

**“This Was an Easy Assignment”:
Examining How Students Interpret
Academic Writing Tasks**

Jennie Nelson

October, 1990

Abstract

This study explores academic writing from the students' side of the desk, examining how different tasks and writing situations influence students' approaches. The study uses interviews and process logs and examines how 13 college freshmen interpreted writing assignments in a variety of courses and how these interpretations differed from their instructors' intentions. These case studies reveal that students draw from a range of individual and situational resources in their efforts to define and complete assignments and that these factors can interact in complex ways to shape students' approaches. Students' responses to assignments depended upon what they were actually rewarded for producing. In some situations, students relied on short cuts to produce papers and failed to engage in the kinds of learning activities that assignments were designed to promote.

**“THIS WAS AN EASY ASSIGNMENT”:
EXAMINING HOW STUDENTS INTERPRET
ACADEMIC WRITING TASKS**

Jennie Nelson

California State University, Stanislaus

Professor Clark: This assignment should be challenging. I purposely made it difficult. Students have to boil down the information from the lectures and reading and present a concise argument. [Essays could not exceed 200 words.] I believe conciseness forces students to take a stand, to weigh the value of every word.

John: This was an easy assignment. All you had to do was reiterate what you'd read. I picked lots of names and cited important-sounding incidents . . . essentially I paraphrased the reports I read. I think this assignment was another case of the instructor trying to have us learn through reiteration of read[ing] material. In my opinion, it didn't work and was a waste of class time.

These excerpts from interviews with Professor Clark and John, a freshman enrolled in his course, provide important insights into students' interpretations of academic writing tasks and how these interpretations can sometimes differ from their teachers' intentions. While Professor Clark intended this assignment to be a challenging exercise in synthesizing and transforming

course material into a concise argument, John defined and approached the task quite differently. He essentially ignored the 200-word length restriction, choosing instead to focus on paraphrasing what he had read, and produced a 412-word "reiteration" of the assigned material.

In follow-up interviews, John described the assignment as a waste of time because it "basically called for rewriting what we had been given" [in lectures and assigned readings]. John explained that his teaching assistant's grading practices on previous assignments helped to shape and confirm his assessment of this assignment. The teaching assistant, who was responsible for grading all student homework, wrote very few comments on John's papers. Instead, he wrote checks in the margin next to points which, he explained, corresponded to a list of key points from the readings and lectures that students should have included in their papers. Thus, while Professor Clark, who designed the assignments for the course, stressed the importance of conciseness and taking an argumentative stand in responding to this assignment, the teaching assistant who actually evaluated students' responses stressed the importance of reproducing information from the assigned readings. Hence, while John's approach and assessment of this writing/learning experience differed from what Professor Clark intended, they matched what his teaching assistant was looking for, and as a result, John received full credit for this assignment.

John's story of how he interpreted and responded to this particular writing assignment reveals the central role that tasks and accountability play in shaping students' writing and learning experiences. Recent research suggests that students' writing processes are a function of the task and the context in which writing occurs (Applebee, 1984; Herrington, 1985; McCarthy, 1987; Marshall, 1984; Ruth & Murphy, 1984). As teachers and researchers interested in promoting the effective use of writing in composition courses and across the curriculum, we must learn more about how particular tasks and writing situations influence students' efforts. By examining *when* and *how* students' interpretations of writing assignments converge or diverge from their teachers' intentions, we can increase our understanding of how certain classroom practices and students' assumptions affect student writing. In addition, such research should lead to a richer understanding of the concerns and habits of student writers working on academic tasks in natural settings. This report begins with a discussion of the special nature of classroom settings and the central role of tasks and accountability in shaping students' learning and writing experiences. Following this discussion, a study is described which examines how various features of specific writing assignments and classroom situations influence students' approaches, and how disjunctions between teachers' and students' task interpretations might occur.

THE SPECIAL NATURE OF SCHOOL SETTINGS

Although student writing processes have been widely studied (Emig, 1971; Flower & Hayes, 1980b; Perl, 1979; Pianko, 1979; Sommers, 1980), many of these studies were conducted in settings in which the subjects were asked to write for the occasion of the research project itself. As a result, much of what we know about the processes and practices of writers during composing comes from this research setting and not from the everyday contexts in which people normally write (Brandt, 1986). Unfortunately, tasks in research or laboratory settings may pose different problems for writers than tasks in everyday settings.

Researchers who have studied "everyday cognition" in natural settings (Odell & Goswami, 1982; Rogoff & Gardner, 1984; Scribner, 1984) stress the importance of social factors in shaping people's approaches to a task. According to Rogoff (1984), "central to everyday contexts in which cognitive activity occurs is interaction with other people and use of socially

provided tools . . . for solving problems People, usually in conjunction with each other and always guided by social norms, set goals, negotiate appropriate means to reach the goals, and assist each other in implementing the means and resetting the goals as activities evolve" (p. 4). These researchers' conclusions suggest that if we want to understand the factors that influence how students interpret and respond to writing tasks, we need to locate our research in the complex social settings of actual schools and classrooms.

Researchers interested in studying writing processes in the classroom must take into account the special nature of school settings. In an extensive review of educational research, Doyle (1983) explains that "academic work is transformed fundamentally when it is placed in the complex social system of a classroom" (p. 185). Doyle describes several important reasons for this transformation. Perhaps most obvious is the fact that academic work is conducted in a social group (the class) where students can rely on their social and interpretive skills to define and negotiate task demands. Hence, Doyle reports, fellow classmates can serve as valuable resources for accomplishing academic work. Peers not only can provide direct assistance on assignments, but can also be used to solicit information from the teacher about the requirements for a particular task. In other words, assignments can be defined and negotiated in the public forum of the classroom.

Another resource that students can rely on for accomplishing academic work is the history of the class itself. Unlike laboratory settings, classes have a history that provides important information about the evolving nature of task demands. Students can use the feedback they receive on early assignments to refine their notions of what "counts" in a particular course. Doyle reports that as "the character of the task system becomes more apparent, [s]tudents can then selectively attend to information that has consequences for task accomplishment regardless of whether it is explicitly signaled by the teacher" (p. 181). We can see how classroom history served as a valuable resource for John in completing his writing assignment. Because of early feedback he received from his teaching assistant, John selectively attended to information in the writing assignment, ignoring the length restriction and focusing on summarizing course material. In addition, John's comment that "this is another case of the instructor trying to have us learn through reiteration of read[ing] material" suggests that he was drawing from his previous experiences with school writing in general. No doubt, experience going to school establishes what Doyle calls "task schemata" (p. 181) which can be used by students like John to interpret similar task situations.

One of the most important features distinguishing academic work from other tasks, according to Doyle, is that it takes place in a highly "evaluative climate" (p. 182) in which grades are exchanged for performance. As a result, accountability-in the form of the answers and processes students are actually rewarded for-becomes the driving force behind how students respond to school assignments. He explains that "the answers a teacher actually accepts and rewards define the real tasks in the classroom" (p. 182). In other words, students like John tend to take seriously only the work for which they actually are held accountable.

The highly evaluative nature of academic work can pose problems for students who not only must struggle to define often ambiguous tasks, but must weigh the risks involved in choosing a particular approach or answer. Many tasks (Doyle cites expository writing tasks in particular) are ambiguous not because teachers fail to explain them clearly but because there is not a single "right" answer or procedure for arriving at an answer available to students in advance. Students must interpret assignments and formulate responses on their own, a complex

process that can prove troublesome and sometimes lead to disjunctions between students' approaches and teachers' intentions. Doyle describes several studies (Carter & Doyle, 1982; Dillon & Searle, 1981; Graves, 1975; MacKay, 1978) which suggest that students invent strategies for managing the ambiguity and risk involved in accomplishing classroom tasks. These strategies include offering provisional or restricted responses to assignments and questions as a way to elicit more information from teachers about the correct response, and requesting that the teacher make task instructions more explicit or provide models to follow closely. Each of these coping strategies provides students with valuable information about what really counts in completing a particular assignment. In addition, these strategies allow students to focus on the products they are required to produce instead of on the *processes* they are being asked to engage in. Thus, while these coping strategies may lessen the ambiguity and risk inherent in academic work, they may also provide students with short cuts for producing acceptable responses—short cuts that allow them to circumvent the thinking and learning processes their teachers hope to promote.

This brief summary of related research reveals just how important the special nature of school settings can be in shaping students' responses to academic tasks. What emerges from this discussion is a view of academic work from the student's side of the desk. We see students taking advantage of several features of classroom environments in their efforts to define and fulfill their teachers' assignments. They rely on their peers, on their current and long-term experiences with school work, and on various coping strategies to determine what counts in completing a particular assignment for a particular course. "Successful" students are those, like John, who can determine what constitutes an appropriate response through their interactions with teachers and classmates.

