In the spring of 1985, Mississippi State University adopted a core curriculum requiring that, beginning with freshmen entering in the fall of 1986, every undergraduate at the University "must earn three hours of credit in one upper-level (junior/senior) course in which writing is the major component." The task of coordinating the implementation of this requirement was assigned to a committee consisting of one representative of each of the University's divisions having undergraduate majors: the Colleges of Agriculture and Home Economics, Arts and Sciences, Business and Industry, Education, and Engineering, and the Schools of Architecture and Forest Resources. (The Chair was the representative from Architecture, who had served on the committee that developed the core curriculum as a whole.) The Vice President for Academic Affairs directed the committee "to ensure uniform quality" in courses approved as means of fulfilling the requirement. What follows here is a summary to date of the committee's dialogue with the rest of the University.

The principal text for the committee's initial deliberations was the official document describing the new core curriculum, which contains a brief explanation of the requirement: "The selected course addresses the specialized forms and subject matter of a discipline or broader academic area . . . . The course should enhance a student's ability to write accurate, clear, logical prose. . . . Such courses must be taught by individuals who are effective writers." The committee sent a memorandum to all deans and department heads of units affected by the requirement, calling for proposals about how their majors would comply. The memorandum asked that each proposal include discussion of these topics: whether the course has been approved by the University's Curriculum Committee (we did not wish to approve, for purposes of the requirement, a new course that might later be modified substantially in the process of review that all new courses must undergo); the nature of the writing required; the percentage of the course grade based on writing; the student-teacher ratio; the pertinent qualifications of proposed instructors; and the majors who could satisfy the requirement by taking the course.

A potential danger in this procedure, which allows departments to propose that their majors be required to take courses offered by other departments, is that departments offering such courses could be overwhelmed by increased demand. Courses approved so far generally have a maximum of twenty-five students per section— in some cases, considerably fewer; and we have been wary that increased demand might create pressure to alter existing ratios unfavorably. Having no power to allocate funds, we try to prevent such problems by facilitating communication. When a department
proposes an acceptable course that is offered by another department, we notify the deans and the heads of both departments involved, suggesting that they begin negotiations about funding the additional sections that will be required. In one popular course, the student-teacher ratio was reported to have reached 30:1 fairly often; and while we approved this course, we indicated to the dean of the college in which the course is offered that we hoped support could be found to reduce the number of students per section to twenty-five or fewer. This gesture was intended to strengthen the positions of both the dean and the head of the department offering the course.

One of the most frequently and intensely debated issues, both within the committee and without, was whether the English Department should be principally responsible for instruction in writing at the University. One argument was that English teachers typically have considerable training, experience, and interest in the teaching of writing, while teachers in many other disciplines typically do not. The counterargument was the few English teachers have the knowledge necessary to teach truly upper-level courses in other disciplines. The English Department's position was that it had some members with interdisciplinary interests and expertise, and that these people could work with members of other departments to develop courses, but that there were not nearly enough such people, in sufficient variety, to create and staff courses for the large majority of disciplines represented at the University.

Often proposed was the idea of a generic junior/senior-level writing course, to be taught by English; but this idea was consistent neither with the core document's requirement that the course address "the specialized forms and subject matter of a discipline" nor with the English Department's available staffing (or any foreseeable increase in it). Members of the committee pointed out that, since the courses must be taught at the junior or senior level--after students have completed two semesters of English composition--instructors would not be expected to devote any significant amount of attention to basics of grammar, punctuation, spelling, and structure. (One of the most persistent misconceptions about the requirement was that it was intended to be remedial, functioning mainly as minimal quality-control; one early response said that surely the English Department should develop an appropriate course, since, regardless of the discipline, "correct English is correct English!"). Some students might arrive at the junior year somewhat deficient in basic writing skills, whether as a result of having pursued courses of study that required little writing outside of freshman composition classes, or as a result of having taken composition at schools whose standards are lower than Mississippi State's; but such students can be encouraged to seek help at the University's Learning Center, or even to repeat freshman composition. Furthermore, members of the committee noted that instructors of advanced writing courses within a student's discipline have a major advantage that teachers of general composition courses do not: the motivation provided by a clearly perceptible connection between writing and the students' major academic interests.
Some of the same considerations were important to resolving the question of whether a student might be allowed to satisfy the requirement of demonstrating a certain level of proficiency, by examination or perhaps by high grades in freshman composition. An argument in favor of such an option was the students would clearly have the chance to fulfill most other core requirements by examination--CLEP, or (as in English) AP, or the University's Spring Testing Program for gifted students. The counterargument, which prevailed, was that such testing out would be inappropriate because the junior/senior-level writing requirement differs fundamentally from others in the core curriculum in requiring something beyond basic competence at the freshman and sophomore level. It is intended to build basic competence into proficiency.

