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How an ISU Writing Center tutorial affects students' revising processes: case studies

Karen A. Ross

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How an ISU Writing Center tutorial affects students' revising processes: Case studies

by

Karen A. Ross

A Thesis Submitted to the Graduate Faculty in Partial Fulfillment of the Requirements for the Degree of

MASTER OF ARTS

Department: English
Major: English (Composition and Rhetoric)

Signatures have been redacted for privacy

Iowa State University
Ames, Iowa
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CHAPTER ONE

INTRODUCTION: TESTING THE BASIC ASSUMPTION OF WRITING CENTERS

Over the past decade and a half, writing centers have been established in over one thousand post-secondary institutions in the United States (Morrison and Tatu 1985). Although the scope and services of writing centers have become increasingly diversified, many centers were originally set up during the early 1970s to help English departments cope with the growing number of nontraditional students who were not prepared for college writing. During this time of the birth and development of writing centers, writing center professionals have necessarily focused their energies on establishing, maintaining, operating, and, at times, justifying their programs. Thus, most writing center research has not been investigations which test basic writing center assumptions; instead, as North (1984) points out, most of the scholarship produced falls into three categories: reflections on experience, speculation, and survey.

The most common type of scholarship has been reflections on experience. In this mode, a practitioner details something he did—set up a writing lab, used computer-assisted instruction, developed a diagnostic form—with the intent of establishing some sort of guidelines for others who wish to follow his example. According to North (1984), two of the more influential and well-known examples of

---

1This study has been approved by the Iowa State University Human Subjects Committee. Fictitious names are used when discussing the students involved in the study.
reflective research are Harris' (1976) "Structuring the Supplemental Writing Lab" and Hartwell's (1980) "A Writing Laboratory Model."

In speculative research, a writing center professional uses a theory or concept of composition or rhetoric to explain what's happening in writing centers or to suggest improvements. Examples of this type of research are Freedman's (1982) "A Theoretic Context for the Writing Lab" and Bruffee's (e.g., 1984) articles on peer tutoring, which are based on collaborative learning theories.

Survey research, a third category of writing center scholarship, takes place locally and nationally. On the local level, it is used mainly as a means for evaluating the writing center in terms of the number and types of students who come in, faculty and student reaction to the center, types of writing problems handled, etc. On the national level, a few survey-based studies have been completed, including Lamb's (1981) "Evaluation Procedures for Writing Centers" and Haring-Smith's (1985) A Guide to Writing Programs.

Some writing center scholarship combines two or even three of these research modes (e.g., North 1979; Croft and Steward 1982). In addition, research in all three modes has been brought together in collections of writing center scholarship which serve as guides for many practitioners. The most well-known of these collections are Harris' (1982) Tutoring Writing: A Sourcebook for Writing Labs and Olson's (1984) Writing Centers: Theory and Administration.
Needed Research in Writing Centers

As the writing center concept matures, however, more and more professionals (e.g., Kail and Allen 1982; Hawkins 1984; North 1984) are calling for increased writing center research. North (1984) believes that if writing centers are to survive and gain a respectable status in the composition community, scholarship must go beyond the three types which he classifies and must begin to explore and test the basic assumptions of writing centers.

In a 1984 essay reminiscent of Lee Odell's (1979) award-winning article about needed research in discourse theory, North identifies some of the basic pedagogical assumptions underlying writing centers and argues that writing center professionals need to test these assumptions. In particular, he believes that all writing centers are based on one theoretical foundation: individual instruction, or what is called the writing tutorial, will improve a student's writing by intervention in and alteration of the student's writing process. Yet, as North points out, "Despite the ancient heritage of our primary method of teaching—the tutorial—we are considered by our contemporaries to be at best unconventional and at worst 'ad hoc' and essentially futile" (24). North believes that this view of writing centers is one reason why writing center professionals are obligated more than their classroom counterparts to test their pedagogical assumptions. He suggests that the inquiry begin by exploring what happens in and as a result of the writing tutorial.
One important question, then, for writing center researchers is what effect a tutorial has on a student’s writing process. Some studies have demonstrated the tutorial’s beneficial effect on the written product (e.g., David 1983); but to understand and explain what happens as a result of a writing tutorial, research is needed which explores the effects of a tutorial on a tutee’s writing processes. What, if anything, changes in a student’s writing process to help him write better? Does the student use concepts and techniques gained from the tutorial to aid him in his writing?

One way to begin to explore these questions is to study the effect that a writing tutorial has on a single aspect of the writing process. This study uses such an approach. With the aid of a process-tracing technique called protocol analysis, it examines the effect that a writing tutorial has on a student’s review process, that is, the process in which the student evaluates what he has written or orally rehearsed.

This study focuses on a writing tutorial offered by the Writing Center at Iowa State University (ISU). Students who do not meet the correctness standard for mechanics of the ISU freshman composition course, English 104, receive a report of "incomplete" and are required to take a Writing Center tutorial before they can receive a grade for the composition course. Since many of these students have problems with sentence construction, punctuation, and proofreading, Writing Center tutors concentrate on helping them learn to recognize and correct these problems. Thus, the nature of this writing tutorial is
such that it focuses on the process of review. One would assume that such instruction would affect a student's review process.

The purpose of this study is to examine that effect. In particular, the following questions are explored:

1. Does the tutorial increase a student's review time?
2. Does the tutorial alter a student's review pattern, that is, the sequence and frequency of review in the student's total composing process?
3. Does it alter a student's concerns and strategies for review? If so, in what ways?
4. Does a student use tutorial content when reviewing? If so, is such reviewing successful?

Description of the Study

A case-study approach is used in this inquiry for two basic reasons. First, the nature of a tutorial, with its one-on-one relationship and the many variables involved, calls for such an approach. Just as students in tutorial relationships have different personalities, writing backgrounds, strengths, and weaknesses, tutors also have different personalities, teaching styles, and methods. Even though the content of the tutorial may be the same in general, the differences among tutors and among students have an effect on how the content is taught and received. The case-study approach allows the researcher to describe and discuss many of these variables. The use of protocol analysis as a main source of data for this study is a second reason for employing case-study methodology. Protocol analysis
is a complex technique which can yield much information about a particular writer's composing processes. Such information deserves the kind of focused attention that a case study can give.

The subjects of this case study were five ISU students assigned to the Writing Center during the fall of 1987 with incompletes in English 104. The five students did pre- and post-tutorial composing-aloud protocols; that is, they were tape-recorded as they thought aloud and wrote short compositions before and after their semester-long writing tutorials. During the semester, the five students met for one hour per week individually with a tutor; three of the students were tutored by this researcher, and two met with another experienced tutor, Nancy. Tutorial content consisted mainly of how to identify and punctuate basic sentence patterns and how to develop individual proofreading techniques. (See Chapter Three for a fuller description of the tutorial.) Both tutors kept notes about the material covered in each session; the researcher also interviewed Nancy to gain a better understanding of what happened during the tutorials with her students.

The composing-aloud protocols were transcribed and marked to show when the student was reading or writing. The transcribed protocols were then coded using a scheme developed by Flower and Hayes (1981a) which identifies three basic components of the writing process: planning, translating, and reviewing. The protocols were also timed, and the time spent on each process was recorded. The segments of the post-tutorial protocols identified as review were further coded for
use of tutorial content. By analyzing the coded and timed protocols along with other relevant data, various graphs, figures, tables, and other data were generated to help the author in answering the research questions outlined above.

Summary of Findings and Conclusions

While the tutorial's effect on review time, patterns, and concerns varied according to the individual subject's writing needs, the tutorial affected the subjects' review strategies in several common ways. The tutees adopted strategies mainly based on tutorial content, were successful in some instances of tutorial content use, but were also confused about some of the rules. Since the five subjects have writing backgrounds and writing problems which are typical for ISU Writing Center students, these findings provide a fairly reliable basis for predicting the effects of the tutorial on Writing Center students' reviewing processes.

This study suggests two main implications for the ISU Writing Center and writing centers in general. First, because of the idiosyncratic nature of writing problems, tutors should diagnose these problems carefully by analyzing both written products and writing processes. And second, when teaching writing strategies and rules, tutors also should monitor both product and process to check students' comprehension and application of tutorial content. To analyze students' writing processes, tutors can use a simplified version of the composing-aloud protocol as both a diagnostic and an evaluative tool.
CHAPTER TWO

MOVING FROM PRODUCT TO PROCESS

This study of the effect of a writing center tutorial on students' review processes draws on composition research which has evolved over the last twenty-five years. Moving from knowledge based on the experiences of practicing teachers, composition researchers began testing the teaching methods used in composition classes. Finding that many methods were based on a description of what a written product should contain rather than how writing is produced, some researchers shifted their focus to exploring how a writer produces a written piece and to describing the processes he uses. The present study uses the process-tracing method of protocol analysis and the knowledge about writing processes gained from these latter studies; thus, it is part of current research which uses process-based knowledge and methods to explore the writing process.

More specifically, the current study is part of slowly emerging writing center research aimed at testing the basic assumptions underlying writing center pedagogy. In some respects, writing center research, in its brief fifteen-year history, has followed the same developmental pattern as composition research in general. After relying mainly on practical knowledge to guide writing centers, writing center professionals have recently been calling for research which examines the basic methodology of writing centers—the tutorial. Few studies of this nature have been completed to date, so the present
study represents an initial step in the direction of process-based exploration of writing center pedagogy.

This chapter takes a closer look at the history of composition research and the literature pertinent to this study: (1) process inquiries, (2) literature on the use of protocol analysis, and (3) revision studies.

History of Composition Research

As a field of study, composition is a relatively young discipline. Faigley et al. note that a survey of composition research by Braddock, Lloyd-Jones, and Schoer published in 1963 "found nothing to suggest a discipline" (1985, 3). Writing pedagogy had mainly been informed by knowledge based on practice. North, who also dates the origins of the composition field to the early 1960s, believes, "What marks its emergence as a nascent academic field more than anything else is this need to replace practice as the field’s dominant mode of inquiry" (1987, 15). North characterizes the composition field’s development thereafter as "a kind of methodological land-rush":

Impelled by widely proclaimed arguments that, even after half a century of English teaching in America, very little was known about composition, group after group of investigators, each equipped with some different mode of inquiry, some new way of making knowledge, has scrambled to stake their claim to a portion of what they have perceived to be essentially virgin territory. (1987, 2-3)
Viewing its history as more orderly in nature, Faigley et al. (1985) divide composition research since the early 1960s into three generations which "reflect changes in research methods and how composing is understood" (4). These three generations can be characterized as follows:

**Experimental studies.** First generation studies follow the basic experimental model of the natural sciences and try to discover what is generalizeable about composition by using the written product as the main data source. Their purpose is to examine composition pedagogy.

**Clinical research.** Second generation studies borrow methodology such as case-study format from the field of psychology and thus are considered clinical in nature. They focus on particular writing information about individual writers and rely on both the written product and the writer's composing process as main data sources. Their aim is to describe the composing process.

**Ethnographic inquiry.** Third generation studies borrow methodology such as ethnographic inquiry from the field of sociology. In an ethnographic study, the researcher studies a particular phenomenon in its environment, so third generation composition studies focus on a combination of product, process, and writing context for main data sources. Their purpose is to define the writing processes of different writers in various contexts.
The first generation investigators of the 1960s used a pre-test/post-test research design to compare a control group of writers and an experimental group; their purpose was to test teaching methods aimed at improving the written product, so the investigators examined the written product to gauge the effect of the particular methods. These first generation studies raised issues which led to the evolution of second generation studies. Many investigators began questioning a composition pedagogy which was based on describing what good writing is rather than how a writer produces a written piece. Efforts by first generation researchers to describe a model of composing produced linear models such as the one proposed by Rohman and Wlecke (1964)—prewriting, writing, and rewriting—and prompted other investigators to argue against such a model.

Second generation researchers borrowed methods from the field of psychology to aid them in their efforts to develop a more dynamic model of the composing process. Many investigators used a case-study format and a combination of process-tracing techniques, including interviews about the writer's thoughts on his writing, observations of the writer's behavior during composing, and tape-recordings of the writer thinking aloud as he composed. One of the pioneers of this process-based research was Emig in her 1969 dissertation *Components of the Composing Process Among Twelfth-Grade Writers*. Many composition researchers believe that Emig's study, which was published in 1971 by the National Council of Teachers of English, was the forerunner of composition research which moved from a focus on instructional methods
for improving writing quality to inquiry into the composing processes of writers. This second generation research was the major focus of change in composition inquiry during the 1970s.

Although Faigley et al. (1985) are not specific about the nature of third generation research, several changes are discernible in recent composition inquiry. Like the product-based studies of the 1960s, second generation studies raised issues which led to third generation investigations. In particular, some researchers have questioned the validity of studying writing process in a controlled laboratory situation. So, while second generation researchers focus on describing the cognitive aspects of writing, third generation investigators are examining the sociological aspects of composing. Borrowing ethnographic methodology from the field of sociology, these researchers are concerned not only with the written product and composing process but also with the writing situation. Thus, they examine how different writers compose in various "real-life" situations. The researchers often participate in, as well as observe, a particular writing situation in order to understand better the holistic relationship of product, process, and context. Their aim is to develop and refine descriptions of the writing process of different writers in various contexts.

In the past few years, composition researchers have extended second and third generation inquiry by using the process-based knowledge gained from their studies to examine other aspects of composing and to gauge the effects of teaching methods. In effect,
the proposed process models are used as research tools for further inquiry.

The present study draws from all three generations of composition research. Like first generation studies, it examines a teaching methodology, using pre- and post-tutorial measurements. From second generation inquiry, it borrows case-study format and process-tracing techniques. And it adopts the ethnographic nature of third generation research, with the researcher participating in the writing context as a tutor. This study is also part of the current research which uses process-based knowledge and methods to explore the effects of a particular teaching method on a writer's composing process.

Process Inquiries

Most of the initial studies of writers' composing processes were modeled after Emig's (1971) pivotal research. Emig studied the writing processes of eight above-average seniors from six Chicago-area high schools. She met with the students individually four times over one summer and drew her data from several sources: (1) transcripts of each subject's two tape-recorded composing-aloud sessions in which Emig also observed the students and took notes; (2) taped interviews about each subject's writing background, their recollections about their prewriting activities for the composing-aloud sessions, and their descriptions of how they wrote an assigned piece of imaginative writing; (3) past writing samples; and (4) writing completed for the study. Emig synthesized the data from the interviews and gave an in-depth writing profile of one of the twelfth-graders. From the
data, she described ten "dimensions of the composing process" (Chapter 3), including prewriting, planning, starting, pausing, reformulating, and stopping.

For her study, Emig defined two major modes of composing among high school students: the reflexive and the extensive. The reflexive mode focuses on the writer's feelings about his experiences, with the writer as the audience. The extensive mode centers on the writer's communicating a message to another person. Emig found that the extensive mode is the chief school-sponsored mode of composing and the reflexive mode is most often self-sponsored. She also found differences in the composing processes for these two modes. Emig concluded that changes were needed in composition pedagogy—specifically that teachers should offer students a broader range of writing opportunities. Through her exploratory work, Emig generated many of the questions guiding current process studies (Swarts, Flower, and Hayes 1984, 66).

Many of the composing process studies since Emig's have focused on specific types of writers or on a particular aspect of the writing process. Using Emig's methodology and her dimensions of the composing process to analyze his data, Mischel (1974) examined the writing behavior of a quiet, above-average black twelfth grader. Mischel's study reaffirmed many of Emig's findings and suggested that writing instruction does not deal enough with helping students use language to make sense of their own reality. Stallard (1974) analyzed the composing behaviors of fifteen good twelfth-grade writers by comparing
them with a randomly selected group of fifteen other twelfth-grade writers. Each subject wrote one at a time on the same topic area in the presence of the investigator, who kept notes on subject behavior. In interviews after the writing sessions, students were asked about what they consciously attended to and were concerned about as they wrote. Stallard's study showed that in comparison to the writers selected at random, the good writers (1) spent more time prewriting and writing; (2) were slower writers; (3) changed more words as they wrote; and (4) were concerned about having a purpose for writing.

Pianko (1979) observed the writing processes of a cross-section of seventeen college freshmen. She described several dimensions of the composing process based on (1) observations and videotapes of the subjects composing in five separate episodes and (2) taped interviews about the subjects' composing behaviors and past writing experiences. Pianko used these dimensions to discover differences in writing behavior for three categories of college freshman writers: remedial vs. traditional, typical college entrance age vs. adult, and male vs. female. She found process differences for the class status and sex categories but not for the age category.

Process researchers have also explored such diverse areas as a student's sense of authority over his text (Berkenkotter 1984), the effect of teacher comments on writing (Ziv, 1984), and the relationship of writing purpose to planning (Matsuhashi 1981). Other investigators have studied the writing process from a developmental viewpoint. As Warnock (1984) notes, the current centers of interest
in writing process development are based in Toronto with Bereiter and Scardamalia (1987b) and in New Hampshire with Graves and Calkins (see Warnock's [1984] reference list). Several studies have also focused on the revision process (e.g., Beach 1976; Sommers 1980; Bridwell 1980); these inquiries will be discussed later in this chapter in a section on revision studies.

In addition to expanding the scope of process research, some investigators have searched for a more precise and replicable method for describing composing processes. In Perl's (1979) case study of five unskilled college writers, she proposed a scheme for analyzing her subjects' composing behaviors in a "systematic, replicable manner" (317). Data sources for each subject included transcripts of four composing-aloud sessions, the student's written products, and an interview about the student's perceptions of writing. Using the transcripts from the composing-aloud sessions, Perl developed a coding scheme which includes sixteen operations observable in the composing-aloud transcripts. Some parts of Perl's coding scheme, however, seem to reflect an analysis of aspects of the composing-aloud process rather than an analysis of the writer's processes based on what the writer says or does during the composing-aloud session. For example, operation eight is "talking and writing at the same time" (32); this behavior could be described as part of the composing-aloud process but not necessarily as part of the writing process. Operation fourteen, "writing aloud," seems to be a repetition of operation
eight. Operation thirteen, "writing silently," is also more descriptive of the composing-aloud process than the writing process.

In order to show graphically the duration and frequency of the operations she observed, Perl constructed a "composing style sheet." This consists of a time line and a numbering system in which a "ten-digit interval corresponds to one minute and is keyed to a counter on a tape recorder" (321). Using the counter as a timer, Perl coded the nature and duration of each operation as she listened to the composing-aloud tapes. She also indicated which draft and which sentence a student was working on by using different types of brackets and numbering systems. The composing style sheets, although complex and somewhat distorted by the coding scheme, allowed Perl to present an informative, graphic depiction of the writing process. From her study, she concluded that unskilled college writers have deeply embedded writing processes which teachers may need to identify before teaching these students.

