaver and Michigan Tech); some have perished when the soft money ended. Some have been funded centrally through regular institutional budgets (universities of Maine and Vermont), others are part of statewide programs (universities of Minnesota and California), while still others are networked with local secondary schools and community colleges (Loyola in Maryland, William Paterson in New Jersey). In other words, we can identify common practices and program elements and, at the same time, also identify unique administrative and structural differences—making common evaluation studies difficult.

Fifth, measures that are quick and dirty do not seem to prove much. Quantitative measures of either writing or learning ability are difficult to achieve and perhaps marginally useful. The most obvious example is the program that promises an improvement in student writing ability between freshman and senior years, collects and holistically scores hundreds of student papers from each year, then announces that a perceptible difference in writing is noticed from year to year. The casual observer might question whether or not such improvement would be expected with or without a WAC program in place. And, if improvement was clearly evident, could it be attributable only to the WAC program? And, if there was no measurably demonstrable improvement, would we blame the WAC program for adversely affecting student writers? In other words, an evaluation that at first glance seems reasonable represents at second glance a no-win situation.

Sixth, writing across the curriculum programs are amorphous and

open ended. Even within well-structured programs, the problems WAC addresses are complex and ill defined: Why do students have difficulty with writing? With learning? With critical reasoning? Is it because they do not know enough? Are not skilled enough? Have not read enough? Have not practiced? Are inexperienced? Can't spell? Aren't motivated? Good answers could include all or none of these, which makes accurate assessment difficult under the best conditions. Comprehensive WAC programs explore all of these possibilities and more with ever larger groups of faculty from disparate departments and disciplines who teach students of different ages and abilities in classes ranging from 12 to 200. It becomes progressively more and more difficult to monitor what goes on in the name of writing across the curriculum as faculty leave workshops and seminars and return to their classes to try things out. The farther away the practitioner gets from the source of his or her training, the harder it is for the evaluator to know what methods the practitioner is actually using. Furthermore, the very nature of the programs is to involve different disciplines and administrative units in one loosely linked structure, making it difficult, if not impossible, for a central intelligence to monitor. Finally, many of the most successful programs promote open-ended rather than fixed-formula pedagogical practice, which again makes efficient, simple data collection and assessment difficult.

Seventh, successful writing across the curriculum programs run deep into the center of the curriculum. In many institutions, so-called WAC programs are more comprehensive than the label alone suggests; they are really language, learning, and teaching programs, involving students and faculty from diverse disciplines. They take place over extended periods of time with sometimes subtle treatments, practice, and activities being the only noticeable changes since the program developed. This may mean that it is as difficult to "prove" that writing across the curriculum works as it is to "prove" that students are liberally educated after four years of undergraduate instruction. Looked at in this way, *evaluating* writing across the curriculum programs may be as complicated as evaluating such things as "good teaching" or "successful learning." What you end up with will depend more on what can be measured than on what is happening.

Measurable Dimensions of WAC Programs

On the other hand, good evaluators, given time, energy, and incentive, can measure anything. That is, we can learn about and measure *some* of what is happening in our programs and report the results to whomever is interested. In this section, I examine the nature and scope of program intentions—a necessary precondition for conducting evaluation studies—and I suggest ways in which the accomplishment of these intentions can be measured.

The writing across the curriculum programs with which I am most familiar are faculty centered. That is, these programs identify the instructors of a given institution as: (1) the primary agents of instruction, creators of both knowledge and attitude toward learning; (2) the determiners of writing assignments, including the nature, purpose, frequency, and kind of writing asked for; (3) the key audience for whom students write those assignments and whose expectations the students must fully understand in order to write successfully; and (4) the respondents and correspondents from whom students hear regarding the quality of the ideas as well as the quality of the language in which those ideas are expressed.

Faculty-centered writing across the curriculum programs generally include some component for training and retraining faculty in designing and responding to writing assignments. And the most common vehicle for such training is the writing workshop offered to groups of interdisciplinary faculty for periods ranging from several hours to several days to several weeks—the intensity varying accordingly. For example, my own university, Vermont, offers two-day workshops for faculty from all disciplines; the faculty sign up on a voluntary basis to attend sessions held off campus in August and January, before classes begin, and in May after exam week. These "introductory" faculty workshops—together with later voluntary "advanced" workshops for veterans—comprise the heart of the Vermont writing across the curriculum program, just as they do for similar programs in all parts of the country.

