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The Ohio State University

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DEVELOPING AN INTERACTIVE TECHNICAL WRITING CURRICULUM THROUGH ACTION RESEARCH

DISSERTATION

Presented In Partial Fulfillment of the Requirements for the Degree Doctor of Philosophy In the Graduate School of The Ohio State University

By

Stephen Matthew Flaherty, B.A., M.A.

******

The Ohio State University

1983

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I would like to thank Professors Bateman, McCutcheon, and Mullen for all of their helpful comments. I would also like to acknowledge the influence that Professor E. Ojo Arewa had on the study, even though he was not directly involved in it.
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INTRODUCTION

This dissertation is a dramatic and self-evaluative narrative of my first year of teaching technical writing at a privately owned institute of technology. My purpose in undertaking this study was to apply L.S. Vygotsky's theory of language to the teaching of writing. This study was focused specifically on technical writing because this is the type of writing that I was assigned to teach. Throughout my self-evaluations, I discovered contradictions between theory and practice. I learned that the structured system of the institution in which I worked and my own predispositions about the role of the teacher in the classroom contradicted the theory that I hoped would guide my teaching. I was able to transcend the limitations of the contradictions by examining and re-evaluating my teaching methods over three terms and attempting to change my methods to be more consistent with Vygotsky's theory.

I chose to do this study on implementing Vygotsky's theory in the writing classroom because I believe in it. According to Vygotsky and his followers Luria, Leontiev, and Lamov, language is a social activity. It develops out of the human need to communicate, and it is shaped and structured over time by the interactions of language users. Inherent in Vygotsky's theory of language is the metaphor of the dialectic, a philosophical model that explores the relationships between individual development and cultural history as a series of
human activities and conflicts. A dialectical perspective is a general worldview that is focused on how human activities and the individual development of human beings arise out of a historical set of relationships (Riegel and Meacham, 1978). According to a dialectical perspective, language is a reflection of human activity. It is a record of the history of the making of meaning among human beings who have shared experiences, needs, situations, goals, and conflicts. Meaning is being constantly made through language as language users interact attempting to understand the situations that face them. Language is fundamentally a medium created by people out of the need to communicate and make meaning.

Vygotsky showed through a series of participant-observation studies how language learning involves the interaction of the individual language learner with the surrounding society (Vygotsky, 1962; 1978). He observed that speech development and initial language acquisition occur when the child becomes aware of the language that is being used by adults and tries to imitate it. After this initial stage of imitative social speech, the child begins to use the sound and some of the expressions of adult language in the formation of what Vygotsky terms as "inner speech." Inner Speech is not purely imitative like initial social speech; it is an idiosyncratic type of language the child develops and uses to verbalize to him/herself solutions to problems faced in everyday life. As the child interacts with older generations of language users in the solution of problems and in daily activities, he/she
learns the conventional expressions and forms of conventional social speech.

The learning of language is an interactive process that includes the determined actions of the language learner involved with conventional language users. Vygotsky's theory of language learning holds significance for the teaching of language and for the teaching of writing in particular. It indicates that language is learned as an interactive process. It consists of communicating ideas and establishing relationships with other language users. It is really the making of meaning through human interactions. I decided that implementing Vygotsky's theory into teaching practice in a classroom situation would enable me to improve my own methods of teaching writing.

Before I began this study, I had taught writing at high school and college levels. As a graduate teaching associate I had taught both freshman writing and technical writing. When I considered implementing Vygotsky's theory into practice, I considered my own teaching experiences in relation to the very interactive definition of language inherent in the theory. I believed that my ideas and practices as a teacher were somewhat congruent with the theory. I believed that I had an interactive approach when I taught. I liked to discuss ideas with students in class. I felt as if I had always done my best to break down the barriers of communication between my students and myself. I believed that I understood problems that students faced in their attempts to write assignments, and I tried to discuss potential problems in class.
After having completed this self study, I realize that despite my earlier efforts to break down communication barriers, at least some of those barriers still existed. I was not aware of the degree to which my own teaching methods deeply contradicted the Interactive theory that I believed in and wanted to use as a guide for my teaching. Three terms of self-evaluation helped me to understand myself, Vygotsky's theory, and my own teaching methods more deeply and concretely.

Research Methodology

Throughout this study I used participant/observation research methods. Participant/observation methods are widely accepted in qualitative research in general (Clark & Florio, 1978; Douglas, 1976; Georges & Jones, 1980; Jacobs, 1971; Lofland, 1971, Schatzman & Strauss, 1973; Splindier, 1982, Spradley, 1979; 1980; Spradley & McCurdy, 1972; Wax, 1971). Having the same individual play both roles simultaneously in a self-evaluative purpose is preceded in a field of educational research known as Action Research. It was pioneered during the 1950's through the work of Stephen Corey (1953) and Abraham Shumsky (1958) as a hypothetico-deductive model that practitioners could use to improve their teaching without the help or interference of outside researchers. Action Research has more recently moved in the direction of using participant/observer research methods to help teachers improve their practice by identifying patterns of classroom behavior (Elliott, 1977; McCutcheon, 1980; 1981; Nixon, 1981). Self-assessment of teaching
performance has been suggested as an Action Research focus (Elliott, 1979). Keeping a teachers journal and reflecting upon it has been used as a data collection technique (Enright, 1981). Action Research has been suggested as an appropriate way to monitor the Implementation of theory into teaching practice (Ross, 1983). The recursive nature of Action Research enables the practitioner to collect and analyze data and to improve teaching practices based upon results of data analysis (Hovda & Kyle, 1983).

My method of recording data consisted of keeping a dated teacher's journal. Before each term began, I recorded my planning and after each term I recorded my own evaluations of lessons taught during the term. During the term, after each class that I taught, I recorded events which occurred in the classroom. Analysis of data took place initially when I wrote down my own analyses of classroom situations either during or immediately after factual notetaking. I wrote analytical notes whenever I could make connections between events in different classes or events over extended periods of time. About once per week I read over notes and made introspective comments on them.

Data collection and analysis during the second and third terms of research included students' evaluations of my teaching. These evaluations and the principles of Vygotsky's theory were the ideals against which I compared my own teaching performance.

After data collection and analysis was completed, I wrote a narrative of my experiences over three terms of trying to implement educational theory into teaching practice. Writing the narrative,
and especially reading it and having others read it and comment on it, enabled me to discover some tendencies in my teaching that were preventing me from implementing Vygotsky's interactive theory.

What follows is the narrative of my experiences attempting to implement L.S. Vygotsky's theory of language in the teaching of writing. The narrative begins with a description of my initiation into the Central Electronic School system and continues with descriptions of my planning, lessons and evaluations over three terms.
CHAPTER I

INITIATION INTO CENTRAL ELECTRONICS

Becoming Employed

My relationship with Central Electronics School (CES) began in April, 1981 when I called the school and asked about the possibility of being employed there. I spoke with the academic dean Mr. Henry Smith. I told Mr. Smith that I was looking for a job teaching technical writing and that I was also qualified to teach literature and English grammar and composition. Smith told me to send him my resume, but I insisted that he give me an interview. He complied with my request. I had called on a Monday and I was interviewed on the following Friday. At the time that I applied for a position at CES, I considered my own employment situation to be quite tenous. I was apprehensive about finding a job because I was seeing graduates from doctoral programs in both English and English Education taking temporary positions with no hope for apparently any type of permanent employment. I had read several articles about the so-called gypsy scholars, Ph.D.'s who went from job to job, staying in one place for a few years and then moving on to some other type of temporary employment at a different school until they were either turned down for tenure or until the time limits on their appointments ran out.
Although I would have preferred even then to work at a four-year liberal arts college or university, I knew that even at Midwestern where I was doing my graduate work, the undergraduate and graduate enrollments in English and English Education had fallen precipitously in recent years, and that the situation was the same or perhaps even worse at other schools, especially smaller schools where I might have a better opportunity (because of less competition) at getting an appointment. I had recently read about the mass firings of tenured faculty members at Michigan State University and I had heard rumors about the upcoming elimination there of the Humanities Education Division in the MSU College of Education.

Smith seemed to be quite sincere when we discussed the teaching position that I had come to interview for. I had arrived with the assumption that Smith was going to discuss with me a teaching position for English, but he mentioned a history and literature course as well. When he spoke with me, he told me that the position he originally had in mind for me was no longer available because a woman who worked for the school periodically was going to fill the position. I was disappointed, but I still stayed and spoke with him for about fifteen minutes.

A few weeks later he called me and asked if I would like to come in and perform a test lecture as the second stage of the application procedure. He told me that he unexpectedly had more positions than he had originally planned on. I agreed to perform the lecture. I was thrilled at having the opportunity.
He explained to me that a test lecture consisted of the applicant conducting a class before a number of faculty members who discuss the applicant's performance afterward and help the dean make a decision about whether or not to hire the applicant. He told me to plan on teaching for about twenty minutes, and he gave me nouns and verbs as a lesson topic.

I was amused at the lesson topic because I was not sure what I was supposed to do with nouns and verbs. I got the impression that Smith simply thought that nouns and verbs was an area that English teachers should just know how to teach. One can do many things with nouns and verbs. As I planned my strategy for the test lecture, I weighed several options that I had at my disposal and tried to choose and develop the one that would be most appropriate for Smith and his colleagues. I thought of my future classroom audience in terms of the school with which they were associated; I assumed that an institute of technology approached knowledge from a piecemeal perspective. I am not quite sure why I made that assumption; although, I believe that it was based on my own earlier experiences in science and engineering courses.

During the autumn after I graduated from high school (1968) I attended for a brief period a large university in Boston as an engineering major. It was a very brief stay because I did not like the courses that I was taking in the engineering curriculum. As I recall, the focus in all of my courses at that time was on reducing information into components, isolating these components, and studying how these isolated components functioned. It was a frustrating
experience for me because I never as a student ever had the opportunity to see or understand the larger picture, the common purpose toward which the functioning of all parts was devoted. There were no unifying themes or coherent trends that were put forth to help me to understand the knowledge that I was expected to internalize.

Based on my understanding of engineering education as piecemeal, I decided that a piecemeal approach to nouns and verbs would probably most impress my audience. I could have presented a communication triangle and explained how nouns and verbs function within it. And to me such an approach would have been much more informative and useful than the categorical approach such as the one I decided to use. I also decided that a lecture would be more impressive for my audience than a discussion oriented class. Again, because I had experienced virtually all lecture-type classes in engineering courses that I had taken. Also, the categorical approach to explaining nouns and verbs seemed much more cleanly workable with a lecture class.

I prepared for my test lecture by going to grammar handbooks and textbooks and taking notes on the different types and uses of nouns and verbs. I wrote these categories down on paper. When I actually gave the test lecture, I simply presented the information to my class from my notes by copying the major types and uses of nouns and verbs on the blackboard and explaining to the "students" these types and uses. The specific categories I used for nouns and verbs were the usual ones included in handbooks (transitive, intransitive, linking,
On the day that I was to give my test lecture, I assembled my notes and mentally prepared myself for the lecture. My mental preparation consisted of surviving periods of fear and nervousness about my performance at the test lecture, which constituted my real hope at that time of a teaching position. I reacted to these periods of self-doubt by continually persuading myself that I would perform adequately. To successfully create a positive impression, I knew that I would have to come through with an energetic and impressive performance.

I assumed a tough and self-confident persona toward my lecture material because I believed that my audience would appreciate such an approach more than they would a less confident and perhaps more probing attitude. As I went into the lecture I had an image of myself as being a no-nonsense source of factual information. But as soon as I began to lecture, I began to discuss the larger aspects of language use such as communication situations and the distinctions between written and spoken language. However, I noticed a confused series of expressions on the faces in the classroom. I immediately shifted my approach to the factual one that I had earlier decided upon. The confusion was replaced with expressions of recognition. Encouraged by this development, I continued on with the piecemeal and factual lecture that I had preplanned.

I explained transitive and intransitive verbs and collective and concrete nouns. The "students" asked me several questions about the
terms concrete and collective. One question pertained to the word "concrete": "What do you mean? Like cement?" I explained that by the term "concrete," I meant to indicate something physical as opposed to something abstract. It was apparent to me at this point that the faculty were actually role playing an assumption about students— that they asked trivial questions (Actually, I did the exact same thing at two test lectures that I was asked to attend after I was hired at CES — after those I realized what I was doing and I decided not to ask those types of questions at test lectures anymore). All of the questions that I was asked during the test lecture concerned the purpose of learning nouns and verbs: "Why do we have to learn this study, anyway?" or petty technicalities about the terms that I was using. Apparently the faculty who observed me assumed that students would not understand the usefulness of learning English nouns and verbs nor would they be able to understand the terms that I was using to explain nouns and verbs. Ironically, I was in total agreement. I saw no reason why students should have to learn about the various categories of nouns and verbs. It did not make any sense to me either. But Smith was the one who had given me the assignment and the situation seemed to me to dictate handling it in this fashion. So I persisted with this approach, and even at one point became angered (play acting anger, that is) at a "student" who intentionally asked me a really dumb question: "Why do we have to do this? I don't understand!" I said "Well, if you did your homework maybe then you would understand!" The "student," who I was later to know as Mel Slightly, the Director of Educational Services, put his
head down toward his desk. I felt as if I had momentarily overstepped my authority and I retreated into a more affable attitude.

But just then Smith signaled that the lecture was concluded. I was relieved but somewhat disappointed. All of us walked back to the administrative offices as a cordial group and Smith asked me to wait outside at the reception area. I should note that he signaled that the lecture was concluded by speaking out that the "class" had had ample time to evaluate me. As I waited at the reception area for Smith to come out, I thought about what had happened during the test lecture. I decided that I had performed adequately, although I did feel embarrassed at having become angry with Mel slightly. I accepted the ridiculousness of the situation as much as possible--if that is what I had to do to get a job teaching English, then that is what I had to do. Smith came out after about ten minutes of consultation and asked me to come into his office. He told me that the group had a favorable impression of my performance and that my prospects for being employed at CES looked very promising.

Smith told me that he would contact me within a week. He added that if he failed to do that I should call him. Then he told me that I would in all likelihood be receiving within a week, a written offer of employment. Smith failed to call me within the week's time so I called him. He apologized for not contacting me and he promised that I would be receiving a written offer of employment within a week. I did receive the offer, but it was not signed by Smith. It was signed by John Lands, the new academic dean. The letter explained the terms
of my employment and requested that I respond to it in writing by a specific date if I decided to accept the offer. I did respond to Dean Lands with an acceptance letter in which I thanked him for and accepted the job offer and expressed interest in meeting him very soon.

Learning the New System

As I was to later learn, CES had gone through a tremendous bureaucratic shake-up at the same time that I was going through the application procedure. Smith was no longer the academic dean; in fact even the position of academic dean had gone through a complete transition. Before the shake-up, the academic dean was responsible for hiring virtually all of the instructors, and he had broad administrative control over the entire school. After the shake-up, the academic dean was in charge of four underlings who were in charge of the three separate technology programs and the General Education Department. So John Lands was now the chief honcho who resided over Dick Monarch, Dean of the Electronic Technicians Program, Jay Burns, Dean of the Electronic Engineering Technology Program, Bill Glean, Dean of the Computer Science and Business Program, and Jack Gontowsky, Department Head (and later promoted to Dean) of the General Education Department. Jack Gontowsky was my boss even though he had nothing to do with hiring me; he did have the authority to evaluate and fire me. And his power over me made me a little nervous because he mentioned that he had this authority the very first time that he met with the newly hired staff. I was apprehensive that
perhaps he resented not being able to hire the new teachers because the General Education Department Chairmanship had not existed when I had gone through the application process. He had no say in the hiring of any of the new staff including myself.

With this new system each program dean including Jack (who was at that time still a department head) virtually ran his own show: he would be responsible for hiring and maintaining his own staff, holding regularly scheduled staff meetings, monitoring and evaluating the teaching staff (through class visitations, students' teacher evaluations, and student complaint forms), and administering students through the bureaucratic requirements of the school (grade-point, attendance, and proficiency requirements). Lands only had direct contact with the teaching staff at general faculty meetings held between terms. Above Lands sat the president of the school, Ralph Wozniak -- from what I learned, Wozniak's administrative role seldom infringed upon the academic areas of the school. His role was more focused in areas such as financial aid, graduate placement, and student retention. Above Wozniak and Lands and everybody else sat corporate headquarters in New York. Although the CES leadership hired, fired (I later learned that Lands had the final say in firings), and administered their own personnel, they did so according to regulations set down by New York and according to salary guidelines set down by New York. CES was only one school in a system of twelve. All the schools in the system offered the same basic curriculum (with a few exceptions). The system was owned by Dell Corporation, a Fortune 500 company.
According to Dell Corporation's yearly report, their educational branch was their second most profitable. This high level of profitability was attributable to the tuition rate and teacher-student ratio. The tuition ranged from $1300–$1500 per term (three terms per year) per student. The student-teacher ratio considered to be optimally profitable was 60:1. Another important factor in the system's profitability was a very high placement rate. Until very recently this rate has held at above 90% (of those students who seek placement help through the school). This high placement rate reflects the very high demand that Industry has for high technology graduates. More recently the current recession has somewhat deteriorated the placement percentages.

Gontowsky explained to the General Education Staff that as a means of safeguarding the educational branch's profitability and enhancing the attractiveness of the schools by making credit earned from them transferable, Dell sought accreditation from the Central Association of Secondary Schools and Colleges. Such accreditation would enable CES graduates to transfer credit to other Central schools and to use CES credit as a basis for graduate study. Several months before I was employed, Central had refused to grant CES and the other schools in the system accreditation largely because the General Education Program was understaffed and lacked adequate centralization. Also, Central had criticized the lack of "synthesis" in the way that general education courses at CES and throughout the system were taught. By "synthesis" Central was apparently referring to creative use of knowledge in developing ideas. When they
Investigated the General Education curriculum the first time around, they claimed that most courses were taught so students would memorize information; not enough emphasis was being placed upon getting students to use information creatively for the purpose of developing ideas and points of view.

The changes that were implemented in the school due to Central's criticisms consisted of the broad bureaucratic changes that I have mentioned above. Other changes in the General Education Curriculum also occurred. Instructors of General Education courses were allowed to teach only a maximum of 17 hours per week — before this the maximum was about 28 hours. The ceiling of student-teacher ratio stood at 60-1 — before accreditation, there was, I believe, no firm ceiling on this ratio. Each school in the system got a General Education Department Head and corporate headquarters in New York got a National General Education Manager who was supposed to ensure the academic quality of General Education courses throughout the system. To say the least about this situation, there was a veritable avalanche of corporate memos from New York and from all of the new administrators.

Getting Started In the System

Orientation at CES began one week prior to the start of classes. It lasted for two days. The first day consisted of sitting down at a table with Henry Smith and filling out a number of business forms: a W-2 tax form, a checklist of items concerning employment (salary arrangements, vacation time, job responsibilities, etc.) a release
form giving the Dell Corporation full rights to any electronic inventions an employee happened to develop at CES, and a few other miscellaneous forms. Smith took a long time to patiently explain the forms, and he answered questions that new teachers had very slowly and methodically.

Beside myself, two other hirelings attended the orientation session: Mike Gallant and Dave Young. Mike was hired to teach mathematics and Dave was hired to teach psychology. Dave and I were hired as temporary employees, but Mike was hired as a permanent employee. This meant that he would go to New York corporate headquarters for a teacher-training program. Dave and I would not; we would simply hand in syllabi to Gontowski and begin to teach.

On the second day of orientation we met with Mel Slightly, the Head of Educational Services. Slightly explained to us the Faculty Assistant (FA) Program and the other services offered by his department. The FA Program was something like a graduate assistant or associate program; however, it functioned at CES at the undergraduate level. FA's offered support services such as grading objective tests (which generally meant running them through the Scantron machine), running off class materials such as handouts and syllabi, and in some cases even lecturing Introductory classes. Mel Slightly explained to us that Educational Services was a support system. FA's should be used to provide only support services: they should not teach or evaluate other students. After I began teaching at CES the faculty received a number of memos restating Mel's policies. In general the faculty seemed to use FA's within Mel's
guidelines, but rumor had it that a number of instructors virtually used FA's to teach their entire courses. So the system seems to have been somewhat abused, although the degree of abuse was certainly not clear to me.

Although Mel Slightly explained to us that the FA System was supposed to be a support service for the entire faculty, the General Education Department did not benefit as much from FA's as did the other technical departments. This was especially true for English courses and writing courses in particular. The grading and class materials in writing courses required constant evaluation and a verbal sensitivity that few FA's seemed to demonstrate. After I had begun teaching, I had used FA's several times to do preliminary proofreading of students' papers as I had been advised to do by Gontowski, but I discovered that the FA's tended to put a lot of negative comments on papers. They also failed to correct a large number of mechanical errors (spelling, punctuation, and syntax). I decided not to use FA's for any of my grading. This inability of FA's to correct writing errors, their apparent lack of verbal or linguistic sensitivity, which was perhaps also a lack of caring about writing and language, seemed to indicate to me that the educational situation at CES encouraged a piecemeal and positivistic approach rather than a more coherent and dialectic approach that might be characterized as interactive and transactive. When FA's would grade papers, they would simply go down them picking out the most obvious flaws and using this as a basis for their general comments. It would not be fair to expect undergraduates to be capable of doing a really
professional job of grading papers. But in the grading I thought that I detected one of the major educational themes at CES. This was simply to find out what was wrong and to get the job done. If students were not "getting" the material they were supposed to get, then they must have been doing something wrong. Perhaps I exaggerate this attitude because several teachers seemed sensitive to students' needs. But the environment at CES, the bureaucratic nature of it, the maintaining of schedules and requirements, left little time for dwelling on the knowledge that was supposed to be the basis for the school's existence.

As far back as my test lecture, I had assumed that the underlying approach to education at CES was piecemeal, although I did not make the same assumption about the General Education courses. I will only here address the writing courses that I taught, but for informational reasons I will just mention that the General Education curriculum included the non-technical courses that students were required to take: Psychology, Economics, and several business courses in addition to English and Technical Writing. When a teacher was assigned to teach a course, he/she was provided with an appropriate course outline. These outlines consisted of brief course descriptions, course objectives (what tasks students should be able to perform at the end of the term), a topic outline (timing and sequence of specific topics to be covered in class), and instructional aids (a list of texts to be used in the course). Course outlines were not very specifically detailed; and they offered little or no advice about methods of teaching or testing or the other
day-to-day practical problems faced by teachers. They provided the Instructor with a general topical format to follow and a few texts to help organize class assignments and lectures. The class objectives were idealistic and arbitrary, especially ones proposed for the writing courses (e.g., "Write a well-organized report.") Descriptions of writing courses were general and consisted of a list of basic skills and assignments that students were supposed to learn (e.g., outlining report formats, writing memoranda, using concise prose effectively.) At the current time the system has been drastically supplemented. All General Education courses now have detailed sets of lesson plans that provide teachers with lecture content and proposed teaching methods and resource texts. These were not available during my first term of teaching.