Perhaps what hindered both Perl and Emig in their attempts to describe writing behavior is the fact that they described the composing process from their frames of reference rather than from the writer's viewpoint. Flower and Hayes' work with protocol analysis over the last decade offers researchers a more objective method for describing the processes in writing. A protocol is a transcript of a tape-recorded composing-aloud session—a tool which Emig, Perl, and others also used. To describe the mental processes involved in writing, Hayes and Flower (1980), however, based their work on the
successful use of protocol analysis in cognitive psychology in which mental processes used in completing a certain task are inferred from an analysis of thinking-aloud protocols. In several articles, they defined, tested, and refined their theory of a cognitive process of writing (Hayes and Flower 1980, 1983; Flower and Hayes 1980, 1981a, 1981b; Swarts, Flower, and Hayes 1984). Hayes and Flower proposed that writing has four main features: "writing consists of distinct processes, writing processes are highly embedded, writing is goal-directed, and writing stimulates the discovery of new goals" (1983, 208). They offered a tentative model of the writing process based on their informal analysis of a "number of protocols" of competent writers over a two-year span (1980, 10). Although the model is described in more detail, it includes three main interactive elements: the task environment, the writer's long-term memory, and the writing processes.

Concentrating their analysis on writing processes, Hayes and Flower identified three major thinking processes that skilled writers use in composing: planning, translating, and reviewing. (These processes will be more fully described in Chapter Three.) According to their theory, these processes are regulated by a monitor which "determines when to switch from one writing process to another," much like a switchboard operator (1980, 209). They cautioned that the model should not be viewed as a stage model. Their model is unique because it "specifies an organization that is goal directed and recursive, that allows for process interrupts, and that can account
for individual differences" (1980, 29). Defining a writer as "a thinker on a full-time cognitive overload," Flower and Hayes (1980, 1981b) used their model and protocol analysis as a basis for further study of the planning process. They theorized that one way to help writers deal with the excessive number of constraints involved in composing is to help them improve the planning strategies they use as they write, not just those they use before they write. As a research tool, then, Flower and Hayes' model provides a basis for much further research in composing processes.

Literature on the Use of Protocol Analysis

The present study uses protocol analysis as a main data source, as do many process studies of the 1980s. However, this increased use of protocol analysis has sparked debate over its validity as a research tool. In looking at some of the literature about the use of protocol analysis, it is important to keep in mind a few definitions and categories. Flower and Hayes, two of the current leaders in the use of protocol analysis in process inquiry, define an experimental protocol as "a sequential record of a subject's attempt to perform a task" (Swarts, Flower, and Hayes 1984, 53). As noted earlier in this chapter, a composing-aloud protocol is a transcript of a tape-recorded writing session in which the subject thinks aloud. Auten (1984) defines protocol analysis, then, as "an attempt to describe the cognitive processes that a subject uses to perform a task based on an interpretation of the subject's self-report" (49). Hayes and Flower (1983) point out that the thinking-aloud protocol is one of four
categories of process-tracing methods: (1) behavior protocols in which the subject’s actions are recorded; (2) retrospective reports in which a subject reports on a task after its completion; (3) directed reports, also called introspective reports, in which a subject reports on a certain aspect of a task while performing the task; and (4) thinking-aloud protocols in which a subject verbalizes anything he is thinking while doing the task.

Critics of protocol analysis (e.g., Voss 1983; Cooper and Holzman 1983) have voiced several main concerns about its use as a research tool. Hayes and Flower (1983) summarize these concerns as follows:

1. Such reports are not valid because people are not conscious of their cognitive processes.
2. Even if people were aware of their cognitive processes, reporting them verbally would distort them.
3. Verbal reports are incomplete.
4. Verbal reports are not objective and, therefore, cannot be used as scientific data. (213)

The remainder of this section will be devoted to a discussion of these objections.

Cognitive processes are not conscious

A study by psychologists Nisbett and Wilson (1977) seems to confirm the belief that cognitive processes are not conscious and therefore cannot be reported. Indeed, critics of protocol analysis often cite this study to substantiate their claims. Looking at experimental studies of subjective verbal reports about mental
processes, the pair of psychologists reviewed evidence suggesting that people have "little or no direct introspective access to higher order cognitive processes" (231). The key word here is "introspective."

Most of the studies reviewed were retrospective or introspective reports; none dealt with thinking-aloud protocols. As Hayes and Flower (1983) and Steinberg (1986) observe, protocol analysis has received some undeserved criticism because it has been confused with other methods of verbal reporting, mainly introspection (e.g., Cooper and Holzman 1983). To clarify the difference between these two methods of verbal reporting, Flower and Hayes (1985) explain that in introspective studies subjects are told how and what to observe while performing a task; thinking-aloud protocol subjects are usually told to say whatever is in their minds. In one sense, the term verbal reports is misleading as a general concept which includes both thinking-aloud protocols and introspective reports: in thinking-aloud protocols, subjects are not reporting their cognitive states, as they are in introspective reports, but are simply voicing their thoughts. Perhaps a more useful and less confusing general term would be verbalizations.

The confusion about the nature of thinking-aloud protocols is probably the basis of another erroneous assumption about protocol analysis: since some critics believe that protocol subjects are attempting to report on their mental processes, the critics then assume that protocol analysts claim to have "direct access to writers' cognitive processes" (Cooper and Holzman 1983, 290). But proponents
of protocol analysis do not claim that protocols give them a direct look at the mental processes guiding writing—just a closer look than what the product of those processes can give. Hayes and Flower (1980) use a metaphor of a porpoise to describe how a protocol is viewed:

Analyzing a protocol is like following the tracks of a porpoise, which occasionally reveals itself by breaking the surface of the sea. Its brief surfacings are like the glimpses that the protocol affords us of the underlying mental process. Between surfacings, the mental process, like the porpoise, runs deep and silent. Our task is to infer the course of the process from these brief traces.

(9-10)

Critics of protocol analysis have missed the section of Nisbett and Wilson’s (1977) study which is most applicable to thinking-aloud protocols. The two psychologists concluded that people "do indeed have direct access to a great storehouse of private knowledge" (255). They reviewed a study which describes that private knowledge:

The individual knows a host of personal historical facts; he knows the focus of his attention at any given point in time; he knows what his current sensations are and has what almost all psychologists and philosophers would assert to be "knowledge" at least quantitatively superior to that of observers concerning his emotions, evaluations, and plans.

(255)

Thus, the writer’s knowledge about his focus of attention and his
plans and evaluations are just the types of information of which protocols are made—not reports on mental processes.

**Verbal reporting distorts process**

A study by psychologists Ericsson and Simon (1980) addresses the question of whether various forms of verbalization distort the process under examination. Using the theoretical framework of human information-processing theory, they propose a model for the verbalization processes of subjects instructed by a researcher to use various methods of verbalization. For their model, they distinguish between two general types of verbalization: (1) concurrent verbalization in which information is verbalized when the subject is attending to it and (2) retrospective verbalization in which the subject is asked about mental processes that occurred earlier. Considering the variations in circumstances under which verbalization takes place, Ericsson and Simon postulated the following about the verbalization process:

1. If subjects concurrently verbalize only information to which they normally attend and which is already in verbal form, there will be no effect on task performance. Because subjects are producing information about what they are attending to at the moment, the information is in short-term memory and thus directly accessible for the subjects. An example of this is a subject thinking aloud to solve an anagram.
2. If subjects concurrently verbalize only information to which they normally attend but which is not already in verbal form, task performance will be slowed down but the course and sequence will not change. A subject describing how he is tying his shoes, for example, will naturally take more time than he would in just doing the task silently; but verbalizing his procedure for tying shoes should not alter the sequence in which he completes the task.

3. If subjects concurrently verbalize about information they don't normally attend to, the task performance will be disrupted. For example, a subject might be asked to report every time he notices an odd number while doing a multiplication problem. In effect, a subject's attempt to verbalize such information interferes with what he is attending to and can lead to the loss of the contents in short-term memory.

4. If subjects retrospectively verbalize about a task, much of the information about the process will be gone from short-term memory. The amount of accessible information depends on the interval of time between the task and the report.

Ericsson and Simon tested their model using studies of verbalizations, including those reviewed by Nisbett and Wilson (1977). They found that their model of verbal reporting is consistent with all the data in the literature.
According to the Ericsson-Simon model, then, composing-aloud protocols, which are concurrent verbalizations, should not distort the writing process unless subjects are asked to report on information to which they would not normally attend. Since much of the information needed for a composing-aloud protocol is already in verbal form, the verbalization model would also predict that task performance would not be slowed much. Donald Murray's comments in "Response of a Laboratory Rat—or, Being Protocoled" (1983) also confirms the accurate reflection of process in thinking-aloud protocols:

It [the protocol] did reflect what I was doing, and a bit more. My articulation was an accurate reflection of the kind of talking I do to myself while planning to write, while writing, and while revising. At no time did it seem awkward or unnatural. My talking aloud was merely a question of turning up the volume knob on the muttering I do under my breath as I write. (170)

Cooper and Holzman (1983) also question whether processes are distorted in protocol-based research because of the controlled laboratory conditions which are generally used. But to discredit protocol analysis based on this objection, one would also have to discredit most methods of composition research, except perhaps those used in ethnographic studies, a fact which Cooper and Holzman acknowledge. One could also argue that the controlled laboratory setting resembles most academic writing environments; thus, the process for writing academically would probably be the same in both
contexts and protocol analysis could reliably be used to infer that process. In fact, for students who are struggling to write in a school setting and whose academic success depends on their writing success—like the writing center students in this study—researchers probably would gain more helpful information about a student's writing in a controlled situation than in a situation outside the classroom.

Swarts, Flower, and Hayes (1984) believe the question of process distortion is a matter of trade-offs:

Reactive research methods interact with (and possibly distort) the process studied but offer a closer look at it; nonreactive research methods, such as examining a written product, have no effect on the writer's normal process but also offer far less information about it (Atlas 1980). So all investigative techniques have some drawbacks. The value of any method is comparative: Is there any better alternative? (55)

Verbal reports are incomplete

Proponents of protocol analysis agree that protocols are incomplete. Hayes and Flower (1983) explain that many psychological processes which we use every day are unconscious and other processes become automatic as we acquire skill in performing a certain task. Thus, such processes will not appear explicitly in a thinking-aloud protocol. According to Hayes and Flower (1980), the protocol analyst's task is "to take the incomplete record that the protocol provides together with his knowledge of the nature of the task and of
human capabilities and to infer from these a model of the underlying psychological processes by which the subject performs the task" (9). Hayes and Flower (1983) note that it is interesting that protocols are criticized for being incomplete since they are more complete than many other methods in composition research. For example, the composing-aloud protocols in the present study can yield more information about the procedures students use in reviewing their writing than can an analysis of their successive drafts.

**Verbal reports are not scientific data**

Critics of protocol analysis believe that verbal reports are too subjective to qualify as scientific data. However, Ericsson and Simon (1980) point out that many psychological experiments rely on verbal responses as the basic data. In a problem-solving experiment, for example, the best evidence that subjects have reached a solution is "their ability to report it" (218). Ericsson and Simon continue:

The relation of report to outcome of the process is so obvious that it never occurs to us to question the inference about process that we are drawing from the behavior. The procedures we propose in this article to infer internal processes from a wider range of overt verbal behaviors are simply an extension of the procedures that we already use every day in the laboratory. (218)

A similar comparison can be made in composition research where the product of writing has traditionally been the basic data: in a sense, the written product is verbal evidence that a subject has reached a
"solution" to a rhetorical problem. Thus, the use of process-tracing methods such as composing-aloud protocols is simply an extension of already accepted procedures.

Steinberg (1986) also believes that verbalizations serve as valid data even though they are indirect. He points to other disciplines which rely on indirect methods:

Many other kinds of scientists deal with phenomena whose effects they see only indirectly and on which they cannot perform "experiments in the classical sense"—seismologists and geologists who deal with strata of the earth they have never seen, for example, and physicists who can’t see quarks directly, but must rely on their traces for evidence. (707)

In composition research, Steinberg says examining the final product of the writing process provides little information about the process. Looking at rough drafts of the product yields some information, but listening to the writer as he plans, writes, and makes changes offers much indirect information about the writing process. Viewed together, the written product, drafts, and protocol provide much valid data about the composing process.

**Three reasons to use protocols**

Hayes and Flower (1983) offer three reasons for using process-tracing methods such as protocol analysis: (1) process-tracing methods give a more direct look at process than do input-output methods; (2) they offer exploratory opportunities because of the rich data which they yield; and (3) they allow researchers to
observe aspects of process which are difficult to observe using other methods (212). The present study confirms these advantages of protocol analysis. The source of students' writing errors surfaces more clearly from spoken thoughts than from written texts. And the protocols uncover new areas for exploration, such as the role of planning in the composing processes of Writing Center students. In this study, protocol analysis reveals how students use tutorial information to help them in their writing—an aspect of writing which could not be observed by just examining a written product.

But what about those in the composition field who are not directly involved with protocol analysis and who seemingly are uninformed about the nature of protocols? None of the literature reviewed for this study includes a single complete protocol—just samples of protocols. Even though protocols are often lengthy—frequently twenty pages or more—perhaps protocol analysts should include complete protocols with their studies, as in the current study. A body of protocols could then be amassed, and other investigators could explore the richness of the information provided, make their own inferences about underlying composing processes, and perhaps discover more generalizable information about the process of writing.

Revision Studies

The present inquiry gauges the effects of a writing tutorial on unskilled writers' revision processes (what is defined as review processes for this study). Revision studies in general have followed
the broad pattern of composition research, pursuing product-, process-, and context-based investigations. Many of the studies describe and analyze the revisions of a particular group of writers (e.g., Beach 1976; Bridwell 1980; NAEP 1977; Sommers 1980). This line of research has helped refute the linear model of writing which depicts revision as a final one-stop cleaning up of the written product; instead, revision is described as a complex, recursive, idiosyncratic process. A few revision inquiries examine the effects of a specific treatment on a writer's revision skills and subsequent writing quality (e.g., Beach and Eaton 1984; Hillocks 1982). In addition, some investigations attempt to determine the cognitive processes involved in revision (e.g., Bereiter and Scardamalia 1987b; Flower et al. 1986; Nold 1981, 1982). Taken together, these revision studies provide considerable information about the review processes of unskilled writers.

**Studies of a particular group of writers**

Many revision studies have focused on at least two similar goals: (1) describing and comparing the revision strategies of particular groups of writers and (2) developing a classification scheme for analyzing revisions. The most extensive of these studies was completed by the National Assessment of Educational Progress (NAEP) (1977). This study examined the revision strategies of nine-, thirteen-, and seventeen-year-olds, with approximately 2,500 individuals in each category. Other reporting variables included sex, region of the country, parental education, and community type. The
nine- and thirteen-year-olds wrote and revised using the same topic; however, since the seventeen-year-olds were given a different topic for writing, comparisons are not possible across all three age groups. In addition, students used pencils to write their first drafts and blue pens to revise their drafts in a later session. Any in-process revisions, then, were not considered—and possibly were not even evident if subjects erased as they revised. This methodology reflects the linear notion of the writing process that was still prevalent in the 1970s. From an analysis of the revisions, the researchers classified nine types of revision: cosmetic, mechanical, grammatical, continuational, informational, transitional, stylistic, organizational, and holistic. These categories attempt to reflect the writer's intent in revising, even though the categories are based solely on an analysis of the written products.

Other revision studies of particular groups of writers have employed more process-oriented techniques. Using case-study methodology, Sommers (1980) studied the revision strategies of twenty college freshman writers and twenty experienced adult writers. Unlike the subjects in the NAEP (1977) study, Sommers' subjects wrote three essays, rewrote each essay twice, and were interviewed about their revisions after the final draft of each essay. Based on the revisions in the resulting texts, Sommers developed a revision classification scheme in which she identified four levels of changes: word, phrase, sentence, and theme. She also identified four revision operations applicable at each level: deletion, substitution, addition, and
reordering. But Sommers' analysis of revision went beyond studying just the types of revisions in the written products; by analyzing the transcribed interviews, she also explored the concerns which writers have when revising. She found that student writers' main concerns are at the word-level, while experienced writers' main concerns are in finding the form or shape of their text.

Exploring the revising strategies in twelfth-grade students' transactional writing, Bridwell (1980) analyzed the kinds of revisions at three times in the composing process: in-process first draft, in-between drafts, and in-process second draft. To classify revisions, Bridwell expanded Sommers' taxonomy by adding three more levels of revision—surface, clause, and text—and by adding three other possible operations—expansion, reduction, and interlinear and marginal notations. The surface-level category includes ten operations which might concern the reviser including spelling, punctuation, and capitalization. Both the Sommers and Bridwell taxonomies classify revisions according to the linguistic structure involved. Bridwell found that surface- and word-level revisions occurred most frequently; she also found that the greatest number of revisions at all levels occurred during the two in-process stages, with the larger number occurring as the student composed the final draft.

Faigley and Witte (1981) classified revisions according to how the changes affect the meaning of the text. Their taxonomy is based on "whether new information is brought to the text or whether old
information is removed in such a way that it cannot be recovered through drawing inferences" (402). Changes which do not add new information or which delete important old information are called surface changes. Meaning changes are those which add new information or delete information necessary to meaning. Surface changes are further divided into formal changes and meaning-preserving changes; meaning changes are divided into microstructure and macrostructure changes. The formal changes include operations similar to Bridwell's (1980) surface-level category. The meaning-preserving, microstructure, and macrostructure changes all include six revision operations, again similar to Bridwell's operations: additions, deletions, substitutions, permutations, distributions, and consolidations. Faigley and Witte (1981) applied their taxonomy in a study of the revision strategies of six inexperienced student writers, six advanced student writers, and six expert adult writers. Using procedures for gathering data similar to Bridwell's (1980), Faigley and Witte analyzed the revisions at three points in the composing process. They found that surface changes occurred most frequently in the revisions of inexperienced writers, while content changes were most prevalent in expert writers' in-process and in-between drafts.

In her study of thirteen skilled and eleven unskilled editors, Hull (1987) developed a scheme for categorizing revisions based on the strategies writers use when making changes. Each subject was asked to read a standard essay and a self-written essay silently until he spotted something that needed changing. After making a change, the
subject was instructed to explain aloud why he had made the change. After receiving feedback on the locations of errors which had been missed, the editing process was repeated. Using both the revised texts and the protocols of the subjects' explanations, Hull developed three categories for revision strategies: (1) consulting—using conventions of the written language; (2) intuiting—relying on how a text sounds; and (3) comprehending—detecting a problem with the meaning of the text. Although this taxonomy consists of broad categories, a fact which Hull acknowledges, it is a starting point for developing other more process-oriented methods of classifying revision. From her study, Hull found that both groups of editors performed better with feedback and better on the standard essay.

Without feedback, the unskilled writers focused on meaning, using the comprehending strategy; when employing the consulting strategy, the unskilled editors often used idiosyncratic rules.