In looking at the several dimensions of faculty-centered programs, we find a number of places from which to start thinking about evaluation. Where you actually collect data will depend on one of two factors: (1) where you most want to find it and (2) where you think you *can* find it. Let's look at the possible places of emphasis that I've identified:

Community of Scholars. No matter what we once intended in starting a writing across the curriculum program, it soon became obvious as we listened to faculty and read their workshop evaluations that the single most important dimensions of our "Faculty Writing Project" was, in fact, faculty community and collegiality. Of course, it was important that we were getting together to talk about writing, since writing is one of the issues of instruction that cuts comfortably (or not) across all disciplinary lines. But person after person in workshop after workshop stressed simply the value of arranging for faculty to meet someplace off campus with reasonably good food for a couple of days to share ideas about pedagogy, scholarship, students, and the university community in general. (I am not describing exotic settings—rather, the conference rooms and restaurant at the Econo Lodge a mile from campus.) It has become quite clear as I go from campus to campus as a consultant that this collegial dimension dominates most programs that bring faculty together for more than a few hours; in fact, it is an even more powerful experience

among those faculties that can afford to spend several days (including an overnight stay) in a retreat-like atmosphere.

While faculty community may be the greatest gain of all for WAC programs, I suspect that few programs put this objective up front when they argued their case before their colleagues, administrators, or a federal granting agency. Yet, if a program is to be honestly evaluated, it must look to measure where the point of greatest impact lies, and if that impact is on faculty community rather than on student writing, it might be a good idea to acknowledge that and collect some data. Many WAC programs could be judged successful simply by the strength of the faculty community they succeed in generating.

What to Measure? If you want to find out how successful your WAC program is as a generator of faculty community, there are some obvious places to collect information. First you collect survey data on who attends workshops, and you keep an up-to-date list of participants. One very simple measure of program success is a growing list of participants who voluntarily attend your program. For example, at Vermont, in the four years from 1984 to 1988, 240 of 650 faculty participated in a total of twelve two-day workshops. These are significant data. Period. In fact, these are the kind of descriptive data that ensure that your thirteenth and fourteenth workshops get to take place.

Second, you ask for an on-the-spot evaluation at the end of every such workshop (and I know some who collect formative evaluations at the end of every day of such a workshop). I ask that they be anonymous five-minute freewrites; I collect these and make sure all of my administrators see all the comments. This is one of the most important measures of program success that I obtain, as the comments are overwhelmingly positive and request continued support for the program. (Quite frankly, many faculty simply cannot believe that the dean is springing for the salad bar!) Testimony about collegiality is strongly embedded in these subjective evaluations, and they are an easy form of assessment to collect, coming as they do from a captive audience. This information, collected at the end of a workshop, is also closest to the direct source of treatment (the workshop) and may, in the end, be the strongest measure you can achieve. Check with participants six months, a year, and two years later by simple mail survey to see how much of the collegial spirit remains. And be prepared for a drop in survey participation corresponding roughly with the length of time away from the program; if you receive better than a 50 percent survey return, you are doing well.

Pedagogy. Most college instructors have had little or no training in how to teach. In fact, many professors actually pride themselves on having taken no education "methods" courses, holding such courses (rightly or wrongly) in low esteem. The result, it seems to me, is that most college teachers teach the way they were taught, relying on the simple dispensa-

tion of information rather than on any studied strategies that best exploit how human beings actually learn. In general, college professors take few risks and make few innovations in strategies or techniques—with wonderful exceptions, of course.

Thus, the writing workshops often provide the first actual training in pedagogy for many of the participants. Most of the workshops with which I am familiar are highly experiential and participatory in nature; none of us who lead such workshops would dare lecture (the teacher-centered model) at our peers all day long. Instead, we put them in discussion and exercise situations, often modeling the very techniques most likely to promote more writing in their own classrooms. For example, rather than suggesting that student journals might be a good way for students to explore ideas in a given subject, we provide participants with journals and ask them to write in them often; we write in our own as well, and only later do we actually talk about the technique as it applies to students. Similarly, to discuss how multiple-draft assignments or peer groups work, we ask the faculty to write papers and discuss their several drafts with peer groups. For many college faculty in history, business, biology, and so on, all three of these ideas—journals, multiple drafts, and peer groups—may be new ones.