The meetings with Mel Slightly and Jack Gontowsky provided some information about testing and teaching methods. Although most of Mel's discussions with us concerned the FA system and bureaucratic procedures like attendance policies, he recommended biweekly quizzes, a no make-up exam policy, one major test in the middle of the term, and a final examination specified on a certain date counting as more than 20% of the final grade. Mel also advised and adhered closely to policies that we chose to set down in our course syllabi. The day after Jack Gontowski spoke to the new General Education faculty for the first time.

We first met with Jack in the faculty lounge area (the coffee room). He spoke confidentially about all of the General Education courses. He gave us each a summary of what he expected in the
courses that we taught. He expected each of us to provide all of our
classes with syllabi which contained a testing schedule, absence
policy, and textbooks. Jack stressed the importance of salesmanship
in the classroom, especially at the beginning of the term. He
encouraged us to sell to students (by sell he meant persuade) the
value of the course by explaining to them why the course was relevant
to their needs. He also stressed the importance of explaining to
students the usefulness of the textbooks. He said that two major
examinations were minimal and that three would be preferable. Jack
also addressed the FA policies: FA's could be used for clerical
duties only (in the writing courses this meant spelling and
punctuation correction). The primary responsibility for evaluating
students' work were the teacher's and these duties should not be
relegated to FA's. Finally, in a general vein, Jack stressed the
importance of a strict attendance policy. Attendance had to be taken
during each class hour because of regulations regarding grants and
loans to students. Jack was firm on this issue. (Several months
later he showed me a memo that he had received from New York stating
that any instructor who failed to take regular attendance was to be
terminated). Jack stated that policies concerning tardiness and
grading policies in relation to absenteeism were at each teacher's
discretion.

Next Jack informed each new instructor about his/her specific
courses. The first course that he described to me was the
communication skills course that I would be teaching to technician
students. The course was abbreviated as CS-301, an abbreviation for
Communication Skills, third term, first (and only) course in the series. The Technicians' Program, unlike the other two programs at the school, was a non-degree program. Upon completion of the five terms of study, the technician students (or "Techies" as they were called) were awarded a Technician's Diploma. The course of study that they followed contained just one English course, and that was CS-301. Jack stressed the following aspects of the course: technical spelling list, a two-part (grammar test and a writing sample) proficiency test that would enable students to test out of the course if they could score an 80% or above on a multiple choice grammar skills test and then score an A essay (We had many discussions about revising this test later at General Education meetings), using a drill teaching methods in class (going up and down the aisles and having students read aloud from exercises in the course text), and using a standard, objective test pattern (multiple choice items) that FA's could grade. Jack also encouraged me to have six or seven weeks of grammar Instruction from the text and eight or nine weeks of essay writing, including rhetorical modes (process, contrast/comparison, cause and effect, etc..) and technical reports (lab reports, technical instructions, technical description, etc..) He suggested that I give the same proficiency grammar test after the six or seven weeks of grammar instruction was completed and compare the scores. In this way I could measure the class's progress in learning standard grammar rules. He urged weekly quizzes and a coherent series of writing assignments which would include a library research paper. He recommended Sherman and Johnson's Modern
Technical Writing as a reference text for getting good and bad examples of writing for in-class presentation. He concluded his suggestions on teaching CS-301 by stipulating piecemeal assignments (spoon-feeding students) and getting student feedback.
CHAPTER II
TEACHING THE FIRST TERM

Plans

Before I began teaching CS-301, I disagreed with the basic philosophy that seemed to underly Jack's suggestions. Although I agreed with his suggestions regarding student feedback and convincing students of the relevancy of the course, I disagreed with his notion of drill work and teaching grammar rules as a preparation for essay writing. The drill approach and the teaching of grammar rules conflicted with my own beliefs that language development was basically a dialectical process involving inner speech and social speech. Jack's approach resembled the "banking theory" of education that Paulo Freire objected to in Pedagogy of the Oppressed. In this theory, the student is viewed as an empty container that must be filled with the knowledge of the teacher. I saw this tendency in Jack's suggestions. The ideas that students could be filled up with grammar rules that would enable them to write essays seemed to me to be absurd, even though composing studies done during the 1960's seemed to indicate a relationship between former grammar training and writing performance. The Bateman-Zidonis study (1966) indicated a significant correlation between formal grammar training and well-formed syntax. And more contemporary research by Hunt (1965),...
Mellon (1969), and O'Hare (1971) indicated that sentence-combining, the practice of increasing students' use of relative clauses and phrases by informal drills rather than by formal grammar training, would improve the well-formedness (defined as the increased use of grammatical relative constructions or T-units) of writing. The process studies done in the 1970's raised doubts about the value of learning formal grammar rules and regulations. These studies (especially Emig, 1971 and Perl, 1979) indicated that writers are really quite unique in their methods of writing and in the style of their written expression. Very recent research in cultural anthropology (Hymes, 1972; Heath, 1982; Wozniak, 1981) indicates that writing ability and performance are culturally defined. Good writers tend to form an image of themselves that they can express in writing. Poor writers often do not have this sense of themselves as writers. They have an ill-defined writing personality or persona. Since Jack's suggestions concerning the drill method and the formal grammar training in the course were inconsistent with the cultural and dialectical philosophy that I accepted, I had to disagree with Jack's advice. But I did not reject it. I considered that he had taught and worked with these students for over nine years. There had to be wisdom in his advice. I decided to try to blend my own beliefs with Jack's suggestions. Since the course would begin with grammar instruction, I turned to the course text, Teresa Ferster Glazier's The Least You Should Know About English, to begin my preparation for the upcoming term.
I made a thorough analysis of the text. Glazier's book is divided into four sections, the first of which deals with mechanical composition skills: spelling, syntax and punctuation. I say "mechanical" not because these three aspects of writing (except for conventional spelling) are necessarily mechanical in nature. I say mechanical because Glazier's book presents them in a very mechanical fashion. Her approach is linear and geared toward mechanical errors that students apparently often make. The spelling section consists of six parts: "Words Often Confused," contractions, possessives, compound words, rules for the doubling of a final consonant, and a list of frequently misspelled words. The syntax section focuses on common writing errors such as subject-verb identification, run-on sentences, fragments, use of standard English verbs, subject and predicate agreement, pronoun choice and agreement, misplaced and dangling modifiers, parallelism, tense shift, person shift, and wordiness. The punctuation section consists of usage rules for the nine major marks of punctuation (period, question mark, exclamation point, semicolon, colon, dash, comma, quotation marks, and capital letters).

All of the grammar sections in The Least You Should Know are similarly structured. First a specific rule is stated. Second the rule is illustrated. Third, a series of exercises are presented to test the student's ability to use the grammar rule in reading incorrect sentences and paragraphs. The subdivisions of each grammar section are followed by ten exercises, each consisting of ten sentences.
The section of *The Least You Should Know* that focuses on writing is less rote. At the start of the writing section Glazier devotes a page and a half to free writing. She goes on to discuss cliches, using specific details, limiting the subject, writing a thesis statement, supporting the thesis with reasons or points and writing a paper from a thesis statement. These subdivisions in writing are followed by five assignments that require students to summarize five short abridgements of journalistic articles. The strategy that Glazier suggests to students in the instructions to these summary assignments is first to find the thesis statement and to focus their summaries on the thesis. Glazier also suggests that students initially write longer drafts of approximately 150 words and then edit them down to about 100 words by eliminating redundant information and excess verbage. After these several exercises on summarizing short articles, Glazier includes a chapter on writing a letter of application and vitae. She concludes that writing section of her text with a very brief chapter on students writing self evaluations of their course performance. Glazier is very careful here to instruct students to critique themselves and not the course.

My very initial impression of Glazier's book after a very quick perusal was "Oh yes! Another one of these mechanically oriented, item-centered texts." I objected to its focus on the words rather than on the language user (although the writing section does focus on the writing process) and I especially objected to the text's title. Titling the text as "the least you should know about English" indicated to me a pejorative attitude toward English instruction, as
If it was of little importance. I also felt that a careless attitude toward language learning might be conveyed to students by the text's title; and in some cases, a careless attitude toward language instruction might be conveyed to teachers who would be using the text. Idealistically, I would have preferred to use an enriched approach, one that would include discussing the communication situation and the various ways a writer could deal with it, to learning about the English language and writing than the minimal approach suggested by this text.

I would have preferred to teach the cognitive process of language, the emotional and intellectual process by which people express their social and emotional identity with words. I wanted to teach English composition from the point of view of Vygotsky's theory of inner speech. I wanted to teach language as a dialectical process that occurs within a defined social situation between a language user and an audience. I wanted to teach students that a writer enters into transactions of communicating information to an audience and that these transactions consist of the writer's self-conception expressed in words in relation to expectations an audience has about the particular genre the writer is composing and the message he/she conveys. Although I wanted to teach language and composition a la Vygotsky, I really did not have the practical teaching methods for such an approach worked out. I had plenty of theory, but I had not worked with students (I had not worked with CES students at all) enough to know what Vygotsky's theory would transform into in the classroom. I did not have any lesson plans worked out; I had no
assignments to give students; and I had no practical and specific learning objectives for students. While I understood that these aspects of a curriculum based on Vygotsky's theory should probably be worked out interactively as the course proceeded, I also understood that I needed a concrete and practical starting point, a prototype curriculum. Keeping Vygotsky's theory in the back of my mind, I turned to *The Least You Should Know* (the required text) for basic course content and a basic course sequence.

As I began to plan out CS-301, I became aware of many of the text's strong points for classroom management and curriculum sequence. For example, the "Words often confused" section focuses on words that may be easily confused by language users who are involved more in oral than in written usage. Homonyms such as do/due, brake/break, forth/fourth, here/hear are often interchangeably used by students who use spoken, recorded and orally transmitted language, and who have spent only limited time reading where the visual distinctions between these homonyms would become apparent. I also perceived the large supply of exercises in Glazier's book to be an asset. I thought that they would supply me with ready-made classroom material.

To check out my assumptions about the usefulness of the text, I spoke with Ed Phillips, an English teacher who had worked at CES for a number of years. Ed told me that the technicians who I would be teaching were really not motivated to write. He told me that students' central interests and motivations were in learning what they considered to be job-related skills. They did not consider
English grammar and composition to be job-related. Since these
students did not assume that effective writing was a job-related
skill, according to Phillips, the only way to motivate them was to
have them do job-related writing exercises (such as resumes, letters
of application, and job descriptions). Edward explained to me his
three-part curriculum which corresponded to the three class hours
scheduled for the class each week. He used this three-part sequence
for the grammar part of the course—Gontowski had recommended using
the first several weeks of class for grammar instruction. During the
first class of each week, he would lecture on a grammar topic and
have the class perform some related in-class exercises. During the
second class he would give a hypothetical quiz that the class would
take under test conditions and then discuss afterward. During the
third class, Edward would give the class an actual quiz similar to
the one he had practiced with students during class two. During the
second section of the course, the writing segment, Edward would use
basically the same format but shift to writing assignments instead of
grammar assignments. To Edward's system, the extensive number of
exercises was instrumental.

I immediately understood the value of Edward's approach. It
provided me with a ready-made sequence of classroom exercises (and
these were just taken from the text), a series of attainable goals
for students to achieve, a rationale for students to learn course
material (job-related exercises). But I had reservations about the
approach. The context of Edward's learning model seemed confined and
limited. It was prepackaged education. And as I made this judgment,
I realized that I had no experience with these students, and that I was judging from a position of practical, hands-on ignorance. But at the theoretical level, at this point in my preparation for the upcoming term, Edward's approach seemed to put students into a piecemeal and item-oriented paradigm for learning language. It seemed to leave no room for students to break out of that learning paradigm with creative and inventive work. From the practical standpoint that Phillips and Gontowski assumed, even the title of the course text, The Least You Should Know About English, was a positive component because it appealed to the negative attitude that students had toward language arts study in general. But I thought that an English teacher ought to try to change students' attitudes instead of trying to play into them. Both Gontowski and Phillips insisted that a more extensive approach, one that would require students to understand audience analysis, and communication theory, one that would require students to take the English language seriously would only be self-defeating in the face of the psychological reality of the situation, the students' negative attitude.

I felt as if I was being pulled in two directions: Ideologically I was being drawn to Vygotsky's approach; but practically I was drawn to the neat and clean piecemeal, item-centered approach that could be used to easily structure class periods, to define assignments and learning goals, and to manage students. My dilemma was shaping up as a classical dialectical (interactive and transactive) theoretical viewpoint versus a positivistic (teacher dominated and factually defined) viewpoint conflict. I decided that using a totally
Interactive approach (generating class content within the class in collaboration with students and attempting to develop real relationships with them) at this point would be too risky. I had no idea what my students' needs and interests were, except for the advice I received from Phillips and Gontowski, and I had no shared experience with my students (I had not even met them) on which to base a transactive and interactive approach. I decided to structure the class in a way similar to Phillip's suggested scenario and to wait and see how the class went. I would gradually try to work in interactivity with the students and try to form a basis for transactional activities. I simply decided that I did not know enough about the course or about the students to try and "wing" it a la Vygotsky.

To prepare for the class, I arranged a class sequence for myself that consisted of one grammar topic per day following the sequence in the text. These grammar topics lasted for eight weeks. For the writing segment, I decided on a sequence of four writing assignments arranged in sequence from easy to difficult (application letter and resume, proposal, process description, and problem-solving, library research report). The writing assignments were supposed to be useful to students during the job application process and in on-the-job writing (e.g., describing the process by which a technician repairs a broken electronic component). I decided to devote about a week and a half to each writing assignment. To make sure that I would not be swamped with writing assignments to grade during any one week, I arranged quizzes and papers so that I would receive a maximum of
only two sets in any week. I also decided to use crossword puzzles to help students to improve vocabulary and spelling skills. I thought that word puzzles would encourage students to use words creatively and to be more attentive at the same time to spelling. I hoped that students would enjoy the puzzles at the same time.

It was after I decided to use crossword puzzles in my classes that I decided it was time to go home. I left CES and tried not to think too much about it over the weekend. I wanted to take advantage of that little bit of time I had before the system groaned back into action on Monday.

Lessons

When the first term was about to begin, all of my planning seemed to have been an exercise in nervousness. I found that the situation around me laid waste, at least at first, to my plans. I felt engulfed by the changing scene. My initial classroom preparation was really based on my own fantasy of what the classroom experience at CES would be like. Except for the advice and admonitions of Gontowski and Phillips, I had no way of knowing. Like a writer composing to an envisioned audience, one created from his/her own fiction, I composed my course syllabi and assignments. I assumed that the technical writing classes would be initially discussion oriented and focused on grammar rules. As I saw it, my big job at the beginning of the course would be promotional. I was going to have to sell one of the most unmarketable of all intangibles—grammar rules.
But as soon as my plan was completed, perhaps even before it was completed, the situation that I found myself in began to twist and reshape it. I completely lost sight of my objective to induce interactive teaching methods. I became overwhelmed with anticipation. Once students entered the scene, the school changed. Even before I had taught a class, I noticed the change in the school. Faculty and staff members became more preoccupied with work. Activities in the halls increased tremendously as students were constantly travelling them and intermittently standing in lines at various points along them to pay bills, register for courses, or take care of some other related paperwork. The furniture in the school was totally rearranged. The school library (or "Learning Resources Center") had become transformed into an advisement area. There deans and secretaries counseled students about courses. The recreation area (usually a cafeteria with juke-boxes and video games) was bordered on all sides with tables at which students were filling out forms. The parking lot was packed with cars and motorcycles.

All of these changes seemed to trigger in me a certain nervousness that I always feel on the first day of class. I have always believed that this nervousness has something to do with being an effective teacher. I had never failed to get "butterflies" prior to teaching a class—even classes that I felt were going quite successfully. The butterflies seemed to motivate me for teaching. They created a certain nervous energy that I used to excitedly communicate information in the classroom.
However in this particular instance, my "butterflies" were a bad omen. I missed my first class (3TQ) due to a bureaucratic foul-up, an error posted on my revised schedule. The class was supposed to meet at 1:40 but my schedule read 2:40. When I went to the assigned room, another instructor was there teaching another class. When I noted the mixup to the program secretary, she took me out to the learning resources area to see Dick Monarch, the Electronic Technician Program Dean. He blamed the foul-up on Henry Smith, claiming that Smith was already supposed to have made the time change on my schedule from 2:40 to 1:40. I did not really care who had caused the foul-up. I was upset about the mixup because I was looking forward to meeting this class. There were sixty-two students in it, and I was very curious to discover what these students were like. Phillips had indicated to me that technician students were really non-communicative.

I got the impression from Phillips that the survival tactic for English teachers in the technician courses was to enable as many students as possible to pass the proficiency exams in order to reduce class size. The procedure that we had been given for presenting proficiency exams by Mel Slightly during orientation week was first to give the class a standard grammar test and then to allow students who scored an eighty or above to write an essay. Phillips had indicated to me that it was up to our professional opinion whether or not to give the written part of the proficiency. In other words, if a teacher felt that the students who had taken the proficiency grammar test were adequately prepared in grammar then our
"professional judgment" could dictate that the written portion of the exam was unnecessary. The notion of professional decision-making was, according to Phillips, the guiding philosophy at CES. I got the impression that about fifty percent of the students who took the proficiency passed it. Phillips mentioned that he generally reduced his class by about half. But when I asked Gontowski about the written portion of the proficiency examination being optional, he disagreed with the idea noting that he had seen many students pass the grammar test but fail the written test and therefore, fail to proficiency out of the course. He told me that I would have to give the written component of the proficiency examination to complement the grammar component. I used this occasion to inform Gontowski that I had missed my first class. I wanted him to learn about the foul-up from me so I could explain that the reason for my absence from the class was an incorrect time posted on my schedule sheet. After I explained the problem to him, he assured me that the foul-up was not my fault.

But I felt uncomfortable about missing the class. I was afraid that my initial absence would have a negative effect on my relationship with the students. I thought that the students would have a "He's the guy who didn't even show up on the first day of class" attitude toward me as a teacher. When I finally did meet with the class at its second scheduled meeting, I was immediately struck by its size. It was huge at 62 students. I concluded that my absence from the first class had probably contributed to the very unruly nature of the students. They were milling about the room
throwing paper objects and yelling and joking with each other. At first I tried to bring the class to order calmly and quietly. Then I found myself yelling at several students before the class quieted down. When I went into the class I intended to probe students about the previous training they had had in English grammar and composition. I thought that if students shared with me the common experiences that they had in earlier English classes that I would perhaps be able to establish a common basis of understanding between myself and them. I also would get some insight into their opinions about English instruction.

But my attempts to get students to discuss their earlier experiences were totally ineffective. I asked the general question, "What kind of training have you had in English before?" All I got in reply was a series of guffaws and snickers. I probably could and should have approached the whole issue of previous training in a more specific format by perhaps asking students if they understood certain grammar rules or if they liked to write. But I was just trying to be honest with them. And I did perceive the situation to be a fairly hostile one. I assumed from my discussions with Gontowski and Phillips that the students did not care about English. My initial impression of the class reinforced this assumption. I did try to establish some feedback from students by asking them what particular kinds of tasks they were asked to do in earlier English courses. But the class went as cold as ice, not a single response. I decided that students had little interest in discussing their earlier English classes. I also thought that they were looking me over, wondering
what my next move would be. I decided to forget about establishing rapport for the time being, and I proceeded with the grammar instruction. I began to discuss parts of speech to show students that, like math, English has formulas, composed of words instead of numbers, and that these formulas had specific functions. Using parts of speech instead of numbers, I tried to show students that words can be arranged in formulaic patterns that consist of different parts of speech being placed in appropriate slots to create meaning. I wrote a mathematical formula (2+2=4) on the board and a sentence (John went to the store) underneath it and discussed how both expressions were statements that could be understood by seeing the relationships among the elements included in them. I proceeded in this direction was to appeal to the math orientation of students' training. The approach kindled some Initial Interest in the class, but because I did not have a structured plan and handouts to reinforce my teaching thesis, the lesson deteriorated into a lecture and sketchy discussion of parts of speech.

During the immediately following second hour of this double session (we took a brief break in between), I used a crossword puzzle to teach vocabulary words. This approach seemed to engage students quite well. They took to the exercise with real interest and quickly completed them. Students avidly concentrated on their puzzles. Several students I could see looking up at the ceiling trying to think of answers and then writing answers down on the page. Most of the class focused their attention down on their papers and filled in appropriate spaces. A few students asked me for advise about the
solutions to the questions. I had students read out the crossword questions and define and spell out the words that correctly answered each question. Several students misspelled words and corrected themselves when I told them that they had made spelling errors. I concluded the class by reciting the vocabulary words from the puzzle to students who in response tried to spell the words correctly in writing. Several students did quite poorly, but most had at least seven of ten correct. At the time that I gave this lesson I rationalized it in the following way:

"I think that the lesson was especially pertinent to students in the Technician Program because by using a crossword puzzle to introduce students to certain words, I was giving them a concrete activity by which to learn the words. I was also challenging them to compete with each other in a goal-oriented activity. These two perspectives (concrete activity and goal-oriented approach) seem especially pertinent to the attitudinal milieu here at CES because technicians tend to work with concrete materials (electronic paraphernalia) in their science courses and they participate in competitive activities."

As I think about this rationale now, I agree with part of it. The crossword puzzle is a concrete activity, and I think that it does teach students to spell words. It does fit in with the technician, hands-on approach at the school. My comment in the conclusion about "competitive activities" seems vague to me now. I am not quite sure what I meant by that. I was apparently making an unsupportable assumption about the relationship between goal-orientation and competitiveness. As I consider the class now, a more cooperative atmosphere might have reduced the tension in the class. For example if I had decentered my position in the class and encouraged students to help each other, the lesson would have perhaps been a stronger
learning experience. I believe the most striking characteristic about my earlier comments, however, is my own attitude toward the technician students. I think that I was buying into the assumption that technician students were only capable of doing simple activities such as crossword puzzles. I was excluding from their realm of possible activities, complex and creative activities such as story writing or even poetry writing. I felt this way because I believed that technical students would not enjoy writing stories and poetry. But I was wrong. Toward the end of the term, a number of the students complained to me that they had not had an opportunity to write stories and poems. But I had another reason for avoiding creative writing in this course. I did not think creative writing would fit into a technical writing course.

My other technical writing class was quiet, and because of this, I liked these students (3TP) better than the noisier 3TQ students. I was not sure why 3TP was quieter than 3TQ. Both classes met in the afternoon at about the same time. 3TP was only two-thirds the size of 3TQ, so size might have been a contributing factor in the different noise levels of the two classes. I suspected that there were a few students in 3TQ who consistently cut up under the cover of class size. There was no intrinsic educational benefit to quietness; but I did appreciate the solace that quiet 3TP provided me with after experiencing the noisier chaos of 3TQ. The first time that I met with 3TP, I used the same basic lesson that I had used in 3TQ, except that I included a brief lecture on subordination and coordination, using examples written on the blackboard to illustrate the balanced form.
and importance of coordinated ideas and the unbalanced form and importance of subordinated ideas. Students seemed to have a difficult time understanding what I was talking about. They looked at me quizzically and did not react to the information. When I asked them if they understood, they responded that they "kind of did", but "not really". I think that my problem was using a deductive approach in teaching these concepts. The terms "coordinate" and "subordinate" really had no meaning for students. But I am sure that they had all experienced at one time or another in their lives subordinated and coordinated ideas, experiences and facts. By using methods that illustrated to students the existence of these two concepts in the world and in their lives in particular, and then by explaining to them that language provides them a means for distinguishing between subordinated and coordinate ideas, experiences and facts, I would have been able to teach to them these two concepts more clearly by induction. But yet, upon reflection, I even begin to wonder about the propriety of teaching these concepts at all. If students are not aware of linguistic rules that govern subordination and coordination, then so what? It is most important that they have the ability to distinguish between them in reading and to use them in writing. Perhaps focusing on the actual usage of subordinated and coordinate written expressions and analyzing and choosing the most effective ones would make more sense than learning the grammar rules that govern them.