The committee decided early against using a uniform quantitative criteria such as a minimum number of writing assignments or total number of words. However attractive such criteria would be, because simple and seemingly objective, they would fail to acknowledge differences between conventions and genres appropriate to different disciplines, and would also fail to acknowledge that methods emphasizing either intensive or extensive writing assignments can be effective. Furthermore, the committee decided that neither a quantity of writing nor a given importance attached to written assignments in the figuring of grades would be sufficient grounds, alone, on which to approve a course. Our question about the percentage of the course's grade based on writing did, in fact, raise the venerable question of the relation between form and content. Some colleagues responded simply that a certain percentage of a grade is based on writing because that percentage is assigned to prose exercises rather than multiple-choice or short-answer tests. Others gave specific percentages of grades to be based on organization, format, style, and mechanics, as distinct from such matters as thoroughness of research and sophistication of analysis. Still others asserted that no very exact percentage could be assigned to writing skills, apparently maintaining that form and content are not precisely separable.

The committee found it useful to pose these questions in order to determine whether "writing is the major component" of a course. How much class time is devoted to instruction in and commentary on writing? Would it be possible for a poor writer to perform satisfactorily in the course ("satisfactorily" from the point of view of his or her major department) on the basis of mastery of content--assimilation of information, for example, or proficiency in experimental technique? The committee has refused to approve some courses whose grades are based on papers and essay examinations on the ground that, however admirable in other respects, these courses allocate too little class time to instruction in writing per se. On the average, the courses approved so far require about seven written assignments. However, one approved course has a total of only three finished writing projects, but emphasizes process, each project receiving commentary and grades at several stages of development.

The proposals approved so far have been of three basic
types: identification of an existing course, modification of an existing course and creation of a new course. Of the approved existing courses, the two most popular are Organizational Communication, taught in the College of Business and Industry, and Writing for Engineers, originally developed some years ago by the Department of English at the request of several departments in Engineering. This latter course is taught primarily by a faculty member who holds an undergraduate degree in engineering and a doctorate in English. The College of Agriculture and Home Economics chose to modify an existing course, Introduction to Communication in Agricultural and Extension Education, changing the title to Introduction to Technical Writing in Agricomunication; the modifications include substitution of more written assignments and instruction in writing for assignments and instruction previously devoted to such media as television.

Typical of approved new courses developed by departments for their own majors is Professional Writing for Biologists, whose catalogue description reads, "Refinement of writing skills for more effective communications. Assignments to include routine and specialized correspondence, technical reports, and speech preparation and delivery." The stated policy on grading for this course is that "thoroughness of the literature search, pertinency and accuracy of the materials presented, and the technical soundness of views expressed by the writer will account for 25% of the grade; 75% will be based on writing per se."

The one new course developed by the English Department at the request of another discipline is Writing for Architects. Although already requiring its majors to take a course including substantial instruction and practice in the kinds of routine business writing that architects must do, Architecture wants its students to have a course requiring them to approach their discipline from a humanistic perspective, in order to be better able to analyze and verbalize relationships between spatial forms and a variety of systems of value. On its side, English has two faculty members having knowledge of and interdisciplinary interests in architecture— one, in fact, having published two books on relationships between architecture and literature.

At present, plans for meeting the requirement have been approved for the majority of programs of undergraduate study at Mississippi State. The initial process of approval should be finished this spring. One significant question that remains is to what extent, and in what form, there will be continued monitoring and co-ordination of the various programs designed to fulfill the requirement.
Advanced Composition at the University of Minnesota, Duluth: An Interest-focused Solution

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Faced with a campus request to develop a second writing course to be taken during the Junior or Senior years, the composition staff developed a spectrum of interest-related courses titled as follows:

Advanced Writing: Business
               Engineering
               Arts and Letters
               Human Services Professions
               Language and Literature
               Science
               Social Sciences

Before taking the advanced course, students complete a five-week lower-division course, Word Processing for Writing, and a one quarter lower-division course, College Writing, that focuses on logical thinking and analytical writing. College Writing employs word processing for exercises, for composing, and for revising.