Intervention inquiry

Only a few studies have been completed which measure the effect of a particular treatment on revision. Hillocks (1982) examined the effects of three treatment conditions: (1) observational activity before writing or assignment only, (2) regular revision or no revision, and (3) brief teacher comments or longer comments. In this four-week study, subjects receiving the revision treatment were required to revise every composition; students in the control group were not required to revise. Using pre- and post-writing samples from 278 seventh and eighth graders as the basic data, Hillocks compared
the rated writing samples for these instructional sets: prewriting activities plus revision; prewriting activities without revision; assignment plus revision; and assignment without revision. He concluded that practice in revising when focused on particular skills over several pieces of writing can improve subsequent writing quality.

Beach and Eaton (1984) examined the effects of using a guided self-assessing form on college freshmen's revising practices. Four classes of freshman composition students participated in the study, with two classes using a guided self-assessing form to evaluate their writing. The experimental classes also received instruction based on the form. All four classes completed pre- and post-test essays.

Beach and Eaton analyzed the students' self-assessing forms for the students' ability to describe and judge types of revision strategies. After students revised their first drafts, the essays were analyzed for the students' ability to correct problems noted on their forms. The study found that students receiving instruction in self-assessing made more judgmental inferences about revision than those in the control group. In addition, students were more likely to make revisions in those areas noted as problems on the self-assessing forms. Like the present study, Beach and Eaton's inquiry does not focus only on the treatment's effect on written products but also on the processes involved in revision.

Models of cognitive processes in revision

Several researchers have posited similar notions about the cognitive processes involved in revision, based on human information
processing theory. Nold (1981; 1982) compared the writing process to the recursive steps of problem solving: planning the solution, carrying out the plan (transcribing), and reviewing the results. In planning, Nold believes skilled adult writers develop global plans about meaning, audience, and persona which they store in long-term memory and use in transcribing and reviewing. During the transcribing process, writers are also constrained by at least seven other concerns: semantic layout, syntax, use of standard English, word choice, physical layout, orthographies, and motor skills. Thus, Nold (1982) grouped the subtasks of writing into three categories: intentional, mixed, and conventional. The mixed category includes concerns which are affected by both intentions and conventions, such as lexical or syntactic considerations. According to Nold, writers review and evaluate their texts by matching them against the conventions of written English and against their global plans for intended meaning, audience, and persona. Writers who do not make elaborate plans about their intentions, then, will review their texts only against the conventions of written English as they understand them. Nold concluded that "revising strategies cannot be inferred from the text alone: writers indeed may want to revise, but not be able to because they lack more promising solutions" (1981, 68).

From their work with children and procedural facilitation, Bereiter and Scardamalia (1987a) described a revision process called CDO—compare, diagnose, operate. They believe that the various cognitive processes involved in CDO must interact: (1) language
production, (2) evaluation, (3) tactical decisions, and (4) executive control of the overall composing process. Like Nold's (1981) theory, the compare part of their revision model involves the writer's matching the intended text with the text written thus far. When a mismatch is detected, attention is shifted to diagnose, which in turn leads to the operate phase: choose tactic and generate change if necessary. Bereiter and Scardamalia postulate that children's inability to revise may be a problem of executive control, that is, a problem of incorporating CDO into a composing process which is already cognitively full.

Defining revision as "a strategic action, adapted to the necessities of the task" (19), Flower et al. (1986) proposed a similar but more detailed model of revision based on their analysis of composing-aloud protocols. In their model, revision is called the review process and includes two sub-processes—evaluation and revision. In evaluation, the writer reads his text to comprehend, evaluate, and/or define problems. These three tasks represent a "generative process built on the principle of a progressive enlargement of the goals and constraints one entertains" (Flower et al. 1986, 25). That is, reading for meaning can lead to reading for testing which can lead to reading for diagnosis. As in the Nold (1981) and Bereiter and Scardamalia (1987a) models, this evaluation sub-process is based on the writer's comparison of his mental representation of his written text with his global plans and his standard criteria for written texts.
Flower et al. believe that the problems which writers define range along a continuum from quite ill-defined problems to extremely well-defined ones. The ill-defined problems are merely detections, while the well-defined ones are more diagnostic in nature with more information about the problems and possible strategies for solving them. Flower et al. theorize that a writer has several choices after defining a problem: search for more information about the problem, delay action, ignore the problem, rewrite, or revise. However, they believe the major strategic choice is usually between rewrite and revise. In rewriting, the writer takes the gist of the problem text and simply generates new text, with little analysis of the problem. In revising, on the other hand, the writer is guided by his diagnosis of the problem, based on any revision strategies which he thinks to apply—his means-ends table.

According to their model of revision, Flower et al. believe there are at least three points in the process which might be troublesome for the novice writer: detecting a problem, diagnosing it, and/or selecting a strategy. Thus, unlike revision studies which focus only on the quantity and types of revisions made in texts, cognitive models of the revision process provide researchers with a basis for locating parts of the process that cause writers difficulty—information which could give more direction to composition pedagogy.

Review processes of unskilled writers

As a body of literature, revision studies provide pertinent information about the review processes of unskilled writers. These
writers revise mainly at the surface level of their texts, primarily concentrating on finding the "correct" words (Bridwell 1980; Calkins 1980; Faigley and Witte 1981; NAEP 1977; Sommers 1980). Unlike skilled writers, the novice writers revise little, if any, at the whole text level; that is, the unskilled writers do not use the review process as a way of "re-seeing" the meaning of their entire text in order to adjust content but rather as a means for tidying up surface-level matters such as spelling, word choice, punctuation, and neatness. However, for the unskilled writers, like the five subjects in the present study, this latter goal of revision is often not successful either.

Several composition theorists point to the complex demands placed on a writer during the composing process as a major reason why inexperienced writers do not successfully revise. Flower and Hayes (1980) describe writing as "the act of juggling a number of simultaneous constraints" (31): the demand for integrated knowledge, the linguistic conventions of written texts, and the rhetorical problem. The unskilled writer is often unable to juggle even one of these constraints successfully. From their composition research with children, Bereiter and Scardamalia (1987c) posit three text production factors that interfere with the processes of composing: short-term memory loss due to a slow rate of writing; interference from the mechanical requirements of written language; and lack of external cuing as a guide for composing--cuing which is present in the oral language pattern on which novice writers base their writing routines.
These production factors seem applicable to older unskilled writers as well. Daiute’s (1982) work with psycholinguistics and revision, for example, shows that the root of many syntactic errors is the overlapping sentence—an error which Daiute believes is caused by the limited capacity of short-term memory. In composing longer sentences, the writer holds the gist of the first part of his sentence in his short-term memory but often forgets its syntactic structure as he completes the sentence. The result is a sentence which begins with one syntactic structure and ends with another. Also, because older unskilled writers have not developed a routine to replace the external cuing found in conversation, they often lack a sense of what the rhetorical situation demands.

Other researchers find barriers to successful revision in writers’ oral language. Epes (1985), for example, studied basic writers who spoke a standard dialect and those who spoke a nonstandard dialect. She found that the nonstandard dialect speakers could not detect their mistakes, even though they could correct their errors when the errors were pointed out. Epes theorized that these writers think in their natural language. When rereading their texts, these basic writers match the written text against the nonstandard dialect in their minds rather than against the conventions of standard dialect, thus failing to detect their errors.

A few studies seem to suggest that more revision means better writing. Beach’s (1976) nonrevisers, for example, followed revision patterns similar to those of unskilled writers and his extensive
revisers were more likely to revise similarly to skilled writers. Other research has contradicted this notion that more revision equals better writing (e.g., Bridwell 1980; Faigley and Witte 1981; Hansen 1978). Faigley and Witte (1981) point out that just because expert writers revise differently from inexperienced writers doesn't mean that novice writers should revise more. Revision depends on "situational" variables besides the writer's skill: the purpose for writing, the format, the genre, the level of formality, the projected length of the text and task, and the writer's familiarity with the task, subject, and audience (410-11). As Flower et al. note, "The amount of revision is simply not the key variable." Revision must be "adapted to the necessities of the task" (1986, 19).

Several researchers agree that the review process begins when the writer notices a mismatch between his text and his intentions in composing the text (Bereiter and Scardamalia 1987a; Flower et al. 1986; Nold 1981). Sommers (1980) calls this sense of a mismatch "dissonance." Flower et al. (1986) define a writer's intentions as including the goals, constraints, and criteria which he applies to the rhetorical task. This idea of comparing the actual text with the writer's intentions in order to revise means that the writer must clearly represent both the text and his intentions to himself. For unskilled writers, accurately representing the text through rereading can be difficult: many such writers misrepresent their texts to themselves, "reading" the text which is in their minds and missing the dissonance in their actual texts.
Several composition theorists also believe that unskilled revisers cannot adequately represent their intentions (goals, constraints, criteria) to themselves and thus cannot test their text against these intentions (Bereiter and Scardamalia 1987a; Flower et al. 1986; Nold 1981). That is, novice writers do not have a large repertory of rules for acceptable text or of criteria appropriate for a writing task or genre. Even when unskilled writers do detect problems, they often cannot define the problems well enough to select strategies for revision (Flower et al. 1986). As Flower et al. (1986) note, representing one's intentions constrains the reviewing process by focusing on certain features of the text and limiting attention to other aspects.

Many revision researchers conclude that unskilled writers lack revision strategies and need instruction which would help them develop frameworks and patterns to use in lightening the cognitive load during writing (Beach and Eaton 1984; Bereiter and Scardamalia 1987a; Daiute 1982; Flower et al. 1986; Hansen 1978; Hillocks 1982). Hansen (1978) argued that assignment rewriting does not improve writing; she believes, "Revision needs to be taught, not assigned" (960). Hillocks (1982) concluded that practice in revising improves subsequent writing quality if revision is focused on particular goals or skills over several pieces of writing. Beach and Eaton (1984) found that self-assessing forms helped students critically evaluate and revise their own drafts. Since students probably can revise only those text structures with which they are familiar, Beach and Eaton concluded
that writers would benefit from instruction in self-assessing strategies. And to help writers correct syntactical problems such as overlapping sentences, Daiute (1982) believes students need sentence analysis strategies—strategies like sentence pattern frames which condense the amount of information and the burden on short-term memory.

Thus, for unskilled revisers like the subjects in the present study, instruction in revision strategies should prove helpful. What effect such instruction has on the students' review processes is the basic research question of this study.

Process and Intervention Inquiry

One of the basic assumptions of studies examining the composing process is that knowledge about the strategies which both skilled and unskilled writers use will provide more specific direction for teaching composition. Researchers such as Flower and Hayes (1981c) believe that process inquiry will help teachers "intervene where we might do the most good—by changing the writer's thinking process, not just the final product" (15). Thus, most process research has been descriptive and/or diagnostic.

The present study, however, uses the study of process as an evaluative tool to gauge the effect of an intervention technique such as a writing tutorial. Perl (1978) suggested a need for such intervention studies that assess the effect of teaching strategies on both the written product and the composing process. However, little of this type of research has been conducted in writing centers or the
general composition field. Beach and Eaton's (1984) study of the use of self-assessing forms in revising is probably the most well known of such research. To date, intervention inquiries have measured the effect of a writing tutorial on the product but not on the revision process. Thus, the current study extends writing center research and process research in general by studying a tutorial's effect on students' review processes.
CHAPTER THREE
APPLYING PROCESS THEORY TO INTERVENTION INQUIRY

This study, conducted in the Writing Center at Iowa State University (ISU) during the 1987 fall semester, examines the effect that a writing tutorial has on a student's review process, that is, the process in which the student evaluates what he has written or orally rehearsed. Specifically, the study focuses on a writing tutorial offered by the ISU Writing Center for students who complete the work of the first semester freshman writing course, English 104, but do not meet its correctness standard for mechanics.

Background of the Study

To meet the correctness standard, freshman composition students at ISU cannot have more than one major error (e.g., run-on sentence, fragment, faulty pronoun reference, error in subject-verb agreement, and misspelling) per one hundred words in their writing (see Appendix, p. 199, for "Ten Major Errors Summary"). Students who cannot meet the standard receive reports of "incomplete" for the course and are required to complete a Writing Center tutorial before receiving a grade for English 104. The English 104 writing files of these students are sent to the Writing Center, along with Writing Center contracts signed by instructors and students. On the contract, the instructor lists the specific problems in mechanics on which the student agrees to work.

Since students with English 104 incompletes often have problems with sentence construction, punctuation, and proofreading, Writing
Center tutors concentrate on teaching students skills which help them recognize and correct these problems. Many of the skills necessarily focus on the review process. In effect, tutors do not aim to change specific written products but rather what students do as writers to produce and review their writing. Thus, the present study explores whether a writing tutorial actually alters a student's review process. In particular, it addresses the following questions:

1. Does the tutorial increase a student's review time?
2. Does the tutorial alter a student's pattern of review, that is, the sequence and frequency of review in the student's total composition process? If so, how?
3. Does it change a student's concerns and strategies for review? If so, in what ways?
4. Does a student use tutorial content when reviewing? If so, is such reviewing successful?

Design of the Study

Participants in the study

Six native American English speakers with English 104 incompletes from the 1987 spring term enrolled in the ISU Writing Center program during the 1987 fall term. Non-native speakers with English 104 incompletes were not included in the study since a different tutorial is used to meet their special writing needs. The six native speakers were asked to participate in a "research project examining how students write"; all agreed to participate in the study. To help eliminate the possibility of other language-related instruction during
the writing tutorial, potential participants were informally questioned about the classes they were taking. None of the six students were enrolled in any writing, literature, linguistic, or foreign language classes. At the end of the tutorial, the students completed a questionnaire which assessed the types and extent of other language experiences which they had during the tutorial (see Appendix, p. 200). One of the students was later dropped from the study when it was learned that he had received instruction similar to the writing tutorial during his English 104 class.

The remaining five students, four males and one female, ranged in age from 19 to 21 and were classified as either freshmen or sophomores. They are individually referred to in the rest of this account by the following pseudonyms: Chad, Jason, Diane, John, and Bill. According to their English 104 instructors' comments on the Writing Center contracts, all five students had problems in constructing and punctuating sentences correctly; that is, they wrote fragments and/or run-on sentences and used commas, semicolons, and colons incorrectly. Various combinations of four of the five students also had problems with spelling, use of apostrophes, and subject-verb agreement. Following standard Writing Center procedure, each student wrote a 200-word essay, completed a questionnaire on his writing background, took a spelling test, and was assigned a tutor and an appointment time for his weekly one-hour session.

The writing background questionnaire includes two sections. The first part consists of 35 questions asking students about their family
background and their high school writing and language-related experiences. The second part is an interview section which tutors administer to their students. It contains 29 questions about the students’ writing processes and attitudes toward writing.

Use of pre- and post-tutorial protocols

Each student completed composing-aloud protocols before and after the writing tutorial. That is, the student thought aloud and was tape-recorded as he completed an assigned writing task. The investigator was not present as each subject composed aloud in a small nonsoundproof room located in the Writing Center. The room was furnished with a library-size table and two chairs. A dictionary, writing paper, and two ink pens were placed on the table for student use. A small sign which read "Keep Talking" was also placed on the table, opposite the student. A reel-to-reel tape recorder was positioned on the table on the student’s right-hand side. Two microphones were used: one mounted on a small stand and placed across from the student, and another placed on the table near the student’s papers. Students were instructed not to place any padding underneath the paper on which they were writing so the sound of their writing would be more easily picked up by the microphone.

To help the students become familiar and comfortable with the composing-aloud process, two ten-minute trial protocols were completed by each student. These protocols were done during the first two weekly one-hour sessions as the students were completing the standard Writing Center tests and questionnaires. For the first trial
protocol, the student and researcher read and discussed a sheet of instructions for composing-aloud protocols (see Appendix, p. 129). Basically, in composing aloud, students are asked to do whatever they normally do when writing, but to say everything aloud as they think and write. Students are told not to analyze what they are thinking, and they are encouraged to say whatever is on their minds, including stray thoughts. After discussing these instructions, students were asked to compose aloud for ten minutes as they wrote a paragraph on the following topic: Explain to your advisor why you chose to attend ISU. Since this was a trial protocol, a time limit was used and students were told not to worry about finishing their paragraphs.

The tapes and paragraphs from the first trial protocols were reviewed and notes were made concerning any difficulties which the students had in composing aloud. None of the students had problems externalizing their thoughts, although they had varying reactions to composing aloud. Diane thought the process seemed "weird," John said he had "done worse things," and Bill thought it was "kinda fun." John, Jason, and Chad did not always speak loud enough to be easily heard on tape, so they were encouraged to speak louder for the second trial protocol.

For the second ten-minute trial protocol, the composing-aloud process was again discussed. Then the paragraph written during the first protocol was returned to the student and he was instructed to concentrate on what he had already written and follow his normal revising procedure. These second trial protocols were reviewed to
check for any problems with equipment, to see if students had made the necessary adjustments in composing aloud, and to gauge what types of information the protocols could yield about the review process.

After successfully completing the trial protocols, the five students did pre-tutorial protocols during their regularly scheduled appointments. The post-tutorial protocols were also completed during scheduled appointments, before students wrote their test-out essays. The writing tasks were similar for both the pre- and post-tutorial protocols. The assignment for the pre-tutorial protocol instructed students to explain how being in college had changed their attitudes, feelings, and/or behavior concerning one of these topics: career goals, study habits, or finances. Students were told to assume they were writing for an audience of their peers; they were instructed to try to complete their essay in one hour. The writing task for the post-tutorial protocol was identical to the pre-tutorial task except students were given a choice of three other topics to consider—parents, friends, or siblings—when explaining how college had affected their attitudes, feelings, and/or behavior. Students were encouraged to do their best work for both the pre- and post-tutorial protocols. They were told why the two writing situations were important: first, the pre-tutorial protocols would allow tutors to diagnose the students' writing strengths and weaknesses; and second, the post-tutorial protocols would help tutors gauge the students' progress.
ISU Writing Center tutorial

Three of the students—Chad, Diane, and Bill—were assigned to this researcher for tutoring during their weekly one-hour sessions. John and Jason were assigned to Nancy, another Writing Center tutor. Both Nancy and the researcher were graduate students and had tutored in the Writing Center during the 1987 spring term. Both tutors used the same handouts as the basis for the tutoring sessions and kept notes about the material discussed in each student's sessions. At the end of the tutorial, the investigator also interviewed Nancy to gain a better understanding of what happened during her students' writing tutorials (see Appendix, pp. 202-6).

The writing tutorial consisted of instruction in four main areas: (1) the identification of basic grammatical units such as subject, verb, phrase, and clause; (2) the use and punctuation of basic sentence patterns; (3) the correction of individual problems in mechanics unrelated to sentence construction problems; and (4) the development of individual proofreading strategies. These basic components were intermixed throughout the tutorial as the tutors assessed each student's needs and progress. The students were also given short writing assignments (usually not more than 200 words) and/or sentence-combining exercises to reinforce their weekly lessons. As often as possible, the student's own writing served as the basis of each session rather than examples from textbook exercises or worksheets. Although topics for writing assignments were not uniform throughout the tutorial, each student initially wrote a paper
describing his process of revision and proofreading (see Appendix, pp. 207–9). At the end of the tutorial, after writing a rough draft of his required testout essay, each student also wrote a short paragraph explaining how he planned to revise his essay (see individual case studies in Chapter Four).