The next time that I met with 3TP and 3TQ, I administered the first part of the proficiency examination. The first part of the
test consisted of multiple choice questions that required students to choose the correct grammatical form of an expression. There were 125 items in the test and students were given one fifty-minute class period to complete it. The fact that the test was not completed until the second week of the term created some problems: even though it was anticipated that a large number (about half) of the students would proficiency out of the course, during the first two weeks of the term, all of the students had to be taught and managed. Moreover, once the grammar test was administered, there was a time gap between it and the essay portion of the test. At the class following the grammar test, students who scored an 80% or higher on the grammar were given an essay to write at home, but they still had to remain in class until they turned in their essays about a week later. And once the essays were turned in, there was yet another time gap between the collecting of the essays and grading and the final determining of who would be proficiencied out. Students were supposed to score an A on the essay in order to get proficiency credit.

I chose to assign to students a mechanism description of a pair of dividers. I decided upon this topic because I wanted to give them a technical topic that they were already familiar with. All of the students had taken a course in drafting during an earlier term, so I knew that they would be familiar with dividers. I included an image of a pair of dividers on the assignment sheet, and I left a pair of dividers on reserve in the school library for students to inspect as they wrote their essays.
The official purpose of the proficiency examination was to exclude from the course students who did not need it. But the unofficial purpose of the examination for teachers was to reduce class sizes to manageable numbers. I used the examination for this purpose at least partially. I reduced the class size in 3TQ from 65 to 35 and I reduced the class in 3TP from 44 to 21. Only one student who passed the grammar portion failed to pass the essay portion. And I discovered later that this student probably should have passed the proficiency test because he wrote far above the level of other students in the class throughout the term, and he seemed bored most of the time. I passed several students on the written portion of the proficiency exam after they revised a few mechanical errors in their essays. Unfortunately, at that time no follow up study was done on students who passed the proficiency; so I have no data on how well they did in subsequent courses. A study is currently being done, however. But despite all of my justifications in the students' behalf, I know that my ulterior motive of reducing class sizes certainly affected my attitude toward the proficiency tests, and perhaps even my grading of the essay portion of them.

Once students who had proficiencied out of the course were gone, the personalities of both classes changed quite drastically. Students who had any talent or interest in English, in general, passed the proficiency exam. Students with little or no interest or talent had of course not passed (unless they cheated) and they remained. 3TQ was not as boisterous as before because fewer students remained, but the ones who did remain had no interest in taking the
course. They groaned at virtually every exercise, complained about the irrelevancy of each writing assignment, and frequently commented that "Techies," as they called themselves, should not have to take English. I considered that they perhaps just did not like having me as a teacher. And I was sure that was part of their disgruntledness because I pushed them to do more work than they expected to do in the course. They told me this throughout the term. But as the term progressed, I became convinced that their central source of anguish was the content of the course. They hated to write, hated to do grammar exercises, and hated to even discuss English. A number of times students simply exclaimed frustratedly that they just could not do this, when it consisted of making subjects and verbs agree in number or identifying prepositions in a group of sentences. Yet the sheer reduction in numbers was a welcome relief. My thoughts on the class immediately after the reduction of class size are as follows: "I am beginning to like this class better. It's smaller and easier to handle now with most students out of it. They (students who passed the proficiency test) were probably the bored ones who were too antsy to relax." From this excerpt, I can see that I was assuming that the students who passed the proficiency were the bored ones. Ironically, I made the opposite assumption about the students who proficienced out of 3TP, the originally smaller, quieter class: "Perhaps I made a mistake when I proficienced so many out of this class. I really have the dregs. These kids are not at all motivated. The whole thing is a joke to them." I was assuming that the students who remained in 3TP were the bored ones. I can see now
that I was stereotyping students in a way that made it easier for me to be defensive about the negative attitude that students had toward my subject. I could say to myself that the only students I had in my class were bored ones, or that all the bored students had left after passing the proficiency interchangeably even though both statements contradicted each other because in each situation each statement enabled me to insulate myself from the constant criticism that I was getting from students about how worthless English was to them. I had no real basis for either assumption. The only basis I can think of except for my own perceptions of the two situations was my overhearing Phillips say that the proficiency eliminated most of the good students from the class. It seems that the seeds for both of my assumptions were based on this hearsay: In one instance I accepted the hearsay at face value and in the other instance I reversed it to be consistent with the situation that I faced.

The negative attitude of the students wore off on me. I can see from my notes that the classes became for me a mechanical task. Numerous passages in my notes just consist of a sort of mindless and robotic description of in-class activities:

"Went over some editing sheets during the first hour and identified fragments and run-ons. We also went over the spelling words for the week. I passed back their tests. Second period we identified complete and compound and simple subjects of sentences. I had verb identification drill that went over like a lead balloon—used nonsense words to show that one could identify verbs by word patterns. They got a real kick out of it. That's one lesson I should can quickly. Went over the crossword puzzles and that finished the class."
The verb identification that I refer to above was an exercise that consisted of helping students to identify verb patterns in sentences. The sentences consisted of nonsense words, that is words that had the grammatical form and placement and syllabication of real words, but they had no real meaning. Students were supposed to identify the verb in the sentence from its relationship with other words and its grammatical ending. This exercise seemed to me to be useful because it encouraged students to identify verbs in relation to other words, a skill that I thought would foster improving noun-verb agreement in students' writing. However, my students thought that the nonsense words were really nonsense. They mocked the entire exercise throughout by reciting the nonsense sentences and cracking jokes about them. I could see their point; from their perspective the very tentative importance of learning English grammar was totally undercut by this exercise. Perhaps if I had paired these nonsense sentences with real ones they would have seen how the pattern of words was similar in each and perceived the reasonableness of the lesson.

But even though many of the classroom experiences of this first term were lost in the routine of exercises and characterized by my own need to be respected by the class, there were numerous occasions when I had sudden realizations, like epiphanies, about what I was actually doing. One of the early realizations that I had concerned finding the correct formula for teaching a class:

"I recall how I felt yesterday—that I had somehow found the correct formula for teaching these classes. Now I know that any one formula for any class over an extended period would be impossible, or at best boring. These classes are dynamic
groups of people and they require a dynamic curriculum. The mind of the teacher must be aligned and involved with the minds of the students. No static formula can work. Originally, I was anxious to develop a workable formula to maintain class control. Once over the fear of losing control of the class, I can let the learning activities (as opposed to controlling the class) take precedence."

The magic formula I thought I had discovered was simply writing information on the board in a way that forced students to copy it. In this way I thought that I could control the class and have them concentrate on the course topics at the same time. I discovered however that my preoccupation with control made me blind to occasions when students were willing to discuss issues out of real interest. (sometimes they pretended to be interested just to kill time). To take advantage of these instances, I had to be flexible enough in my teaching methods to postpone notetaking and allow students to temporarily control the class with their questions and comments.

But on occasions when I did give students the "green light" the classes tended to become chaotic: "... the communication level in the class was good—it was chaotic but it was fluent—perhaps too fluent." By the "too fluent" comment I mean that students were communicating too freely. I observed that they were not focusing as specifically on class topics as I wanted them to. They seemed to be taking advantage of the open discussion in class to tell jokes, to discuss their cars, and to do homework for their other classes. This bothered me. I decided that a teaching method that required students "to concentrate to a certain degree on a laid out format" would control students' attention but not to the degree of being too absorbed to ask questions. For example, I would set up a format on
the board for using commas. I would list rules and offer examples. Students would be encouraged to copy pertinent information. And I could ask students for additional examples. If discussion died out or if the class lost its focus, I would move on to the next example and rule. I also learned that I had to play it by ear sometimes:

"Gave a difficult quiz and intended to have the class do puzzles afterward, but decided after I saw some negative responses and realized that the class was tired, to have them do the puzzles for homework. I allowed them to leave as soon as the quiz was completed."

I learned that on occasion, I had to loosen up.

I was also beginning to understand that variety is a very key ingredient in an effective methods plan, especially for these students: "It's so important either to intersperse conversation with exercises or to mix things up so a variety of activities keeps students busy." Students became easily bored with any activity that involved grammar rules. One very useful activity I used for maintaining class control and involving students with language was sentence-combining: "Not only does it capture their attention and motivate them to play with words, but it also allows me to work with students individually." I used exercises based on Frank O'Hare's *Sentence Craft*. And though I think that I was probably overemphasizing the value of these exercises at this time, the sentence-combining problems helped me to develop a consultant method of teaching with students. Sentence-combining requires students to revise overly simplistic prose (short and choppy sentences) into more sophisticated prose (usually, prose that uses relative clauses and phrases instead of separate sentences). I would pass out the exercises to the class
and walk around the room and consult each student as he tried to revise the sample sentences.

I took the first writing assignment out of the course text: "It is a descriptive paper on the student's favorite place. I outlined what information ought to go into each paragraph:

1—General description of the place
2—Most important physical characteristics of place
3—Most important activity at this place
4—Other less important activities
5—Conclusion: Why is the place no longer important or why is it still important?"

I gave this assignment for a number of reasons. One, its structure and content is a logical lead into technical descriptions of mechanisms and processes. Two, it consisted of a simple five-paragraph format, one that I believed that most students could easily master. And three, it was autobiographical in content, a fact which I hoped most students would find relevant and interesting.

During the writing of these "a place that is important to me" papers, the consultant method I had developed during my grammar classes while doing sentence-combining proved to be a very effective teaching tool:

"We took a break after the assignment was introduced. After the break students began to write and make lists of information to be used in their papers. They raised hands as they needed to speak with me—several students had specific questions, most wanted me to read over their first drafts and give an opinion. I always had some corrections to suggest. It was a good start to the writing part of the course."

In subsequent writing classes, I continued to use the consulting method:

"Gave the class time to work on their rough drafts and answered questions they had about papers. In general, I
spoke with class members and tried to help them iron out any difficulties they were experiencing getting started on their papers. Several students were suffering from real writer's block."

The consultant method enabled me to sympathize with and understand students' problems and to help and encourage students to solve those problems. The consultant method also encouraged students to get involved with their writing.

I taught students to use a three-phase system when they wrote. The first phase was writing the rough draft. The second phase was having it edited by their fellow students, and the third was revising the edited rough draft into the final draft that was to be submitted for a grade. This was the same system that had been encouraged at Midwestern in the Freshman English Program, where I had taught composition as a graduate student. It struck me as a very logical system. In my experience teaching, I have discovered that student writers often make errors that could be easily corrected if they were pointed out by a reader. The three-phase system that I encouraged students to use gave each writer an opportunity to have his work read and edited at least once prior to turning it in for a grade. This system has been criticized because some contend that students are really not equipped to edit and correct papers as professionals. Maybe so, but requiring teachers to read and edit papers twice would be very burdensome. It was a burden that I was not willing to assume. Also, even though students were certainly not expert editors, they would certainly learn strong and weak aspects of other
students' writing through editing peers' papers. Hopefully, they would emulate strong aspects and avoid weak ones.

Once students had completed their rough drafts of the "place important to me" papers, I had them exchange papers and edit each others work according to three criteria: Mechanics (grammar), Organization (logical succession of Ideas), and Transitions (wording of movement between Ideas). I wrote the criteria on that board and explained them. I passed out editing sheets (white sheets of paper, each having a thin margin to the left for numbering editing suggestions and a wide margin to the right for explaining the errors the editors discovered in the writing). I instructed students to place numbers beside errors in student's essays and then corresponding numbers in the left-hand column of the editing sheet with an explanation adjacent to It In the right-hand column. When I first gave out these editing assignments, I was too impatient.

Students in 3TQ did not have enough time to complete their editing sheets. I rushed the exercises and had to collect papers and editing sheets before students were finished. I discovered after some reflection that I was rushing these exercises because of my preoccupation with class control. I decided to give students a second chance to do the editing sheets in a less-rushed environment. During the second editing session, I was still concerned about controlling the class, but I was also beginning to loosen up and lessen my own need to be in charge. As I consulted with students and encouraged them to re-edit and rewrite papers, I reflected upon the
class and came to the conclusion that the answer to my sustaining question over my preoccupation with class control was more structure:

"I guess the class was a success, but it was a bit too open-ended; most of the time a majority of the class was working on papers, but all of the time a fair number of students were goofing off. I suppose it is not possible to engage 100% of the class all of the time. Also the noise level in the room, though it was higher than what I was accustomed to, was probably an indicator of students' involvement in discussing the papers. I would like to structure the class a bit more for next time."

By this extra structure I am sure that I meant more specific guidelines for editing. I was still preoccupied with controlling the class.

I felt uneasy about letting the class go off on its own. I felt a continuing impulse to assume total responsibility for the class and to stipulate what each student should do. I felt a need to dictate rules and regulations to the class so that I would be assured that everything would turn out all right. By controlling the class I felt that everybody would be doing what he/she was supposed to and I would not have to worry about the unpredictable chaos that seemed to threaten the coherence of the class.

The extra time spent on the editing of the "place Important to me" papers meant that we only had time for one more writing assignment. I was not quite sure what this should be. I was enthused about the term being over. But I did believe that it should be concerned with a technical topic. I decided to feel out the students in class about what technical topic they would prefer to write about. But before I did this I decided to structure the assignment by teaching students how to limit the subject of a report.
I taught subject-limiting to 3TQ first. The lecture got off to a noisy start. I had to tell several students to quiet down. Then I asked students about what places they had written about in their earlier reports. One student explained that he had written about Disneyland because he had been there and had enjoyed the rides. I discussed his interest in Disneyland and asked him to compose a thesis statement about it. Each time he came up with a statement, I asked him to make it more focused and specific:

- I go to Disneyland often.
- I go to Disneyland to ride the rides.
- I enjoy three rides at Disneyland because they are exciting.

I then explained to the class that technical reports must follow the same sequence of development from general to specific. I then asked the class what problem-solving techniques they had studied or learned about in their other classes. Students almost unanimously responded with "Troubleshooting." Students told me that this was the process of observing and testing a malfunctioning electronic machine and discovering and repairing its problem. I then asked students what were the general phases that they go through during troubleshooting. There was much discussion and disagreement about this until the class agreed on what was apparently the appropriate phases:

- Identify symptoms
- Testing
- Repair

I wrote each of these phases of troubleshooting on the blackboard and with the class developed four subsections within each phase. This was only accomplished with much discussion and disagreement and
eventually changing around the sequence of the subsections. Next we developed the conclusion (by this time it was obvious to everyone that we were structuring a report) as a summary of the three phases of troubleshooting and the introduction as a definition of troubleshooting and a general explanation of its purpose and usefulness.

I went through the exact same process with 3TP during the first class of a double session. The class was discussant and involved and through interacting, we successfully developed a format similar to the one developed in 3TQ. I gave 3TP the second period of the double session to begin working on the troubleshooting paper. And I was somewhat apprehensive about the wisdom of this: "This could have been a problem since writer's block, especially in a classroom situation, might have prevented the class from working." But apparently because of the open atmosphere we had created in the class and students' own familiarity with the troubleshooting process, the class as a whole (except for a few goof offs) got involved with the assignment and produced some writing. In addition, I had an opportunity to work one-on-one and consult with every student in the class on their papers.

When I again met with 3TQ I had them continue to work on the troubleshooting papers. They were supposed to have had the rough drafts completed for editing, but only two students in the entire class had completed rough drafts. I gave them a one-day extension. Students took advantage of the extension period and produced rough drafts at the subsequent class. In both classes, the clear-cut
structure of the troubleshooting papers was beneficial in both editing (it gave students a model by which to judge each others work) and revising the rough draft into the final draft (writers had better comments from editors and a clear structure to work with). Once the troubleshooting papers were handed in the term had ended. I had survived.

Evaluations

In general I was not satisfied with the writing that students did throughout the term. The most common criticism I had of it was that it was too vague. I noticed that students tended to assume that a reader of their reports would be able to fill in information that was obvious to the writer. When I consulted with students about this I was occasionally successful in indicating to them the importance of including and explaining to the reader information that to them might seem obvious. But most of the time I got responses such as "But that's good enough," or "Anyone knows that." A general weakness in the writing was an inability to empathize with the informational needs of a prospective reader. My general impression of these students (though there were exceptions to this impression) was that they did not give a hoot in a hollow whether or not a reader would be able to understand what they had written. My impression of these students was negative. And this was partially my own fault. I did not look at my students closely enough. I saw them as a group of very stubborn, and perhaps realistic, people who cared very little about writing because as technicians they realized they had very
little use for it. They told me several times that they would do a little bit of form filling but no essay writing on the job.

Students indicated their displeasure with me on the teacher evaluations. These evaluations consisted of twenty-five questions with five possible responses each: (a) always, (b) most of the time, (c) some of the time, (d) never, and (e) not applicable. The questions ranged from questions about the students, "I placed a good deal of effort into this course", to questions about the Instructor's teaching and preparation, "The Instructor made good use of class time; The Instructor was well-prepared for each class," and the Instructor's classroom management, "Assignments were returned promptly; discipline was maintained in the class." Until I received my first evaluation, I was unaware that they were considered important. But according to Gontowski, they were. I received a 2.26 out of 5.0, a very mediocre score. Gontowski was used to receiving 1.30's on his and he had similar expectations of his teachers.

My technical writing students especially found fault with me in the following areas: my expectations of what they were supposed to learn were not clear, my unavailability outside of class for extra help, my inability to lessen their confusion about course content, my lack of enthusiasm, my inability to hold the class's attention, my lack of interest in their progress, my unfriendliness and partiality in class, their lack of respect for me, my uninteresting questions, my unfair examinations, my fuzziness on grading standards, my lack of discipline, and my impatience. But I was not a complete washout; they gave me strong scores in the following areas: the effort they
placed in the course, the consistency with which they did their assignments, the consistency of the material covered in class, good use of class time, freedom of expression in the class, my class preparation, and my promptly returning graded papers.

I interpreted these results to mean that I had gone through the motions of teaching without really interacting with students on a personal enough level to effectively communicate with them. My preoccupation with controlling the students seemed to have poisoned the well. It encouraged me, especially during the early grammar section of the course, to use teaching methods that created the illusion of learning—active and well-controlled students who were doing work that was consistent with course content. But these methods failed to get students personally involved in their writing, and this absence of personal involvement was reflected in the quality of their writing. They did not provide me with enough detail in their descriptions because they did not really care if I understood—they did not care about me, the audience, the reader because I was not demonstrating enough care for them in my teaching. Actually I did care about them—I resented their resentment of writing because writing is important to me; but at the same time, I honestly wanted them to improve their writing, and I justified my sometimes rather coercive teaching methods because I believed the means justified the hoped for results. But upon further reflection and after reading my teaching evaluations, I decided that coercive and control-oriented methods did not justify or even succeed in achieving my desired goals.
After deciding that my methods would have to change (in general I decided that the sentence-combining was too much like a sweat shop activity and the grammar rules drills were too rote—the collaboration that I had done with the class on the last writing assignment and the consulting method were far more preferable). They would have to become humanistic and interactive. I preserved the consulting method and used it as a core of my newly planned curriculum. I decided that I was going to have to improve my rapport with students by getting to know individual students on a personal, humanistic level above and beyond the stale and predetermined student/teacher level. I also decided that I was going to have to collaborate with students about class policies such as grading, assignment content, late paper penalties, classroom management and other classroom problems in general. I also decided that I was going to have to shift my perspective on writing from the product-oriented, grammar-rule approach to an approach that emphasized the communication process of writing. I decided to stress the writer-reader relationship.

But before I had a chance to implement by born-again methods, I had an opportunity to become a bit more sensitive to the political structure in which I was residing. As I mentioned before, Gontowski's preoccupation (or what I perceived to be a preoccupation) with his hire and fire powers at our initial meeting had made me nervous. His policy as General Education director at the school was to visit each General Education teacher's class once per term and to write up a written evaluation. He did not observe my technical
writing class. Instead, he observed a senior American Studies class that I was teaching. The first time that he visited my class was very inconvenient. I had a terrible cold and headache, and to avoid a poor evaluation, I simply gave the class a writing assignment when he showed up in class. He asked me if the entire class would be spent on writing. When I told him that it would, he left after telling me that he would observe me during the following week. Later in the day when I saw him, I told him that I was sorry about the writing exercise and if I had known that he was going to come and observe me (He told me only a few minutes before class that he was going to observe me) I would have planned something else, even though I had given the writing assignment on the spot to avoid being observed in the poor health condition that I was in. His response to me was "No problem. That's the game we play." He did not observe me again for about three weeks. I got the impression that he was making me play a guessing game with him as to when he would show up in class again. After he finally did come in to evaluate me, he gave me all superior ratings and offered me a permanent position teaching at the school. I was pleased as punch.

I did not receive my student evaluations until a few weeks later. I had no idea that these evaluations were taken seriously until Gontowski had a little chat with me in his cubicle and informed me that my evaluations by students were not good and would have to be improved. He showed me other teacher's evaluations. These were far better than mine. And he showed me that the only teacher who had worse evaluations than mine had been fired by him during that term.
So after having been relieved that I was offered a permanent position only a few weeks before, my poor students evaluations gave me a very jolting experience. At the time I described my feelings as "a small, sharp nail being driven through my heart." I went through a period of fear and loathing: fear that I would get fired and loathing for the coercive nature of the evaluation system, which seemed to me to be downright coercive—maybe I was just getting a dose of my own medicine.

But even though I objected to what I perceived to be the coercive nature of these evaluations, they did give me a slap in the face that I needed to realize that my teaching methods had to change. So in my case at least the evaluation system did seem to be effective. It woke me up to the fact that I was not being interactive enough in my teaching methods.

The evaluation system, however, was certainly not perfect. While it did give students a certain power to express their opinions about the strengths and weaknesses of certain teachers, it did so only within the limits of the questions asked on the evaluation form. Any apparent contradictions in students' responses were not analyzed or even considered in tabulating the final evaluation score. Furthermore, and from a political viewpoint perhaps most important, the competition to get good evaluations encouraged teachers to entertain students. A running joke at CES was that second term teachers put on a term-long song-and-dance routine to improve their evaluations. The most popular teachers seemed to be the most entertaining ones.
I spoke with one teacher who had been at CES for ten years and he told me that students had actually conspired to have several teachers removed from the faculty on the basis of poor evaluations. Later, I even spoke with a class of students who told me that as a group they intended to have a specific teacher fired because they did not like the way that he taught and did not like him personally. Since I had been at the school, I knew of two teachers who had been fired due to poor teaching evaluations. And I knew of two other teachers who had students conspiring against them.