WRITING IN SCHOOL SETTINGS

Doyle's well-supported conclusion—that academic work is transformed fundamentally when it is placed in classroom settings—seems especially important for composition researchers. We know that because of the "ill-structured" (Simon, 1973) nature of many writing tasks, writers must actively interpret and define composition tasks for themselves. Studies which have examined how writers represent composition tasks (Berkenkotter, 1981; Flower & Hayes, 1980a; Flower, Hayes, Schriver, Carey, & Haas, 1987) reveal that experienced writers build rich task representations that include goals for dealing with the assigned audience and other rhetorical constraints. Indeed, Flower and Hayes (1980a) suggest that the act of representing one's writing task "may be one of the most critical steps the average writer takes" (p. 23).

Like other rich, naturalistic writing situations, it appears that school settings can influence the critical process of task representation in writing in important ways. Most obviously, students and teachers can openly negotiate and modify writing tasks. In addition, students can rely on their peers and other resources for help in defining and completing assignments. College-level writing assignments typically extend over long periods of time, unlike writing tasks in laboratory settings which normally have fixed time constraints (Marx, Winne, & Walsh, 1985). Consequently, students' task interpretations can change and evolve over time as students receive feedback on their performance and become more attuned to their teachers' requirements. Finally, while laboratory tasks are often designed to be novel (cf. Flower & Hayes, 1980a), classroom tasks are usually very familiar to students (Marx, Winne, & Walsh, 1985). This means that students can draw on their past experiences with school writing (some 12 years by the time they reach college) to help them interpret assignments.

Clearly, each of these features of school settings can shape the way a student approaches a writing assignment. Doyle argues that in order to design effective assignments, teachers "need to think about academic tasks in cognitive terms and become aware of the various paths students invent to get around task demands in accomplishing academic work" (p. 188). In addition, teachers need to understand the importance of accountability, or rewards for performance, in the academic task system and to find effective ways to use it to promote learning. Doyle's advice seems especially relevant for teachers and researchers interested in improving writing instruction in English courses and across the curriculum. The research already cited indicates that students often may invent paths to get around the demands of writing tasks. Researchers in composition (Brook, 1987; Herrington, 1985; McCarthy, 1987; Marshall, 1984; Sternglass & Pugh, 1986) who have examined student writing processes in classroom settings point out that school settings, with their focus on rewards for products, may limit the way students approach writing tasks. We need to learn more about how particular writing tasks and classroom contexts encourage or discourage students from engaging in the thinking and writing processes we hope to promote.

A STUDY OF NATURALLY-OCCURRING ACADEMIC WRITING TASKS

The following observational study begins to examine the many factors involved in how students interpret and respond to naturally-occurring academic writing tasks. In particular it focuses on the following questions:

1. What resources do students rely on to help them interpret and complete writing tasks, and how do specific classroom writing situations influence their approaches?
2. How do students' task interpretations and approaches relate to their teachers' stated goals for assigning writing?
3. Under what conditions do students rely on coping strategies to circumvent the demands of writing assignments?

Participants

Writing assignments, like other academic tasks-, are subject to interpretation and negotiation within the complex social system of the classroom and school. For this reason, I have found it useful to approach the study of naturally-occurring writing tasks as a series of case studies. This method has allowed me to examine how particular tasks are conceptualized by teachers and students and how these conceptualizations converge or diverge.

Over the course of a semester (4 months) I examined how 13 freshman students interpreted and responded to the writing assignments they received in a variety of courses. These participants were selected from the class rosters of 7 courses in the Arts, Sciences, and Humanities at Carnegie Mellon University. These courses (identified through a survey) all required student to write academic papers. By looking at students working in a range of disciplines, I hoped to get a sample of the kinds of writing situations and tasks students encounter across the curriculum. Students were selected on the basis of their scores on the SAT-verbal exam, the only measure of language ability available for all students. In each course or recitation section, two students were selected as participants, one student with a low score and

one student with a high score in comparison to the rest of the members of the course. (During the course of my study, one student withdrew from school and could no longer participate.) This selection process permitted me to examine how students with different scores on this measure responded to features of their writing assignments and situations.

Data Collection

My research methods included collecting of detailed writing process logs in which students described all aspects of the work they completed for papers; collecting of all notes, drafts, and graded papers the participants produced during the semester, and interviewing both the participants and their teachers.

The writing logs kept by the participants included descriptions of all paper-related activities, such as reading, thinking, conducting library research, talking, and writing. Once participants began thinking about or working on a paper, they were required to write daily log entries (even if they did not actually work on papers every day) and were asked to deliver entries and copies of notes or drafts on a regular schedule, at least three times a week.

The findings of other researchers (Faigley, Cherry, Jolliffe, & Skinner, 1985; Sternglass & Pugh, 1986) reveal the benefits of using writing logs as a research tool for examining the concerns and processes of writers working in natural settings over extended periods of time. Sternglass and Pugh (1986), in their semester-long study of the reading and writing processes of graduate students, argue for the value of retrospective accounts. They found that retrospective or concurrent journal accounts "are a rich source of information because they permit consideration of the complex context within which composing occurs" (p. 297). While retrospective reports can reveal-sometimes in remarkable detail-what information writers attend to when they interpret and complete their tasks, the validity of such reports cannot be determined in any definitive way. (See Cooper & Holzman, 1983; Ericsson & Simon, 1980; Morris, 1981; Nisbett & Wilson, 1977; Tomlinson, 1984 for discussions about the value and validity of retrospective accounts of language processes such as those gathered in writing logs.)

The interviews with participants in the current study were open-ended but also included questions about students' initial responses to specific writing assignments, how difficult they thought the paper would be to write, how well they thought they did on assignments, and how they interpreted teachers' comments and grades. In addition to interviews with students, I also interviewed their teachers and asked them to discuss: (1) why they give particular writing assignments, (2) how they structure writing assignments, and (3) how they evaluate papers. This information allowed me to compare teachers' stated goals and purposes for assigning writing with the actual goals and processes students brought to specific writing tasks as revealed in their logs and interviews.

Analyses

The data collected proved to be very rich. It consisted of over 700 pages of material, including writing process logs from the 13 participants; copies of all their assignments, notes, drafts, and graded papers; and transcriptions or notes from interviews with the students and their teachers. My goal in analyzing these extensive materials was to examine, as systematically as possible, (1) how writing tasks were conceived, presented, and evaluated by teachers; (2) how

these tasks were interpreted and completed by students; (3) how various situational and individual resources influenced students' approaches.

To accomplish this goal I identified several factors for analyzing the teacher's and the student's version of individual writing tasks. In order to understand the teacher's conceptualization of a writing task, the analysis focused in particular on the following areas:

1. Teacher's stated goals for assigning writing.
2. Teacher's presentation of the assignment to students, including any resources or procedures students were expected to use to complete their task.
3. Teacher's explanations of the criteria used to evaluate students' papers.

The analysis of the student's conceptualization of a writing task focused on the kinds of resources each student might rely on to interpret and complete assignments. These resources could include:

1. Student's understanding of the purpose of the assignment and the criteria used in awarding grades.
2. Student's understanding of the procedures and resources to be used to complete the assignment.
3. Student's repertoire of "production systems" or strategies for completing certain kinds of school writing tasks.
4. Student's past experiences in the course.
5. Student's past experiences with the subject matter being covered in the course.
6. Student's time and effort allocation.
7. Student's collaborations with peers in the course.

This list of factors for analyzing a teacher's and student's version of classroom tasks is based on a similar analysis scheme developed by Nesper (1987). In her study, Nesper examined how a persuasive essay assignment in a high school English class was defined by the teacher and ten students. Drawing from other examinations of cognitive processes in the classroom (Doyle, 1983; Posner, 1982; Como & Mandinach, 1983) and her own research, Nesper identified several "heuristics or sensitizing concepts" (p. 210) that proved to be useful for analyzing how classroom tasks are defined. Because Nesper's framework for analyzing academic tasks takes into account the important features of classroom settings that can influence how students define and approach tasks, it proved to be an especially useful analytical tool for the current study.

In order to determine whether students' task interpretations and approaches matched their teachers' intentions for assigning writing for each case study task, I carefully reviewed the teacher's description of the assignment and his or her stated goals and methods for assigning and evaluating writing. I then compared the teacher's conceptualization of the assignment with each

student's interpretation and response as revealed in the interviews and process logs. Based upon these comparisons, I made a judgment about whether students and teachers concurred or disagreed in their conceptualizations of the assignment. These judgments were then tested against those of an independent rater who went through the same process, reviewing information from assignments, logs and interviews. In every case our judgments matched: 7 out of the 13 students' responses to writing assignments appeared to match their teachers' intentions, while 6 did not.