History
Prior to developing the advanced courses, composition staff were funded to discuss writing with various faculties. We discussed teaching writing, making and evaluating writing assignments, dealing with errors, and other topics faculties asked about. Usually, two persons facilitated a workshop during a faculty meeting. Besides this, a writing hotline was funded for two years, receiving calls from faculty, students, and community members. These effects built a professorate informed about writing and laid a firm base of cooperation between departments and composition staff.

Administration
The Director of Composition oversees the program's budget, personnel, and scheduling. A program development officer supervises the formulation, implementation, and evaluation of courses and teachers. This person counsels teachers in the courses to better prepare them for teaching. The Advanced Writing Coordinator is responsible for making sure students are directed to the proper course, for assisting with scheduling and personnel assignment, and for continued net-working with schools and departments across campus to insure the courses meet student needs. Course change evolves in a group made up of those teaching the course and representatives of those schools/departments served by the course. This advisory committee guides the course's development. Course changes negotiated by these people are brought through the coordinator to the program development officer and the Director for implementation and evaluation. This structure is new and relatively untested.
because the advanced courses are just this autumn abandoning experimental status to become regular offerings. This particular division of duties reflects an attempt to use the professional staff's various strengths as fully as possible.

Staffing
The advanced courses are staffed by English department professors, appropriate professorial personnel in other departments, and persons (usually M.A.'s) who are titled Education Specialists. Professors within the English department are being asked to select two courses in which to specialize and will be expected, during this next year, to prepare themselves to teach these courses. They will have the opportunity to observe each course selected, to talk it through with composition staff, and, when teaching, to participate in ongoing course development. All teachers in these courses are expected to use the basic syllabi and to meet the goals agreed upon between the composition program and the departments/schools whose students take the course.

Program Overview and Potential for CAT
Because the graduation requirement in writing leaves the choice of the specific advanced writing course up to the major department, departments and schools have reason to involve themselves in course development. The first step in negotiating these courses was consultation with departments/schools. We asked them what they wanted their majors to be able to do in writing. The answer to this question reinforces the process to product approach that underlies our writing program. The overwhelming finding here is that departments want assistance with thinking skills as well as with writing skills—writing to learn as well as writing to communicate. These departments and schools see writing as integral to the discipline, something English departments frequently fail to do.

All the courses integrate thinking in the discipline with writing in the discipline for varied and appropriate audiences. Students work from various raw materials: an object, a case, a text, an experiment. These raw materials may be written, on film, physically present in the classroom, or some combination of the above. Students must first observe, then think to discover real problems which must be resolved, usually in terms of a specific audience or audiences. Because we are working within a discipline about which the students have a reasonable degree of knowledge and in which they have an interest, the problems and audiences appear real and urgent. Motivation to work in the classes is usually high.

All of the courses were piloted at least two times during the 1985-86 academic year and evolved from their original conception during that time. At present, only one, Advanced Writing: Business, has been subjected to critical evaluation in a controlled sense. The results of that evaluation were highly positive, encouraging us to replicate the experiment during the 1986-87 academic year with a larger number of students and a variety of
faculty. The other courses are being evaluated by means of student surveys. During the next two years, all of the advanced courses will be evaluated using controlled testing procedures and the results used to assist in revising course designs and syllabi.

Because the basis for word processing and computer-assisted instruction (CAI) are laid in College Writing, we are able to build word processing and CAI into the advanced writing courses without spending the time teaching students how to use the computer. Students who can word process on the computer after the first course can be expected to use the computer to prepare their papers in all courses. Since all will also have completed the same set of computer-based exercises in logic, sorting, and organizing during the lower-level course, some degree of across-the-board competence can be presumed which can serve as a basis from which to develop advanced-level CAI components. Plans are also complete for using UNIX* Writers Workbench in the science and engineering courses. All that remains is to secure stable funding for computer use. Less obviously and more speculatively, we would hope to develop computer exercises which exploit the thinking processes integral to professional conduct within the discipline and which provide a body of material within the subject matter of the discipline from which the students can work. The networks developed between the English department and the disciplines should make ongoing exchanges and constant up-dating possible and relatively painless once appropriate computer programming protocols have been developed. At least one such protocol exists now in rudimentary form and will be used to develop exercises for use in the business course during Spring Quarter 1987.