The teacher who I spoke with about the evaluations told me that the system "had a tendency to drain off your personality" unless you made a stand against it; that is unless you drew the line and showed the students that you were worthy of their respect. He thought that students really wanted teachers to provide them with a tradition of education. The teachers who survived the system were the ones who had established reputations for themselves as giving students something worthwhile in their classes. Students tended to talk quite a bit about teachers. Once a teacher was established enough to fit students' expectations in a favorable way, once students knew what to expect from a particular teacher and had an understanding of and respect for the teacher's point of view, the teacher was accepted and his/her evaluations would not always necessarily be excellent but they would almost always be acceptable.

The evaluations had a much different meaning to the administration than they did to the students. To the deanhood at CES, they represented the numbers game. Since the General Education
Department had the highest evaluations of any program in the school, Gontowski could use these figures as an administrative tool to justify his program and to even help get what he wanted in areas such as salary increases and teaching schedules. High evaluations was a positive reflection upon the dean or department head. It made little difference that students' teaching evaluations contradicted Gontowski's evaluations. His main concern was to get my student evaluation numbers down where they belonged. If after a few terms I was unable to get the numbers down to where they should be, then I would not be playing the game as a good team player should, and of course, I would have to be placed on waivers and released as a free agent.

This quantitative gamesmanship was not Gontowski's invention (I perceived that he did not really care for it). He like the rest of us had to live and survive in a system that played numbers games.

The quantification game that permeated CES was strikingly apparent at a full faculty meeting that followed my meeting with Gontowski on the student evaluations. Academic Dean Lands went on about the appropriate footage required to accommodate the school's 2800 students, noting that 3880 pupils entering class was running about 1000 over capacity. Every issue he discussed was dealt with in quantitative fashion: numbers of parking spaces available, time scheduling of classes, accounting of student absences, and plans to increase the square footage of available class spaces. He never discussed academics, the educational needs of students, or the training of teachers; and yet his formal title was academic dean.
Underlying all of Dean Land's statements was a preoccupation shared by the entire faculty with job security. Will student enrollment keep growing? That was the question. The more it grows, the safer one's job would be.

At the conclusion of my notes on the faculty meeting, I wrote: "The schools plays a game with itself and reduces interactions to joking and dancing around bureaucratic procedures and planning strategies that it ultimately submits itself to."

I entered my second term of teaching with my eyes opened a little wider.
CHAPTER III
TEACHING THE SECOND TERM

Plans

I was not reassigned to teach technical students for my second term at CES. Instead, I was assigned to teach one technical writing class in the Bachelor of Electronic Engineering Technology (BEET) Program. The BEET students were bachelor degree students. But I did not really consider how they would differ from the technician students as I planned for the new term. I had no experience with them and only the news that I picked up through the grapevine that they were supposed to be more sophisticated and more verbally skillful than the technicians indicated that I might have a different experience teaching them than I had teaching the technicians. But I planned for the new term from my experience in the technician technical writing classes.

Keeping in mind my new term resolution to develop a more personal rapport with students and to collaborate more with them regarding course issues (grading, assignments, course content, late paper policies, classroom management), I set out to design my new course syllabus hoping that it would reflect the interactive approach that I had decided to implement. I thought that the consulting method that I had used during the writing segments of the earlier term was
consistent with being interactive. It had enabled me to really get to know my students on an individual and personal basis. So I wanted to teach the class with a heavy dose of consulting. And I wanted to introduce the concept of linkage into the curriculum. Linkage was a term I coined. It meant that all writing assignments in a course should consist of content and communication situations that are logically linked. Linkage will be made clearer throughout this chapter. Linking of assignments was widely used by technical writing instructors at Midwestern, where I had taught as a graduate student.

Even though I intended to collaborate on course content and policies, I knew that as I entered the classroom on the first day, I would need a detailed course syllabus that would give students a clear idea about the types and frequency of assignments that I intended to have them write. In the syllabus, I presented the course to them as a rotating sequence of lectures and laboratory writing experiences. The first two weeks of class required students to write two letters: a communication letter (inquiry, reply, complaint, claims, adjustment—one of these types) and an employment application letter. These two weeks were arranged as lecture/lab sequences. One day I would lecture on the format, content, and communication situation surrounding the letter and on the following day the class would do some in-class writing. On the third day of the week the students would exchange papers and edit each other's work.

The letters constituted a brief writing assignment, one that students could compose in the first person in a simple and sometimes familiar format. The letters were intended to get students' "feet
wet" in writing and to introduce them to the discipline of writing to a specific reader in a specific format for a specific purpose. The letter writing assignment was standard fare in most technical writing textbooks. All of the other assignments that I cited on the course syllabus were also standard technical assignments.

Once the letters were completed during week three of the term, students would be asked to choose an area of interest about which they would be encouraged to write all subsequent assignments. This is where linkage would fit in—from this point all assignments would really consist of writing about the same content (of the student's own choosing) from the different perspectives required in each type of technical report. The assignments in the course included the following: proposal, process description, mechanism description, progress report, abstract and outline, and final research report. To each of these six assignments, I devoted on the syllabus a two-week block. One week of lectures and a quiz and one week of writing labs. Each week consisted of three classes; so the lecture week consisted of two lectures and a quiz and the lab week consisted of three labs: in-class writing, in-class editing, and in-class revising. The primary goal of the course after the letter assignments was to get students to revise the writing assignments proposal through progress report into the final research report according to a format that I gave them in class. To make writing situations as realistic as possible, I would encourage students to create fictional writing situations in which they were proposing, describing, and reporting on the final results of actual small projects that they had "contracted"
to perform for imaginary companies. Students who could not or would not imagine a contractual relationship with a company were to simply write about their interests to me in the required formats presented during lectures.

To facilitate students' input and collaboration among peers and to enable me to develop a rapport with the class as a whole and with individual students, I divided the class into groups of threes for editing and lab days. The rationale for forming groups of threes was to allow each group to have his/her paper edited at least by two other students, sort of like getting two opinions prior to surgery, or in this case, prior to revising. I also thought that three was a suitable group size for discussing writing and revising problems. I hoped that one group might choose to focus its assignment on a common area of interest with each member working on a different aspect or sub-area. I also hoped that the class would be more easily controlled because communications would be channeled into regular patterns instead of being purely chaotic and always controlled at the front of the room. I wanted the groups to establish their own systems of interacting. I hoped that the class would become more informative and as a teacher I could play the role of the helpful consultant and resource person instead of the disciplinarian.

Lessons

Just as my plans for teaching the first term classes had been disrupted by the appearance of students, my plans for teaching the second term were if not disrupted at least obfuscated. On the first
day of class during the second term, I walked in and frowned at the huge class size. The room was barely adequate to accommodate 60+ students (my enrollment figure eventually climbed to 69 before it fell off to 67). I introduced myself to the class as their technical writing instructor. I explained that the class would consist of a series of writing assignments that would be made clearer on the course syllabus. At this point in my introduction, I had to ask a few students who were sitting in the back of the room to leave because they were throwing paper airplanes and laughing out loud. The class quickly became quiet. For a brief period my authoritarianism (which lasted for about five minutes) calmed the class down, but it also squelched any hope of interaction, at least on this first day. But gradually the class became more discussant after I handed out course syllabi and asked students to read them over. I asked students if they had any questions regarding the course syllabus. Nobody asked me any questions, but they did discuss the document among themselves. I could not hear what students were saying.

This class was not as unruly as the classes during the previous term had been. These bachelor degree students seemed to demonstrate a higher degree of attentiveness than the technician students, at least at this first impression (although it was hard to know if my impressions were being colored by the rumor or popular belief that they were supposed to be that way). Students looked at me and listened for the most part quietly to everything that I said. From this, I was pleased to discover that they were attentive; and that
was the good news. The bad news was that I would not be able to reduce the class size through a proficiency examination. All bachelor degree students were required to take technical writing.

Once the syllabus was handed out and I explained it (since I received no questions), I spent the remainder of the class period explaining the first assignment, a communications letter in full block form written from a fictional perspective. I explained and outlined the basic parts of the letter and described specific types of certain communication letters (complaint, order, adjustment, inquiry, etc...) telling students that they could write any of the specific types mentioned in class. The only stipulations were that all of the basic parts of a letter and all of the specific parts of the type they chose to write had to be included, and I had to be able to understand the communication situation from reading the letter.

After I dismissed the class, I was standing there seriously questioning my original plan. I wrote, "There are so many, however, that I really wonder about the possibility of effectively communicating with all of them."

As I was standing there pondering the fate of my interactive curriculum, Dean Lands walked by and saw me standing at the lectern looking out on an empty class. He poked his head in and good-naturedly asked me if I was teaching an empty class. I felt a little foolish at being found in such an odd situation, but his words had a hidden irony. The class was so full that I thought it might as well be empty.
When I met with the class for the second time, I intended to have students work in groups and edit the rough drafts of the letters that they were supposed to have written for homework. As I was walking to class with my plan in mind and thinking of the best way to divide the class into groups, I discovered several students waiting for me to pass by the recreation area (This was an area where students bought snacks and played video games. At that time it divided the school in half. Technician Program lectures were taught on the east side of the school and BEET lectures on the west side). One of the students said "There he is!" and they followed me to class. As we walked to class I asked them if they had completed the assignment from the night before, and they all responded that they had. It is difficult to describe, but from that point on a certain comraderie between myself and the class began to develop. An it developed pretty quickly.

When I arrived at the room, I handed out editing sheets to the class. After I passed out the sheets, I explained how to use them by diagramming an editing sheet on the board and telling students to first make a general statement about the paper they were editing, second, list all mechanical errors, and third read over the paper for logical organization of ideas. This system made sense to me at that time because I thought it was important for students to first develop a general impression of a piece of writing and then look more closely at it for grammar and organizational points.

As I walked through the class to look at students' editing sheets, I could see that they were filling them in and apparently
reading each others papers. Students seemed to understand immediately what I meant and when I gave them the editing instructions they got right to work. Some confusion did follow when I announced that I expected students to edit two papers: I had only passed out one editing sheet. I walked around the class and handed out an additional editing sheet to each student as each needed it.

As I was walking through the class doing this, students would ask me questions about spelling, organization and content. I even got into a conflict with one student who asked me about the spacing of his assignment. I commented to him that I thought his paper looked a little too short. When I saw how brief his paper was I got a little apprehensive that students might simply write one or two lines; I understood that a fair amount of volume was necessary to develop writing skills and I wanted to make sure that my students wrote enough prose to perhaps begin to feel comfortable with it. The student's reaction to my comment was that length was not important because he had fulfilled the purpose of the assignment; he had learned how to write a business letter. He seemed a little frustrated, so I explained to him that I only expected him to add one or two brief paragraphs to the letter. He jokingly consented saying he understood. I did not expect "pages and pages" of writing. The dispute was settled.

During the remainder of the class as students edited each others work, I moved around the class asking how things were going and if anybody needed any help. Several students were quite concerned about the spacing of their letters. This made me think that I had perhaps
pushed the formatting of the letters a bit too much. I would have preferred to have students preoccupied with the clarity of their words. I understood that the second class of the term was too early to expect to achieve this goal.

By the end of this second class, I had mixed feelings about my editing system. I noticed that some groups were involved in a lot of discussion, while others seemed passive and still others seemed to be involved with laughing and fooling around ("Yet," I thought to myself, "mirth certainly does not necessarily indicate getting off of the topic."). I wrote "I hope the class develops its own dynamic system out of the expectations nurtured by the group approach." I was hoping that the groups would gel and develop and reinforce positive group values and standards for the course. But I had apprehensions about the prospects of success for the class:

"I am kind of apprehensive about this class because of its size. The great number of students makes interacting within the room almost a nebulous experience. The noise level in the room is bothersome. I feel kind of uncomfortable with the noise, although students do not seem to be bothered too much by it. The noise is just a product of this small group atmosphere I am trying to cultivate in the classroom."

I did get a brief respite from my apprehension. The next time that I met my class was on Halloween, and as I walked into the class, I saw one of my students wearing a Richard Nixon mask. My immediate reaction was to laugh. The student came up to me after class to tell me that he had trouble with English. He offered to bring in some writing so that I could get an idea about what level of writing he was capable of (He never did bring in any writing samples). He told me that he was an auto mechanic so the only kind of writing he did on
the job was filling out forms that indicated work he had completed. When he first spoke with me after class I did not realize that he was the same person who was earlier wearing the Richard Nixon mask. His name was Jim Smith. From this point on, whenever I saw Jim around the school, we exchanged greetings. Because I knew Jim by name and I took a personal interest in him, I was aware of who he was whenever I graded his papers, and when we discussed his grades, I was open to his suggestions and he was open to mine. Just having one friend in the class, one face who I knew as an individual, helped me to feel more accepted in the classroom. I knew that I could depend on Jim to answer a question in class when nobody else would respond. And he provided me with periodic barometric readings about the effectiveness of my teaching. On one occasion, he advised me to teach proposal writing using more specific illustrations. When I followed his advice, I found that it was good advice indeed—students understood proposals much better after I did use more specific illustrations.

But Jim was, at least at this point in the term an exception. I still felt as if the class was an anonymous mob of individuals. The type of instruction that I was forced to give them was "short and sweet" because the attention span of the class seemed to be limited by the frequent and spontaneous distractions that this large group seemed to continuously and effortlessly generate. Distractions consisted of comments made by individual students or by somebody throwing a paper ball or airplane. It seemed as if the class was testing me. But I never lost my temper or reacted negatively. I just passively waited the two or three minutes that it took for the
uproar to subside and continued on with my lecture good naturedly. Sometimes I would even laugh and briefly become part of the group.

I was beginning to understand the gigantic peer group that existed at the school. These students all entered school together during their first trimester. Throughout their education at CES, they stayed in the same classes. Many of them even lived and socialized together. The school was the hub of their lives. Because they shared so much together in and out of school, they formed very strong bonds of friendship. I noticed that by the fifth trimester, many students developed a negative attitude toward CES. There was an extremely high dropout rate. In some classes the rate was as high as four dropouts for every one student to make it through. Students also complained about the ever increasing tuition, and they claimed that the school bookstore inflated the prices on books they had to purchase for courses. The general attitude that students as a group had was that the school was trying to squeeze every red cent it could out of them.

This anti-establishment attitude, which I thought was basically hypocritical because most students who attended CES would readily admit that their central reason for being there was to secure a high-paying job upon graduation, came out during the third class. It was a lecture and discussion on writing letters of application and resumes. The class was somewhat noisey, but individual students seemed to enjoy participating in the discussion because it gave them an opportunity to offer ridicule in response to questions. To almost every question I asked about the letter of application and data sheet
assignment, the class response was "to make money." For example, I asked as a discussion question "What is the purpose of including a data sheet with a letter of application?" When I asked it, I thought of a number of reasonable answers: to highlight one's most pertinent qualifications, to give the employer an overview of one's background, or to account for time during certain periods in one's life, just to mention three reasonable answers. But students only responded with "To make money!" When I mentioned to the students that many employers would be turned off by such a greedy preoccupation with money, they asked me for an alternative. I suggested that an employer might be more interested in ways that a prospective employee could contribute to his/her company. The class jokingly thought that my suggestions was "BULL!"

Apparently what they meant by "bull" was that they perceived I was candycoating a situation and that was bull—they only wanted to consider the bottom line of the situation, the money involved. Yet despite this cynicism, they did listen to the practicality of my advice. They understood that their "bull" response was really expressed in jest (Though there certainly was a degree of truth to their contention that money was the bottom line—in the CES environment, that did seem to be the case). Several students indicated that they understood my message about the importance of creating an intelligent and informed impression on data sheets and application letters. They said things such as "Yeah, yeah, we know what you mean." or "OK, OK, we get the message." Apparently they were having some fun with me and taking this opportunity to let out
some of the pent up frustration over the consumer relationship they felt they had with CES. The more I taught, the more I realized that students really wanted a teacher who genuinely cared about them and whose primary concern was teaching them useful and helpful information. They wanted teachers to live up to the traditional teacher ideal of being totally dedicated to teaching and caring about money and materialistic things only as a secondary consideration—students should come first and be patiently taught despite their own stubbornness and unwillingness in some cases to learn. A good teacher was one who taught students and made them learn whether they wanted to or not.

But despite that I perceived to be these noble ideas about good teachers and selfless teaching, many students could not muster the willingness to accept correction on their written assignments. I graded their first assignments, the communication letters, during the second week of the term. The general reaction I got from students was that I graded too severely; I thought that I made an effort to be lenient and understanding. Part of the problem students had with my grading was their built-in A expectation. The teacher who taught the course before me was an exceedingly easy teacher. The students told me that Technical Writing used to be an automatic A. Another part of the grading problem was the resentment that many students felt about having to take the course. No matter how many times I emphasized the advantages of being able to communicate clearly in writing on the job, students just could not or would not take English classes seriously. Next to courses in computer hardware, calculus,
electronic communication, classes in English paled. Students had enrolled at CES to study courses in electronics; taking courses in English just meant spending time on a subject students considered unimportant if not tedious. I was faced with the problem of making writing relevant for students.

But perhaps the most central part of the problem the students had with my grades (Let me make it clear that I did not give any D's or E's, and only four C's) was a difference in the expectations I and the students had about the quality of papers. I expected papers to be logically organized with a clear introduction that delineated subsequent parts of the body and conclusion. I expected assignments to be thoroughly detailed and very clearly worded and correctly written in terms of grammar and punctuation. On the other hand, students often expected to do the minimum. They expected to write a letter and include all appropriate parts in fulfillment of the assignment period. As far as they were concerned the assignment was completed and 'Kaput' they wanted their A. As the course progressed I constantly encouraged students to be more detailed in their writing. I believed that detailed writing was much more informational and just more intelligent than vague and overgeneralized descriptions and explanations. But they saw no practical sense in my preoccupation with details. They thought that my insistence on details was just more "BULL" that I was giving them to be tough.

One student, John Huff, objected strenuously to his C+—he had probably actually earned a B— but I lowered his grade because he
wrote his paper in pencil instead of ink. I explained that final drafts had to be submitted in ink because pencil often smudged and I wanted students to associate pencil with rough drafts and ink with formal, final drafts. His objection consisted of a long string of crude expressions that indicated his displeasure with having me as his teacher during the one term that this was not going to be an easy A course. I controlled myself, but his outburst unnerved me. I decided to give him a wide berth.

The class period during which I passed out the graded papers was not successful. It was chaotic and students only concentrated briefly on what they were supposed to be doing. Their assignment was to get started writing their application letters. This was a writing laboratory session on composing rough drafts. Students had been instructed to bring in lecture notes and an outline from which to compose their letters. Many did bring the required materials, but once they had received their grades they seemed to lack any motivation to do in-class writing. I passed out the graded assignments early because I thought that students would benefit from my comments on their earlier graded assignments in writing letters of application. Students claimed that I "burned them" on their assignments. Well, if that was true, they certainly "burned" me during the remainder of the class. I decided that I would need more guidelines for handling students who wasted time during writing labs. I also decided to hand back graded assignments at the end of the lecture and lab classes to avoid this self-satisfied and apathetic attitude from diminishing the class again.
After this class, I began to reassess my role in the classroom. I could feel myself being pulled toward an authoritarian role reacting to the lack of enthusiasm demonstrated by my students. Even though I realized that I could probably have been a better motivator, I felt I was doing a good job in the classroom. But I knew that the apathetic attitude had to change. One solution to the apathy was discipline. I considered this path. Then I asked myself "What am I actually supposed to be doing here?" Am I teaching literacy or am I supposed to be controlling a group of disgruntled people who were disappointed because somebody had taken away their guaranteed A. "Do I put students into a holding pattern or do I help them create their own educationally relevant environment?" I thought about the class that evening and I decided that I would have to implement some guidelines. I specifically wanted to institute rules and regulations concerning grades to clarify my criteria. I also wanted to create a system to induce students to bring appropriate materials (outlines, rough drafts, and lecture notes) to lab sessions and to use the lab time productively. I planned to go into class and "lay down the law".

On the morning of class, however, I rethought my plan. I kept my concerns in mind, but I left my solutions flexible and largely undefined. I was open to other less tyrannical ideas. The foremost reason in my mind for placing a hold on laying down the law was the possibility of alienating the class. The possibility of alienation troubled me. I remember how torturous the previous term had been when I had succeeded in doing just that. Of course, with the
students' assistance). Alienation had resulted in resentful completion of assignments, poor teaching evaluations (which jeopardized my job), and a potentially stressful classroom atmosphere. I decided that I was going to have to collaborate with the class if this interactive, consultant approach was going to work.

With this notion of collaboration in mind, I went into the class and announced to students recommended that I would like to discuss grades with them. They immediately became attentive. I told them that I would weigh later high grades more heavily than earlier low ones to give them an incentive to improve. I also told the class that I expected most students to get A's or B's if they used lab periods wisely. Next I mentioned the problem that I was having with unprepared students (Although most students did come to labs prepared a fair-sized minority was coming unprepared). I suggested to the class that I might count those students as being absent on those days or I might reduce the final grade on their assignments. But I also stated that since the problem was still relatively confined I would not yet make an official move. I admitted that I expected a few students would probably forget to bring the proper materials to labs. I asked the class's advice, and almost unanimously the students recommended that I should not create stiff guidelines to punish unprepared students at labs yet.

I realized that what I did in class was perhaps more coercive than collaborative (I did hold the power of the grade), but I believed that my willingness to openly discuss course issues with the
class did indicate that I was prepared to negotiate with them regarding class policies.

In the few subsequent classes after this instance of coercive collaboration, I was pleased with the relaxed and quietly friendly manner in which the class communicated. Students seemed to be getting used to the new relaxed and informal atmosphere that I was trying to establish in the class, especially during lab periods. Students were also getting used to handling editing sheets. The second time that the class used them there were no questions at all about them. I used the same system for editing the application letters that I had used for editing the communication letters. I handed out the editing sheets (This time two to each student) and wrote on the board the main editing criteria that students should follow: mechanics (grammar, spelling, and punctuation), organization (arrangement of information and transitions), and general comment (level of interest the writer sparks in the reader). Students had few questions on the editing of letters and when I read over the editing sheets I discovered why they had no questions. A lot of students were just going through the motions of editing and writing down empty-headed responses such as "Yes, very good" or "Thorough and detailed" to fulfill editing requirements. To encourage students to be more thorough and thoughtful in their editing sheets, I began to grade them using a check system. A plain old check (/) indicated an adequate job, a check plus (+) indicated a superior job, and a check minus (-) indicated an inferior job. The minuses of course comprised the empty-headed, one-word or cliché-phrase response.
But even though everything now seemed to be going fairly smoothly, I still felt like an outsider in the class. I was still the teacher and they were still the students. I was trying to learn about them while they learned about me. As I thought about the subject of my course, I realized that even though technical writing was supposed to be the focus of the course, the course was essentially an opportunity for human interaction. But this interaction seemed to have to take place within the prescribed course roles of students and teacher.