FINDINGS

The following discussion focuses for the most part on the classroom settings where disjunctions occurred between teachers' intentions and students' interpretations. In describing and attempting to account for these disjunctions—and for some instances where teachers and students agreed—my aim is to discover possibly significant factors involved in the complex process of interpreting and responding to naturally-occurring academic writing assignments. In particular, by focusing my discussion on the classroom settings where teachers' and students' task interpretations diverged, I hoped to identify the factors that can lead to disjunctions between teachers' intentions for assigning writing and students' responses. Any inferences about causation were made tentatively and, whenever possible, were checked with the participants themselves.

In the following section, the teachers' and students' conceptualizations of three different writing tasks are presented. In order to make the comparison of teachers' and students' conceptualizations of different tasks easier, the findings are presented as case studies of individual tasks: (1) a writing task from a freshman-level sociology course; (2) a writing task from a freshman-level engineering course; and (3) a writing task from an undergraduate literature course. Each case study begins with a brief description of the class in which the writing task was assigned. Then the teacher's conceptualization and presentation of the assignment are described. Next, two students' descriptions of how they interpreted and completed the task and how their papers were evaluated are presented. Finally, each case study ends with a brief summary of the students' interpretations of their task and the resources and coping strategies that appeared to influence their approaches. All of the participants' names in the study are pseudonyms.

Case Study 1. Sociology Writing Task: Reports of Fieldwork

Like many universities, Carnegie Mellon requires entering freshmen to take a series of "core courses" in the Arts, Science, and Humanities. Such courses are often large (over 100 students) and taught by lecturers with the help of teaching assistants, who conduct weekly recitation sections and, more often than not, grade students' work. The writing tasks described below were assigned in "Social Influences," a course that all freshmen enrolled in the college of Humanities and Social Sciences are required to take. In Social Influences, writing assignments were designed by the professor and then presented to students and graded by teaching assistants in individual recitation or discussion sections. This practice—while practical and commonplace—complicates our attempt to examine how writing tasks are negotiated and defined in classrooms. In the case of Social Influences, writing assignments can undergo two possible transformations: first, when teaching assistants interpret and translate the professor's assignment for their individual sections; and second, when students interpret and respond to their section leader's assignment. In order to account for the possibility of differences among the professor's,

teaching assistant's, and student's version of a writing assignment, I chose to examine how writing assignments were presented in two separate recitation sections and how a total of four students (two from each section) defined and completed these tasks. While the following discussion focuses on only two of these four students' approaches, the concluding discussion describes how all four students defined and approached their writing tasks for Social Influences.

Professor's Version of the Assignment

Conceptualization of the task's goals. During an hour-long interview, Professor Smith explained that the writing assignments for the course consisted of three papers that were designed to "build on each other." Each assignment required that students conduct fieldwork as part of their research and write a 5-7 page report. The first assignment was intended to help students "to systemize their observations and experiences" by asking them to gather material and use it to present valid conclusions about "socialization" processes at Carnegie Mellon. Dr. Smith explained that for this beginning assignment, it was important "to impress on students the fact that readers don't know what they do" and that they should "learn to write for an uninformed audience." The second paper required students to do fieldwork and examine how power relations are manifested at Carnegie Mellon. Professor Smith described three goals for this assignment: to get students to select and organize data for an argument; to use the theories and concepts discussed in class to frame these arguments; to understand the use of comparative data. The third and final paper, while similar to the others, placed "greater demands" on students. For this paper, students were expected to include "field data, comparative data from the readings, and key concepts from the course." In addition, a "high premium" was to be placed on how the paper was presented.

In response to questions about why she gave writing assignments in her course, Professor Smith explained that "writing is a way of learning, of integrating ideas and experiences. It helps students to go beyond course content, to learn how to systemize what's happening to them." Thus, she believed that writing could play a central role not only in helping students to learn course material, but in allowing them to relate this new material to their own experiences.

Presentation of the assignment. All three assignments were described briefly in the eleven-page course syllabus. According to the syllabus, each paper was worth 15% of a student's course grade, the same weight as the mid-term exam. Thus, grades for all three papers accounted for nearly half (45%) of the student's grade, revealing that writing did indeed play an important role in the course.

Professor Smith provided teaching assistants with a detailed description of the requirements for each assignment, including the kinds of information the paper should include and the criteria for grading. For example, she recommended that papers be graded on a 100-point scale, with 80 points for "content" (data and method; concepts and theories; analysis, conclusions, use of comparative material) and 20 points for "presentation" (description of data; style of the whole paper). In a memo to teaching assistants describing the first paper, she explained that "I realize that the above [description of requirements] gives a bit more than you might want to say to students. Use it as a general framework for instructing students." Several teaching assistants responded by using these descriptions to generate a somewhat shorter list of guidelines which they handed out to students in their sections. These guidelines turned out to play an important role in determining how students approached the assignments.

Two Teaching Assistants' Versions of the Assignment

Sometime during the middle of the semester, two students from different sections of Social Influences were caught plagiarizing. Apparently, one student handed in a paper that a fellow classmate had written and turned in to another section leader. After this event became public knowledge, several students complained to the professor that students in different sections received an unfair advantage on their papers because their teaching assistants handed out explicit guidelines for completing papers while others did not. In answer to these complaints, Professor Smith decided that students in all sections should receive the same detailed guidelines for assignments.

Consequently, both teaching assistants in the sections I studied presented their students with the same seven-point list of steps for completing the second paper. Each of the seven steps students were to follow included advice, examples, or questions to help them focus on key issues. For example, the second step directed students to: "State your assumption; what are you going to test in your study?" (See Appendix for the complete guidelines.)

Even though the two teaching assistants I interviewed presented the same assignment to students, they described different concerns about shaping and responding to student writing. Section leader Stevens explained that the worst advice teachers can give is "to tell students to be clear." He tells students "if you're not confused, you're not learning." Because he believed that students need to struggle to define and express their ideas, Stevens did not like giving students outlines or guidelines to follow for their papers. In fact, on one set of paper guidelines he wrote "Security Blanket Guide--discard as soon as possible." He felt that these guidelines took too much of the "struggle" and, hence, the learning out of the assignments.

When asked how he liked to respond to student papers, Stevens explained that he preferred to respond at different stages in order to "trace their progress, how their thinking is evolving." He liked to ask students questions about their ideas and methods, and to "keep pushing." He also encouraged students to consider rewriting and resubmitting papers.

In contrast, section leader Todd believed in giving students clear advice for producing papers. He spent a large portion of his weekly recitation meeting discussing the second paper with students, telling them to pay particular attention to their "method section." He wanted students to provide more detail about their data-gathering techniques than they had in their first papers, to "be active observers, not passive."

In responding to student papers, Todd explained that it was important to explain his criteria for grading in class and to "talk about where students missed" and "what they could do to improve next time." Todd also encouraged students to share their early drafts with him and told students to call him, at home or at school, if they needed help.

Students' Versions of the Assignment: Art and Barbara

Described below are the responses of two students: Art was enrolled in Stevens' recitation section and Barbara in Todd's recitation section. As stated earlier, both students received the same written instructions for completing their papers, but each student brought different assumptions and past experiences to the tasks.

Conceptualizing the task. When I interviewed Art before he began working on this assignment, he explained that he did not anticipate any "major problems" in writing this second paper. However, he did say "I'll be lucky to get six pages-maybe with wide margins." Art found the first paper easy to write because he could rely on his classnotes and "since it was about my own experiences, all I had to do was BS a little." He explained that while he composed the first paper, friends dropped by to ask how it was going and "I'd say 700 words-950 so far." Art admitted that the conclusion for this first paper could have been expanded but said, "Hey, 1500 words is enough." He was quite satisfied with the B- he received and seemed confident about producing his next paper without much difficulty.

Art's conceptualization of the second paper (a field study of power at Carnegie Mellon) seemed to match his conceptualization of the first paper. He focused on the product requirements (length and format) to define and complete the assignment and failed to engage in many of the processes described by Professor Smith and his recitation leader.

Unlike Art, in preliminary interviews, Barbara described misgivings about writing her paper. These misgivings stemmed from her lack of experience with "long papers" (over 3 pages) and the fact that she was used to producing either "opinionated" papers or research papers where she "could quote a lot from sources and use up space."

She received a B on her first paper for Social Influences, and Todd, her teaching assistant, wrote fairly extensive general comments about how she could improve her paper:

First, you have not included a section that describes your methodology. How did you collect your data? What kinds of data did you collect? This should be made explicit after your introduction. Also, additional analysis and interpretation of your observations would strengthen your paper considerably.