Looked at this way, the faculty writing workshop is a faculty development project, providing a safe place for instructors in many disciplines to discover possibilities for running their classes differently. In many workshop evaluations, comments on pedagogical inspiration are prominent. These comments are especially likely at institutions that have a large percentage of mid career faculty who, after having taught for twenty or more years, are feeling stale and sometimes burned out.

What to Measure? The first and easiest information with which to assess changes in pedagogy comes from the summary evaluation collected at the end of the actual workshop in an anonymous five-minute freewrite, as already mentioned. Here participants reflect honestly on the immediate impact of the workshop experience, and this is useful information. Remember, however, that, from such information, you will learn only what they *intend* to do once they start teaching again.

In order to find out what effect the workshops are actually having on classroom pedagogy, you will need to survey or interview the faculty at a later date. You can design a simple survey to ask faculty what they are doing now that is different from what they did before they attended your workshop (for a sample of such a survey, see Kalmbach and Gorman, 1986). For best results, send this survey out twice and call each participant if you can. Again, you will probably get your best rate of survey return within the first year of the workshop experience. When you have all the returns you're likely to get, simply tabulate the results and describe what's going on. Sometimes this information can also be obtained by comparing faculty syllabi before and after workshop attendance.

Interviews may be in order if you want more in-depth information about what faculty are doing after having attended a workshop. If you survey your faculty, you can then select people to interview according to their answers; in other words, the answers will tell you who is likely to give you what information. Most faculty will give you an appointment in order to discuss the effect of the workshop. Some, of course, will feel guilty that they've not done enough, but, with the right questions, you can still have a useful conversation.

At California State Polytechnic University in Pomona, for example, Carol Holder interviews each participant in her WAC seminar during the course of the following year, gathering both the new assignments that the faculty member has generated as a result of the seminar and the student responses to the assignments. Such interviews have an effect beyond evaluation, since she is also able to answer questions and help faculty fine-tune their assignments on the spot. Collecting such qualitative data takes quite a bit of time and effort and often requires clerical help; before you commit yourself to interviews, make sure you have the time and the support to do a good job.

Finally, a further check on faculty teaching as influenced by WAC programs might be culled from student evaluations collected at the end of each term at most institutions. Students often mention, even if not specifically asked, the fact that faculty are using journals, peer groups, multiple drafts, and the like. These responses can be compared to those for the same instructor for the term before his or her participation in the workshop.

Improving Student Learning. Many writing across the curriculum programs derive from the work of James Britton and Nancy Martin, at the University of London and from the related ideas of Janet Emig, James Moffett, Ann Berthoff, and Peter Elbow in the United States. They argue collectively that writing ability is intimately involved with thinking and learning ability, and that, in fact, writing will never improve unless learning does. Programs inspired by these thinkers focus more heavily on "writing as a mode of learning" (to steal Emig's phrase) than on writing as a mode of communication. Such programs will be more interested in collecting data that might demonstrate an improvement in student learning ability across the curriculum, rather than an improvement in writing ability.

What to Measure? In programs where learning ability rather than writing ability is emphasized, you will want to demonstrate that, because students are doing *more* writing or *different kinds* of writing, their learning is improving. The "softest" way to find this out, of course, is to ask them. You may find such expressions of faith and accomplishment in student journals, classroom testimony, teacher evaluations, or personal interviews. And, soft though it is, I think such data are important to collect: *Thinking* that something is happening may actually help it to

happen; thus, students who believe that writing helps learning are more likely to do more of it and find out that it does help. Simply making students aware that writing and learning are connected may be useful in promoting still more writing on their own. However, such testimony will count little in circles where people expect "proof" that learning has in fact improved.