After the letter assignments were completed, I decided to introduce the class the concept of writing a research paper. To prepare for the first lecture, I read through the course text and collected pertinent information on the preliminary steps (choosing a topic, perusing sources of information, collecting and recording data) of writing a research paper. I chose to introduce the research paper at this particular point in the course because I wanted students to write all of their reports (proposal, process description, mechanism description, and progress report) from this point in the course on the final research report in mind. Before I discussed particulars of writing the research report with the class, I wanted to explain to students how assignments given in the course could be linked and how this linkage of assignments could be used by students in the preparation of their final research reports. I wanted to encourage each student to write his/her reports all on the same limited topic. I hoped that students would be able to see that all of their reports were actually different points of view of the
same material (e.g., a step-by-step perspective as opposed to a part-by-part perspective). I also hoped that students would be able to revise their reports and use the material from them in the composition of their final research reports.

When I explained this concept of linkage to the class, I used a circular diagram on the blackboard. I wrote the remaining report names on the board in a circular arrangement showing with arrows and explaining that all of these assignments could be linked. The next assignment students would write was a proposal, an offer or a statement of intention to solve a technical problem or to research a particular technical area; after the proposal, students would write a progress report which would be a statement about the amount of progress a proposal writer had made in fulfilling the obligations of his/her proposal. And the final research report would be the complete fulfillment of the proposal. The process description (a step-by-step perspective) and the mechanism description (a part-by-part perspective) did not fit into the linkage scheme as snugly as the other three reports, but they also might be incorporated into the system with a little bit of imagination. Students could choose aspects of their limited topics and write them in part-by-part and step-by-step formats. Occasionally a student would have a subject area that was not conducive to either the mechanism or process description (seldom to both). When this occurred, I would encourage students to choose a separate topic for that single report that did not fit in.
Several students spoke up and expressed agreement with the logic behind the sequencing and linkage of assignments. Others simply remained silent. Others asked questions such as "So, the assignments have to be about something technical." I responded preferably but not necessarily. Another student, Bob Rollins, asked if a topic such as a melting ice cube would be appropriate. I responded "Possibly, if you knew a great deal about physics." Rollins nodded at me and I nodded back.

I explained to students that technical writing really consists of a perspective that one assumes in viewing and explaining a chosen topic. A topic itself may not necessarily be technical, but a writer can make it technical by viewing and describing it in an objective and piecemeal fashion. A technical perspective, I explained is really a part-by-part, step-by-step, point-by-point explanation of a chosen topic. It is writing that follows prescribed guidelines, and it tends to be focused on facts rather than on opinions. I explained that even though technical writing tends to be factual and minimally opinionated, technical writers may draw conclusions from their facts in the form of recommendations and interpretations about the best options for using or understanding the facts. I thought that by explaining technical writing as a perspective, students would be encouraged to choose their own topics and write about them within guidelines prescribed during lectures. I thought that it was important for students to learn appropriate technical writing formulas.
But I also wanted students to interpret their assignments in relation to their chosen subject areas and come to terms of how the technical formats we were learning in class could be realistically useful in expressing information that they believed was important. I required students to see technical writing within broad standard guidelines; that is, that technical writing has several traditional formats and that it is generally based on facts. But within these guidelines, I wanted students to understand that the "technical" in technical writing is a perspective that a writer assumes and because it is a perspective, it is to a certain degree controlled and interpreted by the writer.

After explaining the linkage of assignments to students, I discussed aspects of research such as finding sources of information in the library, and compilation and use of notes and bibliography cards. I had the class take lecture notes on research methods for a quiz. I interspersed lecture information with an impromptu discussion of the logic behind the various aspects of researching: note cards (to paraphrase facts and cite sources), footnotes (to give credit to an author), and bibliography (to cite all sources of information used). The class did not demonstrate very much enthusiasm for researching methods. They remained passive. Some yawned. Others stared blankly. But I hoped that students would keep these methods and the research paper in the backs of their minds as we covered the rest of the reports.

During the next class, I introduced proposal writing. I used the blackboard to explain to students that a proposal was a written
statement that offered to solve a technical problem. I explained that a proposal may be written by company A and it offers to solve company B's problem, whatever it may be. Using arrows, I diagrammed on the board the relationship between companies A and B. I also wrote on the board the six major parts of a proposal: introduction to the problem, discussion of the problem, management plan, cost analysis, company facilities and capabilities, and concluding comments and recommendations. I sense that students saw little relevance in this report format to their own topics and their own writing situation. After all they were students and not companies—practical company problems such as cost analysis, management plan, and company facilities did not really affect their lives.

After class the student who had worn the Richard Nixon mask, Jim Smith, spoke with me and explained his understanding of the assignment. He thought that I would have to give the class more specific examples of proposals. Jim explained that he understood what I was talking about because as an auto mechanic, he had written proposals in the form of job estimates. I took his advice, and during the next class, I explained proposals by giving examples such as writing a contract to rebuild an engine or to build a house. Students were passive to my explanation, but most of them were able to define a proposal on the quiz, so I assumed that they at least understood what a proposal was and its principle parts. The quiz simply required students to define a proposal and specify components of the introduction, body and conclusion. The entire class received A's and B's.
After I had assigned and quizzed on the approach, I tabulated some results on the application letter and data sheet assignments. I discovered two interesting aspects of students writing that I had not before noted. The first aspect was that students seemed to have a very difficult time being specific and detailed about themselves in the context of the assignment. They went through the motions of fulfilling the assignment without playing a realistic persona. For example, they would identify themselves and list pertinent employment and schoolwork, but they could not muster enough enthusiasm to present an intelligent, motivated, interesting personality on paper. The second aspect I noticed was that few students took advantage of the creative, fictional possibilities of the assignment. A few students did. One projected himself into the future and applied for a management position as an engineer. A female student applied for a job at an all-male camp under the guise of "Joe Schmoe." Several students pretended to be Midwestern University (the more prestigious nearby school) graduates. A few applied for dream jobs such as President of Apple Computer Corporation or Chief Design Engineer at Rockwell International. But more than 75% of the class presented themselves without much enthusiasm.

These two observations indicated to me that students might benefit from an assignment with a more concretely defined context. Perhaps teaching writing in a situation-based format that asked students to respond to a real person in a concretely defined set of circumstances (such as to pre-described personnel director for a
specific purpose) would give them more of an opportunity to define themselves more concretely and enthusiastically.

But at the next class, the editing day for proposals, my attention was turned away from the designing of assignments and back to classroom management. My fears about the lab sessions flopping returned when about 25% of the class was absent. However absenteeism did have its benefits. When fewer students attended class, I had greater opportunity to speak and consult with more students. Several students used this lab time to speak with me about their papers. Their questions ranged from the specific use of words and punctuation marks to the reasonableness of their topics and the possibilities of developing topics throughout all of the reports (proposal through final research report). So even though there was a large degree of absenteeism, the interaction between myself and a number of students who were present was beneficial.

After class I spoke with two students, Bill Dempsey and Joe Day, about how they liked the course. They indicated that the class seemed to be going pretty well. Their perception of the absenteeism situation was not as negative as mine. They thought that the editing was useful because it gave them an opportunity to correct errors in their writing prior to submitting it for grading. They thought that the lab sessions were useful and if they were not well-attended then students who missed them would suffer on grades.

My fears about the attendance problem were relieved at the next lab session, the revising session. Most students who did not attend on editing day did attend on revising day. I was not sure if the
word got around that I was upset about the attendance problem and the fear that I would institute some type of enforcement policy motivated students to attend, but I had my suspicions. I was going to ask Jim Smith about it, but I did not want to put him in the position of "ratting" on his friends. Everybody worked on their papers except for Rollins (The student who asked about writing on a melting ice cube). For some reason, he was unmotivated today.

I sensed that I was at this point developing a smooth rapport with students. I was beginning to talk with them on a personal, one-to-one level rather than on a student-teacher hierarchy. I could walk among the class quite relaxed and smile and ask if everything was going all right and students would open up and ask me about specific problems. Also students began to summon me to their desks with a raised hand when they had a problem to discuss.

During this session, one student asked me an interesting question. I told class members that rough drafts and editing sheets had to be submitted along with the final draft because they constituted part of the final grade (I was also concerned about discouraging plagiarism). One student asked "Why?" and added "That's stupid." I explained to him that even though someone might receive an A on a paper without doing editing sheets and writing a rough draft, he/she is detracting from the class by depriving other students from having access to his/her ideas and criticisms. The student who had challenged me nodded half-heartedly in agreement, though I am not sure that he understood what I meant. I think that he interpreted my statement to mean that I was giving him a lot of
"BULL" to make my answer sound good. But I had sincerely meant what I said. My statement revealed to me my own real intentions in setting up an interactive class such as the one I was in the process of establishing. I thought that when students understand the interactive classroom as clearly as I did when I unhesitatingly responded to my student's challenging question, the interaction will be successful.

My answer also led me to question my own expectations about what a class should be. My fear of excessive absences and losing control of the class indicated to me that below my desire to create an interactive class lay my expectations that a class should really be controlled, attentive, and focused on appropriate content material with the teacher in the forefront. Once I realized my own prejudices about classroom behavior, it was easier for me to accept the greater flexibility that an interactive environment required. I decided that "the classroom environment should allow enough freedom for students to stop and go and to express themselves openly." The lack of motivation that I had noted in my first-term students might have been a result of my teacher-centered approach. The student evaluations of my teaching had indicated this weakness in my approach. But I did not realize what my problem was until this point in the subsequent term. I suppose that I needed to have students "tell" me to my face. I decided that a more free and interactive environment would be more conducive to writing, which to me was a complex, stop-and-go process which involved social and mental activities.
As soon as I realized my own built-in expectations about controlled and teacher-centered classroom behavior and decided to change those prejudices to adopt a more interactive approach. That is, an approach that put me in touch with students so that I could understand how their interests and my course content and methods could best match up. As I tried to establish a more interactive approach, the interaction between students and myself became more spontaneous, communicative, and relaxed. This all began when I decided to be of service to my students. When I arrived at the next class, the physics teacher had gone overtime—I decided to give the class a ten-minute break before starting. Proposals were due in class during this period and several students asked me if I had a stapler that they could use to hold together their reports. I decided to use the break time to get the stapler. As I was returning to the office to fetch the stapler, two students (Macheski and Rider) asked me if I would get them editing sheets, since they had missed both the editing and revising sessions of the previous week. I retrieved the editing sheets for them at the same time that I got the stapler. As I was returning with the stapler and editing sheets, a group of my students were eating candy outside the students store. We walked back to class together as a group, almost as if I was one of their peers. I thought that it was important for me to be able to interact with students on their peer level. I thought that this type of interaction would enable me to better understand and communicate with them.
At the next lab session, I noticed that more students were consulting me about problems that they were having with their papers. Tim Hall was concerned about the tense of his paper. We were working on process descriptions and I had mentioned in my lecture (attempting to distinguish a process description from a set of instructions) that a process description is commonly written in the past tense and a set of instructions is commonly written in the present tense. I think that Tim was having problems with tense because my advice was a little misleading. Even though what I taught was accurate, I should have included with equal emphasis that a set of instructions is also written in second person, imperative mood and it includes little or no background information or theoretical information. A process description, on the other hand, is written in the third person, active voice with general background and theoretical information included: it is intended for a reader who wishes to understand a process and a set of instructions is intended for a reader who wishes to actually perform the process. I know that I distinguished the two types of reports more thoroughly than in tense distinctions. But I had apparently emphasized the tense distinctions more heavily than the other areas—at least that is what Tim perceived. When I gave Tim the broader explanation, his problems cleared up.

Alvin Burns was concerned about the mood as well as the tense of his process description. I quickly read over his paper and noticed that he was trying not to use the imperative by using the subjunctive instead. His widespread use of 'shoulds' and 'woulds' made it seem
as if he was trying to compensate for the harshness in the tone of the imperative with the politeness in the tone of subjunctive. I suggested that he change his mood from subjunctive to indicative after I explained to him the factual nature of the indicative and the hypothetical nature of the subjunctive.

Sally Jones' problem was involved with focusing her topic down to a manageable size. She originally wanted to design a new method of laser technology. I advised her to instead focus on one specific aspect of laser technology such as laser use at a rock music concert or in some type of scientific experiment.

Eugene Bishop had a rhetorical problem. His paper was concerned with providing weight-training equipment to an athletic club. He was unsure about what kind of relationship existed between the club's director and the club's members. He was not sure who to address in his process description, which was to be an evaluation of the club's needs for weight-training equipment. He was not sure how he would address to the club's director his plans for evaluating the club's needs for weight-training equipment. I used a pictorial diagram to illustrate the relationship among the writer, the club director, and club members:

Writer

Director
Cost, Maintenance, Longevity

Members
Appropriate equipment
The writer's job, I explained to Eugene, was to write to the director about how to fulfill the club member's needs for weight-training equipment at a reasonable cost with long-lasting and easily maintained equipment.

My consultative relationship with the class continued to improve until I felt comfortable talking to any student in the class about his/her paper. I could not claim that every student felt comfortable with me, but I had the impression that most students enjoyed being in class. Once students had established their proposal topics, doing the subsequent assignments really consisted of choosing aspects or perspectives of those topics that were appropriate for the specifications of the assignment that they were doing. Much of my interaction with students in class consisted of discussing with them what options they had (given their proposal topics) for choosing appropriate content for their assignments. To be effective at doing this, to get students to open up to me, I had to be genuinely interested in them. I had to be attentive to them when they spoke, and I had to make a real effort to listen to what each student said to me whether or not I thought at that time that it was directly related to writing or not. I realized that ultimately any interactions I had with my students were going to be directly related to their writing: I was their audience. So when Macheski and his friends who always inhabited the left-hand corner of the room told me about how his puppy drank some beer and clownishly flopped around, I shared the story with the group, enjoyed it and the brief laugh that made all of us more comfortable in class. And when Miller talked to
me about all of his past jobs and his car problems, I listened and shared some of my own job experiences and car problems with him. I worked hard to develop an ongoing dialogue between students and myself. This dialogical relationship really facilitated communications in class. My hope was that it would also facilitate communication between students and myself on paper when they wrote their assignments.

The rapport that the class and I developed during lectures consisted of a verbal ping pong game. But instead of a ping pong ball, we exchanged mild verbal criticisms of each other. This type of interaction could have become quite hostile and counterproductive to the goal of improving positive interactions. To prevent this from happening both sides, the students and myself, had to know how far we could actually push each other. They made fun of my clothes, my east coast dialect, and the supposedly easy and soft life that we teachers enjoyed. I made fun of their lack of interest in writing, their preoccupation with electronics and computers, and their constant bragging about drinking and partying. We never criticized each other very personally—very personal insults about intelligence, family background, or sensitive personal habits was strictly taboo. Interestingly enough, nobody made any rules to limit our insult game.

During lectures when I had students' attention, I would quickly interject important points about that week's writing assignment. I would quickly write the information on the board and students would copy it knowing that they would be quizzed on it. Then as I asked the class if there were any questions on the material on the board or
as I passed out pertinent examples of style or format, the insult

game would begin. Somebody in the class would yawn out loud and then

somebody else would make a comment about my green pants (My wife had

bought me these bright green pants which I liked very much but which

I stopped wearing to school when the class tried to nickname me Mr.

Greenjeans) then I would make a comment about the "exquisite style"
of the last set of papers until I wrote something else on the board

for students to copy. This verbal ping pong was to an extent
distracting, but it was also a very effective way to keep the class

interacting and attentive during lectures that I must admit would

have been a lot duller without this student input. Lectures on

technical writing can be boring especially to students who did not

consider the topic relevant to their professional aspirations.

Evaluations

One problem that continued to nag me throughout the term was the

boredom that quite a few students felt about technical writing. It

was not the most stimulating subject for them in their curriculum. I
could usually motivate students to get involved in their assignments

and the lecture/lab approach helped students to digest a lot of the

information more easily, especially using the consultant method.

Linking assignments also helped combat boredom by enabling students
to see the logical relationships between the different types of

reports that they were assigned; and linking also encouraged

students to revise earlier assignments and to use them in the

composition of later ones and thus helped cut down on the difficult,
first-draft writing that students would have to do. But even these measures did not eliminate the problem of boredom.

On the Monday after Thanksgiving break, I chose to do a review lecture on writing process descriptions. I had lectured on this during the previous week, but I assumed that the class would need a review of the material after the five-day vacation. When I asked if anybody had any questions about how to write a process description, they all moaned, indicating that the Monday after Thanksgiving was not the best time to teach such a boring topic. But most students were attentive. Several students even asked questions about the format, person, tense, and mood of process descriptions. Rollins (Mr. Melting Ice Cube) dogged me with questions. He had a difficult time distinguishing a process description from a mechanism description. I told him that while a process description did include a certain amount of part-by-part describing, its central focus was on describing the steps involved in some type of operation. To illustrate this, I told him to think of a set of Instructions and I passed out to the class a sheet of Instructions on installing windows. I explained to Rollins and the rest of the class that a process description was like a set of Instructions but it was written in third person, indicative, and past tense. And a process description included like the instructions a description of materials that were involved in the process. They were dying on the vine so I concluded the class about fifteen minutes early and used the remainder of class time to speak with students one on one. Nobody stayed late.
There was little that I could do besides the verbal ping pong that I played with students to jazz up the lectures, but I did try to make the labs more interesting. One method I used to combat boredom there was to return graded work to students at intervals that would stimulate them to be attentive during class periods. On one lab day, the third and final class for that particular week, I noticed that students were busy and really involved in writing in sharp contrast to the very unproductive preceding lab. It seemed to me that part of the explanation for this increased level in enthusiastic work was attributable to my handing back graded papers at the end of the preceding lab. Once they had received a grade, students seemed more motivated to work, either out of a need to improve on a mediocre grade or out of being stimulated at receiving a high one. To take advantage of the positive effect graded work all of a sudden seemed to be having on students, I decided to return papers at the end of the first class of the week. I had previously returned them on the second class of the week. The old system left the first two lab sessions of the week (graded work was always returned during lab weeks because I always received it at the beginning of a lecture week) without any feedback from me. The new system I found encouraged students to be in class on the first lab day to receive their assignments (I always handed them out at the end of the period to minimize the disruption that returning graded papers always seemed to have on a class in progress) and to use the second and third lab days more actively for writing. Returning the graded papers earlier, while it was somewhat of a burden on me, helped students to focus on
specific areas of their writing that needed improvement, and when students had their papers for two entire lab days per week, I was able to consult with them for longer periods of time discussing writing problems.

Another method that I used to jazz up classes did not work as well as returning assignments earlier. I thought that class would be more interesting if I gave exercises to the students with more variety. I passed out a seven-part sentence-revising exercise, and after dividing the class by rows into seven groups, I assigned each group to do one section of exercises. Each set of exercises was supposed to represent a rule of thumb for effective sentence revision (using active voice, reducing unnecessary wording, avoiding nominals). I originally intended that members from each group would read out revisions orally, but the class proved to be so large with students from all of the groups completing assignments at such different intervals that my plan fell through. If I had followed through on my plan, members from one group would have been reciting while members from most other groups and even some of their own were still doing their revisions. I simply collected completed assignments from students when they finished and dismissed the class. Students took the assignment seriously and this amazed me. As I realized that my plan for the class was falling apart students were busily working away learning about revising sentences despite my ineptness.

But I found that the best method for keeping the class interesting and involved was maintaining a close interactive
relationship with my students. By maintaining open lines of communication with them I always knew when class got boring for them because they felt unfettered enough to simply tell me. When these occasions occurred, we could liven up the class by playing our ridicule game or I would sympathize with the class's boredom and lecture on only the most important points. As long as students realized that I understood how they felt and that I took their feelings into consideration they would accept me and what I had to say. No quick-fix gimmicks were as effective at motivating students as mutual understanding.

But we had our disagreements. For example after I returned a set of quizzes, Macheski and Dempsey severely questioned me about answers I had marked as incorrect. Their misunderstanding stemmed from confusing the introduction of a mechanism description (which should be focused on the content of an entire report) with the body of a mechanism description (which is focused on describing each part of the mechanism). I knew that I had stressed these distinctions during lecture so I did not budge on the grade. Instead I stressed how insignificant one quiz grade was in relation to all other grades on papers and other quizzes. Both students admitted eventually that they had confused the two sections of the report.

Another problem that nagged me throughout the course was late papers. Since I understood that writing is a time-consuming process, I was lenient on large papers, reducing scores by only one grade per week of lateness. Students really took advantage of my leniency--late papers floated in all of the time (10-15 per week) and
It became difficult for me to keep track of what papers I was grading at any one time. And I had to keep realigning my thinking to grade different types of reports. Toward the end of the term I was getting a log jam of late papers. I decided not to change my policy during this term but the problems that late papers created taught me a lesson about requiring papers on specific dates in later terms.

At times during this term I felt unsure of myself. During these times I would question my teaching methods wondering if my students were really learning anything. But as I taught, it was difficult for me to make a detached evaluation of this system that I had established. I was preoccupied with the daily routine of class preparation, lecturing, conducting lab sessions, and grading. Christmas break gave me an opportunity to think about the class and the things that we were doing there. But I did not really consciously think about the class very much during the vacation until the day before it was to resume. On that day I made the following judgment about it:

"I think the open atmosphere and in-class advising provides an exceptionally good atmosphere for teaching technical writing. Students enjoy a creative and relaxed environment, and this I really believe fosters their writing skills."

I did not know exactly how I came to this judgment. I simply thought about the class and decided that the atmosphere I had helped create was appropriate for writing. My opinion I believe was related to the relationship that I shared with students in the class. On the first day of class after Christmas break, for example, I had a difficult time getting back into the routine. I misspelled words on the board
and I stumbled through my explanation of progress reports. But the
students loved it. They cracked jokes about it and suggested that we
break early. I found their reaction entertaining and
tension-relieving. I had students take notes on the essentials of
progress reports, and after students left at the end of the hour, I
stood leaning on the podium, in the same way I did when Dean Lands
captured me weeks before, staring out on the empty classroom grateful
that I was not observed by Gontowski that day.

As I stood there I thought that the image one has of an ideal
teacher, always in control, dynamic, and fact-laden, is much
different from a real teacher. "A real teacher," I wrote, "doesn't
ever control a class, he/she only creates an environment and fosters
an attitude and the students take it or leave it from there." I
understood that the content of my class was relatively unimportant to
most of the students who had to take it. But despite that, the class
communicated exceptionally well. I felt as if I had a genuine
relationship with these people.

Part of being a real teacher to me meant being able to admit
making a mistake. Once during the term when I confused the sequence
of assignments and taught the wrong report format, I had to explain
to the class that I was sorry but I had made an error in scheduling.
They simply accepted it. I suppose that it is natural for any
teacher to be apprehensive about admitting an error in class. After
all, the teacher is usually the one who is always telling students
that they have made mistakes. There is something embarrassing about
the criticizer being vulnerable to criticism. But when I was able to
admit mistakes, I found that students just accepted me as a normal human being who was having a bad day. To foster this relationship with students, I would always ask their advice about how to spell and use words whenever I got stuck.

As a real teacher I found myself on one occasion working out a potentially sticky problem with a student. Sid Skefflington admitted that he had plagiarized his mechanism description after I asked him about it (it seemed to me to have been too polished to be written by a student). I explained to Sid that plagiarism was wrong and that I expected him to do another honestly written paper. He agreed to do so. I assumed that Sid did not understand what plagiarism was so I did not punish him for it. He did turn in an honestly written report later on.