In a general discussion with the class about how to improve their second paper, Todd once again stressed the importance of describing one's methods in detail. In her reaction to the teacher's comments on the first assignment, Barbara wrote, "I thought they were good points; however, he should have told us before we wrote our paper In any case, I was pleased with my grade!" She also explained that "I thought I could work under pressure for my paper. Now I know this kind of paper is not for my usual approach. I think to start my second paper, I'll talk to my recitation teacher for some advice."

Planning and composing the paper. Two weeks before the paper was due, Art's teaching assistant, Stevens, required students to write one-paragraph openings for their papers and bring them to class for discussion. Art wrote about "to what extent professors and teaching assistants can and do use their power." If the goal of this activity was to check how students' work was evolving, it seemed to have failed in Art's case, who reported that he didn't talk about his opening and didn't pay much attention to the discussion because he was too worried about the upcoming mid-term exam.

When he returned to the assignment ten days later (just two days before the paper was due), Art reported, "I changed my topic from the power of professors to the power of sports-figured it would be easier since I'm involved with sports." He then reported that he "started writing everything from the top of [his] head; said that [he] had interviewed the coach and interacted with teammates but really didn't." Essentially, Art fabricated his field report.

While writing the paper, Art said he watched a basketball game on television, and took several breaks to rest and talk to friends. When he got stuck in his writing, he looked at the paper guidelines for help. He finished his paper in four hours and typed it on the computer the next day, making only minor, word-level changes. As with the first paper, Art reported that "always, throughout the paper, [I] constantly kept track of how many words I had written." In follow-up interviews, Art explained that he used the seven-step assignment guidelines to compose the paper: "I read through each step and tried to answer it." Interestingly enough, Art produced a seven-paragraph paper.

Approximately two weeks before her paper on power was due, Barbara wrote:

I think that I'm gonna write my paper on the power of fraternities because I talked to my roommate and she helped me think of different options for the paper Since a guideline was given to help us focus on the issues for our paper, I'll be basically answering the questions given in this guideline and hopefully my answers will stretch to 4-6 pages.

A week later she reported that she had "no new ideas-probably work better under spontaneity."

She did visit her teaching assistant, as planned, but apparently used this visit to get an extension on the paper's due date and not to discuss her work. When she finally sat down to write her paper, her strategy was remarkably similar to Art's. She explained:

While looking at the guideline that was handed to us earlier, and also the hints given in recitation, I was kinda overwhelmed with all the questions to be included in our papers! I guess I didn't really know how to organize it. However, being the spontaneous person that I am, I finally thought that I should just write the ideas down as they came in mind and try to refer back to the guideline if I wanted to answer more questions.

Like Art, she did no actual planning or field research and relied on the detailed questions in the assignment sheet to generate her paper.

Evaluation. Art received 75 out of 100 possible points for this paper. His instructor (Stevens) wrote three questions at the end of his paper: (1) How does the coach regulate the behavior of athletes? (2) Which behaviors are legitimately regulated by the coach? (3) What evidence would you need to back up the claims made? Since Art did not plan to revise the paper, he did not find these comments particularly useful, explaining that his instructor was "a good teacher, but expects too much." Art said he was satisfied with this grade and that his "teacher's comments don't really matter." Apparently Stevens' goal to "keep pushing" students by asking them questions about their research did not always succeed. Art found his feedback largely useless.

Barbara's recitation teacher (Todd) wrote extensive critical comments in the margins of her paper, pointing out that she included irrelevant information in her report, and failed to provide any detail about her methods or observations. In his final comments he wrote, "I think you are capable of much better work, Barbara" and gave her a B-. In follow-up interviews, Barbara revealed that she agreed with her teacher's comments, saying "I knew it was a bad paper when I handed it in-I didn't do any real research." She felt that his criticisms "made sense" and said, "His comments will let me write a better final paper."

However, in spite of these projections, Barbara's system for writing her third and final paper for the course followed the same pattern as before. She composed it at the computer on the day it was due ("right before class"), using the assignment sheet to refer to if she did not have anything to say.

Students' Interpretations, Resources, and Coping Strategies

Several factors seemed to enter into Art's response to this assignment. Time and effort allocation were kept at a minimum—he stopped writing when he had produced enough words to fulfill the length requirement. The seven-step paper guidelines furnished by his teacher proved to be an especially valuable resource. These guidelines served as a prompt and helped him to produce a "field study" without ever actually collecting any data. Thus, Art's predisposition to expend minimal effort on the writing assignments may actually have been fostered by the resources his teacher provided. Finally, because the teacher's evaluation of his paper and suggestions for further analysis were not tied to any required revision, Art decided that Stevens' comments could be ignored.

Throughout her interviews and log entries, Barbara referred to herself as a "spontaneous" writer whose "usual approach" was to put off assignments and "work under pressure" at the last minute. Early on in the course, after her first paper, she realized that this method for producing papers would not work for the field reports she was being asked to write. In spite of this realization and promises to change her ways, Barbara continued to put off planning and writing until just before her papers were due. As with Art, it appears that the explicit paper guidelines she received enabled her to continue to rely on this efficient "production system" (Nespor, 1987, p. 214). The guidelines served as a sort of paper generator for both students, allowing them to circumvent the assignment's process requirements and produce fairly acceptable products.

In many ways, these two students' short cuts for producing acceptable papers are sensible. Rogoff (1984) and other researchers stress the practical and opportunistic nature of cognitive activities in everyday settings. Rogoff (1984) explains that "thinking is a practical activity which is adjusted to meet the demands of the situation Rather than employing formal approaches to solving problems, people devise satisfactory, opportunistic solutions" (p. 7). As mentioned earlier, a total of four students (two in each recitation section) were observed in this course, and three out of these four students chose not to use the research methods they had been taught to plan and produce their papers. Instead, they adjusted their approaches to meet the demands of the situation, which they believed called for papers that clearly matched the steps outlined in their detailed assignment guidelines. One student was even astute enough to fabricate her data and conclusions so that they matched the ideas raised in class lectures. However, while these three students found the paper guidelines very helpful, the student who did try to complete the assignment as his teacher intended complained that the explicit guidelines co-opted his own ideas by forcing him to follow a series of steps. He described the paper guidelines as a "narrow constriction" which he felt obliged to follow and explained that "it seems as if we're being graded on how well we can follow directions, not how we think on our own."

It is important to remember that the guidelines for producing papers were provided to students in all sections of the course only after they complained to the professor and asked her to make task instructions more explicit. This request is one of the coping strategies outlined by Doyle that students rely on to lessen the ambiguity and risk involved in accomplishing academic work. While Art and Barbara relied on these explicit task instructions to circumvent the research

and learning processes their professor hoped to promote, they also brought particular individual "production systems" or writing strategies that influenced their responses.

Time and effort allocation—one of the variables involved in how students define and accomplish academic task—seemed to play an important part in students' responses. For the most part, the students I observed in Social Influences seemed unwilling to invest the time and effort necessary to complete the assignments as their teachers intended. Three variables seemed to interact and shape their approaches: the individual "production systems," or set of composing strategies, students brought to the assignments; the explicit task instructions that students received; the nature of the feedback students received— particularly whether it applied to work on later papers. Similar individual and situational variables come into play in the following analysis as well.

Case Study 2. Engineering Writing Task: Producing a Concise Argument

The following writing task, described briefly at the beginning of this paper, was assigned in a "pilot version" of a new required core course for all freshmen enrolled in the Carnegie Institute of Technology at Carnegie Mellon. This course was developed and taught by a team of four engineering professors, who each designed and presented the assignments for their specific portion of the semester-long course. This particular writing assignment was designed by Professor Clark, and then assigned and graded by teaching assistants in individual recitation sections. As with the previous case study, I will briefly summarize the professor's and teaching assistant's conceptualizations of the assignment, and then present two students' responses.

Professor's Version of the Assignment

Conceptualization of the task's goal. As described earlier, Professor Clark explained that he intended this writing task to be a challenging exercise in synthesizing and transforming course material into a concise 200-word argument about the role of "nontechnical issues" in the development of lead regulations. Professor Clark said that when he responded to student writing, he liked to give detailed "constructive feedback," focusing in particular on organization and coherence. He stressed writing in his courses because he believed that writing was "very valuable" and that speaking and writing skills needed to be stressed throughout the engineering curriculum in order to better prepare students for the writing demands they were sure to encounter when they entered the job market.

Presentation of the assignment. This writing task was presented to students as one of several assignments included in the nine-page syllabus for Professor Clark's section of the course. It was the second task of a two-part assignment worth a total of four points. Specifically, students were told to "write a carefully prepared short statement . . . using information in the assigned articles, in the handout, and presented by all of the speakers throughout this unit." Students were expected to "boil down" all of this material and present a concise argument in 200 words or less.