Instruction in basic grammatical terminology was necessary for the students to understand and use the various sentence patterns presented. Through the use of handouts, exercises, and their own writing, students were given instruction in the following grammatical units: verbs and subjects, phrases, prepositions, verbals, dependent clauses, subordinators, independent clauses, coordinating conjunctions, transitions, and conjunctive adverbs. Whenever possible, students were given alternative strategies for discussing and remembering grammatical concepts. For example, coordinating conjunctions were called FANBOYS, a word created from the first letter of each of the coordinating conjunctions. Since each student’s grasp of the various grammatical concepts differed, the tutors adjusted their instruction according to each student’s needs. Chad, for example, could easily identify subjects, verbs, and prepositional phrases, so he did not need additional handouts and exercises in these areas.

In the sentence pattern component of the tutorial, students learned to identify and punctuate ten basic sentence patterns. The pattern system used was a modified version of a heuristic developed by an ISU graduate student and included the following patterns:
1. **IC.** (Independent Clause.)
   Ex.: The dog barked in the night.

2. **IC, FB IC.** (Independent Clause, FANBOYS Independent Clause.)
   Ex.: John had finished basting the turkey, so he placed it back in the oven.

3. **IC; IC.** (Independent Clause; Independent Clause.)
   Ex.: Zachary is sick today; he did not go to school.

4. **IC; TW, IC.** (Independent Clause; Transition Word, Independent Clause.)
   Ex.: I don’t feel well today; however, I will try to go to all my classes.

5. **TW, IC.** (Transition Word, Independent Clause.)
   Ex.: Therefore, the cause of the disease is unknown.

6. **IC DC.** (Independent Clause Dependent Clause.)
   Ex.: The teacher read the students’ essays as he ate his lunch.

7. **DC, IC.** (Dependent Clause, Independent Clause.)
   Ex.: As soon as he returns from the store, he will prepare dinner.

8. **VP, IC.** (Verbal Phrase, Independent Clause.)
   Ex.: To proofread his essay, Mike read it backwards.

9. **PP, IC.** (Prepositional Phrase, Independent Clause.)
   Ex.: After completing his homework, he played baseball with his friends.
10. **Set up: Completion.**

Ex.: We will test the effect of three variables: gamma rays, x-rays, and delta rays.

Teaching these sentence patterns naturally involved more than just concentrating on correct punctuation. Student writers were taught that they had choices in constructing and punctuating their sentences—choices which affected the meaning, impact, and readability of their writing. For example, students were shown how coordination and subordination could help them vary the emphasis given to a particular idea. And tutors discussed the use of a comma after an introductory phrase as a writer's way of guiding the reader through the text. Thus, the sentence patterns were used not only to teach correct punctuation but also to increase the tutee's awareness of audience and of rhetorical techniques.

A third component of the tutorial dealt with individual correctness problems which were not related to sentence construction. Four of the students, for example, needed work in using the apostrophe correctly, Diane had problems with parallelism, and Bill needed instruction in capitalization. Thus, this part of the tutorial was highly individualized. As in the sentence pattern component, students used handouts, exercises, and their own writing as a means for correcting their individual writing problems.

Another part of the tutorial focused on teaching proofreading strategies. Students were given general proofreading guidelines: note possible problems while writing, schedule proofreading time for
every writing task, look for one type of error per reading, read backwards, and read aloud (see Appendix, p. 210). Then, with the help of his tutor, each student developed an individual proofreading procedure based on his particular writing problems. The steps in the procedure were listed in order of importance so that key problems could be checked even when time was limited. Chad, for example, developed the following plan:

1. Check for comma splices.
2. Proofread for missing words and endings.
3. Check for needed commas after introductory material.
4. Check words with ys endings.

Students were also urged to adapt their proofreading procedures on the basis of their success on previous writing. By the end of the tutorial, for instance, Chad dropped step four from his proofreading plan because he had internalized the rule for adding s to words ending in y.

Computer-assisted spelling program

Four of the subjects—Diane, Bill, John, and Jason—each missed more than 35 words on the New Stanford Achievement Test of Spelling (below 7.9 grade equivalent), indicating they needed work in spelling. So, in addition to the writing tutorial, they spent one hour per week working on a computer-assisted spelling program called "Spell Rule." Each student was required to complete a minimum of nine sessions on the program.
Developed by two ISU staff members, the spelling program focuses on spelling rules and uses words which were found misspelled in Writing Center students' papers over a two-year span. In the program, a word is flashed on the computer screen and the student is asked if the word is spelled correctly. If the word is correct and the student indicates that it is misspelled, the correct spelling is shown again on the screen and the student is asked to study it for a few seconds. If the word is misspelled, the student has three chances to spell it correctly. If the student cannot spell a particular word, the word is spelled for him; any rules which govern its spelling are then presented to the student through a series of questions which serve as a heuristic procedure for remembering the particular spelling convention. Examples that follow the same rule, as well as exceptions, are given. The program then continues with another word. Since students only see rules for the words with which they have difficulty, the computer-assisted spelling program gives the students individualized help.

Analysis of Data

Transcription of composing-aloud tapes

The pre- and post-tutorial protocols were transcribed from the tapes using the following procedure:

1. The students' written compositions were consulted to gain a better understanding of what the students were doing and discussing.
2. The compositions were also consulted so that the spelling and punctuation in the protocol transcripts would match those in the students' compositions.

3. The transcribed protocols were marked to show when students were writing and when they were reading. Writing segments were underlined with a straight line and reading segments were bold faced. Students had been instructed to say aloud everything they wrote and read, so these activities were detected by listening to the tapes and consulting the written products. Writing was distinguished from reading by listening for the sound of writing and the rate and intonation of the writer's speech.

4. Miscues were marked with brackets in the protocol transcripts. Miscues occur when subjects are writing and don't write what they say aloud or when they misread what they have written. When subjects miscued, the protocol transcripts reflect what the subjects said rather than what was in their composition.

5. The protocol tapes were listened to again to double-check what had been transcribed and marked as reading, writing, and miscuing.

Coding scheme for three major processes

The ten protocols were coded using a scheme developed by Hayes and Flower (1980) and further defined by Flower and Hayes (1981a) and
Swarts, Flower, and Hayes (1984). This scheme identifies three basic components of the writing process: planning, translating, and reviewing. In coding the writing processes used in the ten protocols, converging lines of evidence were used whenever possible:

- The form of the written material
- The writer's comments about what he is doing
- The rate and intonation of the writer's speech
- The sound of writing or of pages being turned
- The investigator's knowledge of tutorial content

All ten protocols used in this study are included in the Appendix, along with a coding key (see Appendix, pp. 130-98). Protocol segments marked as PLAN are those in which the writer is doing one or more of the following activities:

- **Generating ideas** about the topic or rhetorical problem,
- **Setting goals** which specify what one wants to achieve or which describes how to do it, and
- **Organizing** information already generated.

TRANSLATE segments include all attempts at finished text, generated either orally or in writing. New information which is generated during revision is also coded as "translating" but not if the writer just rearranges previously generated information or substitutes words (that would be coded as "reviewing"); in other words, if a subject is writing, it doesn't necessarily mean that he is translating.
REVIEW segments are those in which the writer is engaged in one or more of the following activities:

Reading the text,
Evaluating translations, and
Making revisions in the text.

Revision differs from generating in two ways: (1) what the writer is revising has already been articulated and (2) time has elapsed.

A problem arises in using Swarts, Flower, and Hayes' (1984) coding scheme when one tries to follow their guidelines for distinguishing between reading which is reviewing and reading which is a springboard for further translating. They suggest this rule of thumb: Note the elapsed time between the repetition and translate. If a long clause or significant length of time intervenes, code the repetition as a review. This rule of thumb, however, is not useful since a "long clause" and a "significant length of time" are not defined. In addition, students in this study often read one or more complete sentences before translating new information. Their fast rate of reading indicates that the reading serves more as a memory prompt for further translating than as an attempt to review their text. Thus, in this study, "reads" which precede translating and contain no direct evidence of the review process are coded as reviewing only if (1) more than two sentences are read or (2) if one or more complex sentences are read. Reading which does not meet these criteria is coded as part of the translating which it precedes.
Protocol segments marked as METACOMMENT include comments about the writing situation or process and stray remarks (e.g., "Just don't know how to start it yet, so I'm thinking right now." "It's kind of amazing that I can read this fast, isn't it, and check 'em at the same time."). In this study, interjections such as okay, let's see, and well are included as part of the process in which they are used.

A computer stopwatch program was used to record the length of time spent in planning, translating, reviewing, and metacommenting in each of the protocols. The timing was accomplished by running the protocol tape and the stopwatch program at the same time. Using the coded protocols as a guide, the investigator indicated the beginning and the end of a particular coded segment by hitting the appropriate key on the computer keyboard. The stopwatch program then printed the length of time spent on the coded segment and the cumulative elapsed time.

Coding for use of tutorial content

The review segments of the five post-tutorial protocols were coded for use of tutorial content. Each specific writing problem which subjects tried to solve using tutorial content was coded separately with a "TC" and enclosed with braces. Some instances of tutorial content use include an intervening planning or metacomment segment. One or more of the following lines of evidence were used to determine the use of tutorial content in the post-tutorial protocols:

Direct statements about tutorial content. This line of evidence includes comments by the subjects about sentence patterns,
tutorial handouts, and/or proofreading strategies developed during the tutorial. Bill, for example, refers several times to FANBOYS in his post-tutorial protocol. He also talks about the proofreading strategy he has developed: "Punctuation--FANBOYS--intro material--capitalization--possessive--noun's noun--I'll get this right" (Appendix, p. 194).

Inferences drawn from what the subjects said or wrote. In several instances, use of tutorial content was inferred from what the students said or wrote. For example, Jason says, "... but I don't--won't trust myself using a colon there--I don't have that sheet so I--If I had that sheet I might try it so I--If I had that sheet I could look it up, but I forgot it" (Appendix, p. 153). In this instance, one can infer that Jason is referring to a tutorial handout on the use of colons.

Inferences drawn from the sound of turning pages. During the composing-aloud sessions, subjects sometimes consulted a dictionary or their own personal notebooks which included tutorial handouts and notes. In a few instances, use of tutorial content was inferred both from what the subjects said and from the sound of turning pages. For example, as Bill checks the spelling of which, one can hear the sound of turning pages. He finds the word so quickly, however, that one can infer that he is checking his personal spelling list developed during the tutorial rather than consulting the dictionary.

Absence of tutorial content use in the pre-tutorial protocol. Tutorial strategies and/or rules which subjects were
already using in the pre-tutorial protocols were not coded as tutorial content use in the post-tutorial protocols. Thus, the presence or absence of tutorial content use in the pre-tutorial protocols was considered for all possible instances of tutorial content use in the post-tutorial protocols. For example, Diane consistently uses a comma after introductory material in her pre-tutorial protocol; so her comments in her post-tutorial protocol about placing a comma after introductory material are not coded as tutorial content use.

The instances of tutorial content use were also coded for their success, using a scheme similar to Stay's (1985) taxonomy of quality changes. The subject's use of tutorial content was considered successful and coded with a "+" if it clarified the text and/or corrected grammatical, mechanical, usage, or spelling errors. Use of tutorial content was coded "0" and considered neutral if the subject made no change in the text or if the change made was not significant; that is, the change did not affect the meaning or correctness of the text. Unsuccessful use of tutorial content was coded with a "-". In these instances, the subject added unnecessary information or deleted necessary information; failed to make necessary changes in grammar, mechanics, usage, or spelling; and/or made incorrect changes in these areas.
CHAPTER FOUR
ANALYZING THE EFFECTS OF A WRITING TUTORIAL

This chapter presents five case studies analyzed for the effects of the ISU Writing Center tutorial on the subjects' review processes. Each case study focuses on the specific questions of the present inquiry and follows the same general format: writing background; time spent on review; pre- and post-tutorial review patterns; concerns and strategies for review; and summary of tutorial effects. The content and rationale for the first four sections are described in the following paragraphs:

Writing background. The data for this section are drawn from the subjects' writing background questionnaires, reading and writing questionnaires, Writing Center contracts, and English 104 writing files. Three types of information are included about the subjects' writing backgrounds: educational background, specific problems in mechanics, and other language-related experiences during the tutorial. The information on educational background and writing problems provides a basis for a later comparison of the case study subjects with ISU Writing Center students in general. The description of the subjects' specific problems in mechanics is also useful as the study focuses on the concerns and strategies which the subjects use in review. The information about other language-related experiences clarifies other instructional influences on the students' writing growth during the tutorial and places the writing tutorial in the context of the subjects' other reading and writing experiences.
Time spent in review. Based on a comparison of the time spent in review in the pre- and post-tutorial protocols, this section addresses the question of whether the tutorial increases the subjects' review time.

Pre- and post-tutorial review patterns. Based on the subjects' composing-aloud protocols, this section describes and compares the subjects' pre- and post-tutorial review patterns, addressing how the tutorial affects the subjects' review patterns. (In this study, review pattern is defined as the sequence and frequency of review in the subject's total composing process.)

Concerns and strategies for review. This section analyzes the concerns and strategies for review which subjects use before and after the tutorial. It gauges the tutorial's effect on the subjects' concerns for review and the strategies they use for meeting them, and it focuses on the subjects' use of tutorial content as strategies for review. For the pre-tutorial analysis, evidence is drawn from the students' essays on their review processes and from their pre-tutorial protocols; for the post-tutorial analysis, evidence is drawn from the students' plans for revising their test-out essays and from their post-tutorial protocols.

Chad

Writing background

Chad is a twenty-one-year-old sophomore majoring in Agricultural Studies. His father attended college and his mother is a college graduate. Chad attended high school in Minnesota where he took four
years of high school English courses, none of which were primarily composition. His high school rank was fifty-eighth in a class of eighty-four students.

Chad's Writing Center contract indicates that he had problems in the following areas: sentence construction (fragments and run-ons), spelling, use of apostrophes, subject-verb agreement, verb tense, and adjective and adverb differences. Two of these writing problems—spelling and subject-verb agreement—proved to be more a matter of learning correct usage and careful proofreading. Chad's score of 18 on the New Stanford Achievement Test of Spelling (above 10.0 grade equivalent) indicates he does not have serious spelling problems. A check of the words marked as misspelled in his English 104 writing file shows that many such words are either an error in usage (e.g., their for there) or a copying or proofreading error (e.g., ro for rot). Chad's rough drafts from English 104 show that several of his subject-verb agreement errors are also copying errors in which he failed to add an s or ed to a verb as he recopied an essay.

While enrolled in the Writing Center program, Chad was also taking sociology, chemistry, and two agricultural mechanization classes. He wrote five to fifteen pages for each of three of his classes. He rarely wrote for purposes other than his course work but when he did, he wrote letters. The course reading he completed included less than one hundred pages for each of three of his classes and over two hundred pages for his chemistry course. During the
semester, he sometimes read newspapers, news magazines, and specialty magazines.

Time spent in review

Chad spends 28% of his time reviewing in the pre-tutorial protocol and increases his review time to 36% in the post-tutorial protocol (see Figure 1). The gain of 8% in review time becomes more significant when one other factor is considered: Chad's post-tutorial essay (235 words) is approximately 100 words shorter than his pre-tutorial essay (346 words—see Appendix, p. 212). Thus, Chad uses more review time in writing his post-tutorial essay which is shorter than his pre-tutorial essay. Over the course of the tutorial, Chad has increased his review time.

![Figure 1](image_url)

Figure 1. Comparison of planning, translating, reviewing, and metacomenting time in Chad's pre- and post-tutorial protocols.
Pre- and post-tutorial review patterns

In his pre-tutorial protocol, Chad reviews briefly and intermittently to evaluate and edit as he writes his essay; near the end of the protocol, he devotes a longer uninterrupted span of time to reviewing as he rereads the entire essay (see Figure 2). In his post-tutorial protocol, Chad’s review pattern is essentially the same as it is in his first protocol: he reviews intermittently as he writes, rereads the entire essay, and decides to add a concluding paragraph (compare Figures 2 and 3). Thus, Chad’s review pattern is basically unchanged by the writing tutorial.

Figure 2. Chad’s review pattern in his pre-tutorial protocol

Concerns and strategies for review

Pre-tutorial concerns and strategies. Chad’s paper on his revision and proofreading methods, written at the beginning of his tutorial, focuses on what he calls proofreading (see Appendix, p. 207) which has become important for him because the "little mistakes can
Figure 3. Chad’s review pattern in his post-tutorial protocol
make or break your grade on a paper." To proofread, he says he uses
the following procedure, learned in English 104: he reads his paper
aloud to "hear what is awkward and what doesn't seem to belong;" he
reads it backwards to check spelling; and he has someone else read it
to catch errors he has missed. Chad's procedure, however, shows that
he is concerned with more than just proofreading. His strategy of
reading aloud to listen for awkwardness and unnecessary content shows
a concern for style and audience. This strategy is similar to what
Hull (1987) classifies as intuiting (relying upon how a text sounds)
and comprehending (detecting something wrong with the text's meaning).

In his pre-tutorial protocol, Chad's concerns in reviewing and
his strategies for revising and proofreading are fairly consistent
with what he describes in his proofreading paper. Most of his review
segments involve reading and rephrasing text which has just been
generated or adding missing words or letters. There is no evidence in
the protocol that he uses any strategy other than intuiting to check
sentence structure. After rereading his entire essay, for example, he
comments, "Sounds pretty well." He does not, however, read his essay
backwards to check for spelling errors—in fact, none of his review
segments focus on spelling, yet his pre-tutorial essay has only one
true spelling error (the other "spelling" error is a transcribing
error [Iow for Iowa]). As noted earlier, Chad doesn't have a serious
spelling problem; perhaps he listed reading backwards as part of his
proofreading procedure because he had been told he has spelling
problems.
Post-tutorial concerns and strategies. Before revising his test-out essay at the end of the tutorial, Chad wrote what he planned to do to revise:

I plan to read through it first to pick out any awkward sentences. I also want to look to see if word usage is correct. Then I plan to find any misspelled words.

His concerns continue to be correctness and style; but because of the tutorial, he now realizes that part of his spelling problem is a matter of correct usage—one which he can handle by checking his writing for the words he commonly misuses (e.g., your for you’re).