But being a real teacher also meant I had to play a double role. I had to be part peer and part authority figure. The peer role I played openly in class. The authority role I played away from class in the planning stages of the course. The authority role I played required me to take into consideration the level of class control, degree of difficulty of assignments, sequencing of assignments to motivate students, severity of grading and other related issues. The authority role I had to play made me always question the lack of control that seemed to exist during laboratory sessions and it made me concerned about absenteeism. Once I was able to relegate the authority role to the planning and evaluative aspects of the course and keep it secondary to the peer role I played in the classroom, I was able to gain a clearer vision of what students in the class were
experiencing. And once I was tuned into students' experiences, I was able to devote my planning to students' best advantage.

I was pleased with the in-class interaction achieved through the lab/lecture sequencing and the consulting method. From perusing students' papers throughout the term, I was satisfied that a majority of students understood the general formats for several different types of reports covered in class. I was also satisfied that most students understood important concepts of technical writing such as using subheadings, active voice, logical paragraphing, and avoiding jargon. But I felt that students could be more specific and detailed in their physical descriptions of technical mechanisms and processes. I understood that part of the problem that students were having with being detailed was attributable to not having a truly defined writing situation to work in. When I gave students assignments, they usually consisted of format requirements (content criteria of the Introduction, body, and conclusion). I expected students to supply their own concrete situations. I think that I expected too much. I decided that students would benefit from having a series of memo-like assignments that concretely defined (provided audience, content, purpose, and format) the writing situation. As the term came to a close, I began to work on a more concretely defined system of assignments.

When I received the second term teaching evaluations from my technical writing students, I was relieved to discover that they had improved dramatically over my first term evaluations. I was apprehensive about them because I understood all too clearly that my
employment at CES really would be jeopardized if they had not improved. The central complaints that my second term students had about my teaching was insufficient discipline in class and some wasted class time. I was not very surprised that students had complaints in these areas. I was concerned about them throughout the term. My first term evaluations had averaged approximately 2.5 out of 5.0 (the lower the number, the better the score). My second term evaluations averaged 1.79 out of 5.0. If a grade was assigned to these numerical scores, the first term evaluations would be in the C range and the second one in the B range.

Specifically, the evaluations fell into two categories: communication between teacher and students and classroom management. Students responses indicated that I was an effective communicator. Students rated me as above average (below 2.0 out of 5.0) in areas such as clearly stating course objectives, knowing when students did not understand, being interested and concerned, being fair and friendly, making grading standards clear to students, and providing patient and understanding help. However, student responses indicated that my classroom management techniques were only slightly above average to average (between 2.0 and 2.5 out of 5.0). Students indicated that I could make better use of class time, be more enthusiastic, hold their attention more consistently in class, and better maintain class discipline. There were a couple of areas that did not fall into these two categories: students gave me a relatively good score for being well-prepared for classes (1.52) and a poorer score for using effective examples in class (2.02). Even
though my overall rating was 1.79, students rated me as only average (2.43) in relation to other past teachers they had. The positive scores that I had received for communicating with students encouraged me because this was the area I had set out to improve in. I understood that classroom management aspects of my teaching needed to improve.

Generally, I was pleased with these evaluations because they indicated that students had found the alternating lab and lecture sequences, the in-class consulting, and the teacher-student collaboration over course issues more meaningful than my first-term students had found the disciplined labs and lectures. I felt as if I had made some progress toward making the course an interactive experience.
CHAPTER IV
TEACHING THE THIRD TERM

Plans

I prepared for my third term of teaching with my second term evaluations in mind. My impulse was to maintain virtually the same system that I used during the second term except for two important changes: one, I would impose more discipline on the class during in-class lab sessions in the form of more detailed editing sheets and writing outlines. These would be required of each student and enforced with a grade. During the preceding term I had used blank editing sheets and I gave students three rather abstract criteria to guide students in their editing. And for in-class writing sessions I had not required detailed outlines such as the ones provided in their text. I decided that wasted time during writing labs was attributable to a lack of structure in assigned lab activities. I hoped to improve the discipline problem with more structured editing sheets and outlines. In addition I intended to also give students more specific requirements in the form and content of rough drafts.

The second improvement I hoped to make in the curriculum was developing assignments that provided students with more concrete writing situations. From my consultations with students during the previous terms, I perceived that they had a difficult time writing
reports when no concrete situation existed to make the report functional. I recalled how Jim Smith had explained to me that he understood proposals because he had actually written them in real situations, but other students in the class did not understand proposals because they had no practical use for them and no experience with them. To compensate for this absence of need and experience, I had to make my lecture on proposals extremely concrete and specific to provide students with a fictional experience that would enable them to see the practical usefulness of proposals. I decided that a similar approach was essential to teaching all the reports. I was becoming convinced that my own lack of specifics in assignments and lectures was the culprit that lay behind many of my own complaints about the absence of specifics in my students' writings. During previous terms, I had only really provided students with report and letter structures. I would outline introduction, body, and conclusion criteria for the various writing assignments on the blackboard and I would lecture to the class explaining each bit of criteria (e.g., The introduction should contain statements of purpose, scope, and limitations of a topic and a background section). But I did not provide students with a realistic context in which to write. During lectures, I had discussed hypothetical business situations such as problems that face the engineer who has to explain a technical device, process, or theory to a non-technical business manager. During these occasions, I stressed the importance of explaining technical information in detail and in plain English, especially for an uninformed audience. But I left specifics about
the writing situation to each student's imagination. I purposely did this because I assumed that each student would best be able to conjure up contextual material such as audience and purpose that would be most relevant to his/her needs. But the lack of detail in writing assignments indicated to me that many students did not bother to spend much time considering the context. In general, they took the structure I provided in class and filled in information in the appropriate places without considering audience or the larger surrounding writing situation. The result of this well-intentioned yet contextless effort was writing that seemed to lack direction. In their papers students seemed to be addressing the assignment itself instead of an audience who really wanted and needed to understand the facts that were being explained. In many of the papers, the personality of the writer seemed to be absent along with any motivation to be detailed and explanatory. I thought that if I could provide students with a lifelike audience and a real context that placed constraints, requirements, and responsibilities on them as writers, they would be more motivated to react to the writing situation with detailed and focused writing. I also thought that this contextual approach would help me to make lectures more concrete as I addressed specific needs of the reader and discussed various ways to fulfill those needs. I also hoped to make labs more structured because I would be able to pass out editing sheets and outlines tailored to the reader's needs in each assignment. I thought that a series of memos between students and myself outlining the context of each assignment would be an appropriate method for me
to accomplish my goal. I never got around to making all of these alterations in the course during the third term. Instead I went off in a different direction. I decided to change the sequence of assignments to make them more relevant to students' life experiences.

My change in direction occurred as a result of a meeting with my dissertation committee to evaluate my dissertation proposal. As a result of this meeting, I decided that my proposal lacked a detailed guiding theoretical perspective. I began to re-evaluate my approach to the discipline of writing by going back to some of the learning and social theories I had studied during graduate school. As I was reading through some of these theories, I experienced a couple of days of painful rebirth. As I re-read the Soviet learning theories of Vygotsky, Luria, and Leontiev, I decided that the learning system that I planned to establish was in some respects too focused on the end product of writing, the text, and not focused enough on the process of writing experienced by individual students. Although, the consulting, in-class labs, and collaboration enabled students to exchange ideas and develop limited historical relationships in the class, the focus of all of this activity was on the text itself and not on the writer. At the same time that I was reading through these learning theories, I was rereading Hyme's *Reinventing Anthropology*. As I read the introduction of this work, I began to ask myself, almost it seemed at Hyme's urging, why I was doing this research in the first place. Why was I bothering to do a qualitative study of teaching technical writing? The selfish aspect of my reasoning on doing this study was that technical writing was convenient (because I
had taught it before) and it was marketable (because technical writing teachers are somewhat in demand these days.) But there was another dimension to my study. I wanted to improve the teaching of writing; I wanted to make it more relevant to students; I wanted to encourage students to write understandable prose for a concerned reader; and, in general, I wanted to make technical writing more humanistic—more preoccupied with communicating information between human beings. The only way that I would know whether or not I had accomplished these goals would be from students' comments and questions in class, their writing products, and their teacher evaluations. If students were concerned with communicating with their reader, they would ask questions such as "Do you think that my reader will understand this?" and request editing help such as "How can I help the writer to clarify the content of this report?" I would expect students' writings to be detailed, indicating real effort to clearly communicate their ideas. And I would expect teacher evaluations to be positive about the communication aspects of the course.

After considering my role as a teacher and researcher, the action research perspective became even more relevant to me. Corey's and Shumsky's notion of practitioner/researchers evaluating themselves and trying to improve their own teaching and curricula made sense to me in conjunction with Vygotsky's theory of the social nature of writing and Hyme's encouragement to use qualitative research as a means for reform and improvement.
As I planned for the third term refreshed with theory and perspective, I decided that I would need a series of assignments that would initially enable student writers to develop a sense of identity as writers. Vygotsky, Leontiev, and Luria all stress the importance of the language user's self awareness—the relevance of language to the user depends upon his/her self-image in the performance of that role. And this self-image is based on all of the times that the individual has used language before. The initial writing assignment should then be autobiographical. And all subsequent assignments would be built upon the autobiographical base established in the first one. But I wanted students to write about more than just themselves. I wanted them to be able to communicate information about their surroundings, about the things in the world that affected their lives. I decided that each assignment should become less focused on the self and more directed toward communicating information about other important topics. At this point my ideas for the curriculum were vague so I consulted a number of texts in an attempt to concretize my plans. I decided to adopt James Moffett's writing assignment sequence as outlined in *Active Voice*. The sequence that I had used during the previous term consisted of types of reports (communication letter, proposal, progress report, process and mechanism descriptions). Moffett's system consisted of changing relationships between writer and audience: autobiography, eyewitness memoir, biography, chronicle, direction, narration, thematic collection of incidents, and research and theory. I was attracted to Moffett's model because the assignments constantly called upon the
writer to evaluate and interpret his/her environment and to be factual, an important requisite of technical writing. In terms of the theory that I was dealing with, Moffett's schema made sense. And I believed that I would be able to readily adapt it to technical writing. So I decided to use it. On my course syllabus I wrote the following:

This is a course in technical and/or report writing. It is a follow up to the earlier grammar course that you should have taken. In this course we will not focus on English grammar, but we may have to touch upon it now and then depending upon how grammatical or ungrammatical your writing is. In this course we will focus on helping each of you to develop your own writing style for composing technical reports such as process and mechanism description proposals and progress reports, and the like. All of the papers you write in this course should be written about your own experience in life and how those life experiences have involved technology and working with technical objects, ideas and things.

But even if I had students write about their own experiences, I needed a well-defined audience for them to write to. I remembered how I had criticized my students' lack of motivation during the previous term: I had attributed this problem to the absence of a well-defined audience to whom they might be motivated to write.

To help students to develop a real sense of audience, I had two different classes exchange and edit each other's papers. By doing this I hoped to encourage students to write for a real flesh-and-blood audience instead of a fictional one that might tend to be abstract and ill-defined. Each of these two classes was in a different program at the school. One class was a sixth term Computer Science class. Since its inception, the Computer Science program at CES had experienced a few difficulties, especially with faculty.
Because of the high market demand for Computer Science professionals, CES had experienced some difficulty securing long-term, knowledgeable faculty for the program. Since computer science is a new field, few if any programs in Computer Science education are in existence, so most faculty hired to teach programming and software were not professional educators. Students in the program felt they had been "burned" by the high turnover rate in the faculty and the "shoddy" as they put it, instruction they received during the very early days of the program. The program had since stabilized; but the sixth term class that I taught during the third term of my teaching were the first group to come through the program. They saw themselves as "guinea pigs" and they resented it.

The other technical writing class was in the BEET Program. Since the BEET Program had been established at the school for ten years and had been market tested (there was always a high demand for BEET graduates), its faculty had become quite stable. BEET students did not experience the same fluctuations in their program that the Computer Science students had experienced in theirs. They complained, as did most students, that the school was money-hungry, and that instructors had it easy, but they had faith in their program. They knew that others who had gone before them had been rewarded with good jobs after graduation. The Computer Science Program had not produced any graduates. Computer Science students could not yet have faith in their program because it was as yet completely untested.
Before I had time to do any more planning, the term was upon me and the teaching had to begin.

**Lessons**

I became acutely aware of the tension that existed in the Computer Science class when I taught during the first week of the term. When I introduced the course to students, they seemed interested but nervous. They asked me questions about testing ("Will we have quizzes and a final?"), the length of assignments ("How long do papers have to be?"), attendance ("Do we always have to come to class?"), and grading ("Are you a tough grader?"). I left most of these questions open, preferring not to give definite answers until I had a better sense of the class. I told the Computer Science students that I was most interested in helping them to develop a writing style. By style, I told them that I meant a unique way that each person writes by infusing his/her own personality into writing to choose words and topics most preferable. I said that I believed technical writing could be interesting, poignant, and entertaining. I concluded the class by introducing the first assignment: an autobiographical description of an incident related in some way to a technical topic that interested them. During the second class, I tried to introduce the concept of structure in report writing by discussing with the class various aspects of purchasing a computer. I thought that Computer Science students would find such a discussion interesting and would have a lot of input to offer. I made a list on the board as students volunteered information about purchasing a
computer in response to my question: "What criteria should you consider in buying a computer?" The following criteria were elicited: costs, uses, availability, durability, and maintenance. We discussed items on the list and I mentioned that they seemed to refer more to a computer itself rather than to the act of purchasing a computer. Students agreed. We revised the list so that its items referred to the act of buying rather than to computers themselves in general. The new list consisted of the following items: motivations for the purchase, preparation for the purchase, the purchase, and uses after the purchase. I mentioned to students that subtopics could be developed within each of the four areas of computer purchase that we had developed. For example 'motivations for the purchase' could be broken down into the specific needs the purchaser would have for a computer. The other areas could be broken down similarly. I suggested that students could structure their autobiographical papers similarly, and that they should be careful to avoid writing about the object of their interests and focus on writing about the experience itself, including their own feelings.

But the slot-filling approach of this exercise bothered me because I really wanted the writing to result from an attitude of excitement as an expression of personal power and realization rather than from a mechanical and drudgish filling of information slots. Yet at the same time I knew that structured thinking or at least the ability to structure one's thinking was an important starting point for organizing one's ideas for writing. Without logical structure, the writer could never communicate to an audience effectively.
After my first meeting with the Computer Science class, I prepared for my first meeting with the BEET technical writing class. I was apprehensive about maintaining discipline in the writing labs of the BEET class because of my experiences during the previous term. I knew that the class would be large and would require discipline. But I also understood that I would have to play the student evaluation game with the class to a certain extent. I wanted to tighten up on the wasted time during writing labs that had hurt my evaluations and bothered me throughout the last term. And I was kind of disappointed with the quality of the papers I had received from last term's students. My old dissatisfaction with the degree of detailed explanation persisted; I had the impression that many students did the minimum amount of work; they seemed to have gone through the motions and included appropriate sections in their reports, but they had done it without much enthusiasm. Perhaps I was expecting too much. In any case, I hoped that the new sequence beginning with autobiography would encourage students to be more enthusiastically involved with their writing. However, I was also concerned about how well students would accept this new system.

When I visited the BEET class, I was pleasantly surprised. Students were attentive and well-behaved. I spoke with them about my own ideas on writing, the importance of developing a sense of one's self as a writer and the process of editing and revising rough drafts. I also spoke of the writer-message-reader triangle, stressing that a writer should know him/herself, the content of the
message, and the audience to do a really thorough job of communicating.

When these students asked me questions I noticed that they constantly focused on what I expected from them in writing assignments. They perceived everything to be filtered through me: grades, assignments, and writing evaluations. At the time I realized this (Yet it seems obvious that they would do just that.), I immediately began to make value judgments about it, finally deciding that I was not sure if the students' teacher-centered awareness was "good, bad or indifferent." After some more reflection, I decided that it was simply perceptive. Students understood the game that was generally played in the classroom, and they of course knew that the teacher had the final word in virtually everything. When I gave the BEET students their first assignment, they accepted it without complaint or comment.

The first week of classes was keyed on getting students in both classes through the rough draft of the initial assignment and introducing to them the new editing system. I also had to learn how to schedule the exchange of papers between the two classes. I intended to have the classes exchange rough drafts for editing. I had planned to collect the Computer Science students' rough drafts at the beginning of the first class of the second week. But when I arrived I discovered that few students in the class had completed their rough drafts. I was not completely disappointed at this development because I was not quite sure what to do during this first class period. I did not want to begin a new assignment until
students had completed the autobiographies, and I wanted them to have some feedback before they began to write their next paper. The class decided what to do for me. By mutual consent, we spent the first period completing the rough draft. It was a pretty opened class. Several students left class to consult dictionaries in the library. One student whose rough draft was completed went to the FA room for a smoke. As students completed their rough drafts, they left the class. Throughout this session I consulted with individual students about their papers. When they needed help, students would indicate it making contorted facial expressions, raising hands, or gasping in exasperation. By the end of this class period all rough drafts were completed.

For the second period, we had to change rooms. We moved from cozy room 12, which was just the right size for 26 students, to room 4, a larger and less hospitable place. This second period proved to be quite a confrontation. I used the second class period to demonstrate the differences between concrete and abstract writing. I wanted to stress to students the importance of including concrete details in what they wrote. What I perceived to be a lack of concrete specifics in the writing of my students during earlier terms had really bothered me. I wanted to try and prevent that from happening again.

Unfortunately, I had not planned my lesson very carefully. I began the class by writing the words "concrete" and "abstract" on the blackboard as separate headings. I asked students to give me some characteristics of each type of writing. This approach generated
some muttering about what I meant by concrete and abstract in the first place. I decided to try a different tactic. I defined the word "abstract" as a process of taking knowledge out of its context and "concretizing" as a process of placing knowledge within a defined context. My lack of preparation prevented me from clarifying these concepts as lucidly as I wanted to.

I decided to illustrate the distinctions between abstract and concrete by using a specific example. I tried to get students to define a computer. My choice of topic proved to be a poor one because these students felt quite superior over me in their knowledge of computers, and I believe they resented me trying to have them define one. I discovered all of this as the class progressed. As different students offered different definitions, I wrote the information on the board; but the class could not reach a consensus on the information that was volunteered. Quite a few students became frustrated and aggravated. Several simply gave up by responding "What's the difference, anyway?" I tried to encourage them by coaching them with the fact that they should be able to define a computer because they had worked on and studied them for five terms. As I persisted, one student, Earl Smith, the one who had gone to the FA room for a smoke during the earlier period, became extremely agitated. He lost his temper and stormed out of the room. After he left the class chuckled and loosened up. We did succeed in defining a computer:

"A computer is a device that accepts data and processes (adds, subtracts, sequences, etc...) data into potentially useful information."
Shortly after the class had arrived at this definition, Smith returned boastfully with a textbook definition of a computer that was virtually identical to the definition that the class had generated.

Through discussion, the class decided that the key terms in our definition were data (unorganized numbers or words), processes (what a computer does with data), and information (the processed data in a useable form). I wrote our definition on the "abstract" side of the board and asked students if they believed it was adequate enough so that anyone who read it would be able to fully understand a computer. The consensus of the class was "NO." I suggested that a reader would also need to know some details about specific computers operating in the specific context they were designed to operate in. I suggested to students that a clear way to write about computers might be to first abstractly define a computer and second to then follow the definition with more specific and detailed illustrations of the operations of several standard different types of computers (micro, mini, and mainframe). I dismissed the class after that.

The BEET class was not as hostile as the Computer Science class.

I allowed the BEET students to complete rough drafts during the first class period, and I excused from the class those students who had already completed their drafts. As I consulted with students who continued to write, I noted some of the different types of questions they asked. The most frequent question was simply "Is this alright?" The asker would hand me his/her paper and have me read a sentence or paragraph hoping to gain my approval. Others asked me whether or not their papers contained adequate technical information. A few
students spoke with me about altering their original topics because they were discovering that to explain fully their topics, they would have to write virtually a book.

I noticed how uncomfortable I felt during these consulting sessions when I had very little to do. There were always times when nobody had any questions and all the students were writing. During these "dead" times I usually walked around the room being available for students. If the class remained silent for more than seven or ten minutes, I would begin to do some busy work at the front of the room (grading or class preparation). I tried to be available to students as often as possible. I only occupied myself with paperwork during long periods of inactivity.

I collected the autobiographical reports from the BEET students at the start of the second period. Then I began to discuss with the class some of the differences between concrete and abstract writing. I had learned the importance of carefully illustrating these concepts from my discussion with the Computer Science students. But instead of asking the BEET students to define a computer, I asked them to define something more directly related to their own line of work. I asked them to give me a definition of an electronic signal. The BEET students at first responded with specific examples of the uses and functions of electronic signals. But I pressed them on giving me a coherent definition. We agreed on the following:

"A signal is a voltage or current that may be construed as an intended message."

I then asked the class what additional information an uninformed
reader would need to concretely understand this abstract concept "electronic signal?" The discussion became quite sketchy as students discussed in a very in-depth manner, the theory behind the electronic signals. I intervened at this point and suggested that a radio could be used as a very simple and effective illustration of how an electronic signal works. The radio receives and transmits an electromagnetic signal and produces a sound message. I suggested that a very simple method for illustrating the very abstract concept of electronic signals would be by using the concrete example of a radio. The class rather passively accepted my advice. It was difficult for me to know if as a group they really grasped the importance of using concrete illustrations to most effectively explain abstract concepts.

After I had collected the autobiographical papers, I began using the editing system that I had planned. When I next met with the Computer Science students, I passed out the BEET papers to them for editing. I gave students blank editing sheets (except for a line at the top for the editor's and writer's name and a thin margin to the left for identifying comments and a wide margin to the right for the comments themselves) and suggested that they comment on the papers in three areas:

Offer praise for strong points.
Ask for needed clarification.
Suggest areas that require refinement in wording and explanation.

As I consulted with students during editing I was surprised at how negative their editing comments tended to be. A number of students
commented on the poor quality of the writing and how amazed they were to discover students at such an advanced stage in their education writing at such an immature level. They asked questions such as "What term are these kids in, anyway?" and comments such as "I can't believe how bad this is!" As I listened to these comments, it occurred to me that students were possibly repeating the same kinds of comments that teachers had made about papers they and their peers had submitted during English classes they had previously taken. I decided at that time to speak with students about the negative attitude they had toward peer's writing. I also noticed that many comments students made tended to be very vague, so that when authors received them, they would be confused and unsure of what the editors meant. I made a mental note to encourage students to be more thorough and specific in their editorial comments. A minority of students did not put much effort into the editing. They tended to put down mindless comments such as "Looks OK" or "Everything's Fine." Whenever I saw such comments, I always told students that such a cavalier attitude was not acceptable and they would have to be more detailed and specific (Although, I did not use the word "cavalier").

Because of the great differences in size between the two classes, the BEET students being twice as numerous as the Computer Science students edited each Computer Science student's paper twice, while each Computer Science student edited two BEET papers. I decided to monitor some of the differences in the editing comments in the two classes. I suspected that BEET students would do a far more thorough job of editing than Computer Science students because they would have
a chance to look at each Computer Science paper twice and their attitude toward the whole process seemed to be less cynical.