The Teaching Assistant's Version of the Assignment

In an interview, section-leader Coleman complained that engineering students were not asked to write enough in their other courses and as a result were often "output illiterate." When responding to student writing, he felt that it was important to look for features of "competent

writing" such as "complete sentences, spelling, organization, and evidence." He also looked for particular "content features" which consisted of key points from the course readings. (This emphasis on "content features" when evaluating students' performance on the assignment differed from Professor Clark's stated criteria for the assignment.) Coleman said that while he liked to give students "meaningful feedback" and to "tell students ways to improve their writing," he found that there wasn't enough time in the weekly recitation sections to discuss writing.

Students' Versions of the Assignment: John and Judy

Conceptualizing the task. As noted earlier, John described this as an easy assignment. He had already completed a very similar writing task for the course, one that likewise had a 200-word limit. He explained that it required the writer to "present an argument based on evidence that was all there" in the assigned material. "I felt like it was BS-basically it called for reiterating what we'd been given."

Judy had a similar response to this assignment, saying it wasn't "motivating" and that the 200-word limit was "utterly ridiculous." She found this constraint especially troubling because it interfered with her "normal approach" to writing school papers. She liked to use the "triangle method" for developing her introductory and concluding paragraphs, a popular technique she had learned in high school. However, because of the length restriction for this task, she had to limit her introduction and conclusion on her first paper to just two sentences, and was very surprised that she received full credit for her paper, which she believed was poorly written. She also said that she would have preferred more freedom in writing these papers because it was nearly impossible to present "enough evidence" in just 200 hundred words.

Like John, Judy understood her teacher's grading criteria to be based on "a list of ideas" from the readings and lectures, and she explained that a check "meant that you'd hit one."

Planning and composing the paper. John explained that as he was reading the assigned materials the night before the paper was due, he "formulated the report in [his] head," picking out names and events to mention in his paper. In his last log entry, he said, "Essentially, I paraphrased the reports I read . . . No great insights on this paper-sorry!"

Judy took notes from the assigned readings to prepare for writing the paper, but she limited her reading and note-taking strategies to fit the limits of the assignment, saying, "I just skimmed the assigned articles looking for blurbs about the topic-I don't need a lot of details." Later she reported, "My notes for this assignment are pretty sparse-oh well, the less I have to work with the better, I suppose, since I'm limited to 200 words anyway."

Even with her "sparse" notes, Judy produced a first draft that was 739 words long. She produced two more drafts and kept "looking for shorter ways to say things" until she had cut over 300 words. In a note to her teaching assistant attached to this final version, she said, "Considering the major chop-job I did on my last paper, I absolutely refused to grind this paper up any more. It is simply against my writing principles."

Evaluation. John produced a 412-word paper and received full credit (2 out of 2 points). His teacher's feedback consisted of four checkmarks in the paper's margin and three brief comments, one of which told him that his paper was "a little longer than necessary." John said that he found this writing assignment "a waste of class time."

Judy also received full credit for her paper. Her teacher's feedback consisted of five checks in the margin and two words in the text marked with question marks. Not surprisingly, Judy said that she just looked at the grades she received on these papers and did not bother to look at any other marks or comments.

Students' Interpretations, Resources, and Coping Strategies

Even though Professor Clark intended this assignment to be challenging, the students I studied found it "unmotivating" or a "waste of time." Unlike John, Judy did struggle to make her paper more concise, but found it impossible to meet the 200-word limit, a constraint that she not only found arbitrary and counter to what she had learned about good writing in past courses, but which seemed to shape her limited reading and note-taking strategies. John seemed to object more to the nature of the assignment itself, which on the surface asked students to take a stand on an issue, but in reality called for "reiterating" what they had read.

Thus, two features of the task itself seemed to influence students' responses: the limited purpose for the assignment (i.e., to show that students had read and comprehended course material); and the seemingly arbitrary length restriction. In addition, both students appeared to base their task interpretations and subsequent responses on information about task requirements gained from their interaction with the teaching assistant in the course. In other words, as the nature of their teacher's grading system became more apparent, they were able to "selectively attend to information that [had] consequences for task accomplishment" (Doyle, p. 181), namely the production of papers with information that matched the facts on their teacher's list of "content features." It appears in this case that, as Doyle suggests, the "answers a teacher actually accepts and rewards define the real tasks in the classroom" (p. 182).

Both students brought individual experiences which also may have played a role in shaping their negative responses. John alluded to the fact that he had encountered similar assignments in which the teacher used writing to test whether students had learned course material. Apparently he had developed a fairly efficient system for completing such assignments, though he found them a waste of time.

In contrast, Judy had learned a particular method for developing academic essays which did not match the constraints of this specific assignment and may have interfered with her ability to produce a brief 200-word argument. In fact, Judy said that in her previous English class, her major writing problem had been that she presented good ideas but failed to develop them. Ironically, for the engineering assignment, she was expected to condense her ideas, but argued that this requirement went "against her writing principles." It appears that both students' previous experiences interacted with the situational variables discussed above and had an impact on their approaches to this assignment.

Case Study 3. Literature Writing Task: Research Paper on the Victorian Era

This final case study examines the teacher's and students' versions of a research paper assignment given in "Reading Texts," a freshman literature course that students (who qualify by scoring above 500 points on the SAT-verbal exam) may elect to take in place of the freshman composition course. In this case, a disjunction occurred between the teacher's intentions and one

student's interpretation of the writing task. Unlike the two previous writing tasks we examined, this assignment was formulated, presented, and graded by the professor of the course.

Professor's Version of the Assignment

Conceptualization of the task's goal. Reading Texts differs from many traditional introductory literature courses in that it does not present a survey of particular literary genres or periods. Instead, as Professor Green described in his syllabus, the aim of the course is to "study texts as culturally produced and reading as a culturally-acquired process." Throughout the course, students were required to analyze and describe their reactions to different literary texts in several written "response statements." These fairly informal statements were not graded but were commented on by Professor Green, and good response statements were read aloud in class periodically. Professor Green used these short assignments to build up to more formal paper assignments, which consisted of two papers, including the research paper. The response statements made up 30% of the course grade and the two papers were worth 50% of students' final grades. Clearly, student writing played a very important role in the course.

During an interview, Professor Green explained his belief that having to write "changes the way people read literary works [because] it poses problems and changes attitudes toward texts." In structuring paper assignments, he liked to model this process by posing a problem or question and then suggesting a path students could take to solve it. For his course, papers were developed in stages, with students writing informally about paper topics, and then producing drafts and the final version. In responding to student papers, Professor Green said he looked for "argumentative strength" and evidence of "effective reading and interpretive skills."

Presentation of the assignment. Shortly after the middle of the semester and over a month before papers were due, Professor Green handed out a one-page description of the research paper assignment. The stated goal for the 5-7 page research paper was to "give [students] the opportunity to investigate the repertoire of Victorian texts and to use this information to interpret one or more of them." Students were encouraged to come up with their own topic or issue for the assignment, but Professor Green suggested several possible general approaches in the hand-out and discussed a specific example in class.

In the written instructions he emphasized the kind of paper he wanted students to produce: "Remember that a research paper is *an argument*. It is NOT a report of FACTS, but a careful marshalling of the judgments, opinions, and ideas of others to support your own position." In addition to these general directions, the written assignment instructions explained that the "audience" for the paper was other members of the class and that a written proposal was due four weeks before the final paper. In this proposal students were expected to indicate the topic of their research, the argument they expected to make, the work or works they would interpret, and include a bibliography of sources they had used so far.

In presenting this assignment to students, Professor Green tried to make his expectations clear while at the same time leaving room for students to develop their own topics and approaches. In the following description we will see how two students responded to this freedom.

Students' Versions of the Assignment: Helen and Greg

Described below are two students' responses to this assignment. The first student's response was judged by the independent raters to match her teacher's intentions; however, what is particularly striking is how much this student struggled to understand and define her task.

Conceptualizing the task. When I interviewed Helen before she began working on her research paper, she predicted that this would be a hard paper to write, primarily because she thought students had received very little guidance in choosing topics and formulating their approaches. She wanted more information about what the professor expected. Her insecurity, she explained, was due in part to the fact that she and other students had not received any grades on the work they had turned in so far in the course. Although they had turned in one formal paper, the professor was slow in returning them and as a result, Helen said she had "no idea what the proper approach is or what [the teacher] is looking for on papers." Helen reported that the class had asked for "more feedback" but had not received any yet.

Six weeks before her paper was due Helen borrowed a book on life in Victorian England from her aunt. She planned to use this book to "get some background on the Victorian Period" before she tried to choose a literary text to analyze.