You might get harder information if you set up limited experimental situations to demonstrate the effect of writing on learning. Here the lines between "evaluation" and "research" begin to blur, but that, of course, simply makes evaluation studies more interesting. One simple design would have populations of similar learners in similar courses compared with each other: Some students would write to learn while others would study in traditional ways, and then they would all take a common examination. You need to know at the outset that such experiments are hard to control; the variations in student abilities and instructor techniques can make the results questionable. If you do not know a lot about such research designs, get help from colleagues in education or the social sciences.

When I conducted one such experiment to examine the effect of journal writing on literature learning, I found that there were no statistically significant differences between the performances of the two groups on a common final exam question. What did this prove? Nothing? Or that journals were as good as the more traditional measures of learning? The preliminary results of other such studies are available for science classes (Wotring and Tierney, 1981) and for mathematics classes (Selfe, Petersen, and Nahrgang, 1986).

It seems clear that evaluation studies measuring the impact of writing on thinking and on learning are just beginning, as more and more faculty and administrators find this aspect of writing across the curriculum to be the most interesting. While many faculty will continue to argue that "teaching writing" is really the business of the English department—or at least of "writing courses"—all will agree that improvements in thinking and learning *are* their business. Evaluation and research studies that could more firmly establish the writing-learning link (or disestablish it, for that matter) will be welcomed by all of us.

Improving Student Writing. Most of the current writing across the curriculum programs began with the intention of addressing problems in student writing and offering solutions that would help students to write better. Those of us whose programs emphasize writing to learn would argue that the only long-term solution to many writing problems—vague theses, unsupported generalizations, weak organization, and the like—is, in fact, to improve student learning along the way. However, most of us would also acknowledge that many aspects of good writing could be taught more directly by focusing on techniques that, once learned, are bound to produce better writing. Such a focus

would include: teaching students to determine in advance the purpose of a piece of writing and the audience for whom it is intended; teaching techniques for revising and editing; and teaching faculty how to make more coherent assignments and more helpful responses to students' writing.

In other words, improving student writing is a fairly complex business, involving as it does the students' motivation, knowledge, reasoning skills, grammar, mechanics, creativity, training in a specific discipline, and more. This is why you will find a great number of references to techniques for evaluating written products, some emphasizing particular qualities of a piece of writing (the atomistic approach), others relying on more general impressions (the holistic approach), and still others somewhere in between (such as the primary-trait approach). Which techniques are especially appropriate for use in WAC programs remains an open question.

What to Measure? It is actually quite difficult to prove that students write better because a writing across the curriculum program has been put into place. Sounds silly, doesn't it? Of all the things that these programs are supposed to do, improving student writing is right at the top. But there are good reasons for these difficulties: For one thing, you expect students who attend college to improve their writing from one year to the next no matter what their educational experiences. For another, if students do improve after you've established a program (for example, graduating seniors in 1989 write better, according to whatever measure, than graduating seniors did in 1985), it becomes difficult to demonstrate that it was the program that made the difference and not some other factor (such as different teachers, better secondary preparation, revised freshman curriculum, improved study habits, and so on.) It is also difficult to demonstrate statistically significant differences in the writing abilities of the hundreds or thousands of students in your study unless you collect far more comprehensive data than researchers have collected so far (McCulley and Soper, 1986).

Some things, however, are easier to demonstrate than others. For example, Daly and Miller (1975) have developed an easily exportable "Writing Apprehension Test" to measure the degree of anxiety students have about writing papers in college. This test can be administered in ten minutes at the beginning of a course and ten minutes again at the end; it should pick up positive attitude changes in classes where extensive WAC-related activities have been practiced. I believe that an improvement in attitude is a necessary precondition for any substantial improvement in writing ability.

The most obvious way to demonstrate improvement in student writing will probably be specific to a particular teacher, course, or discipline. In other words, if you want to show the improvement of a limited number of student writers in a particular setting over a fixed period of time, you

should have no trouble using one of the several reliable methods of scoring student writing discussed in Cooper and Odell (1977), Cooper (1981), or White (1985), comparing their early writing to their later writing and witnessing some improvement in the bargain. What is considerably more difficult, however, is demonstrating that the reason students write better *overall at your college* is because of the WAC program.