Class time during the editing sessions in both classes was loosely controlled. By loosely controlled, I mean that I walked around the class consulting with students and encouraging inactive and "goofing off" students to concentrate on their work. To encourage students who were not participating in the editing, I asked, "How are you doing?" and then I proceeded to look at the paper that they were editing and to make suggestions about how they might continue to edit along a more fruitful vein. I would also point out to students areas in papers that had been overlooked but which seemed to require commenting. These areas included grammar errors, under-explained ideas, logical flaws in organization, and poor or no use of subheadings. Classes' editings differed. During the Computer Science class, I had students edit two BEET papers each and then I would return their own edited themes for class discussion. In the BEET class I would simply return to students their edited themes (BEET students had already edited Computer Science papers earlier in the week.) As students edited papers, I would consult with them over problems that they perceived with the writing. A lot of students were worried about grammar and punctuation errors because they seemed to think they were supposed to be. A number of students got quite picky about diction and syntax. As I consulted with them on these problems, I would encourage them to correct those errors but to also look at how well the paper communicated the information it was supposed to be communicating. Discipline in the editing labs was not
a problem; students got involved in the editing and sometimes formed little groups to discuss editing comments they were making.

In both classes problems arose over interpreting and disagreeing with editing comments. The most frequent disagreements writers had with editors concerned judgments about how clearly ideas were expressed: insufficient details, unclear wording, poor explanation. There were also a number of disagreements over awkward writing style. The most frequent confusion writers experienced about editors comments involved idiosyncratic expressions (e.g., "Sounds like you're describing a cat.") and vague comments (e.g., "Bad Sentence" or "Poor Wording"). I decided that I could head off some of this miscommunication by giving students a more specific commenting format to follow on their editing sheets.

I told students to consider the editing comments in revising their papers; but I recommended that they do most of the revising using their own judgment. I did not want students to totally accept or reject the editorial comments. I wanted writers to consider the comments, to evaluate their validity, and use them to their best advantage.

After the first editing exchange, I thought that the built-in weakness of this editing system was the possibility that the editing would become so routinized that students would respond to each others papers rotely. If this should happen, the editing would become a process of putting information mindlessly into the appropriate slots on the editing sheet instead of authentically evaluating and commenting on writing. Grading editing sheets would have prevented
this from happening, at least to a certain extent. But grading them would have also placed a huge extra workload on me; and it might only accomplish getting students to write out a lot of verbage to appease me. I considered another avenue. Students had asked me earlier if they would be editing the same writer's papers throughout the term or if they would change writers each time that they edited. When they asked me about it, I had not decided which way to structure the editing or whether or not to structure it at all with respect to cultivating a relationship between readers/editors and writers. But when I considered the editor-writer relationship in conjunction with the problem of keeping editing comments legitimate, I though that I might solve both the problems by encouraging students to edit the same writer's papers week after week. If students cultivated relationships with each other as writers and readers, I believed that they would probably respond to each other honestly and in a helpful way. And indeed this did occur. When I passed out papers for editing students and groups would request certain students' papers and would discuss as they read them over the progress and problems their writers were experiencing. Some editors would begin to write little notes to their writers denigrating this whole exercise of editing, but at the same time they would explain quite clearly to their writers what they did and did not like about their work. Many of the Computer Science editors wrote to their writers in a letter format with "Dear ______" salutations and used friendly conversational prose.
Dear ________,

Your report is well-written and indeed understandable by both technical and non-technical people. I won't question the accuracy of your report but the concept seems to be of road re-building and not what most of us think of as road repair. At that point the cost factors in your report don't make sense to me and need to be expounded more. Your report needs an outline and table of content and definitely needs a conclusion separate from the body of the report. Other than that you have a fine report. One other thing! You overuse the word problem in the first part of your report. As a matter of fact, you beat it to death. No other comments.

Signed.

Dear ________,

What can I say? It's really great how you have taught your dog to write. I think, though, that you should maybe write papers of this nature yourself or at least teach Fido to type.

Your topic could have been more boring, but not much. The paper did have all the necessary parts, I think.

You need to reword several sentences. Your selling was good where I could read the words. I strongly suggest that you type the final draft.

Sincerely Confused

Signed.

To: __________
From: __________
Subject: Sex Education Curriculum for the Columbus School System

You have a good cover letter. The first paragraph is worded poorly. For example, the sentence concerning the burden of teaching that is being placed on the parents does not state the idea clearly. The abstract's second paragraph is a good argument for your position.

Under Introduction, in the section called Scope, I thought the proposal was for the parents and teachers, not the students. In the paper you refer to child or children when you mean teenagers or adolescents. You mention trips to abortion clinics, VD clinics, ETC. What is ETC? Whorehouses? Go into more detail about the teachers'
"certain qualifications." Your conclusion is excellent. I believe that you should give more detail about the material in the books and films.

Dear ______,

You have a real good introduction. There is one part that I don't understand. I feel you should be a little more specific in the following sentence: "Blistering can be eliminated by using lower amounts of filler when mixing a witches brew." What is a witches brew?

Overall I think it is a good paper. I didn't notice any spelling or grammar errors.

In your index you mention something about illustrations. I didn't see any.

Signed.

But this rapport between writers and editors did not occur until several sets of papers were exchanged. In fact, at first the hostility that editors seemed to have for the poor and immature quality of the writers' work (At first both classes reacted negatively in the same way to each others writing) that was expressed in their oral comments in class came across in written comments as well. Both classes were rudely critical of each others' writing, and for a while, many writers who were "shot down" or brutalized by editorial comments were putting p.s.'s at the end of their rough drafts warning their editors not "to tell" them that their writing was undetailed and awkward and "Grow up yourself!" The crudeness of these p.s. statements especially between male students is unprintable. In the following example, a Computer Information student criticizes a BEET student:
This paper is not up to Computer Science standards. Your paper of progress was quite vague—it lacks the specifics involved and the actual time element of completion (Dates).

P.S. You need to re-read your proposal to get those specifics.

The BEET student reacted to this criticism with a note on the bottom of the editing sheet: "Bleep' Computer Science standards, Computer Science has been giving us some very poor examples of writing ability." In a similar edition, a Computer Science student again criticizes a BEET student: "The Introduction is too vague and the sentence structure is lacking." Above this comment, the student writer wrote "Bull 'Bleep'-ing 'Bleep'" and below the comment, he criticized his editor for misnaming him and for neglecting to put specific criticisms on his written text: "If you'd read the cover sheet you'd know that my name is _______ _______ and not _______ _______" and "If you're going to edit other papers, at least change what you're going to write." I never forbade anyone to make certain comments and I never censored any words that students chose to use. Instead I tried to talk with students about disagreements they had with editor's comments. And whenever possible, I brought up disagreements between editors and writers for the class to comment upon.

On one such occasion, a student, Theresa Smith, disagreed with comments that a BEET student had made about her writing. She
rejected the editor's comment that she should be more descriptive. I read her paper to the class and we discussed what the editor had written in relation to what Theresa had written. I tended to agree with about half of the editor's comments. The class tended to defend Theresa against the editing criticisms. But by discussing the disagreements, I think that I was able to convince Theresa of the importance of at least considering editorial comments even if she did disagree with them. And this is what I preached to both classes: I beseeched them not to totally reject an editor's comments and not to totally accept them, but rather, to carefully evaluate them. I read two other papers to the class in the same way. I read what the writer had written and what the editor had commented, and we discussed the validity of the editor's assertions. I found that reading papers and editing comments was an effective teaching method because it got the class into a discussion about the writer's expectations of audience. Part of the disagreements that writers and editors experienced was caused by the writers expectations: both classes admitted that when they wrote they assumed that their reader knew as much about their topic as they did. I was surprised to hear this because I had stressed throughout the term that the reader should be considered to be uninformed but intelligent.

This assumption that the reader was as informed as the writer seemed to be almost a natural assumption that students automatically made when they wrote for a poorly defined audience. Apparently students created an audience in their own image for lack of any other. When I realized this, I immediately understood that for most
students the initial autobiographical reports were examples of make-believe writing, writing to fulfill an assignment, writing to conform to a format or to appease a teacher. The only real writing that the students were doing was the writing of editing comments. Editors were provided with an audience in the form of reports that they read from specific people and they made their comments, if they were sincere, in an attempt to communicate with another human being, not simply to fulfill an assignment. It is true that editing was a requirement and consisted of a format, but as writers and editors developed relationships with each other throughout the term, the letters and notes that they exchanged turned out to be real attempts at communication, real, honest, contextualized and concrete human expression. The editing comments were not extensive and they were not polished, but they were authentic.

Before I became fully aware of this realization about the lack of validity of the report writing in comparison to the editing writing, I did two things. I assigned the second report and I developed a grading system. I had originally intended to follow the sequence of assignments as designated in Moffett's *Active Voice*. But on the day that I was scheduled to give the second assignment in the Computer Science class, I neglected to bring Moffett's book with me. I decided to improvise by considering the nature of his approach. It seemed to me to be moving from communicating the phenomenology of experience to communicating concrete experiences to communicating abstract experiences. I concluded that a logical move out of the autobiographical mode and into a more concrete description would be
biography. I also recalled that Moffett had included biography in his sequence of assignments soon after autobiography. I decided to assign a biographical report as the next assignment.

I used the same basic criteria for this assignment as I had used for the first one, but instead of having students write about their own experiences with a technical subject, I asked them to write about a person who had influenced them to learn about some aspect of technology. This assignment seemed to me to be a logical extension of the first one because it was still focused on students' personal lives and yet at the same time it required students to write about someone other than themselves. The intrusive "I" of the writer moved away from the self and began to focus on the world outside.

After I gave students the biography assignment, I encouraged them to get started on it by brainstorming. I had them compose a list of ten people who they might be able to write about. Then I asked that they carefully consider each name on the list as a possible topic person. I asked them to think about what experiences each person they had listed had involved them in and to consider whether or not those experiences would be interesting for them to write about. Some students chose a topic person quite soon. I advised them to get started making an outline. The other students who took more time to think about the influential people in their past pondered over the lists of names that they had made up. As I consulted with these students offering suggestions about who they might write on (teacher, employer, sibling, friend), I noticed how differently individuals approached the problem of getting started. Some students would
Immediately compose a list of ten names and consider all ten at once; some would write one name at a time and thoroughly consider it before writing down another name; a number of students immediately knew who they would write about. When time ran out I encouraged students to work on their papers for the next class, and I dismissed them.

Before I had dismissed the Computer Science students, I collected their autobiography papers. They had been edited and revised. Now I was faced with the prospect of grading them. I had a general idea about what I wanted in students' writings. I wanted detailed explanation. I had stressed the importance of clearly communicating with the reader during in-class consultations. I discovered that the in-class consulting gave me a sense of who these papers belonged to. I was not just grading papers, I was grading people with whom I had spoken trying to help in class. The attitude that I assumed as I looked forward to grading the papers was a helpful attitude. I wanted to help students to improve their writing. And to specify my general notion about the importance of being detailed in writing, I formed grading criteria consistent with the interactive approach I was using in other areas of the course. I wanted to grade students individually in three areas: effort, creativity, and the use of conventional forms of grammar and report formats. I understood that except for, perhaps, the conventional forms, the grades that I assigned to students' papers would be quite subjective. But I also had to consider that grading writing and writing itself is also subjective. I could think of no truly objective way to truly credit students for their work. I decided on the following criteria:
A  The student demonstrates a high degree of effort, uses an effective writing style, and correctly uses conventional forms.

B  The student demonstrates visible effort, uses an effective writing style, and has slight or few problems with conventional forms.

C  The student demonstrates minimum effort, uses a fairly effective writing style, and requires correction in use of conventional form.

D  The student demonstrates little effort, uses an ineffective writing style, and uses poorly conventional forms.

E  No effort, non-communicative style, poor grammar.

I found that most students fell into the B-range of my grading criteria. I did not take notes on my evaluation of student papers because immediately after I set up this scheme, I went through an intense period of re-evaluation and introspection.

The day after I devised this grading system, I met with the BEET class for a double session. I used the same method that I had used in the Computer Science class to discuss with the students their papers and editing comments. I assigned the biographical paper. But at this point my notes became very sketchy. I wrote the following three passages:

Reading the assignment was a good idea. The students seemed to enjoy the class and I got some feedback from them in regards to grades. [I had described to them the grading system.] The second period was kind of draggy. I'm going to have to impose more control on in-class writing. The same goes for Computer Science. I need more specific controls on them--Computer Science drunk [I was referring to one class when about half of the students came in half-drunk.]

Technical writing today was poorly attended, and I quickly went over the process of composing a contrast/comparison paper (A/B) and spent the remainder of the time having
students compose in class. [I had taught comparison/contrast just to provide students with what I thought was a valuable writing tool.]

Something else on my mind. I need a different environment to write about it.

Two weeks later I wrote the following passage:

I haven't written notes for almost two weeks and I am not quite sure why. I think that I was going through a period of re-evaluating the entire research project and especially my own role in it. I began to look upon the project at a more personal level and I had a turn of heart toward my students and my daily routine. I began not to like what I was doing very much. I began to re-evaluate my activities and I had some grave doubts about the value of my endeavors. I had to ask myself if I was really helping students to define themselves and their environment in writing. After much thought I really do believe that I am doing this, that I am achieving some degree of success in creating a community of writers. I will address my reasons for believing this later, but first, I want to write about why I was so depressed last week. Part of the reason for my depression was that I had a load of grading to do for my two classes. I graded 53 papers in the BEEB class and 26 in the Computer Science class. My original intention in grading these papers was to do a really thorough and careful job on them. I wanted to read each paper with care and to grade it with a fair degree of attention to details. I wanted to empathize with what seemed to be the student's intentions. I wanted to critically and with feeling understand the ideas expressed in these papers. But there were so many papers and so little time to grade them, that I could not do as thorough a job as I had originally intended. But I was careful to mention in my comments positive aspects of each student's writing. And I was careful to specify all wording and mechanical problems that I noticed. I concluded my comments with general recommendations for improving the papers overall.

The next day I wrote this passage:

I was interrupted during my note writing and I am now trying to resume my writing. But I can't just recall where and when I broke off. I can't even think of how and why I had to stop writing. I know the train of thought I was on when I began. I was trying to explain why I had stopped taking notes for two weeks and I had arrived at the conclusion that
I had stopped notetaking because as I became more introspective about my teaching, I began to dislike what I was doing. I wasn't sure that my teaching was really aiding the growth of my students. I for a while felt that I was simply standardizing them and processing them through the bureaucratic and profit-making system at CES.

But with even more introspection, I changed my mind. I decided that I was contributing to students' growth as writers. I realized that my contributions are limited due to the organization that I work within. There are certain bureaucratic procedures that affect my students' relationships with me. I take attendance, demand obedience to a certain degree, levy grades—all of these things separate me from my students. These acts make me an agent for the institution for which I work. They ensure that the school will operate smoothly, hold together as an institution, and turn a profit for the shareholders in the corporation. I have to work under these conditions, and if I wish to stay at CES, I have very little to say in the matter. If I refused openly to cooperate, I would be swiftly removed from my job. If I did not perform the required duties, students would begin to lose respect for me.

Yet even saddled with these necessary handicaps to teaching, I believe that I still can do an innovative job teaching technical writing.

For this period of time that I did not take notes, I experienced a period of depression, a period of questioning whether or not it was indeed possible to teach technical writing in an interactive way at CES. Two aspects of the environment that bothered me which I neglected to mention in my notes were class sizes and attitude. I finally came to the conclusion that 60+ students in a writing class was the absurdity of all absurdities. A teacher had to be a song-and-dance man for every minute he/she was in the classroom. One instant of inactivity by the teacher meant five minutes of chaos. Somehow, I did get the lab sessions to work; they were chaotic and noisy, but students were writing, reading and editing in class and asking questions about what they were reading and what they were
writing. The attitude problem permeated the school: writing is unimportant. There was an attitude that anybody could teach writing and it was just one of those courses that nobody wanted to take but everybody had to take because it was a requirement. But I did finally decide that I could teach technical writing and do it my way. But I had to make concessions.

Moffett's system was not working with students in the technical writing classes. They complained that while autobiographical and biographical reports were interesting, they were not the types of reports that they would have to perhaps use on the job after graduation. I had to agree with them. Moffett was out, for the time being any way. I went back to a straight technical writing sequence such as the one I had used during term two. After the biographies, I assigned a mechanism description.

After I had decided that I could actually teach students about technical writing, I again began taking research notes. I tried to review the time that I had lost to recapture some of the events that took place. I had lost over a week, almost two weeks. I had not recorded any of the events that took place involving the biographical papers. After the biographies were in their final stages, I assigned a mechanism description. A mechanism description is simply a part-by-part description of a selected mechanical object. I first introduced the assignment to BEET students by simply telling them that it is simply a part-by-part description. I handed out to students a worksheet that contained questions that I thought students would have to answer to themselves before beginning to write
mechanism description. The questions were very simple: What is the mechanism? What are its most important parts? What is the use of the mechanism? Several students had questions about the part-by-part nature of the assignment.

I felt somewhat uneasy about the assignment because it seemed a bit too abstracted from a concrete context. I had not provided students with a writing situation that demonstrated the mechanism description's usefulness. I did encourage students to explain how and why the mechanisms they chose to write about were important. But I did not give, and perhaps I should have, students a concrete situation to aid them in their writing. I used the last ten minutes of class to enable the students who had not completed the biography assignment to do so. I consulted with students as they wrote during these final minutes of class.

During the second period of this double session I passed out a model mechanism description. It was a description of a light bulb. I thought that I could make the class more interesting if I tried to do more with this model than simply having the class read, analyze, and critique it. So I took out all of the punctuation and subheadings, and I had students put in punctuation and subheadings in appropriate places. I wanted to give students an opportunity to space out information and to punctuate it. The exercise was quite dull. The last part of the class was especially dull as I read through the model and students read out punctuation and subheadings whenever I paused. Part of the reason for this dullness of the exercise, I think, was trying to do too much in one lesson. It might
have worked better if I had simply focused on subheadings and left the punctuation for another time. And I have always hated doing punctuation exercises (although for some reason I felt compelled to do them), so perhaps my dislike for the exercise came through and contributed to the dullness of the class. And again, here I can see how contextualizing the lesson, providing students with a writer who had supposedly written this piece and a reader who had specific needs to be fulfilled from it, would have made the placement of punctuation marks and subheadings more meaningful and relevant. Another method that might have been more fruitful would have been to have had students edit the model mechanism descriptions and provide a rationale for their edits. I could have then distributed the subheaded and punctuated reports along with the explanations for in-class discussion.

The next day when I had the BEET class for a single period, I had students write outlines for their mechanism descriptions. These outlines really consisted of a list of the major parts of the mechanism that students were going to write about. As I consulted with students about their outlines, I noticed how differently they interpreted my advice about a mechanism description being a part-by-part type of report. I had intended to keep my advice on mechanism descriptions simple and to give students an opportunity to do some organizing on their own. So I had intentionally not mentioned various methods of organizing such as by function, physical arrangement, or material. Students discovered these methods for themselves. I noticed that students seemed to choose a method of
organization that best suited their topics; I occasionally encouraged them to do so.

After outlining for about thirty-five minutes, more students were completing their outlines and the class was becoming more chaotic. I quickly recorded attendance to get everyone's attention and reviewed the requirements of the mechanism description. I also gave students a report format to follow:

INTRODUCTION: Define the mechanism. Explain its importance. List its parts.

BODY: Describe each part in detail. Sequence the part-by-part description according to the list of parts provided in the Introduction.

CONCLUSION: Describe how all of the parts function together.

As I now consider this format, I can see once again how contextualizing the assignment, providing students with a reader, a situation, and a purpose for writing, would help students to make the writing situation more concrete and more meaningful. As I taught it, I think the assignment was badly abstracted from any type of real writing situation and addressed to a format rather than to an audience defined within a situation.

My apprehensions about the mechanism description assignment were well-founded. When I graded them I was disappointed with what I got. Apparently many students could not get enthused about the assignment. Quite a few, if not the majority of papers consisted of superficial descriptions: students went through the motions of filling in the appropriate slots of the report format without much
effort or enthusiasm. A handful managed to balance a personal writing style with the objectivity and thoroughness that an effective mechanism description requires. As I thought about the results of this assignment, I discovered that I was really not sure what I had expected from my students in the first place. In fact, I felt odd at having given the assignment because it was so objective and impersonal compared to the first two assignments, the autobiography and biography.

It was only after I had read through the mechanism descriptions that I knew what I really wanted students to do in the first place. When they wrote about their mechanical objects, I wanted students to be thorough, specific, and logical, and to provide the reader with a practical context in which to understand the object being described. I also wanted clear visual descriptions that focused on physical characteristics of the object. As I realized what I had really wanted students to do, it seemed unfair to me that I should assign a report and then grade it according to criteria that I decided upon after I had read the assignments. I had obviously not made grading criteria clear to students before they had written the reports; I was placing them at an automatic disadvantage. I wondered how many times I had done the same thing in the past.

As I considered my newfound realization that I had established criteria as I graded, I realized something else. I realized that teaching seemed to be a process of making the class aware of my subconcious standards—this all seemed like such a vicious cycle to be caught in. This grading cycle coerced students and fooled me. I
felt very good that I was slashing away at mediocre descriptions. I felt as if I was educating. What I was in fact doing was fulfilling my students' and my own expectations that many students would not do extremely well on the assignment. By not clearly informing students of my criteria, I was in fact preventing them from doing well on the assignment. It was as if I was playing a guessing game with the class: "Guess what my subconscious criteria are; if you guess right, you get a good grade; but if you guess wrong, you get a bad grade."

I came to the following decision about students' Interpretations about my assignments:

This notion of students' Interpreting teachers' assignments is very relevant. Perhaps I should have students write back letters to me stating that they understand the assignment and explaining their plans for fulfilling it.

Evaluations

Throughout the term I was again becoming apprehensive, as I had been during the term before, about the chaos in the BEET class. As the term progressed, the class was becoming continually less structured, especially lab sessions. The writing, editing, and revising sessions were becoming quite predictable to students; and although many students took these sessions seriously at different times, a large group of students were always uninvolved and goofing off. I decided again, as I had decided during the previous term, that more structured discipline was necessary for a class of this size. I reconsidered using more specific editing sheets, more quizzes, and stiffer guidelines on papers. Besides the chaos, the sheer size of the BEET class seemed to be a roadblock to me
developing closer relationships with students. By the time that the mechanism description had been completed, I felt much closer to the Computer Science class than I did to the BEET class. I knew the names of virtually every Computer Science student. I cannot say that class size was the only factor that distinguished my relationship with the BEET and Computer Science students. There were two others: the time I spent with each class and the journals that Computer Science students were required to keep.