To supply a bit more detail, a brief description of each of the advanced writing courses follows.

Business: This course is taught concurrently with the senior-level capstone course, Business Policy. The instructors in both courses plan together the use and distribution of their time. Students register for both courses when they register for Business Policy. The course centers on cases which involve problems businesses face. The students, taking the role of manager or consultant, must first resolve the case in some fashion based on the evidence available and then present that resolution convincingly to the President, Board of Directors, or other corporate authority in oral and/or written form. The course stresses thorough analysis, and clear, persuasive, presentation directed at the appropriate authority. Every case is debriefed in terms of its corporate and rhetorical problems. The class meets twice weekly for four hours each meeting. All grading is done by the teaching team. Members of the Business faculty serve in capacities such as President or Board of Directors, receiving and critiquing some of the oral presentations.

Engineering: This course is for students interested in learning an efficient writing process to be used in preparing effective papers of different lengths and types designed for various audiences.
The general emphasis is on clear syntax and diction, rhetorically effective organization and adaptation to different audiences. Early in the course shorter pieces (such as memos and descriptions) are used for precise definition of audiences and discussion of appropriate organizations. Longer reports are tailored to students' needs and interests and imitate those typically found in business, industry, and government. These reports involve presentation of results and recommendations, analysis of data and of case studies, sustaining a clear argument, and providing adequate evidence. Special attention is paid to the use of mathematical symbols, numerical data (in tables and graphs), and other forms of illustration. The processes of writing, revising, editing, and rewriting are strongly emphasized.

Arts and Letters: The students are exposed to paintings, textiles, sculpture, film, music, and literature. Professors, reviewers, and artists discuss both the discipline and the artifacts with the students, teaching them how to think in the discipline. Students then compose various texts which analyze, describe, and evaluate for audiences ranging from the initiate to the general public. This class is conducted as a workshop, the students reading and discussing their texts in class. Because we have a small number of Fine Arts students, the future of this class is uncertain.

Human Services Professions: This course serves primarily potential educators--elementary and high school teachers, early childhood educators, and others whose service fields are compatible with education. The course uses films to teach students to observe, assess, and plan as educators. Students compose case studies, present problems to master teachers, administrators, and public audiences, and formulate grant proposals which address problems of concern to them. Both oral and written presentations are required. The Human Services Professions faculty serves as a student resource and receives and evaluates oral presentations.

Language and Literature: This course is for students majoring in English and other fields that demand competence in the written analysis of language and literature. The course therefore includes readings on language and linguistics as well as the analysis of philosophic discourse and works of imaginative writing. Classroom activities emphasize the analytical generation of ideas, the organization of those ideas through effective planning, and the articulation of those ideas in fluent, clear prose. The course includes the writing of short analytical papers and a research component to expose students to the effective use of secondary sources, including oral, published, and archival materials.

Science: The course serves students interested in writing about scientific topics in forms typical to various physical sciences and related professional work. Students read material on the theory and practice of technical writing, use library and experimental
information, and produce a variety of types of writing during the quarter. The basic assignments include: descriptions, definitions, letters, proposals, reports, resumes, summaries, and abstracts. Students are required to do drafts and revisions of most of the written assignments as the primary method of teaching writing as a process and thus improving writing skills.

Social Sciences: This course serves students majoring in sociology, anthropology, geography, psychology, political science and some economics and communications majors. Using data bases comprised of film and written texts including numerical data, students analyze three cases, presenting in written form to six varied audiences their analyses, and resolution, together with plans for resolving the problem. Oral presentations may accompany the written studies.

This upper-division program of advanced writing of course arises out of the lower-division program and reflects the needs of departments across the campus in its attempt to teach students the thinking processes and the communication modes of the various disciplines. By continuing to network with the disciplines, we expect to build a program which has strength and balance, a program which construes language as internal to professional practice in every discipline.

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I want to recognize and thank Kenneth Risdon, Joseph Maolo, Martin Bock and Timothy Roufs, all of whom work with advanced level course development, for helping me compose this article.