Although Chad’s concerns in reviewing remain similar over the tutorial, his strategies for reviewing change. While he uses intuiting exclusively to check sentence structure in his pre-tutorial protocol, he also uses what Hull (1987) calls "consulting" in his post-tutorial protocol. That is, he calls upon his knowledge of the conventions of written language to review his sentence structure—knowledge which he has gained through the writing tutorial. In his post-tutorial protocol, Chad has three instances in which he uses tutorial content in reviewing; two of the instances result in successful reviews and one in a neutral review (see Appendix, pp. 137-41). In the second review segment of his post-tutorial protocol, for example, Chad says as he composes aloud:

school here I—needs something (places semicolon after here)—I lived at home. The time I took off to work after Waseca and before attending school—uh, that should be a
comma—dependent clause (changes semicolon after here to a comma). The time I took off to work after Waseca and before attending school here,—be just a comma—I lived at home. (Appendix, p. 137)

Even though Chad incorrectly identifies a phrase as a clause, he knows that he "needs something" between the introductory phrase and main clause to guide his reader. He has also learned that he must have two independent clauses in order to use a semicolon in this construction; thus, he chooses to use a comma after consulting his knowledge gained from the tutorial.

In the latter part of his post-tutorial protocol, however, Chad is not as successful in using tutorial content:

Whenever I was planning to go home—Whenever I was planning to go home—Whenever I was planning to go home; I was—let's see—Whenever I was planning to go home—let's see—Whenever I was planning to go home—I was planning—uh—it'd be Whenever—no, let's see—If I was planning—uh—If I was planning—oh, I'll just change the whole thing. I would actually—I would actually look forward—I would actually look forward to going home and seeing them. (Appendix, p. 140)

As in Flower et al.'s (1986) model of revision, Chad detects a problem but it is ill-defined: he knows something is wrong with his sentence structure, but he is not sure how to correct it. Following a plan similar to Flower et al.'s rewrite strategy, Chad solves the problem
by extracting the gist of the sentence and restructuring. Although he cannot define and solve the original problem, he can detect it and rewrite the sentence correctly using another structure.

**Summary of tutorial effects**

Although Chad's pattern of review and his concerns in reviewing are not altered by the tutorial, his review time and strategies are affected. Chad increases the amount of time he spends in reviewing and successfully uses consulting strategies based on tutorial content to help him review his writing. Along with the changes in his review process, Chad's post-tutorial essay shows a decrease of 1.1 in the number of major errors per 100 words (see Appendix, p. 212).

Jason

**Writing background**

Jason is a twenty-year-old freshman majoring in Electrical Engineering. Both his parents are deceased: his mother died when he was two years old and his father about two years ago. His father attended high school but did not graduate. Jason attended a small high school in Iowa, where he took four years of English courses including a composition course. His high school rank was ninth in his senior class of eighteen students; his score was 11 on the English portion of the ACT.

Jason's Writing Center contract specifies that he needed help in the following areas: spelling, sentence construction (fragments), subject-verb agreement, and pronoun-antecedent agreement. Jason's tutor did not notice any problems in subject-verb agreement or pronoun
reference in the writing Jason did in the Writing Center (see Appendix, p. 202). However, Jason's pre-tutorial essay contains two errors in pronoun reference and his post-tutorial essay has one error in pronoun reference and one in subject-verb agreement. Jason's score of 37 (7.6 grade equivalent) on the New Stanford Achievement Test of Spelling indicated he needed additional help in spelling, so he completed the computer-assisted spelling program.

During the 1987 fall semester, Jason also took chemistry, sociology, freshman engineering, and two math classes. He wrote papers for just one of his classes, chemistry, for which he wrote more than fifteen pages; he never wrote for purposes other than his course work. He read more than two hundred pages for each of his classes except freshman engineering, for which he read less than one hundred pages. In addition, he often read newspapers, news magazines, and specialty magazines.

Time spent in review

Jason spends 55% of his time in reviewing in his pre-tutorial protocol and a comparable 57% in his post-tutorial protocol (see Figure 4). Both essays are comparable in length—139 words and 138 words—so Jason's review time remains basically the same over the tutorial.

Pre- and post-tutorial review patterns

In his pre-tutorial protocol (see Figure 5), Jason reviews intermittently, almost sentence by sentence, as he writes the first few sentences of his essay; then he rereads all he has written. He
Figure 4. Comparison of planning, translating, reviewing, and metacommenting time in Jason’s pre- and post-tutorial protocols

again reviews sentence by sentence as he finishes his essay. He spends the remainder of his time in review, rereading his essay three times. In his post-tutorial protocol (see Figure 6), Jason’s translating is not interrupted as much by review in the initial stage of composing; after a short review of his first sentence, he writes several sentences before reviewing his entire text. After completing two more sentences, he reviews his entire text twice and adds a concluding sentence. He then reviews his entire text two more times. In general, Jason’s patterns of review are similar in his pre- and post-tutorial protocols (compare Figures 5 and 6), with short periods of review in the first stages of composing and increasingly longer periods of review in the latter stages. The one difference is in the longer span of uninterrupted translating in the first section of Jason’s post-tutorial protocol. Perhaps Jason was trying to follow
Figure 5. Jason’s review pattern in his pre-tutorial protocol

Figure 6. Jason’s review pattern in his post-tutorial protocol
his tutor's advice to "just write—not to worry the first time through about his mechanics" (Appendix, p. 203). However, the exact reason for this slight difference in Jason's review pattern cannot be pinpointed without more evidence.

Concerns and strategies for review

Pre-tutorial concerns and strategies. Like Chad, Jason also focuses on proofreading when he writes about his revising process at the beginning of the tutorial (see Appendix, p. 207). He writes that his main concerns are spelling, punctuation, and word choice. He is also concerned about whether his writing "sounds good" and makes sense, indicating a concern for style and audience. Jason says he tries to correct his errors as he writes, but misses many. He usually proofreads his entire paper twice: first, to "cut or add material to make the paper sound good"; and second, to proofread for errors in spelling, punctuation, and word choice.

These concerns and strategies are evident in Jason's pre-tutorial protocol. He reviews almost sentence by sentence, evaluating what he has written and adding, deleting, or rephrasing text. Then he reads the entire text and comments, "Sounds okay." Like Chad, he uses an intuiting and comprehending strategy to edit his writing. Before reading through his text a second time, he says, "Okay—I'm going to start proofreading—look for spelling, punctuation, good sentence structure—that kinda stuff" (Appendix, p. 146). In this second reading, Jason seems to be using a combination of consulting and intuiting strategies. In reading a fragment, for example, he notices
something wrong then corrects the error by including the fragment with its related independent clause, although giving no reason for the change (see Appendix, p. 147). Later, he incorrectly places a semicolon in a dependent/independent clause construction (see Appendix, p. 147). In these instances, the set of conventions he uses when consulting is neither well-defined nor consistent with standard conventions.

Post-tutorial concerns and strategies. Before revising his test-out essay at the end of the tutorial, Jason listed what he planned to do in revising:

1. I will look at each sentence individually for punctuation errors, and to see if it makes sense.
2. I will look for spelling errors.
3. I will look to see if all verb tenses match.
4. I will look to see if I had used any large complicated words that don't belong in an essay.

Jason’s concerns are still spelling, punctuation, word choice, and audience; through the tutorial, he has also become aware of his need to check for subject-verb agreement—or what he probably mistakenly calls "verb tenses." These concerns are evident in his post-tutorial protocol as he adds or deletes information; substitutes words; and checks spelling, punctuation and subject-verb agreement.

In his post-tutorial protocol, Jason still uses intuiting, comprehending, and consulting to review; however, because of his use of tutorial content, Jason’s consulting strategies are more dominant
in his second reading of his text than in his pre-tutorial protocol, with four instances of tutorial content use—two resulting in unsuccessful reviews and two in neutral reviews. In one of the unsuccessful reviews, Jason checks for subject-verb agreement:

> My feelings towards my friends has not really changed since I came to college. What the verb is—changed—what has not changed—my feelings. That's pretty good. (Appendix, p. 152)

Jason follows the strategy he has been taught in his tutorial for isolating the subject and verb, but he doesn't test the subject and verb for agreement, thus failing to correct the error.

In another unsuccessful review, Jason incorrectly applies one of the rules he has learned in the tutorial:

> I have tried to learn—I have tried to learn from the mistakes I made with my old friends comma, and practice these new technique[s] on my new friends—I need that comma there 'cause it was independent clause, comma, FANBOYS, independent clause. (Appendix, p. 153)

Rather than just relying on his intuition for punctuating, Jason is following his tutor's instructions to "justify the punctuation that he uses" (Appendix, p. 204). In this instance, Jason incorrectly identifies a FANBOYS sentence pattern (IC, FB IC.) and justifies his use of a comma.

In another review segment, Jason correctly applies a rule learned in the tutorial but will not trust himself to use it:

> I could put a colon there, I think--after--after me. In the
end I can only hope my friends will always be there
for—will always be there for me—to learn from, to love, and to respect. Ahh, shoot. In the end I can only hope my friends will always be there for me—to learn from, to love, and to respect. Well, I need commas after from and love because it's a list, and I could use a colon there, but I don't—won't trust myself using a colon there—I don't have that sheet so I—If I had that sheet I could look it up, but I forgot it. (Talking about handout on the use of the colon.) (Appendix, pp. 153-54)

Jason's hesitancy to use a colon here again demonstrates that he has learned the punctuation rules but lacks confidence in applying them.

**Summary of tutorial effects**

Jason's review time does not increase over the tutorial, with over half of his time spent in review in both the pre- and post-tutorial protocols. Although his pattern of review is slightly altered at the end of the tutorial, this change cannot be directly linked to the tutorial: he has a longer period of translating uninterrupted by reviewing in the beginning stages of composing. While Jason retains the same basic concerns in review, he adds a concern for subject-verb agreement over the course of the tutorial. In addition, he adopts a strategy of justifying the punctuation he uses based on rules he has learned in the tutorial. Although he can recite these rules, he is still not always successful or confident in using them. In addition to the changes in his review process, Jason's
post-tutorial essay shows a decrease of 2.2 in the number of major errors per 100 words (see Appendix, p. 212).

Diane

Writing background

Diane is a nineteen-year-old freshman majoring in pre-business. Both of her parents graduated from high school. Diane attended high school in a Chicago suburb where she took four years of English courses, including one composition course. She graduated 24th in a class of 301 students and scored 15 on the English portion of the ACT.

According to Diane's Writing Center contract, she needed work in subject-verb agreement, sentence construction, and proofreading techniques. A check of her English 104 writing file revealed that she also had problems with pronoun reference, verb tense shifts, use of possessive, capitalization, misplaced commas, use of quotation marks, and omission of verb tense markers such as ed and s. In addition, her score of 43 (7.2 grade equivalent) on the New Stanford Achievement Test of Spelling indicated she needed to improve her spelling skills, so she completed the computer-assisted spelling program.

While completing her Writing Center contract, Diane was also taking sociology, accounting, health, computer science, and theater. She read more than two hundred pages for each of her courses and sometimes read newspapers and news magazines for pleasure. Diane wrote five to fifteen pages for one of her classes but was not required to write any papers for her other classes. During the semester, she sometimes wrote letters, diary entries, and poetry.
Time spent in review

Diane spends 49% of her time reviewing in her pre-tutorial protocol; and, according to the timed protocol results, she decreases her review time to 43% in her post-tutorial protocol (see Figure 7). However, for her post-tutorial protocol, there is strong evidence that Diane turned off the tape recorder and continued reviewing. While her total post-tutorial protocol time is 27 minutes and 43 seconds, she spent 35 minutes in the recording room—a difference of approximately 7 minutes. In addition, there are seven changes in Diane's post-tutorial essay which are not evident in the protocol. Since several changes were made and no new text was added, one can assume that Diane spent most of her time in review after stopping the tape. Adding just 5 minutes of review time to the post-tutorial protocol figures increases Diane's review time to 51% of the total composing time—a percentage which is comparable to her pre-tutorial review time. Thus, the amount of time Diane spends in review remains basically the same over the tutorial.

Pre-and post-tutorial review patterns

In her pre-tutorial protocol (see Figure 8), Diane reviews intermittently as she evaluates and edits her in-process essay. When she has problems generating her concluding paragraph, she rereads and edits her entire essay. After completing the last paragraph, she again rereads her composition, adding one word and substituting for three words. In her post-tutorial essay (see Figure 9), Diane also reviews intermittently as she writes her essay. When she can no
longer generate new material, she rereads and edits her complete composition; as in her pre-tutorial protocol, she uses this review as both an evaluating/editing process and a springboard for generating more material. After completing her essay, she rereads her conclusion and stops the tape. Subsequent changes are scattered throughout the main text, indicating that she also rereads the text before the conclusion. Thus, Diane's review pattern is basically unchanged by the writing tutorial.

Concerns and strategies for review

Pre-tutorial concerns and strategies. According to Diane's pre-tutorial paper on her review process, her main concern in reviewing is "doing the necessary [sic] corrections to make your paper perfect" (Appendix, pp. 207-8). For Diane, these "corrections"
Figure 8. Diane's review pattern in her pre-tutorial protocol
include subject-verb agreement, verb tense, spelling, sentence structure, and transitions. Her concern with transitions also indicates an awareness of style and audience, even though she is almost mechanical in her use of a few transitions such as but and so to link her sentences. She writes that she has only two methods of revising her writing: she proofreads it aloud and a friend proofreads it.

These concerns and strategies are evident in Diane's pre-tutorial protocol as she corrects spelling, rephrases text, adds transitions, and changes tense. Like Chad and Jason, she relies on intuiting and comprehending strategies as she rereads her essay to revise it. However, unlike the other four subjects in this study, who speak a standard dialect, Diane speaks a nonstandard dialect. Thus, intuiting
or relying on how the text sounds is not as successful for Diane as it is for the other subjects. Like the basic writers in Epes' (1985) study of nonstandard dialect speakers, Diane does not detect her errors, even though she often corrects them orally when she reads her sentences aloud. In her pre-tutorial protocol, Diane has several instances in which she omits a necessary ed on a verb but supplies the ending orally as she rereads. When such errors were pointed out for Diane during the tutorial, she could easily correct them; she did not need instruction on forming verb tenses, as one would assume from her written product, but she needed some type of detection strategy.

Diane was encouraged to follow two guidelines to help her detect missing verb endings and other missing markers: (1) proofread once, checking only the verbs for missing endings and (2) tape record her writing, when possible, and replay the recording while proofreading. Using the recorded essay reduces some of the cognitive load by allowing Diane to attend to revising and not to both reading and revising. Since she uses another sense, hearing, to know what should be on the printed page, she can concentrate her vision on confirming that the writing corresponds to the tape and make necessary changes. Using this technique during the tutorial helped Diane detect some of the omitted markers in her writing. In addition, in listening to her tape-recorded writing, Diane noticed the overuse of but as a connector so she revised, attempting to use different, more appropriate transitions.
Post-tutorial concerns and strategies. Before revising her test-out essay at the end of the tutorial, Diane wrote what she planned to do to revise:

I plan to take each sentence and check for spelling, verb tense, punctuation, and run on. Then I will reread to see if I'm staying with my topic. To see if my transitions from paragraph to paragraph. Then I will read out loud with the corrections I have made to see if it sounds correct. If so I will be finish with my paper. And I hope I passed it.

Diane's concerns continue to be spelling, verb tense, and sentence structure. Her awareness of audience, however, expands from just a concern about connecting sentences and paragraphs to a more global concern of "staying with my topic"—a concern discussed often during the tutorial. Her review strategy remains similar to her pre-tutorial strategy: check each sentence for errors and then read the complete essay aloud, using intuiting and comprehending strategies to revise.

In Diane's post-tutorial protocol, her concerns and strategies for review are fairly consistent with her written plan for revising her test-out essay: she reads and edits her post-tutorial essay, checking spelling, adding transitions, considering punctuation, changing tense, and adding missing words and letters. There is no evidence in the protocol that she uses any consulting strategies based on tutorial content to help her review; however, since Diane continued reviewing after stopping the tape recorder, her post-tutorial review strategies cannot be completely analyzed. Although Diane used a
cassette tape recorder for review during the tutorial and her Writing Center test-out essay, she chose not to use the recorder for her post-tutorial protocol.

**Summary of tutorial effects**

Diane’s review time remains similar over the tutorial, with approximately half of her pre- and post-tutorial protocol time spent in review. Her review pattern also remains the same over the tutorial. While Diane retains the same basic concerns in review, she expands her awareness of audience to include a more global concern for staying on her topic. Her strategies for review cannot be completely analyzed since Diane continued reviewing her post-tutorial essay after stopping the tape recorder. The fact that she used a tape recorder to help review her Writing Center test-out essay may indicate that she has adopted that strategy at least in writing situations which are academically important for her. Although no major changes are evident over the tutorial in this analysis of Diane’s reviewing process, her post-tutorial essay shows a decrease of 2.8 in the number of major errors per 100 words (see Appendix, p. 212).

**John**

**Writing background**

John is a nineteen-year-old sophomore majoring in biology. His mother graduated from high school and his father from college. John attended high school in Iowa where he took four English courses, including one composition course. He ranked in the upper half of his
graduating class of 450 students and scored 16 on the English portion of the ACT.

John's Writing Center contract indicates that he had problems in the following areas of correctness: subject-verb agreement, sentence construction (fragments and run-ons), use of apostrophes, and spelling. His score of 41 (7.4 grade equivalent) on the New Stanford Achievement Test of Spelling indicated he needed additional work in spelling, so he completed the computer-assisted spelling program.

While enrolled in the Writing Center program, John was also taking botany, chemistry, psychology, and math. He read more than two hundred pages for each of three classes and from one to two hundred pages for a fourth class. In addition, he often read newspapers, news magazines, and specialty magazines. John wrote more than fifteen pages for his botany class and for his chemistry class. During the semester, he sometimes wrote letters.

*Time spent in review*

John spends 49% of his time reviewing in his pre-tutorial protocol and decreases his review time to 41% in his post-tutorial protocol (see Figure 10). Both his pre- and post-tutorial essays are comparable in length—385 and 383 words, respectively. In addition, John's post-tutorial essay contains a slightly higher number of major errors per 100 words (.5), mainly because of increased spelling errors (see Appendix, p. 212). So John uses less review time and has more major errors in his post-tutorial essay, which is comparable in length.
to his pre-tutorial essay. At least for the post-tutorial essay, then, John decreases his review time.

Pre- and post-tutorial review patterns

In his pre-tutorial protocol (see Figure 11), John reviews minimally as he drafts the first part of his essay. He then rereads and edits his essay, generating new material at various points in his draft. After reviewing the entire text two more times, John generates more material for a concluding paragraph which he then reviews. In his post-tutorial protocol (see Figure 12), John’s review pattern resembles his pre-tutorial one. After drafting the first two pages of his essay with little review, he rereads his entire text. As in his pre-tutorial protocol, this review serves both as an editing process and a springboard for generating more material. John
Figure 11. John's review pattern in his pre-tutorial protocol

Figure 12. John's review pattern in his post-tutorial protocol
continues generating and reviewing mainly large chunks of writing—usually a paragraph or more. After completing his essay, he rereads it three more times. Thus, John's review pattern remains basically the same over the tutorial.