A few days later, the rest of her classmates received their first graded papers back, but she reported, "Mine was lost! So I'm still unclear if I have done anything correctly." After speaking with a classmate about his plans for the research paper assignment, Helen reported, "I realized that I was very confused. He, my classmate, had a totally different idea of the assignment." In class that day, Helen asked her professor to explain the assignment again and wrote in her log entry:

I think I have a better understanding of the [paper's] goal. We are to propose and support an argument that is somewhat new. This argument must deal with the Victorian era. First, though I need to choose a topic and create an argument dealing with the topic.

With this clearer conceptualization of the assignment, Helen went to the library two days later and spent five hours looking for information on women in the Victorian era—a topic she had developed by talking to friends. She narrowed her focus to an examination of Thomas Hardy's poem "Ruined Maid" and "decided to try to present an argument about the woman he has portrayed." In her proposal she stated her goal even more explicitly: "I have researched the actual lives of prostitutes in the Victorian era and circumstances surrounding their 'fall' . . . Based on my initial research, Thomas Hardy has created a very true portrait of prostitutes and hopefully this paper will show how." Professor Green approved her proposal, and on the same day finally returned her first paper (nearly a month after she had handed it in). She received an A and the professor wrote "This is far and away the best paper I've received for this assignment."

However, in spite of this positive feedback, Helen reported that she continued to struggle to define her professor's expectations more clearly, explaining that she and her classmates spent thirty minutes one day talking about their research topics and "trying to decide what he wanted for these papers." The following excerpt from her log entry suggests one possible reason for her continued confusion:

I think [the professor] wants us to use others' arguments to develop our own. So, in a sense this isn't a research paper (i.e. telling what's already been said like in high school) but rather an argument that requires research.

This explicit reference to her previous school experiences suggests that Helen had developed a schema for writing research papers in high school which did not match the requirements for this assignment. Once she realized this, she was able to define her task more clearly.

Unlike Helen, Greg predicted that the research paper for Reading Texts would be easy to write since he was familiar with the material because he had "read lots of Victorian literature and history in high school." He also explained that he had written similar kinds of papers for his high school English classes. In addition, he reported that he was studying Victorian literature in an aesthetics course he was also enrolled in and believed that his work in this course would help him to write the paper for Reading Texts.

On the day that research paper proposals were due, Greg reported in his log that he was still not sure about what Professor Green wanted and that he had not yet come up with a topic for his research paper. He was studying Jane Austen's *Pride and Prejudice* in his aesthetics course and finally decided to propose this novel as the focus of his paper. In his written proposal, he explained that his research paper would be "an interpretation of the Victorian best seller, Jane Austen's *Pride and Prejudice*, and the reasons for its popularity in Victorian culture." He admitted that his proposal was a last-minute attempt to fulfill a requirement, writing, "My proposal was a conglomeration of pretentious . . . impromptu generalizations and gave me no base for ideas concerning the actual paper." Unfortunately, Greg never bothered to pick up his proposal (which he had failed to write his name on) and as a result did not learn that he had made a serious mistake in assuming that Jane Austen was a Victorian writer. In fact, Professor Green rejected his proposal because Austen wrote her novels several decades before the Victorian era.

Planning and composing the paper. After Helen had a clearer notion of what her assignment required, she spent several hours in the library doing more research and taking notes. Based on what she learned, she decided to revise her initial claim (described in her proposal) that "Hardy shows reality" about prostitution in his poem. She reported, "I think [Hardy] may be showing what the public *believes* to be reality." After taking over 20 pages of notes, Helen produced a "rough tree" which laid out the form her paper would take. Then she wrote a detailed three-page outline for her paper. Using this outline and her extensive notes, she wrote a rough draft two days before the final paper was due. She completed and revised her draft the next day, basing some of her revisions on a discussion of Victorian ideals that she and her class had after viewing a film. Helen reported that "I was able to contribute a lot of information to the discussion based on my research. Professor Green seemed pleased with some of the things I mentioned, so I included the ideas he seemed to like into my paper." Clearly, Helen's concern about accountability and meeting her teacher's expectations continued to influence her approach to this assignment.

Greg explained that the rough draft of his research paper was "written entirely from information gleaned from [his] aesthetics class rather than actual research on [his] part." He said that he often wrote research papers for high school this way, doing little, if any, actual library research. If he had done some research on the Victorian era, as the assignment required, he might have learned that Jane Austen was not a Victorian author. However, he was confident about his background knowledge of Victorian literature and history, and did not even bother to re-read

Pride and Prejudice, which he had last read three years earlier. When Greg did decide to go to the library on the night before his final paper was due, he limited his research to books of literary criticism about Austen's work.

Evaluation. Helen received an A on her paper, and Professor Green wrote that it was "a first rate use of history to contextualize and revise one's reading of a literary work." Helen's interpretation and response to this assignment matched her professor's intentions, but it is important to remember how much she struggled to define this task for herself.

Professor Green reported that he was surprised to receive Greg's paper on Jane Austen because he had not approved this paper topic. In fact, after several announcements in class weeks earlier that he had an unclaimed paper proposal with no name on it, he had assumed that the student had decided to withdraw from the course. At the end of Greg's paper, Professor Green wrote, "Jane Austen is not a Victorian writer-this is not an acceptable topic" and gave the paper an F.

Students' Interpretations, Resources, and Coping Strategies

Greg's failure on this assignment can be traced, in part, to his previous experiences with Victorian literature and his mistaken assumption that Austen wrote her novels during the Victorian era. This mistake might have been caught and corrected, but Greg failed to take advantage of the same classroom resources that helped Helen to define and shape her approach. Greg skipped class often and did not ask for feedback from his teacher or classmates on his conceptualization of what the assignment entailed. Unlike Helen, he did not question his initial representation of the task and did not rely on the social-interactional resources available in the classroom to help him test and refine his approach.

While it is difficult to know why Helen worked so hard to clarify her understanding of this assignment, at least two factors may have played a part. First, lack of feedback or grades on previous work appears to have made Helen and her classmates particularly interested in determining what their teacher expected. Without feedback, the ambiguity and risk involved in responding to assignments increases and students must become especially sensitive to any cues that signal accountability (Doyle, 1983). It is not surprising that Helen and her classmates shared and compared their representations of the assignment and asked Professor Green for more explicit information about what he wanted. In this way, students were able to negotiate and refine their task definitions, relying on the socialinteractional resources available in the classroom.

Second, Helen's previous experiences with research papers did not seem to match Professor Green's expectations, and after this disjunction became apparent to her, she seemed to find it easier to define her task. In Helen's case, her familiarity with research paper tasks could have been a disadvantage, if she had not realized that what her teacher wanted was "an argument that required research" and not a summary of other authors' ideas.

Helen's story of how she defined her writing task and went on to produce a successful paper illustrates just how important and complex the act of representing one's writing task can be when it occurs in natural classroom settings. She took advantage of the social resources in the classroom and, with her classmates' and teacher's help, was able to clarify and refine her task

definition. This process took time, as well. As Helen worked to find a topic and focus for her research paper, she reported that her representation of the assignment continued to evolve.

When juxtaposed in this way, the stories of Greg's failure and Helen's success are interesting because they suggest that successful students, like Helen, may be efficient "resource managers" who make use of several of the resources available for interpreting and completing tasks.

DISCUSSION

These case studies suggest that we can learn a great deal about the concerns and processes of student writers when we locate our research in the complex social settings of actual classrooms. Previous research reveals that classrooms are highly evaluative settings where accountability (that is, the processes and products students are actually rewarded for) often determines how students respond to school assignments. These case studies are valuable not because they can provide teachers and researchers with clear-cut answers, but rather because they provide opportunities to discover possibly significant variables in student approaches to writing. By examining when and how students' interpretations differ from their teachers' intentions, we can begin to formulate hypotheses about how features of specific tasks and writing contexts shape students' approaches.

Essentially, I wanted to learn more about the kinds of variables that come into play when students set out to define and complete writing assignments in a variety of courses. As stated earlier, my aim in conducting this research was to begin to answer three key questions:

1. What kinds of resources do students rely on to help them to interpret and complete writing tasks, and how do specific classroom writing situations influence their approaches?
2. How do students' task interpretations and approaches relate to their teachers' stated goals for assigning writing?
3. Under what conditions do students rely on coping strategies to circumvent the demands of writing assignments?

The following discussion of my findings is organized around these three questions. My intention here is not to claim that certain situational or individual variables caused certain kinds of behavior, but rather to use these case studies to speculate about what kinds of variables might play a role in shaping students' responses to academic writing tasks and to suggest areas for further research.