Another approach centering on single classrooms is more descriptive and qualitative in nature: Keep careful records of the writing activities that lead to improvement and show how they are related to WAC. If such classes have used multiple-draft assignments and peer groups in the process of generating papers, then the paper trail will show the degree to which these activities have led to improvement in a particular paper. This approach can be quantified if the instructor is able to say that 80 percent of the papers written using this process have improved—as most second drafts will. This approach can also become comparative if the instructor has sample papers from a previous class that did not use a multiple-draft approach or if other sections of the same class have written similar papers without revision. If you are interested in collecting this kind of information, I suggest you collaborate with a colleague experienced in research and evaluation designs.

Another substantial evaluation project would be a longitudinal study of one or more students over several of their undergraduate years (McCarthy, 1987). Such a study may turn up changes in writing ability, learning ability, and attitude all at once. It will be time consuming, however, and, in the end, it proves nothing of a quantitative nature.

A note of caution is necessary here: We could talk at some length about the variety of techniques for evaluating student writing, but keep in mind that the purpose of this chapter is to look at means of evaluating WAC *programs* and that what you evaluate depends on what you treat. Thus, it is obvious why faculty-centered programs do not readily produce student-centered results: The direct treatment is applied to faculty through intensive workshops; the faculty so treated are expected, in turn, to treat their own students with ideas and strategies learned at the workshop—an indirect treatment difficult to control or monitor. To be safe, measure everything you can, but don't promise to produce positive evaluation results on treatments not under your direct control or supervision.

Improving Faculty Writing. All writing across the curriculum programs of which I am aware began as programs to improve student writing. A significant secondary result in many programs, however, has been the confidence in and knowledge of composing strategies gained by the faculty participants themselves. In the program at the University of Vermont, a significant number of faculty who sign up for WAC training actually do so in order to work on their own writing. Nowhere in our WAC promotion materials is this a stated goal, yet word of mouth about

the workshops stresses their experiential nature and the fact that participants do significant amounts of writing while attending the workshops: They keep journals, revise and edit drafts, and receive feedback from colleagues. We do these activities deliberately to put faculty in the role of students and thus generate empathy for the younger writers; we are pleased, however, that the lessons seem to "take" more deeply than that. As one of my historian colleagues, a full professor, told me after a workshop, "I remembered that writing was fun again."

What to Measure? It is difficult to measure whether or not faculty actually improve their writing by attending workshops. If you can afford to interview faculty, collect what they say about the WAC effect on their own professional (or personal) production. A survey by mail is easier and can ask similar questions.

By one means or another, I manage to keep track of the articles, books, and presentations written or given by my colleagues that in any way mention WAC ideas. I also actively promote the writing of books and articles and the giving of presentations that describe the impact of writing on teaching and learning. Through these projects, I am able to argue that WAC programs have a tangible effect on the professional behavior of faculty—in addition to the more obvious social and pedagogical effects. Again, this is not what you set out to do or to measure in the first place, but, once you find it is going on, collect all the data you can.

Observations

The net result of writing across the curriculum programs is both different and greater than expected when the programs began in the mid to late 1970s. Most administrators who oversee complex and necessarily difficult-to-monitor colleges and universities know a good thing when they see it. If you can create a WAC program that produces demonstrable improvements in student writing, you are doing first-rate work. More likely you are directing a program in which significant improvements in student writing—and learning—are taking place, but these improvements are difficult to demonstrate except by anecdote. If that is the case, I suggest you look at everything that is happening at your university (everything within your capability and resources, that is), document it, and see what patterns emerge when you study this information. In active WAC programs with regular points of faculty and student contact, a lot is going on that is making the quality of education better. In the long run, when someone writes the history of this movement, it will probably go down as an undergraduate curricular reform project with noble intentions and unpredictable results. But the more we measure along the way, the more we will, someday, understand exactly what it is that we have created.

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An assessment of the Bay Area Writing Project.

White, E. M., and Polin, L. G. *Research in Effective Teaching of Writing, Phase I. Final Report.* Vol. 1. Washington, D.C.: National Institute of Education, 1983. 248 pp. (ED 239 292)
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4. The following books anecdotally describe successful WAC practices within classroom settings by teachers across the curriculum:

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