Concerns and strategies for review

Pre-tutorial concerns and strategies. In John's pre-tutorial paper on his revision and proofreading methods, he defines revising as "the process of reorganizing a rough draft of a writing assignment and making a final copy flow smoothly" (Appendix, p. 208). Unlike Chad, Jason, and Diane, John does not focus on proofreading concerns but rather on audience and style concerns. He writes that he notes possible spelling and punctuation errors as he writes a first draft. His main strategy in revising is similar to that used by Chad, Jason, and Diane: "I start by rereading the paper to see if it flows smoothly. Then I take the parts that didn't seem to sound too good and work to improve them" (Appendix, p. 208). Thus, John uses intuiting and comprehending strategies to review his writing. In addition, he has a "non-bias person" read his papers to detect errors he has missed.

In his pre-tutorial protocol, John's concerns and strategies for review are fairly consistent with what he describes in his essay on his review process. He writes a major portion of his essay before devoting a long span of time to review. During his review segments, he rearranges text, adds and deletes material, and restructures sentences. There is no evidence in the protocol that he uses any
strategies other than intuiting and comprehending to review his essay several times. In trying to restructure a sentence, for example, John generates a possible alternative and comments, "That doesn't sound very well." After revising the sentence, he approves it by saying, "Sounds better" (Appendix, p. 171). He does not, however, express any concern for spelling during his pre-tutorial protocol nor does he note any possible spelling errors as he writes.

Post-tutorial concerns and strategies. Before revising his Writing Center testout essay at the end of the tutorial, John wrote what he planned to do to revise:

When I proofread my paper I plan to follow the handout on proofreading using things which are helpful to me. I am going to look through the paper word by word and try to pick out misspelled words. Then read the whole paper and look for sentence errors. Hopefully after proofing my paper I can pass out and move on to English 105.

John's concern for proofreading is more dominant now than at the beginning of the tutorial. His strategies for review are also more defined than just "rereading the paper to see if it flows smoothly" (Appendix, p. 208): he plans to follow proofreading guidelines learned in the tutorial, check each word for spelling, and check his sentence structure.

In his post-tutorial protocol, John's concern for proofreading and his more defined strategies for review are evident as he rereads his essay, checking his spelling and his sentence structure. He reads
his essay once to "look for spelling errors" (Appendix, p. 182). While he still uses intuiting and consulting strategies in his post-tutorial protocol, John also uses consulting strategies to review his writing. He has three instances in his protocol in which he uses tutorial content in reviewing: two of the instances result in successful reviews and one in a neutral review; all three involve the use of a comma (see Appendix, pp. 178-82). In one instance, for example, John says as he composes aloud:

Pledgeship is a time in which you come to know the guys in the house, and learn all the history involved with ATO. No comma (crosses out comma after house). (Appendix, p. 181)

While John gives no specific reason for deleting the comma, he probably bases his decision on knowledge gained from the tutorial since he makes no similar decisions about punctuation in his pre-tutorial protocol.

Summary of tutorial effects

While John's review time decreases for his post-tutorial protocol, his review pattern remains basically the same. However, his concerns and strategies for review are affected by the tutorial. With the tutorial's emphasis on correctness, John becomes more concerned about proofreading and checking his writing for spelling and punctuation errors. Rather than just following his pre-tutorial strategy of rereading his writing to see if it sounds right, he also devotes one complete review of his writing to checking his spelling. In addition, he successfully uses consulting strategies based on
tutorial content to check his punctuation. Despite these changes in John's review process, his post-tutorial essay shows a slight increase of .5 major errors per 100 words (see Appendix, p. 212). If only nonspelling errors are considered, however, John's essay shows a .5 decrease in the number of major errors per 100 words. As his tutor points out, spelling continues to be a problem for John (see Appendix, p. 206).

Bill

Writing background

Bill is a nineteen-year-old freshman business major. His father attended high school and his mother attended college. An Iowa high school graduate, Bill took four years of high school English, including one composition course. He ranked in the top 20% of his graduating class of 365 students and scored 13 on the English portion of the ACT.

During the latter part of his English 104 course, Bill spent approximately one hour per week working with his English 104 instructor on correctness, using exercises from a handbook. Although Bill's teacher thought the added instruction "seemed to help his writing" (Bill's Writing Center Contract), she still believed he needed further work in these areas: spelling, use of commas, and subject-verb agreement. A check of Bill's English 104 writing file revealed that he also needed tutoring in usage, use of possessive, capitalization, and sentence structure (run-ons and fragments). His score of 40 (7.5 grade equivalent) on the New Stanford Achievement
Test of Spelling indicated he needed to improve his spelling skills, so he completed the computer-assisted spelling program.

During his Writing Center tutorial, Bill was also taking music, history, aviation, and math. He wrote more than fifteen pages for his history class, five to fifteen pages for his aviation class, and less than five pages for his music class. During the semester, he sometimes wrote letters, diary entries, short stories, and poetry. He likes creative writing because it helps him relax. He read more than two hundred pages for each of his four courses. His personal reading included newspapers, news magazines, and autobiographies.

**Time spent in review**

In his pre-tutorial protocol, Bill spends 31% of his time in review and increases his review time to 38% in his post-tutorial protocol (see Figure 13). Both his pre- and post-tutorial essays are comparable in length—208 and 222 words, respectively. The gain of 7% in review time in his post-tutorial protocol comes mainly from his metacommenting time which decreases 6%. Rather than discussing his writing situation and making stray comments, Bill increases his review time over the tutorial.

**Pre- and post-tutorial review patterns**

In his pre-tutorial protocol (see Figure 14), Bill drafts his complete essay with only one short review segment. He spends the rest of his time in review, interrupted by periods of planning and metacommenting. In his post-tutorial protocol, (see Figure 15), Bill reviews intermittently as he drafts his essay, with several of his
reviews based on tutorial content. He then follows his pre-tutorial review pattern as he devotes the rest of his time to reviewing, interrupted by periods of planning and metacommenting. Bill's increased use of review in his post-tutorial protocol during his initial drafting stage indicates that his review pattern has changed over the tutorial.

Concerns and strategies for review

Pre-tutorial concerns and strategies. According to his pre-tutorial paper about his revision process, Bill's main concern for review are at the word level, with spelling as his major concern. He describes revision as "the combination of checking the paper for errors, and then rewriting the paper and adding any words the writer feels would help the paper" (Appendix, p. 208-9). For Bill, rewriting
Figure 14. Bill's review pattern in his pre-tutorial protocol
Figure 15. Bill's review pattern in his post-tutorial protocol
is simply using "diffrent [sic] words" and revising is correcting misspelled words. Bill says that he circles possible misspelled words as he writes and then checks their spellings later. To proofread, he uses two methods which also focus on spelling: looking at each word separately by using a piece of paper with a small hole cut in it and reading his paper backwards.

These concerns and strategies are evident in Bill's pre-tutorial protocol. He circles several words as he drafts his essay and makes plans such as, "Look up that word for sure" (Appendix, p. 186). Later he checks the spelling of the circled words in a dictionary and looks at each word in his text separately, using a piece of paper with a hole in it and reading backwards.

Bill also indicates a concern for neatness and correct punctuation in his pre-tutorial protocol. In one review segment, he comments, "Hum—That's not too bad for a rough draft since I don't have to—have to write it again I guess that's okay—I hope it is cause I wouldn't hand it in like this—I'd have to rewrite it and make it look prettier" (Appendix, p. 188). In another review segment, Bill says, "I better spell that a little neater because it looks kind of messy" (Appendix, p. 189). His concern for correct punctuation is evident when he says, "Now I gotta look for punctuation—ahhhhhhh" (Appendix, p. 187). He then reads his entire text, making no changes even though there are several punctuation errors.

Like the other subjects in this study, Bill uses intuiting and comprehending strategies to review his pre-tutorial essay. In two
separate review segments, Bill evaluates his writing by commenting, "That sounds okay" (Appendix, p. 185). And again at the end of his pre-tutorial protocol, Bill evaluates his complete essay by saying, "Well, that sounds pretty good so I think—I really do think I'm gonna turn this in" (Appendix, p. 189).

Post-tutorial concerns and strategies. Before revising his testout essay, Bill wrote what he planned to do to revise:

First I plan to Look at the sheet Karen Ross gave me. Then I plan to first, check all spelling errors and circled words. Second, I plan to check all punctuation errors such as fanboys and intro material. Third I plan on checking Possessive words match. Then finally I will check all capital letters.

Bill's concerns remain at the word and surface levels. Because of the tutorial, his specific concerns also include correct use of possessives and capital letters, although it is unclear what he means by "checking Possessive words match." According to his revision plan, he will use a consulting strategy based on the tutorial to review his punctuation.

In his post-tutorial protocol, Bill's concerns and strategies for review are consistent with his plans for revising his testout essay. His main concerns are at the word and surface levels as he checks spelling, punctuation, and capitalization, in that order, occasionally adding or substituting a word. After checking his spelling in his post-tutorial essay, Bill even recites his plan for completing his
review, which is identical to his testout plan: "Punctuation--
FANBOYS--intro material--capitalization--possessive--noun's noun--
I'll get this right" (Appendix, p. 194). As in his pre-tutorial
protocol, Bill's concerns for review serve as a checklist. Because of
the tutorial, however, he has more concerns and more strategies for
dealing with them.

Bill's post-tutorial protocol contains thirteen instances in
which he uses proofreading or consulting strategies based on tutorial
content (see Appendix, pp. 192-96). Six of the instances result in
successful reviews, five in neutral reviews, and two in unsuccessful
reviews. As he drafts his essay, for example, Bill successfully
checks his spelling of three words by using the personal dictionary he
had compiled during the tutorial. In two other instances, Bill
corrects capitalization errors as he follows tutorial instructions to
check his writing once for such problems.

Rather than using just an intuiting strategy to check his
punctuation as he does in his pre-tutorial protocol, Bill uses mainly
a consulting strategy based on tutorial content to review the
punctuation in his post-tutorial essay. Some of these reviews are
successful or neutral, while others reflect Bill's confusion about
applying tutorial content. In one review, for example, Bill correctly
adds a comma after introductory material and uses a colon
construction:

Let's see--To begin with college--To begin with, comma
college is a big change; it changes your life in many ways,
your economic views—that should be a—yeh, I’m gonna use a colon (places colon after ways). (Appendix, p. 192)

Through the tutorial, Bill has learned that he often needs a comma after introductory material to guide his reader. In two other instances, he justifies his use of a comma by saying, "comma, introductory clause" and "intro material comma" (Appendix, pp. 193-94). In a later review, Bill also justifies his use of the colon in the above protocol excerpt: "This is a list so I can use a colon here" (Appendix, p. 193).

Several instances reveal that Bill does not fully understand some of the rules from the tutorial. In one instance, Bill seems confused about the sentence pattern in which a coordinating conjunction is used (IC,FBIC.):

To begin with, college is a big change; it changes your life in many ways: your economic views, your views toward your past and—no, where’d that thing go? (Probably checks a sentence pattern handout.) Comma FANBOY, not semicolon, comma—but if I put a semicolon there and change this to college—To begin with, college is a big change; college changes your life in many ways: your economic views, your views toward your past, and [your] views toward your parents. (Appendix, p. 194-95)

Although Bill seems confident in this review, he doesn’t associate FANBOYS with the coordinating conjunctions. He considers changing the semicolon to a comma, but by changing it to college, he believes he
has changed the punctuation necessary for the sentence, retaining the correct semicolon.

Bill's confusion about the IC,FBIC sentence pattern is also evident in another review segment:

But now as I look back—now as I look back, the rules were preparing me for what was ahead; the rules also—believe there's a FANBOY there—(changes semicolon after ahead to a comma). (Appendix, p. 195)

Bill associates FANBOYS with one of the coordinating conjunctions (but), though it is used as a transition word here rather than a coordinating conjunction. Following the FANBOYS sentence pattern, Bill incorrectly changes the semicolon to a comma, creating a comma splice.

In another review, Bill uses an unnecessary comma when he incorrectly identifies a transition word:

Because—that's a transition word—Because—so I'll put a comma there (after because)—it set a pattern that I could use in college. (Appendix, p. 195)

Bill knows that many transition words and phrases are followed by a comma, but he identifies a subordinator as a transition word, using an unnecessary comma.

**Summary of tutorial effects**

Bill's reviewing process is affected by the tutorial in all areas analyzed in this study. Along with an increase of 7% in review time, Bill's review pattern changes over the tutorial: he reviews more
frequently during his initial drafting stage, basing much of this review on tutorial content. Although Bill's main concern for review remains at the surface and word levels, his specific concerns expand over the tutorial to include capitalization and possessive errors. Bill's strategy for review also changes over the tutorial as he uses mainly a consulting strategy based on tutorial content. Bill is successful in many instances of tutorial content use, although he sometimes recites rules without understanding or correctly applying them. Along with these changes in Bill's review process, his post-tutorial essay shows a decrease of 1.1 in the number of major errors per 100 words (see Appendix, p. 212).
CHAPTER FIVE
DISCUSSING FINDINGS, IMPLICATIONS, AND FURTHER RESEARCH

Since the development of writing centers in the early 1970s, writing center personnel have used the tutorial as their basic teaching methodology, believing that individual instruction will improve a student’s writing by intervention in and alteration of the student’s writing process. Although writing center staffs often see improvement in their students’ written products, little evidence exists which demonstrates the effects of a writing tutorial on students’ writing processes. As an initial step in a process-based investigation of the tutorial, the current study examined a tutorial’s effects on a single aspect of the writing process—the review process or the process in which the student evaluates what he has written or orally rehearsed. Focusing on a writing tutorial offered by the ISU Writing Center, the following questions were explored:

1. Does the tutorial increase a student’s review time?
2. Does the tutorial alter a student’s review pattern, that is, the sequence and frequency of review in a student’s total composing process?
3. Does it alter a student’s concerns and strategies for review? If so, in what ways?
4. Does a student use tutorial content when reviewing? If so, is such reviewing successful?

This chapter presents answers to these questions, possible
implications of the findings for the ISU Writing Center and writing centers in general, and suggestions for further research.

Summary of Findings

The findings of this study are summarized in the following paragraphs:

Time spent in review. The individual student's writing needs determined the tutorial's effect on the subject's review time. Chad, for example, wasn't proofreading carefully and needed to increase his review time. Bill also needed to increase his review time, checking sentence structure, usage, and capitalization. Jason, Diane, and John were already spending approximately one-half of their writing process time in review; rather than increased review time, they needed strategies to help them review more effectively. In fact, John's decrease in review time over the tutorial may have resulted from his more defined strategies for review: he doesn't spend as much time just rereading his essay but uses consulting strategies to review.

Review pattern. Three of the subjects' review patterns were not changed by the tutorial (Chad, Diane, and John), and two were slightly altered. Jason's review pattern showed a slight difference because he drafted his post-tutorial essay without much revision, while Bill used tutorial content to review more during his initial draft of his post-tutorial essay. Like the unskilled writers observed by Perl (1979), the subjects use consistent composing processes which remain unchanged across writing situations.

Concerns for review. While the students were already aware of many of their correctness problems in mechanics, the tutorial expanded
their concerns for review. Jason, for example, adds a concern for subject-verb agreement, and Bill, a concern for correct capitalization and use of possessive. Diane becomes more aware of staying on her topic, and John more aware of spelling and punctuation. Chad's attention to spelling becomes more a concern for careful proofreading and correct usage. Like its effect on review time and pattern, the tutorial affected the subjects' concerns for review according to their individual writing needs.

Strategies for review. The tutorial had several common effects on the subjects' review strategies. (Diane is not included in this discussion since her review strategies could not be fully analyzed.) Four of the subjects moved from using just intuiting and comprehending review strategies to also using consulting strategies, mainly based on tutorial content. These students were successful in some instances of tutorial content use but were also confused about some of the rules.

Discussion of Findings

Although this study should not be hastily generalized to all writing center students, it may well apply to ISU Writing Center students who are native English speakers. But are the writing backgrounds and writing problems of the five subjects in the present study typical of the writing backgrounds and problems of Writing Center students in general?

Profile of Writing Center student

A profile of an ISU basic writing student, described by David and Bubolz (1984), helps establish how typical the subjects in this study
are as Writing Center students (see Table 1). David and Bubolz studied the results of the writing background questionnaire administered to Writing Center students in the spring of 1980, 1981, and 1984. They found the typical Writing Center student to be a freshman male with college-educated parents. He took four years of high school English classes, including a composition course, made average grades in his English classes, and graduated in the upper one-third of his high school class. He prefers to write on topics of personal interest or personal experience and wants to improve his writing skills because writing is important for his future career. He watched eight to ten hours of television per week while in high school; he reads mainly newspapers and magazines. This typical Writing Center student is aware of his weaknesses in mechanics and does not have high confidence in his verbal abilities.

A comparison of the data from the subjects' writing background questionnaires with this profile clearly indicates that the subjects are typical Writing Center students (see Table 1). All five subjects compare positively with at least eight of the thirteen categories in the profile; two compare positively with nine categories, and two with ten categories. Since the profile represents an average of questionnaire responses, the subjects would not be expected to compare positively with all categories. The subjects' high degree of comparison with the profile shows that these five students have writing backgrounds which are typical for Writing Center students.
Table 1. Comparison of subjects to profile of ISU Writing Center student

<table>
<thead>
<tr>
<th>Typical Writing Center Student&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Chad</th>
<th>Jason</th>
<th>Diane</th>
<th>John</th>
<th>Bill</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Is a college freshman</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>sophomore</td>
<td></td>
<td>X&lt;sup&gt;b&lt;/sup&gt;</td>
<td>X</td>
<td>sophomore</td>
<td>X</td>
</tr>
<tr>
<td>2. Is a male</td>
<td>X</td>
<td>X</td>
<td>female</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>3. Has college-educated parents</td>
<td>X</td>
<td>H.S.</td>
<td>H.S.</td>
<td>Mother-H.S.</td>
<td>X</td>
</tr>
<tr>
<td>4. Ranked in upper 1/3 of senior class</td>
<td>lower</td>
<td>upper</td>
<td>X</td>
<td>upper</td>
<td>X</td>
</tr>
<tr>
<td>1/2</td>
<td>1/2</td>
<td>1/2</td>
<td>1/2</td>
<td>1/2</td>
<td>1/2</td>
</tr>
<tr>
<td>5. Took four high school English courses</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>6. Took at least one high school composition course</td>
<td>none</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>7. Made average grades (C) in high school English courses</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>8. Prefers to write about personal interests/ experiences</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>9. Wants to improve writing because to it's important pass for career classes</td>
<td>to X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

<sup>a</sup>Described by David and Bubolz (1984).

<sup>b</sup>Denotes a positive comparison with the profile description.
Table 1. (Continued)

<table>
<thead>
<tr>
<th>Typical Writing Center Student</th>
<th>Chad</th>
<th>Jason</th>
<th>Diane</th>
<th>John</th>
<th>Bill</th>
</tr>
</thead>
<tbody>
<tr>
<td>10. Reads newspapers and magazines</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Xc</td>
</tr>
<tr>
<td>11. Watched 8-10 hours of TV per week while in high school</td>
<td>11-13 hours</td>
<td>a few hours</td>
<td>a few hours</td>
<td>X</td>
<td>a few hours</td>
</tr>
<tr>
<td>12. Is aware of weakness in mechanics</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>13. Does not have high confidence in verbal abilities</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>Cd</td>
<td>C</td>
</tr>
</tbody>
</table>

^cAlso reads autobiographies.
^dConfident except in mechanics.