Student Resources and Classroom Environments

Successful student writers are, above all, sensitive decision-makers. They are able to size up a writing situation and adapt their goals and approaches to meet the demands of different classroom contexts. In these case studies, we saw students drawing from several resources in their efforts to define and fulfill their teacher's assignments. These resources included situational, or context-specific, variables and individual, or personal, variables. Specific classroom

environments provided students with a range of situational resources to draw from, including feedback from professors and teaching assistants, and the collaborative efforts of classmates who helped each other to negotiate and define their tasks. In addition to these context-specific resources, students also relied on individual resources, such as their past experiences with the subject matter being covered in the course, past experiences with similar kinds of school writing tasks, and individual "production systems" or strategies for completing certain kinds of assignments.

All of the students observed in these case studies relied on some of these situational and individual resources as they struggled to define and complete their writing tasks. However, the students differed in the *extent* to which they drew from these various sources. For example, Helen successfully defined her literature research paper assignment by drawing from several social-interactional resources available in the setting as well as from her own experiences with similar tasks in high school. In addition, Helen refined her task interpretation as her paper evolved. In contrast, Greg relied solely on his past experiences with research papers and Victorian literature to define his task, and he did not question or revise his initial task representation after he had formulated it. Moreover, Greg's teacher provided several chances for students to present their work and receive feedback, but Greg failed to take advantage of these opportunities. Perhaps students like Helen succeed because they are able to rely on a range of available resources and are able to build flexible task representations that evolve as they gain more information about task requirements. Students who fail to determine what counts in responding to different classroom writing assignments may fail, in part, because they rely on a limited number of situational resources to help them and because they do not evaluate and refine their initial task representations. This is certainly a hypothesis worth exploring more fully.

In their extensive study of the contexts in which students learn to write in high school, Applebee (1984) and his colleagues found that students vary their approaches to school writing to meet the demands of particular teachers and assignments. The case study material gathered in my study of college-level writing raises interesting questions about how features of specific tasks and writing contexts shape students' approaches.

The students' responses to the writing tasks in *Social Influences* provide especially useful examples. Three out of the four students I observed in this course used the detailed assignment guidelines they received to short-circuit their teacher's intentions. These guidelines seemed to allow students to expend minimal time and effort while at the same time enabling them to produce fairly acceptable papers. The only student who did not use the guidelines to circumvent his teacher's process requirements for the assignment complained that the guidelines preempted his own work, saying, "It seems as if we're being graded on how well we can follow directions, not how we think on our own."

These case studies suggest that teachers need to examine the costs and benefits of providing students with such explicit written instructions for producing papers. Students, like those in *Social Influences*, may pressure teachers to make their task instructions more explicit, but when tasks are tightly defined, students' approaches may be limited as well. In fact, Doyle (1983) and Nespore (1987) argue that by providing overly explicit routines or procedures for accomplishing tasks, teachers may allow students to use only a narrow range of cognitive processes. This appeared to be the case with three out of four students I observed in *Social Influences*.

Clearly, teachers must also weigh the costs involved in requiring students to deal with complex and unfamiliar tasks on their own. Too often teachers expect students who are newcomers to a field to be able to determine the implicit ways of thinking and presenting evidence required to write successfully in their particular disciplines. Some composition specialists (Bartholomae, 1985; Bizzell, 1982) have argued that we need to identify and teach students the structures, language, and ways of thinking required in different academic discourse communities. It appears, though, that in our efforts to codify the rules of procedure and ways of thinking required in different disciplines, we must be careful not to short-circuit the learning we are trying to promote. The step-by-step guidelines in *Social Influences* allowed students to produce a "field study" without ever engaging in the systematic research and thinking processes their teacher intended. Further research is needed in order to find a way to strike an effective balance between providing students with valuable information about the ways of thinking and writing in different disciplines and providing them with "product templates" that preempt their own work and allow them to circumvent the learning their teachers hope to promote.

Another feature of classroom writing situations that appears to shape students' approaches is the nature of the feedback they receive. Students rely on teacher feedback, particularly grades, to help them develop and refine their notions of what counts in completing assignments for a particular course. Without such feedback, students find it difficult to evaluate their own performance. Helen said that she had "no idea what the proper approach" was for writing the research paper in her literature course because her teacher had not returned any graded work. She reported that she and her classmates collaborated in their efforts to clarify their teacher's expectations. It is interesting to speculate about whether the absence of feedback and explicit instructions for completing papers might have caused some students to be even more aware of the choices they were making in interpreting their assignment. English teachers who want to encourage students to take responsibility for all phases of their writing from task interpretation to revision often put off grading student work. It would be worthwhile to explore this practice further, to learn more about how providing minimal feedback in the highly evaluative climate of the classroom influences students' approaches.

Not surprisingly, the nature of the criteria used to evaluate student writing also appears to have an impact on student responses. Judy and John, the two engineering students, mentioned their teacher's limited grading criteria in their explanations of how they sized-up and completed their assignments. When it became apparent that they were being graded on how many pieces of key information from the readings they included in their papers, both students chose to focus on reproducing what they had read. The teaching assistant's limited grading criteria did not reflect Professor Clark's stated goals for assigning writing, however. Professor Clark stressed the importance of conciseness and taking an argumentative stand (two goals that may have been impossible to meet in this assignment), while his teaching assistant stressed the importance of reproducing information from the assigned readings. Other research (Langer & Applebee, 1987; Swanson-Owens, 1986) has shown that the original goals for writing activities are often transformed when individual teachers adapt assignments to meet their own instructional goals. This suggests that teachers may need to be especially aware of the possible disjunctions that can occur in large college lectures where professors design assignments and teaching assistants grade students' responses.

Students' Interpretations and Approaches versus Teachers' Stated Goals

In my analysis of the case study material, I have focused on the settings where disjunctions occurred between students' interpretations and teachers' stated goals for assigning writing. Out of thirteen case studies, six students' responses did not appear to match their teachers' intentions. Nespor (1987), who found similar results in her study of how high school students interpreted a persuasive essay assignment, argues that such disjunctions are inevitable, given the range of experiences, individual repertoires, and situational resources students draw from to interpret their assignments.

However, while most teachers are probably aware at some level that such disjunctions occur, they may not be aware of the important role that task interpretation plays in shaping students' responses. It seems important for teachers to know that students actively interpret the assignments they receive, and that students often rely on implicit cues to determine what counts in completing tasks. These case studies suggest that students' task interpretations are based, at least in part, on situational factors over which the teacher has some control—namely, the criteria used to evaluate products, the quality and frequency of feedback, and the nature of the instructions and other explicit support materials students receive for completing assignments. If teachers understood the potential impact of these situational factors on student performance, they might be able to make more informed decisions in planning, presenting, and responding to assignments.

In addition to examining how students interpret writing assignments under different conditions, we need to explore the relationship between task interpretation and learning through writing. Research has shown that the kinds of goals students bring to writing tasks and the kinds of processes they use to achieve these goals can shape students' learning in important ways. Further research is needed to examine how particular writing situations shape students' approaches and how these approaches, in turn, influence student learning.

Teaching Practices that May Encourage Students to Rely on Short Cuts

Given the limited number of classroom writing situations examined in this study, it is difficult to speculate about whether certain classroom practices actually encouraged the use of coping strategies to circumvent the demands of writing assignments. However, when we combine my findings with those of other researchers (Applebee, 1984; Herrington, 1985; Marshall, 1984) who also have studied student writing in academic settings, we find that certain kinds of task situations may encourage students to rely on short cuts for producing acceptable papers.

Two task situations in my case studies led to student short cuts. In the engineering course, students described their assignment as "unmotivating" and a "waste of class time." In the sociology course, three out of four students expended minimal time and effort on their assignments, and used the explicit paper guidelines to fabricate their field reports. Both of these task situations essentially required students to reproduce the content or form the teacher had provided. The engineering students had to paraphrase what they had read, and the sociology students had to follow the step-by-step guidelines for presenting a field report. Applebee (1984) reports that when teachers turn writing assignments into this kind of sophisticated

"fill-in-the-blank" exercise, students learn to play the game and also quickly lose interest in the activity.

Still, we must remember that students can turn assignments into trivial exercises when they wait until the last minute and take short cuts to produce their papers. Clearly, students base their decisions about the amount and kind of effort they will expend on classroom tasks on a range of personal and situational factors. What these case studies reveal is that these factors can interact in complex ways to shape students' approaches. For example, it is difficult to know whether Barbara, the sociology student who saw herself as a spontaneous writer who worked best under pressure, would have changed her methods for writing her Social Influence paper if her teacher had changed the way he presented the assignment. We need to learn more about how students like Barbara, who have very efficient "production systems" for writing papers, can be encouraged to expand their approaches.