I only spent three hours per week with the BEET students; but I spent four hours with the Computer Science students. This extra hour coupled with the smaller class size meant that I spent far more time with each Computer Science student consulting and more time with the class as a whole lecturing. Because the Computer Science class was worth four credit hours instead of three, I assigned those students to write weekly journals of 300 words minimum. These journals were supposed to be informal (but grammatical) writings on topics that students chose to write about. I encouraged them to critique the course in their journals, and students often did this. During the first few weeks of the term, they continually complained about the assignments. They could not see the relevance of writing autobiographies and biographies in a technical writing course. I explained the theory behind the assignments. But students persisted in asking if these were the types of reports they would be writing on the job after graduation. These complaints coupled with oral complaints in the BEET class made me shift to objective types of reports (e.g., mechanism description) more quickly than I would have
If I had not been receiving continuous student feedback in the journals, Moffett's system, though theoretically relevant to me was not relevant to students. As I considered students complaints, I once again realized that part of the problem with the first two assignments was an absence of relevant context. If I had given the assignments couched in more realistic situations, students probably would have reacted to them more favorably. For example, if I had provided students with a realistic audience such as a personnel manager and a realistic situation such as applying for a job and assigned the autobiography and biography in that context, I am sure they would have seen more relevance in these assignments.

The close rapport that I developed with the Computer Science students seemed to be mainly a result of the intensive one-on-one tutoring that I was able to give virtually every student in the class. I was able to form individual relationships with each student. And I became aware of the particular strengths and problems of various students. Another reason for my closer relationship with the Computer Science class was the continual dialogue, often conflict-ridden dialogue, that we developed in the class. During the first week of class, conflict and dialogue had developed over defining a computer. The class continually criticized me in class about the lack of relevance they found in the two early assignments. This process of dialogue born out of conflict continued. When I discussed with the class the techniques of classification, we got into an argument about how to classify computers. When I suggested price as a valid method for classifying
computers, most of the class rejected my idea, although some class members criticized their peers for just being stubborn. We finally agreed on classifying computers according to physical characteristics and capabilities.

I began to develop judgments about the Computer Science students as a group. I decided, as a result of our theories of conflicts, that these students tended to hide their knowledge from each other as a means of competition. They always prided themselves on how much they knew about computers. Whenever a student made a general statement about computers, several others would qualify it and suggest that the generalization was only true under specific circumstances.

On one occasion the class pulled a mini-revolution on me. I arrived at class to discover them all coloring with crayons because at the previous class I had asked a student if he was coloring in class (He had in fact been coloring). This was also April Fools Day. The coloring book flasco made me a little nervous because I was afraid of losing control of the class. I thought that the group might make the rest of the class into a joke—a coloring book kind of activity. But the following lab session on mechanism descriptions was very productive. Students were so intent on writing their descriptions that they hardly had time to argue with me over grades that I returned to them.

I noticed as I consulted with students that they had real problems with making the transition from the biography assignment to the mechanism description. They found the mechanism description to
be cold and rigidly structured in comparison to the more personal and freely styled biographies.

In general the notes that I took on my interactions with Computer Science students were much more detailed and focused on interactions with individuals than were the notes I took on my interactions with BEET students. Although I did not record as much detailed and interactional material as I wanted to due to my participant role in the classroom, representative material that I did record continually identified individual students:

Smith and Jones thanked me for letting them do late editings. Edited Douglas's paper.
Joked with Joe about sitting on the floor.
Joked with Williams about his topic "Living Trash Cans".
Roberts asked about 3-D sound.
Read Boyd's editing sheet.

Most of my notes on Computer Science students reflect this keen awareness of individuals within the class. In contrast my notes on BEET students are seldomly focused on individual students. They are instead focused on the group. When things happened in the BEET classroom, I tended to record events and sentiments of the class as a whole and not of individuals or groups within the class:

I did have several moments with each student to discuss grades. Also about ten or twelve students came up to ask advice. Barry and Levit recommended that the progress report be written from the perspective of a technician reporting on the progress of the installation of a machine.

In the passage above, I did not identify the ten or twelve students who asked for advice. And my mentioning Barry and Levit was a rare passage.
Part of the reason for my lack of specifics about Individual BEET students was the number of students I would try to interact with during a single lab session. Often, I would walk up and down the aisles asking how things were going. A large number of students would simply respond with "Fine." Others had some problems. But whenever I got into an extended discussion over a problem, the noise in the room interfered with the student and I having a serious discussion.

I experienced a certain degree of nervousness consulting in the BEET class. I felt the need to continually monitor the class as I spoke with individual students. This compulsive monitoring, which I was compelled to do out of a need to maintain class control, disrupted in-class consultations. I always had one eye on the student and the other on the class. However, the consulting that I did in the Computer Science class was not disrupted by either a need to monitor or noise. In fact the Computer Science class often got involved with my discussions with individual students. Other individuals in the class would either support the student's view or my own.

The result of my continually focusing on individual Computer Science students throughout the term was my having a clearer sense of those students as writers. As I graded Computer Science papers I could visualize the students who wrote them and I could perceive the personalities of the students in their writings. When I made comments on papers, I made them to the students in paragraph-length passages:
Greg,

This is a good report. The topic you have chosen is relevant and important to your field of study. There is some room for improvement, however. I think that your description of the entire process should be more detailed— including the specific procedures you use to determine the problem and the physical descriptions of the mats and the computer files.

Christina,

This is a very good report. Throughout most of it, you describe things thoroughly. This was a problem that you had on your last paper. I'm pleased to see your writing becoming more detailed. But this paper can be improved with more specific descriptions of what the balloon display will itself include and what specific precautions you will take to protect spectators.

To a certain degree, I graded BEET students' papers personally; but I could not match BEET students with assignments as well as I could Computer Science students. I felt that the result of being able to match students with assignments was more intelligent grading. I could refer to similar errors made in earlier assignments and comment on improvements made over earlier assignments when I recognized the student. I could also refer to consultations I had had with students in class. But when I could not match students with assignments, I tended to grade papers impersonally and briefly. I felt that students would be more motivated if they felt I was taking a personal interest in their writing.

One drawback to seeing papers as the work of specific students in relation to earlier work and interactions in class was my tendency to stereotype students who had written a few good or bad papers as being
good or bad writers. Once I had made such an assumption about a student, I caught myself slacking off in my grading efforts. I would assume "Oh, he's a bad writer," and I would look through his paper trying to find the errors he/she had made before. This affected my grading of BEET student papers more than Computer Science papers because the grading load in my BEET class was so much greater that I was compelled to find a quick method for evaluating students' work. When I used this strategic grading, I discovered that my comments tended to be quite terse in comparison to comments that I regularly wrote on Computer Science papers:

- Nice diagram. The paper should be more carefully written. You could describe the parts in more specific details with more precise wording.
- Good job. The conclusion could be more detailed. Where is your rough draft?
- The form is alright, but your descriptions require more careful wording and fuller explanation.

I found that as long as the intensity of my grading efforts remained strong, the knowledge of my students' earlier work on written assignments and in class during consultations was beneficial: they enabled me to quickly find the same problems if they were in the paper. But if my efforts in grading lost intensity, I caught myself seeing errors that were not really there—my assumptions about particular students made me see his/her problems as I quickly scanned the paper. For the most part, my grading remained intense throughout the term. But even though strategic grading enabled me to discover students' errors quickly, my need to grade papers as efficiently and quickly as possible prevented me from taking the time to write out a
careful description of my impressions of students' writings. The terseness of my comments to BEET students, I am sure, did detract from their understanding fully my criticisms. Even though I placed corrections throughout their papers, I recalled how negatively student writers perceived terse and negative remarks made by editors, and I realized that my own terse and negative remarks were probably creating negative and defensive reactions from students. I also noticed that my remarks tended to be contradictory when they were so "short and sweet." I tried to say nice things about every student's paper before I said bad things. When I wrote longer comments, as I customarily did for Computer Science students, I could form explanatory transitions between the positive and negative parts of my comments (as I did in the above mentioned examples of Computer Science comments). However, when my comments were terse, I tended to juxtapose positive and negative comments without transitions. This created a confusing kind of statement that I am sure confused many BEET students and a few Computer Science students as well. It was as if I was telling the student that he/she had a good paper and the reason why it was good was that it needed more details or more precise wording or whatever my negative criticism happened to be.

Besides being beneficial in grading, my closeness to the Computer Science students helped me to plan and improve upon class labs and lectures. I could edit my lecture material based on my understanding of what students did and did not appreciate. And I could address writing problems to the entire class during labs because I felt that I could ask individual students to discuss positive and negative
aspects of their assignments with the entire class. In short, I felt freer to improvise on the system the students and I had developed.

After the mechanism descriptions were completed, I resumed the traditional technical writing assignments that I had used during the previous term: Proposal, Progress Report, and Final Report. I encouraged students to link their assignments so that all would be based on the same content. Once I had abandoned Moffett's scheme and reverted to the old system, I again re-evaluated what I was doing. I decided that the pattern of class, the lab weeks (editing, writing and revising) and lecture weeks had created a tacit set of assumptions between my students and myself. Students expected lab activities during weeks designated as such and if I tried to do something different during this time I would disrupt students' expectations. Once the system went on for a while everybody in it was inhibited from changing things. Once the system was established, students' expectations and assumptions had to be changed to alter the class. Such changes created disruptions, especially since the class had been established in a fixed pattern. I realized the importance of setting up the class at the beginning of the term to allow some flexibility for changes that might occur throughout the term.

I also decided that the lectures should take more precedence than they currently did. Students, I believed, needed more detailed information about the purposes, formats and writing situations involved in the reports. I thought that a method for generating students' topics should be developed. One of the major problems
students had throughout the term was getting motivated to develop relevant, well-defined, and interesting topics.

Once I had re-evaluated the course this second time, my note-taking noticeably decreased. I just got tired of it. I felt somewhat frustrated over the failure of Moffett's system in the technical writing course, even though I realized that part of the problem with this failure, or I should say lack of success, was due to the absence of a concretely defined context in which to write. The following passage I think really sums up my attitude as the term drew to a close:

Felt tired all day.
Went to class and just spoke with students as they completed papers--let students go outside to write journals. Jane Clark called me a salvedriver in her new journal--claims I made them write too much. Feel at home with them. I feel apprehensive about evaluations--feel compelled to be nice to students, yet I also want to be.

About a week after I wrote the above passage, I again evaluated my performance and my own relationship with the two classes:

May has been a difficult month in which to write. I have noticed a disenchantment descending upon CES--my guess is that it is a seasonal occurrence. Students growing anxious for break and teachers tired of teaching. I find myself in this frame of mind as well. I am not satisfied with my own teaching performance this term. Although in some respects I think it has been pretty good: I have encouraged and even fostered students to write more descriptively and with perhaps more reflection upon what they are composing. I have encouraged them to consider the entire (as entire as it can be in a classroom situation) writing situation. I have different relationships with the two classes. My relations with Computer Science are more open and friendly--with several students I got to the point of discussing family problems and situations. And with each class member, I have an open and communicative rapport. My relations with the BEE T class are less intimate and much more anonymous. It is twice the size of the Computer Science class. I feel as if I have this huge jelly-like
mass of individuals who will slip through my fingers if I squeeze them too tight. I keep patting the edges of this mass together with brief and light lectures and in-class writing assignments. I have encouraged some students to improve, and a few students have become motivated on their own with or sometimes without my help, and they have produced good work.

I suppose what bothers me is the apparent waste of time and lack of discipline in the lab sessions. But this isn't my fault entirely. I made the course as enjoyable as I could to encourage the class to write for a sympathetic teacher. I had seen how sour a writing course could go with crack-the-whip discipline in lectures and assignments during the first term at CES.

But I do believe that the technical writing course should have more specific content (types of reports, methods of composition, communication situations, and concretized writing scenarios). This content should be such that students are offered a choice of formats to actually use. And I think they should be introduced to many formats that they might not use in the course, but which they might use on the job after graduation.

My students' evaluations of my teaching did not really bear out my own evaluations of the different kind of relationship I had with each class. Even though I thought that I had a much closer rapport with the Computer Science class, the BEET class gave me superior evaluations: a 1.60 as opposed to a 1.97 out of 5.0 (the lower the number, the better the evaluation). The BEET class found me to be deficient (I should mention here that I chose 1.90 as the dividing line between deficient and adequate because numbers on the evaluations tended to cluster above or below the 1.90 figure) in three areas: respect of students for the teacher (1.92), clear grading criteria (1.92) and discipline maintained in class (2.17). The Computer Science students basically concurred with the first and third of the above mentioned criteria (both rated at 2.11), but they did not criticize me as much for clarity of grading criteria (1.83).
They did, however, find me deficient in a number of additional areas, a number of which I thought that I was doing a good job in: knowing when students did not understand (2.17), being enthusiastic while teaching (2.11), holding students' attention in class (2.50), being interested and concerned with students' progress (1.94), and providing patient and understanding help (2.06). I thought that I was providing for students' needs in these areas, but apparently, I was not.

I did agree with Computer Science students' criticisms of me in several other areas: providing clear course learning goals (1.94), using class time effectively (2.06), asking interesting questions (2.35), being well-prepared (1.94), stating important ideas (2.06), and using sufficient pertinent examples (2.00). The experimental nature of this class, using Moffett's system and then halfway through the term reverting to the traditional system, certainly lessened by effectiveness in these areas. However, the BEET students gave me much higher evaluations in these areas (between 1.42 and 1.67). I considered the discrepancy and I thought that perhaps the cynical attitude that I noticed in the Computer Science class at the beginning of the term had manifested itself in the evaluations. Perhaps a 1.97 was not a bad overall score to receive from this class.

In praise, the two classes agreed in three areas of my teaching: students felt that they consistently did their homework (BEET: 1.17; Computer Science: 1.22); Students felt free to ask questions and to express opinions (BEET: 1.42; Computer Science: 1.67); and students
felt that examinations covered material taught in class—apparently referring to the relationships between lectures and labs and paper assignments (BEET: 1.44; Computer Science: 1.60). In addition, the BEET class commended me for being well-prepared (1.36), making course objectives clear (1.42), being available to help students outside of class (1.42), and being enthusiastic about my teaching (1.42). I noticed that Computer Science students had criticized me in these same areas. But Computer Science students additionally praised my performance as well. They commended me on the amount of effort they had to put into the course (1.33) and on my encouraging them to think for themselves (1.67).

The two classes seemed to have different perceptions of my teaching performance as being appropriate for the course. The BEET class thought the course required more discipline, a more respectable authority figure, and clearer grading objectives. But otherwise, they perceived the learning objectives in the class and the teacher's attitude and the course structure to be above average in quality. The Computer Science students, however, were critical on two levels. They criticized me for not caring about them personally. They thought that I was less sensitive than I should have been. And they, I think rightfully, criticized my foul up on implementing a course with such a tentative and experimental substance which had to be altered halfway through the term.

If both classes had criticized me in the same two areas: course structuring and sensitivity to students' needs, I would have concluded that there was an overlap between these areas. Students'
resenting my lack of coherent and consistent organization had perceived me as being insensitive and criticized me as such on the evaluations. But this was not the case. In fact, the class toward which I felt less sensitive, due to its large size, perceived me for the most part (except for clarifying grading standards) as being above-average in my sensitivity toward them. The class that I came to know best and with whom I felt more comfortable, criticized me for my lack of sensitivity.

I concluded that even though I deserved their criticism, the Computer Science students were not simply criticizing me, they were criticizing the CES system toward which they felt so much resentment. I accepted the Computer Science students' criticisms of me. I understood that I would have to improve in all of those areas. And even though I knew that I could always become more sensitive to students' needs, I decided that I had become sensitive to the needs of my students throughout the term. Computer Science students criticized my lack of sensitivity partially because they were hitting back at the system that they felt manipulated and "burned" by.
EPILOGUE

Doing this study and writing this dissertation has benefitted my teaching by pointing out to me some central weaknesses in my practice. But my experiences have taught me lessons of a more general nature that are perhaps widely applicable to the teaching profession. Some basic contradictions between theory and practice have been illustrated, along with the fact that these contradictions must be overcome if one is to improve practice. The importance of theory as a guide to evaluating practice and improving it has also been illustrated. The usefulness of a self-evaluative action research project in identifying weaknesses in teaching has been shown. And the importance of writing a narrative of one's experiences to gain a comprehensive view of one's own practice has been indicated. Using the information from this study, I have been able to continue to improve my teaching practice and to develop plans for future improvement. I have also been able to develop suggestions for teachers who wish to perform a self-evaluative study such as this one.

The most important weaknesses that I discovered in my teaching were my preoccupation with controlling students, my tendency to quickly instead of carefully plan for my classes, and my habit of not making grading criteria clear to students. These were the persistent tendencies in my teaching that contradicted Vygotsky's theory. I was
able to improve other aspects of my teaching from term to term based on my own and students' evaluations. After reading over my narrative I can see that I evolved from the first term through the third term. During the first term I had a very negative attitude toward my students: I called them "goof-offs" and I described them as being "empty-headed." During the second term my attitude improved and my methods also changed. I developed lab sessions and used editing and revising as methods to help students to improve their writing. When I felt compelled to discipline students for not attending labs, I instead collaborated with them. And during the third term I was much more empathetic to my students than I had been over the previous two. I can see the focus of my narrative shifting from concerns with classroom discipline and the quality of written products to concerns with in-class interaction and trying to understand why written products did not come up to my standards. But because of my preoccupation with control and my tendencies to plan too quickly and to at times forget to provide students with grading criteria, my teaching was not as interactive as it could have been because students were never involved in developing course content and course policies.

I think that my study demonstrates some of the contradictions between theory and practice that a teacher discovers trying to use theory in the classroom. I left the university where I had studied educational theory with the intention of practicing the theory in my teaching. But I discovered in my attempts that the educational system in which I worked and my own predispositions about teaching
prevented me from successfully implementing interactive teaching according to Vygotsky's theory. The CES system seemed to be designed to control students. Experienced faculty members who I met after becoming employed at CES stressed the importance of controlling students and coercing them through tests and quizzes to learn information. I can see that this control-oriented system brought out my assumption that a teacher indeed should be in control of students virtually all of the time. My assumption about the propriety of the teacher-dominated classroom, I believe originates in my own experiences in classrooms as a student. The teacher was always the dominant figure and students were always expected to remain quiet and subdued. Centralized control by the teacher of course eliminates the possibility of using language to freely interact with the teacher either in class or on written assignments. As Paulo Freire has pointed out, in a teacher dominated situation, students become placed in an inferior position. Their main task becomes to rotey learn what the teacher has taught. In writing class, as I have discovered, students will use language to fill in appropriately designated slots instead of to share meaning by communicating ideas.

This self-evaluative Action Research study has enabled me to improve my teaching by becoming aware of the weaknesses in my practice. Vygotsky's theory provided me with a constant and ideal model against which I could compare my teaching performance. Theory guided me in my attempts at developing new methods to improve my teaching. Theory also helped me to focus on recording significant information during data collection and analysis. As I evaluated my
performance at the conclusion of each term, I relied on theory to provide me with criteria against which I could judge myself.

Recording and evaluating notes as I evolved through these three terms of the study provided me with enough information to improve my teaching. However writing the narrative of my experiences over three terms provided me with a more comprehensive account of my teaching. When I was within this study, I could not clearly see some of the weaknesses in my own teaching. For example I knew at various points that I was not successful in my attempts to use Vygotsky's theory in my teaching practice. I blamed the students and the CES environment for my failures. But after writing and reading the narrative, I was able to see that some of my own weaknesses were also to blame. The trends in my teaching that contradicted the theory that I was trying to implement became clearer to me after others had read and commented upon the narrative. Writing, reading, and having others read and comment on my narrative revealed to me central weaknesses in my teaching that were preventing me from interacting with students.

As I have continued to teach at CES, I have found that this study has helped me to be sensitive to students' needs. I have developed a self-evaluative trait. I constantly monitor my own teaching before, during, and after I practice. I still measure my performance against the ideals of Vygotsky's theory. As I monitor my teaching I look for indications such as student feedback in class and on assignments that I am communicating clearly. I am careful to listen to students' responses and to elicit feedback when and if none is forthcoming. I provide students with models of essays and discuss grading criteria.
with them using the models to illustrate the criteria. When grading assignments, I consider to what extent students are communicating ideas and to what extent they are simply going through the motions of the assignment fulfilling requirements. If students are simply filling in slots, I try to figure out what happened in class to encourage them to do so, and I ask students why they wrote the assignments in that manner. In evaluating my performance and in planning for subsequent terms, I ask myself some basic questions: How much real communication, which I define as interaction through the exchange of ideas, has occurred in the class? How do I know that this communication has occurred, if indeed it has? How can my teaching be improved to foster more communication?

Presently students are involved in discussing the policies and assignments of my course. Lectures are very discussion-oriented. I am careful to explain to students my reasons for including course content. My plans for the future are to involve students in the planning stages of the course. I intend to explain to students the problems that I face when selecting course content and policies, and ask for their suggestions in solving these problems.

I have several suggestions for teachers who wish to do a self-evaluative study of using theory in practice. First, I would suggest that you avoid overplanning. Consider areas of your course that you feel are essential for your students to learn. Then consider these selected areas in relation to the theory you intend to implement. Ask yourself if there are contradictions between the theory and either the areas you have selected or the methods you
might use to teach these areas. To begin to resolve these contradictions, discuss them with both theoreticians and practitioners. Be prepared to discuss your resolutions with students at the start of the term. Be sure to listen to what students have to say about your ideas and consider revising your plans according to their advice throughout the term.

Try to stay aware of your attitude. I found it difficult to maintain a positive attitude at various points in my study, especially when I felt frustrated about teaching or about problems I was having implementing theory. A negative attitude can disrupt your notetaking and impede your attempts to implement theory.

Try not to be discouraged if you do not meet with immediate or even moderate success. If the system in which you are working runs contrary to your theory, you may discover that institutional policies and/or traditions may hamper your efforts, especially if you are new to the system. My theoretical beliefs were quickly replaced by practical considerations of scheduling course content because I was influenced by the advice of other CES instructors. If the system does seem to be hampering your efforts to implement theory, then look to yourself for the solutions to the problems that you are experiencing. In all likelihood the system will not provide the solutions for you. If you do not discover ways to implement your theory despite the policies of the system, you may become discouraged and give up. If you discover ways to implement theory despite the norms of the system, then you will begin to transcend the limitations that seem to be hampering your efforts.
I hope that you discover as I have that most of the limitations that seem to be placed on you are ones that you actually place on yourself, even though it seems as though others are inhibiting you.

Finally, record notes of your plans, lessons, and evaluations, using the principles of your theory to select the most important aspects of your experiences. Analyze and critique your notes according to the ideals of your theory. Use your analysis of notes to improve your practice and record improvements that you perceive. At some point you should consider constructing a narrative of an extended period of your teaching. In the narrative piece together the most important aspects of your development and areas of your teaching that you feel have not developed adequately. Again, use the principles of your theory to make these selections. It is vital that you provide an honest representation of your teaching performance. A dishonest narrative, one that overemphasizes successes or failures will probably not provide you with adequate information to improve your teaching practice. The narrative should provide you with a comprehensive record of your teaching performance. Have others read the narrative and discuss with your readers theoretical issues and tendencies in your teaching to gain a clearer vision of yourself implementing theory into practice.
BIBLIOGRAPHY


Driskill, Dr. L.P. *Journal of Technical Writing and Communication.* 7 (1977) 44-62.