Typical correctness problems of Writing Center students

Another study by David (1983) identified the six most frequently occurring correctness errors of ISU Writing Center students (see Table 2). David studied the pre-tutorial essays of thirty-five Writing Center students and found these errors to be the most common: misspellings, run-on sentences, fragments, apostrophe errors, misplaced commas, and shifted constructions. Errors in all six categories were not necessarily found in a given student's paper--these errors were the most frequently occurring ones in the writing of the thirty-five students.
Table 2. Common mechanical errors: A comparison of subjects with ISU Writing Center students in 1983 study

<table>
<thead>
<tr>
<th>Common Errors of ISU Writing Center Students</th>
<th>Chad</th>
<th>Jason</th>
<th>Diane</th>
<th>John</th>
<th>Bill</th>
</tr>
</thead>
<tbody>
<tr>
<td>Misspellings</td>
<td>Xc</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Run-On Sentences</td>
<td>(X)d</td>
<td>(X)</td>
<td>X</td>
<td>(X)</td>
<td>X</td>
</tr>
<tr>
<td>Fragments</td>
<td>X</td>
<td>X</td>
<td>(X)</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Apostrophe Errors</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>(X)</td>
</tr>
<tr>
<td>Misplaced Commas</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Shifted Constructions</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>

a "Evaluating Students' Achievement in the Writing Center," David.

b Errors which frequently appeared in pre-tutorial essays written by thirty-five Writing Center students in a study by David (1983).

c Errors in subjects' pre-tutorial essays.

d Other common errors in subjects' English 104 writing files.

Table 3. Comparison of subjects' ACT English scores with mean score of ISU Writing Center students in 1983 study

<table>
<thead>
<tr>
<th>Mean ACT English Score in 1983 Study</th>
<th>Chad</th>
<th>Jason</th>
<th>Diane</th>
<th>John</th>
<th>Bill</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>15.9</td>
<td>NA</td>
<td>11</td>
<td>15</td>
<td>16</td>
</tr>
</tbody>
</table>

a "Evaluating Students' Achievement in a Writing Center," David.
The correctness problems of the subjects in the present study are similar to the common errors in David's (1983) study (see Table 2). In their pre-tutorial essays, all five subjects made errors in at least three of the common error categories described by David. A check of the students' English 104 writing files revealed that the subjects also had correctness problems in other common categories, so all subjects made errors in at least two-thirds of the common error categories described by David. Two of the subjects made errors in five of the six categories. Four of the five subjects were also at or below the mean ACT English score of the students in David's (1983) study (see Table 3). Since one would not expect any single Writing Center student to make errors in all six categories, it is clear that all five subjects have correctness problems typical for ISU Writing Center students.

**Tutorial's effects on typical Writing Center students**

The findings of this study are strictly applicable only to its five subjects. However, since the subjects are typical Writing Center students, the study's findings provide a fairly reliable basis for predicting the tutorial's effects on the review processes of typical ISU Writing Center students who are native English speakers. Like the students in the present study, a typical Writing Center student is likely to increase or decrease his review time over the tutorial depending on his individual writing needs. While he may change his review pattern slightly, his basic pattern will remain the same over the course of the tutorial. The typical student will retain his
initial concerns for review as he expands his concerns during the tutorial, again according to his individual writing needs.

The most common effect of the tutorial across students will be in review strategies. The typical student is likely to adopt consulting review strategies based on tutorial content, in addition to the intuiting and comprehending strategies which he is already using. While he will be successful in some instances of using tutorial content, he will also be confused about some concepts and perhaps even misapply some of the rules.

Implications of Findings

Implications for the ISU Writing Center

This study suggests several implications for the ISU Writing Center. First, since the effect of the tutorial depends to a large degree on students' individual writing needs, these needs should be carefully diagnosed by analyzing both the product and process of writing. While writing problems in various students' written products may seem similar, the causes of the problems may vary. Chad's "spelling" problems, for example, were mainly caused by careless proofreading and incorrect usage. And Diane's tense problems did not stem from a lack of knowledge about tense formation but from the fact that her natural dialect interfered with the detection of tense errors. Such diagnoses can be made only by analyzing both the written product and the writing process.

Protocol analysis, which is used in this study, is particularly useful as a diagnostic tool in a one-on-one tutorial. Writing Center tutors could use a simplified version of composing aloud to help
diagnose students' writing problems. Rather than transcribing and coding the recorded protocols, tutors could just listen to them and watch the written product as it develops, making notes when necessary. By doing this, tutors may gain insights about why students make particular errors in both grammatical and rhetorical choices; tutors could also "observe" the patterns of the students' writing processes and detect needed improvements.

Another implication is based on the finding that tutees are confused about some tutorial content and sometimes misapply rules. Clearly, tutors need to check their students' comprehension and application of rules and techniques. If students are confused about particular rules and misapply them, they are not becoming independent revisers but rather are adding to their already long list of writing problems—problems sometimes based on idiosyncratic rules. Bill, for example, says in his pre-tutorial protocol, "Now, I can't use the word you—y-o-u—cause—I don't know" (Appendix, p. 185). In one of his first tutoring sessions, he also said that he used a comma when he needed to breathe as he read his writing aloud. Bill also experienced some rule confusion based on tutorial content when he tried to apply the FANBOYS sentence pattern. Thus, it is the tutor's responsibility not only to teach the strategies and techniques which students need to become independent revisers, but also to monitor the students' comprehension and application of tutorial content.

As in diagnosing students' writing problems, Writing Center tutors need to monitor their students' comprehension of tutorial content by analyzing both the tutees' written products and writing
processes. Tutors could again use a simplified version of the composing-aloud protocol as a means for discovering possible rule confusion and then work with students to correct any misconceptions. Bill’s post-tutorial protocol, for example, reveals that he is confused about the FANBOYS sentence pattern. Just looking at written products would not give tutors this insight and direction for further tutoring.

A final implication for the Writing Center comes from a general impression that the subjects, though beginning to become independent revisers, are still hesitant and unsure in some areas. These students need to continue working on their writing skills in the Writing Center. Currently, students who test out after a semester-long tutorial are encouraged to return to the Writing Center when they need help, but most do not voluntarily return. Perhaps students who need continued instruction could be required to schedule one Writing Center visit for each assignment due for English 105, the second semester freshman composition course. It seems unwise to assign such students to another writing tutorial; it would be more beneficial both motivationally and developmentally for students to be meeting the reading and writing challenges of another composition course while receiving reinforcement and advancement of their developing revising skills in the Writing Center and also in their writing class.

Implications for writing center pedagogy

Several implications of this study for the ISU Writing Center apply to writing center pedagogy in general. Because of the
idiosyncratic nature of writing problems, tutors need to diagnose these problems by analyzing both written products and writing processes. When teaching writing strategies and rules, tutors also need to monitor both product and process to check students' comprehension and application of tutorial content. By looking at both product and process, tutors can give more individualized direction to their tutoring.

This study also demonstrates the diagnostic and evaluative potential of composing-aloud protocols for writing pedagogy. Writing center tutors can use a simplified version of this technique to analyze students' writing processes, diagnosing individual writing problems and monitoring student comprehension. Although taping and listening to students composing aloud may seem time-consuming, and basing assumptions about students' writing problems on such tapes may seem unreliable, the common practice of error analysis based on the close reading of a student's papers is just as time-consuming and less reliable. Error analysis based on written products alone allows tutors only to hypothesize about the cause of students' writing problems. In composing-aloud protocols, students may actually verbalize why they made a particular grammatical, syntactical, or rhetorical choice. Spending the time necessary for one composing-aloud protocol (approximately one hour for both student and tutor) is certainly better than spending an entire semester puzzling over the same writing problems which appear in students' writing.

Harris (1983) also suggests that tutors use composing aloud in combination with modeling as a teaching technique. Modeling is
actually a reversal of roles in the composing-aloud protocol: the tutor composes aloud for a student to model some aspect of the composing process with which the student is having difficulty. The roles are then reversed again so the tutor can monitor the student's behavior. Thus, the composing-aloud protocol is a tool which tutors can use successfully to diagnose, to teach, and to evaluate in the one-on-one relationship of a tutorial.

Suggestions for Further Research

Possibilities for the current study

Like many studies, the present inquiry leaves several areas for further exploration. Other research could use protocol analysis during the tutorial to monitor and correct possible misunderstanding of tutorial content. A post-tutorial protocol could help determine the effects of such monitoring. Follow-up protocols completed several months after the tutorial would also be useful in determining the long-range effects of the tutorial. For researchers with the necessary funds and time, having several coders establish the inter-rater reliability of the coding systems used in this study would also be desirable in any replications.

Suggestions for further writing center research

Through its use of protocol analysis, this study suggests several other questions for writing center research in general. How do writing center students plan their writing? Does a tutorial affect their planning? Can direct instruction in various planning strategies improve students' overall writing skills? What idiosyncratic rules about writing do students bring to the writing center? How do these
rules affect the students' writing? Too little process-oriented research has been completed in writing centers to address these questions at present.

As Hawkins (1984) points out, however, the main research question for writing center investigators is how writing centers do what they do; that is, how do writing centers help students improve their writing skills? As traditional classroom teachers turn to writing centers for different writing pedagogy, Hawkins believes writing center personnel must be able to explain their approaches. To do this, writing center research, like the current study, must isolate and test the various aspects of the writing center tutorial. As writing center researchers better understand the tutorial and its effects, their findings may guide secondary school writing pedagogy, and in time reduce the number of students needing writing center assistance.


Bridwell, L. S. 1980. Revising strategies in twelfth-grade students'


Emig, J. 1969. Components of the composing process among twelfth-grade writers. Ph. D. diss., Harvard University,
Cambridge, Mass.


Harris, M. 1976. Structuring the supplementary writing lab. ERIC ED 124 966.


Hartwell, P. 1980. A writing laboratory model. In Basic Writing:
Essays for Teachers, Researchers, and Administrators, eds. L. Kasden and D. Hoeber, 63-73. Urbana, Ill.: NCTE.


Matsuhashi, A. 1981. Pausing and planning: The tempo of written


Stallard, C. K. 1974. An analysis of the writing behavior of good


## APPENDIX

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<tr>
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<tr>
<td>Bill/Post-Tutorial Protocol</td>
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<td>Bill/Post-Tutorial Essay Outline</td>
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<tr>
<td>Section</td>
<td>Page</td>
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<tr>
<td>------------------------------------------------------------------------</td>
<td>------</td>
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<td>Student Essays on Their Review Processes</td>
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<tr>
<td>Proofreading</td>
<td>210</td>
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</tbody>
</table>
Instructions for Composing-Aloud Protocols

I will give you a writing assignment which you will complete in the Writing Center today. In completing the assignment, please do everything that you would normally do in writing a paper. The only difference in today's procedure is that I want you to say everything out loud as you are thinking about and writing your paper. Continue to think out loud as you are editing and proofreading. Be sure to include your reasoning if you make any changes in what you plan to write or in what you have written. Even if your thoughts wander and have nothing to do with the task, please say these thoughts out loud. (Even professional writers stray from their topics when writing and think about other matters.) Try not to analyze what you are thinking, but simply think out loud. I realize that it is impossible to say everything you are thinking while you are writing, so just try to say as much as you can. The important thing to remember is to KEEP TALKING.
Coding Key for Composing-Aloud Protocols

Subject is writing

Subject is reading

[Subject miscues]

Subject (circles) word

{Subject uses tutorial content}

· TC+ indicates successful use of tutorial content for review

· TCO indicates neutral use of tutorial content for review

· TC- indicates unsuccessful use of tutorial content for review

(Researcher’s comments)

PLAN includes

· generating ideas about the topic or rhetorical problem,

· setting goals which specify what one wants to achieve or which describe how to do it, and

· organizing information already generated.

TRANSLATE includes

· all attempts at finished text, generated either orally or in writing.

REVIEW includes

· reading the text,

· evaluating translations, and

· making revisions in the text.

METACOMMENT includes

· comments about the writing situation or process and

· stray remarks.
Chad/Pre-Tutorial Protocol

Sept. 18, 1987
2:25-3:00 p.m.

<Plan Study habits—I think I’ll do a paper on study habits. Uh—page
one.> <Translate Study Habits. My—My study habits [have] changed
dramatically since I’ve started school at Iowa State. Uh—oh, let’s
see. I now find myself studying every night for a couple of hours—
uh—for a couple of hours just—just to keep up with my classes. Oh,
let’s see—just to keep up with my classes. Uh—I also am spending
more time in the library—uh—I also am spending more time in the
library studying than sleeping. When I was in high school—When I was
in high school I always left school with a bag full of books with the
intention of studying. When I was in high school I was I always I
always I always left school with a bag full of books with the with the
intension of studying that night.> <Plan Page Two.> <Translate Uh—I
would take the books [home] set them down and plan [on] getting to
them later on. I would go about doing other things—would do other
things—uh—other things—just to keep me busy> <Review—nah—I would
always—would always find something else to work on—to work
on—something else—something outside to do—something outside to do—
something outside to keep me busy> <Translate or at night there
[would] be—there would be a movie or TV show on that I wanted to see
before studying. If—If the homework—uh—needed to be done it—if
the homework—was—if the homework—uh—if the homework needed to be
done the next day I was—uh—if the homework—if the homework needed
to be completed for the next days class I [would]—uh—uh—sometimes
do it while—I would work on it—I [would] work on it while watch[ing]
TV. There were times—There were times I would actually sit down and
work on—work on it but—there were times I would actually sit down
and work on it—but of course—of course—> <Review There were times I
would actually sit down and work on it but of course—uh—actually sit
down and work on it. > <Translate Uh—I always seemed to have—always
seemed to have the radio on or—always seemed to have the radio on.
Uh--When I attended school at the University--versity--of Minnesota Technical College at Waseca--Waseca. I think--I think the only--the only time me or my roommates studied was the night before a test. Uh--I [look] back at it now and realize we always had something--something more important to do. If it wasn't--wasn't wasn't partying it was visiting our girlfriends. Visiting our girlfriends--uh--We did--comma--however, do--do fairly well--well with our classes. Metacomment Uh--We in here for twenty minutes?

If we ever went to the library it was usually--us-usally--in between classes. Uh--let's see--If we ever went to the library it was usually in between classes. That time that we spent there was--uh--was time--\(\text{Translate} \) that time that we spent there was--uh--was spent. Lying on some--uh--oh, what do you call 'em? That time that we spent there was spent lying on some furniture that we pushed together--\(\text{Translate} \) That time that we spent there was spent sleeping. Spent sleeping on some furniture--furniture that we had pushed together to make a couch. Uh--We would, however,--uh--let's see--uh--There were occasions--uh--\(\text{Translate} \) There were occasions--There were on occasions--\(\text{Translate} \) uh--We did, however, spend a little time--We did, however,--uh--spend--uh--spend a little--spend a very small amount of time--spend a little time--would spend--We did, however, spend--oh--a little time studying--studying old test[s] to get us ready--uh--for--get us ready for upcoming tests. Uh--let's see--There was one time--let's see--A friend and I once--A friend and I once smuggled--uh--a bottle of--\(\text{Review} \) a two liter bottle--a two liter bottle--\(\text{Planning} \) What page is this? It's page five--

\(\text{Translate} \) two liter bottle of Sun Country Wine Cooler--two liter bottle of Sun Country Wine Cooler and a few beers. A friend and I once smuggled a two liter bottle of Sun Country Wine Cooler and a few beers into the library--into--one of the study rooms--period. We were studying for our last final--We were studying for our last final--uh--over the last quarter--\(\text{Review} \) We were studying for our last final for last quarter--nah--\(\text{Translate} \) that we were--We were studying for our last final for the last quarter we would spend--
uh—for the last quarter we would spend in that school. Let’s see—uh—I look back—uh—on my study habits now and wonder how—how I ever made it this far. Uh—My study time has increased> <Review—my study habits changed dramatically> <Translate—My study time has increased by as much as four or five times—My study time has increased by four to five times.> <Review—My study time has increased by four to five times—the—My study time has increased by four to five times—by four to five times—> <Translate—uh—and I still—I still can’t seem to be—I still can’t seem to be—uh—up to date with my—with all of—with all of my classes.> <Review—My Study Habits. My study habits changed dramatically since I’ve started school at Iowa State. I now find myself studying every night for a couple of hours just to keep up with my classes. I also am spending more time in the library studying than sleeping. When I was in high school I always left school with a bag full of books with the intention of studying that night. I would take the books set them down and plan on getting to them later on. I would always find something outside to keep me busy or at night there would be a movie or TV show on that I wanted to see before studying—see before studying. If the homework needed to be completed for the next day’s class I was—I sometimes would work on it while watching TV. Uh—There were times I would actually sit down and work on it. There were times I would actually sit down and work on it. I—I always seemed to have the radio on when—when I did study. Uh—When I would sit down—let’s see—When I would actually sit down and work on it the radio—I always seemed to have to have—uh—okay—When I actually did sit down and study—uh—my radio—when I did sit down and study my radio would—uh—cross this out—When I actually did sit down and study, comma—my radio would—uh—let’s see—it was required to have my radio on—my radio would—uh—would have to be—would have to be on in the background. Okay. When I attended school at the University of Minnesota Technical College at Waseka, I think the only time me or my roommates—change that—my roommates and I would study—and I studied was the night before a test. I [think] back at it now—think—back at
it now and realize we always had something more important to do. If it wasn’t partying it was visiting our girlfriends. We did, however, do fairly well with our classes. If we ever went to the library, it was usually in between classes. That time [that] [was] spent there--The time--The time that [was] spent there was spent sleeping--gee--on some furniture that we had pushed to make--pushed together--pushed together to make a couch--together--together--there--to make a couch. We did, however, spend a little time studying old test[s] to get us ready for upcoming tests. A friend and I once smuggled a two liter bottle of Sun Country Wine Cooler and a few beers into one of the study rooms. We were studying for our last--our very last final--last final for the last quarter we would spend in that school. I look back at my study habits now [I] wonder how I ever made it this far. Uh--My study time has increased by four--four to five times. I still can’t seem to be up to date with all my classes. Sounds pretty well.> <Planning I wonder if there’s anything else--> <Review uh--okay--I still can’t seem to be up to date with all of my classes. That’s good enough I guess.
Chad/Pre-Tutorial Essay

Study Habits

My study habits changed dramatically since I've started school at Iowa State. I now find myself studying every night for a couple of hours just to keep up with my classes. I also am spending more time in the library studying than sleeping.