These case studies suggest that the special nature of school settings, with their emphasis on rewards for products, may have an important impact on the way students define and approach writing tasks. In many cases, students focus on the products they are required to produce instead of on the processes they are being asked to engage in. This limited focus can lead students to take short cuts to produce acceptable papers-short cuts that may allow them to circumvent the writing and learning processes that assignments are intended to promote. In addition, these studies suggest that certain classroom practices and writing tasks may actually encourage students to take short cuts and rely on truncated writing strategies. As teachers and researchers, we must continue to look critically at the contexts in which students are asked to write and to examine the practices that may hinder or enhance student writing development and learning.

References

- Applebee, A. N. (1984). *Contexts for learning to write*. Norwood, NJ: Ablex.
- Bartholomae, D. (1985). Inventing the university. In M. Rose (Ed.), *When a writer can't write: Studies of writer's block and other composing process problems* (pp. 134-165). New York: Guilford.
- Berkenkotter, C. (1981). Understanding a writer's awareness of audience. *College Composition and Communication*, 32, 388-399.
- Bizzell, P. (1982). Cognition, convention, and certainty: What we need to know about writing. *Pretext*, 3, 213-243.
- Brandt, D. (1986). Toward an understanding of context in composition. *Written Communication*, 3, 139-157.
- Brook, R. (1987). Underlife in writing instruction. *College Composition and Communication*, 38, 141-153.

- Carter, K., & Doyle, W. (1982, October). *Variations in academic tasks in high and average ability classes*. Paper presented at the annual meeting of the American Educational Research Association, New York.
- Cooper, M., & Holzman, M. (1983). Talking about protocols. *College Composition and Communication*, 34, 284-293.
- Como, L., & Mandinach, E. (1983). The role of cognitive engagement in classroom learning and motivation. *Educational Psychologist*, 18, 88-108.
- Dillon, D., & Searle, D. (1981). The role of language in one first grade classroom. *Research in the Teaching of English*, 15, 311-328.
- Doyle, W. (1983). Academic work. *Review of Educational Research*, 53 (2), 159-199.
- Emig, J. A. (1971). *The composing processes of twelfth graders*. (Research Report No. 13). Urbana, IL: National Council of Teachers of English.
- Ericsson, K. A., & Simon, H. A. (1980). Verbal reports as data. *Psychological Review*, 87, 215-251.
- Faigley, L., Cherry, R., Jolliffe, D., & Skinner, A. (1985). *Assessing writers' knowledge and processes of composing*. Norwood, NJ: Ablex.
- Flower, L., & Hayes, J. R. (1980a). The cognition of discovery: Defining a rhetorical problem. *College Composition and Communication*, 31, 21-32.
- Flower, L., & Hayes, J. R. (1980b). The dynamics of composing: Making plans and juggling constraints. In L. Gregg & E. Steinberg (Eds.), *Cognitive processes in writing: An interdisciplinary approach* (pp. 31-50). Hillsdale, NJ: Lawrence Erlbaum.
- Flower, L., Hayes, J. R., Schriver, K., Carey, L., & Haas, C. (1987). *Planning in writing: A theory of the cognitive process*. (Office of Naval Research Technical Report No. 1.) Pittsburgh: Carnegie Mellon University.
- Herrington, A. (1985). Writing in academic settings: A study of the contexts for writing in two college chemical engineering courses. *Research in the Teaching of English*, 19, 331-359.
- Langer, J. A., & Applebee, A. N. (1987). *How writing shapes thinking*. Urbana, IL: National Council of Teachers of English.
- McCarthy, L. (1987). Stranger in strange lands: A college student writing across the curriculum. *Research in the Teaching of English*, 21, 233-265.
- MacKay, R. (1978). How teachers know: A case of epistemological conflict. *Sociology of Education*, 51, 177-187.
- Marshall, J. D. (1984). Process and product: Case studies of writing in two content areas. In A. N. Applebee (Ed.), *Contexts for learning to write* (pp. 149-168). Norwood, NJ: Ablex.

- Marx, R., Winne, R., & Walsh, J. (1985). Studying cognition during classroom learning. In M. Pressley & C. Brainerd (Eds.), *Cognitive learning and memory in children: Progress in cognitive development research* (pp. 181-203). New York: Springer-Verlag.
- Morris, P. E. (1981). Why Evans is wrong in criticizing introspective reports of subject strategies. *British Journal of Psychology*, *72*, 465-468.
- Nespor, J. (1987). Academic tasks in a high school English class. *Curriculum Inquiry*, *17*, 203-228.
- Nisbett, R. E., & Wilson, T. D. (1977). Telling more than we can know: Verbal reports on mental processes. *Psychological Review*, *84*, 231-259.
- Odell, L., & Goswami, D. (1982). Writing in non-academic settings. *Research in the Teaching of English*, *16*, 201-223.
- Perl, S. (1979). The composing processes of unskilled college writers. *Research in the Teaching of English*, *13*, 317-336.
- Pianko, S. (1979). A description of the composing processes of college freshmen writers. *Research in the Teaching of English*, *13*, 5-22.
- Posner, G. A. (1982). A cognitive science conception of curriculum and instruction. *Curriculum Studies*, *14*, 343-351.
- Rogoff, B. (1984). Introduction: Thinking and learning in social contexts. In B. Rogoff & J. Lave (Eds.), *Everyday cognition: Its development in social context* (pp. 1-8). Cambridge, MA: Harvard University Press.
- Rogoff, B., & Gardner, W. (1984). Adult guidance and cognitive development. In B. Rogoff & J. Lave (Eds.), *Everyday cognition: Its development in social context* (pp. 95-116). Cambridge, MA: Harvard University Press.
- Ruth, L., & Murphy, S. (1984). Designing topics for writing assessment: Problems of meaning. *College Composition and Communication*, *35*, 410-422.
- Scribner, S. (1984). Studying working intelligence. In B. Rogoff & J. Lave (Eds.), *Everyday cognition: Its development in social context* (pp. 9-40). Cambridge, MA: Harvard University Press.
- Simon, H. A. (1973). The structure of ill-structured problems. *Artificial Intelligence*, *4*, 181-202.
- Sommers, N. I. (1980). Revision strategies of student writers and experienced adult writers. *College Composition and Communication*, *31*, 378-388.
- Sternglass, M., & Pugh, S. (1986). Retrospective accounts of language and learning processes. *Written Communication*, *3*, 297-323.

Swanson-Owens, D. (1986). Identifying natural sources of resistance: A case study of implementing writing across the curriculum. *Research in the Teaching of English*, 20, 69-97.

Tomlinson, B. (1984). Talking about the composing process: The limitations of retrospective accounts. *Written Communication*, 1, 429-445.

Appendix to Case Study 1: Guidelines for the second paper in Social Influence

Paper on Power. The paper is to be a fieldwork study of "power" at CMU.

Power is difficult to study; you will be OPERATIONALIZING a concept that has different meanings and different expressions in various contexts. And you will be doing so without being ETHNOCENTRIC.

First step: Determine what "power" means, how you will be using the concept. (cf. Kanter)

Second step: State your assumption; what are you going to test in your study? (e.g. professors always have power over students; power at CMU is attached to role and not to personality; power belongs to an office and not to an individual, etc.)

Third step: Figure out the "observable" indicators of power, as you have defined the concept.

Fourth step: A) Choose your field site, at CMU, and justify your choice (briefly). You may choose the same site in which you studied socialization processes, and use the information you already have about the group. Data already collected can help you refine methods and theories for this study. B) Outline your methods: how are you going to find out about power, what will you DO? (Make sure your methods fit your choice of a site and allow you to support or refute your assumption.)

Fifth step: Collecting the data. Think about the following issues:

1. The significance of emic concepts: do these change your definition of power, the assumptions guiding your study?
2. Immersion/analysis: moving back and forth between "their interpretations" (in words and actions) and "your analytic scheme." Being IN the group without losing your social scientific perspective.
3. When (why) do you have enough data?

Sixth step: Interpret your data. Has your initial assumption been supported, or not? Can you generalize your findings to a broader context? Why or why not?

Seventh step: Consider the implications and significance of your study for issues of power in society more generally. For example: did power in your group reflect power in the wider setting? Are there aspects of the wider setting that might explain what you have observed in the group you looked at? Or, is this group somehow different, and if so, why?

The paper should be 4-6 pages long, typed or printed. As in the first paper, content and form are both important and grades will reflect this.

Writing-up findings: Your paper should have a clear structure, an organization that takes the reader from beginning to end in an orderly and logical fashion.

1. Introduction: what you are going to do and why
2. Data: how collected; what collected; why those data
3. Results: was your initial assumption born out or not? Explain
4. Conclusions: place your study in a broader framework (to be discussed in section)

NOTE: this paper must show progress from the first paper, including a better development of methods, a stronger grounding in concepts and terms that have been used in Social Influence, and an understanding of the techniques of interpreting fieldwork data and reaching conclusions on the basis of these data.