When I was in high school I always left school with a bag full of books with the intention of studying that night. I would take the books set them down and plan getting to them later on. I would always find something outside to keep me busy or at night there be a movie or TV show on that I wanted to see before studying. If the homework needed to be completed for the next day, I would work. When I actually did class I sometimes do on it while watch TV. If we ever went to library it was usually in between classes. If we ever went to library it was usually in between classes. The spent sleeping time that we spent there was lying on some furniture that together we had pushed to make a couch. We did, however, spend
time studying old test to get us ready for upcoming tests. A friend and I once smuggled a two liter bottle of Sun Country wine cooler and a few beers into a quarter of the study rooms. We were studying for our last final for the last quarter we would spend in that school.

I look back on my study habits now and wonder how I ever made it this far. My study time has increased by four to five times. I still can't seem to be up to date with all of my classes.
Nov. 18, 1987
3:10-3:45 p.m

〈Plan Explain how your attitudes, feelings, and/or behavior have
changed since you came to college. Parents〉〈Translate—uh—let’s
see—The feelings between parents—The feelings〉〈Metacomment—oh, I
always forget about that〉〈Translate—The—My feelings—the
attitude—the attitude—The feelings between my parents and I have
changed drastically since I started school. Uh—They are better now
than they were when I was living at home. Uh—let’s see—inbetween—
Inbetween going to school—When I was inbetween—When I [was] working
between—uh—before I came here but—〉〈Review When I [was] working
between—When I was working—The time when I was working—uh—The
time—The time I took off to work between—between school—〉
〈Translate between Waseca and here—between Waseca and here I lived at
home.〉〈Review The time I took off to work between Waseca and—The
time I took off to work between schools—between going—The time I
took off to work after Waseca—after attending Waseca and starting
here—The time I took off to work after Waseca and before attending
here—attending school here—{(TC+) school here I—needs
something—semicolon (places semicolon after here)—I lived at home.
The time I took off to work after Waseca and before attending
school—uh, that should be a comma—dependent clause (changes
semicolon after here to a comma). The time I took off to work after
Waseca and before attending school here,—be just a comma—I lived at
home.〉〉〈Translate That was the worst thing I could have ever done.〉
〈Review That was—That was not—That was not the best thing—let’s
see—That was not the best for my parents and I—That was—I should
have never—That was—that was one of the worst things—That was not
the best thing—uh—I should’ve—I shouldn’t have—have—I should of
never done this because—I shouldn’t of never done this because〉
〈Translate we had trouble agreeing〉〈Review—we had trouble—we had
trouble〉〈Translate accepting each others differences〉〈Review accept,
one or two—> (Translate accepting each others--each others--each others ideas--each others ideas--ideas. They--My parents--uh--wanted to treat me) (Review--My parents wanted--wanted control [over me]) (Translate like they had--uh--they had over my eleven year old--eleven years--eleven year old brother. When--uh--I--uh--let's see--I was going along doing the things I wanted to do--uh--I was--I wanted--I wanted nothing to do--ahh.) (Review What a mess. My parents wanted control [over]--My parents wanted control over me like they had over my eleven year old brother. I should have--have never done this because we had trouble accepting each others ideas--each others ideas.) (Translate Uh--I, comma on the other hand wanted more independance--in-de-pen-dance. Uh--We each--We each wanted our own way--We each wanted our own way, and comma and when this--> (Review that) (Translate didn't happen--that didn't happen--uh--when that didn't happen we had a major conflict--we had--uh--a large conflict. This went on until I [started] school again. Uh--when I started--until I [started] school again. We are--let's see--When I moved down here--When I moved here and started school--school, comma--I--When I moved here and started school, I could see--I could see a big difference in our relationship--ship. Uh--They were interested in what I was doing and--They were interested in what I was doing and how I was--They were in--They--They were interested in what I was doing and how I was not--> (Review what I was doing and how I was--uh--I don't like that.) (Translate When I moved here and started school, I could see a big difference in our relationship. We--We [started] actually talking to each other--actually talking to each other without getting into arguments. It worked out--worked out--uh--worked out perfectly. I--It worked out perfectly. Uh--It worked out perfectly. I was--It worked out perfectly. I was--uh--living my own life and--uh--> (Review naw, let's see.) (Translate I was living my own life and they--It worked out perfectly. I was living my own life and they were actually interested--they were actually interested in what I was doing. Uh--They [even] mentioned
it--mentioned-[even] mentioned that we were getting along better--
along better in one of my sister's--one of--in one of the letters--in
one of the letters they sent to my sister. They mentioned that we
were getting along better in one of the letters they sent to my
sister. Whenever I was planning to go home; I was actually looking
forward to seeing them. Let's see. I don't think I will ever move
back [in] at home--move back home because of--I don't think I will
move back home--I don't think I will ever move back home--things
are--let's see. I don't think I'll ever move back home--I don't think
I'll ever move back home semicolon; I like the way things are going
between us now--between us now. Uh--They are--let's see--They
are better off--uh--. Let's see--They are better off not knowing some
of the things I do> <Review--no.> <Translate Let's see--They--They--
let's see--They wouldn't--They probably wouldn't approve of some of-->
<Review They probably wouldn't approve of--of many--> <Translate
probably wouldn't approve of many--uh--things--They probably wouldn't
approve of many things--many things that I do. So--So they're better
off--So, comma they are better off not knowing about them.> <Plan
Let's see--reread what I got here.> <Translate Uh--Moving Away From
Home--Away From--Away From Home is Beneficial to--Moving Away From
Home is Beneficial to--> <Review That's too long.> <Moving Away From
Home is Beneficial to Everyone--Everyone.> <Review Okay--Moving Away
From Home is Beneficial to Everyone. The feelings between my parents
and I have changed drastically since I started school. They are
better now--The--uh--They are better now than they were when I was
living at home. Uh--They have improved--no. I'll leave that. The
time I took off to work after Waseca and before attending school here,
I lived at home. The time I took off to work after Waseca and before
attending school here, comma I lived at home. I should have never
done this because we had trouble accepting each others ideas. My
parents wanted control over me like--like they had--My parents wanted
control over me like--My parents wanted control over me like they had
over my eleven year old brother. I, on the other hand--on the other
hand—I, on the other hand, wanted more independance—see if that's spelled right—independance—but that's an e—independence—yeh, there it is—independence. We each wanted our own way, and when that didn't happen we had a large—we had—we had conflict—we had a conflict. This went on until—until I started school again. When I moved here and started school, I could see a big difference in our relationship. We actually started talking to each other—each other without getting into an—into arguments—into an argument—an argument. It worked—It worked out perfectly. I was living my own life and they were actually interested in what I was doing. They mentioned that we were getting along better in—They actually—They mentioned that we were getting along better in one of my—in one of the letters they sent to my sister. Whenever I was planning—wait—to my sister.> <Translate So, they also could see the difference.> <Review (TC+)> Whenever I was planning to go home—Whenever I was planning to go home—Whenever I was planning to go home; I was—let's see—Whenever I was planning to go home—let's see—Whenever I was planning to go home—I was planning—uh—it'd be Whenever—no, let's see—If I was planning—uh—if I was planning—> <Plan oh, I'll just change the whole thing.> <Review I would actually—I would actually look forward—I would actually look forward to going home and seeing them.} I don't think I will ever move back home; I like the way things are between us now—let's see—I like the way things are between us now. I don't think I will ever move back home; I like the way things are between us now and would like it to—and would like it to continue. They are probably—They probably wouldn't approve of many things that I do. Uh—let's see. Uh—let's see. Uh—let's see, let's see—between us now and would like it to continue. (Crosses out next two sentences.)> <Translate The only way I can see—> <Review oh, I don't know—> <Translate would like it to continue. Uh—oh, I'd like to think—I'd like to do—uh, let's see—I'd like it to continue. If I was to move back home, comma I know it would—know it would start—
start over—start all over again.> <Review {(TC-)} If I was to move back home, comma--If I was to move back home I know it would start all over again--I know it would start all over again.}> <Translate Uh--I would like to prevent this—I would like to prevent it from happening again.> <Metacomment Where's that page at?> <Translate I would like to prevent it from happening again. I also want to say that—let's see—I would like to prevent it from happening again. That would--> <Review If I was to move back home I know it would start all over again. If I was to move back home I know it would start all over again. I would like to prevent it from happening again.> <Translate That way—That would—That would mean not moving back home.> <Review If I was to move back home I know it would start all over again. I would like to prevent it from happening again. That would mean not moving back home.
Chad/Post-Tutorial Essay

Moving Away From Home is Beneficial to Everyone

The feelings between my parents and I have changed drastically since I started school. They are better now that they were when I was living at home.

after Waseca before attending school

The time I took off to work and here, I live at home.

I have never done this because we had each other trouble agreeing each control over me like they had over my trouble.

My parents wanted to have more independence.

We each wanted our own way, and when that didn't happen we had conflict. This went on until I started school again.

When I moved here and started school, I could see a big difference in our relationship. We actually started talking to each other without getting into an argument.

It worked out perfectly. I was living my own life and they were actually interested in what I was doing.

They mentioned that we were getting along better in one of the letters they sent to my sister. I would actually look forward to going home and seeing them.

I like the way
and would like it to continue. Many things are between us now. They probably/and it's/against/it/it's or/things/think/I/do/it's/they/are/better/not/reading/about/then/ all.

If I was to move back home, I know it would start over again. I would like to prevent if from happening again. That would mean not moving back home.
Jason/Pre-Tutorial Protocol

Sept. 22, 1987
10-10:35 a.m.

<Plan Explain how your attitudes, feelings, and/or behavior have changed since you came to college. Concentrate on one of the following topics: career goals, study habits, and finances. Okay—I think I’ll do it over my career goals. Okay—how am I going to start this? Explain how your attitudes, feelings, and/or behavior—behavior. Okay—well, all these are related—well career goals is related to study habits because they’re goals to be the best so you study harder and uh your career goals set how much have to have for money so you just gotta—you gotta make enough money so you can complete your college to get your career. So I think I’ll go around that—just use that.> <Metacomment Just don’t know how to start it yet, so I’m thinking right now—how I should open up—how I should explain it. Not coming to me so quickly.> <Translate Okay—career goals—concentrate—okay. Career—uh—shoot. Recently—For an average college student—For an average college student, one thing that keeps him going is career goals--> <Review no.> <Translate Okay—When high school students think of college they usually think of career goals or what—what they’re gonna major in so that they can get a better job--> <Review no.> <Translate Career goals. When a high—When in high school a student looks at college and he or she thinks of career goals—When in high school—When a high school student thinks about college he or she must choose a career goal. When a high school student—When a high school student thinks about college he or she thinks about career goals--> <Review yeh.> <Translate When a highschool student thinks about college he or she thinks about their career goal.> <Review When a highschool student thinks about college he or she thinks about their career goal. Their could be he or she. That’s right.> <Translate Okay—When I was in--> <Review that’s—that’s pretty good> <Translate When I—When I—When I entered college my career goals were higher than--> <Review no, no.>
When I entered college I had to set my career goals. To set the goals it was very easy. Although this was before I had any experience of college. After I was in college for a couple of weeks I had to lower my goals a little to fit into this new environment. When a high school student thinks about college he or she thinks about their career goals. To set these goals it was very easy. Although this was before I had any experience of college. After I was in college for a couple of weeks I had to lower my goals a little to fit into this new environment. Sounds stupid. Although this was before I had any experience of college. After I was in college a couple of weeks I had to lower my goals a little to fit into this new environment.

At first it seemed I was already failing the most important part of my life. This changed my attitude completely. This changed my attitude completely, because I wanted to succeed in my goals. I wanted to succeed in my goals. This changed my attitude completely, because I wanted to succeed with my goals—I don't like that. This changed my attitude completely, because I wanted to succeed—succeed in the worst way—no. I wanted to succeed—because I wanted to—because I wanted to succeed with—succeed with my career goals.
Okay—okay—This changed my attitude completely, because I wanted to succeed with my goal—my—my career goals.> <Translate This affected me in such a way that I would study harder to be the best in my class—in my class.> <Review This affected me in such a way that I would study harder to be the best in my class. That's bs 'cause I've never did it. Okay—This affected me in such a way that I would study harder to be the best that I could be.> <Translate In general a persons career goal [will] dominate his or her--his or her--In general a persons career goal [will] dominate his or her life style. This is because—This is because everyone wants to reach their own--In general a persons career goal [will] dominate his or her life style. This is because everyone wants to reach their own goals. This is because everyone wants to reach their own goal[s].> <Review Okay—When a highschool student thinks about college he or she thinks about their career goal. When I entered college I had to set my own career goals. To set these goals it was very easy. Although this was before I had any experience of college. After I was in college for a couple of weeks I had to lower my goals a little to fit into this new environment. At first it seemed I was already—I was already failing the most important part of my life. This changed my attitude completely, because I wanted to succeed with my career goals. This affected me in such a way that I would study harder to be the best I could be. In general a persons—a persons career goal will dominate his or her life style. This is because everyone wants to reach their own goals. Sounds okay—except—I would study harder to be the best I could be.> <Plan Okay—I'm going to start proofreading—look for spelling, punctuation, good sentence structure—that kinda stuff.> <Review When a highschool student thinks about college he or she thinks about their career goal—career goal—career—high school student thinks about college he or she thinks about their career goal. (Emphasizes thinks, thinks, and their) When I entered college I had to set my own career goals. To set these goals it was very easy. Although this was before I had any experience of college.
Although--Although this was before I had any experience. Oh--Oh--To set these goals it was very easy comma, although this was before I had any experience of college--comma. After I was in college for a couple of weeks I had to lower my goals--After I was in college for a couple of weeks I had to lower my goals a little to fit into this new environment. After I was in college for a couple of weeks I had to lower my goals a little to fit--I had to lower my goals to fit--After I was in college for a couple of weeks I had to lower my goals to fit into this new environment. Just xed out a little. At first it seemed I was already failing the most important part of my life. At first it seemed I was already failing the most important part of my life. This changed my attitude completely, because I wanted to succeed with my career goals. This changed my attitude completely, because I wanted to succeed with my career goals--could be a semicolon, too--because I wanted--alright--(places semicolon after completely)--succeed--career goals. This affected me in such a way that--This affected me in such a way that I would study harder to be the best I could be. In general a persons career goal will dominate his or her life style. This is because everyone wants to reach their own goals. When a highschool student thinks about college he or she thinks about their career goal--goals. When I entered college I had to set my own career goals. To set these goals it was very easy, although this was before I had any experience of college. I was in college for a couple of weeks--After I was in college for a couple of weeks I had to lower my goals to fit into this new environment. At first it seemed it was already failing--I was already failing the most important part of my life. This changed my attitude completely; because I wanted to succeed with my career goals. This affected me in such a way that I would study harder to be the best I could be. This affected me--This affected me in such a way that I would study harder to be the best I could be. In general a persons career goals will dominate his or her life style. This is because everyone wants to reach their own goals. This sucks.>
structure, don’t see any spelling errors, punctuation—maybe—okay.> <Review Let’s see—is that spelled right?> <Plan I would rewrite it, but I’ve only got fifteen minutes. I said I would rewrite it, but I’ve only got fifteen minutes—’til my next class, so let’s stop here.>
Jason/Pre-Tutorial Essay

When a highschool student thinks about college he or she thinks about their career goals. When I entered college I had to set my career goals. To set these goals it was very easy, Although this was any before I had experience of college. After I was in college my to for a couple of weeks I had to lower my goals to fit in this new environment. At first it seemed I was already failing the most because with my career goals. changed completely; changed my completely important part of my life. This/changes/your attitude totally because with my career goals.

in such a way that I would study harder to be the best in my class.

In general a person's career goal he or her life is style. This because everyone wants to reach their own goals.
Plan Explain how your attitudes, feelings, and/or behavior have changed since you came to college. Concentrate on one of the following topics: Parents, friends, or siblings. I think I'm gonna talk about friends. Okay—Well—I can't really say how my feelings have changed here so I think I'll—think I'll—yea, like—oh, okay—friends.> <Translate Okay—Since I got here—oh—Since I've been here my—my attitude toward my friends are—it's a lot different. For a first thing, I've got more girl friends than boy friends—which used to be the other way around. My feeling[s] towards my friends—My feeling[s] towards my friends has not really changed since I—since [I] of come to college.> <Review My feeling[s] towards my friends has not really changed since I [came] to college.> <Translate The only way I think they might have changed is in that I have a lot more respect for them. Okay—My feeling[s] towards my friends has not really changed since I [came] to college. The only way I think they might have changed is [in] that I have a lot more respect for them. Due to this respect I try to keep—I try—Due to this respect I try to keep in touch a lot more. My feelings tward my new friends has a lot to do with my old. I try to learn from the mistakes—I try to learn from the mistakes I had with my old friends and—I try to learn from the mistakes I had with my old friends and practice this on—these new—I try to learn from the mistakes I had with my old friends and practice this new techniege on my new friends.> <Review My feeling[s] towards my friends has not really changed since I of come to college. The only way I think they might have changed is [in] that I have a lot more respect for them. Due to this respect I try to keep in touch a lot more. My feelings tward my new friends has a lot to do with my old. I try to learn from the mistakes I had with my old friends and practice this new techniege on my new friends.> <Translate I think this helps my relations with my new friends a lot—> <Review I think
this helps my relations—relationships—I think this helps my relations with my new friends a lot more. I think this helps my relationships with my new friends a lot more. I'm changing relations to relationships—re-la-tion-ships. Okay—with my friends a lot more.> (Translate I think coming to college has made me realize how important friends really are—<Review whoops—I think coming to college made me realize how important my friends really are—my friends really are. Okay—Okay—My feeling[s] towards my friends has not really changed since I of come to college. The only way I think [things] might have changed is [in] that I have a lot more respect for them. Due to this respect I try to keep in touch a lot more. My feelings towards my new friends has a lot to do with my old. My feelings towards my new friends has a lot to do with my old friends. I try to learn from the mistakes I had with my old friends and practice these—these new techniques on my new friends. I think this helps my relationships with my new friends a lot more. I think coming to college made me realize how important my friends really are. This sounds stupid.> (Plan (Counts words written so far.) 113 words—Review sounds stupid, though. My feeling[s] towards my friends has not really changed since I of come to college—since I of come to college—since I—My feeling[s] towards my friends has not really changed since I [came] to college—I came to college. The only way I think they might have changed is [in] that I have a lot more respect for them. Due to this respect I try to keep in touch a lot more. Due to this respect—Due to this respect I try to keep in touch a lot more. My feelings towards my new—toward my new friends has a lot to do with my old friends. I [have tried]—I have tried—that sounds better—to learn from the mistakes I [made]—made—instead of had—I made—this is a better word—with my old friends and practice these on—on—on—these new techniques on my new friends. I think this helps my relationships with my new friends a lot more. I think this helps my relationships—with my new friends a lot more. I think this helps my relationships—
think this helps my relationships with my new friends a lot more. I
think coming to college has made me realize how important my friend[s]
really are.> <Translate In the end I can only hope my friends will
always be there--In the end I can only hope my friends will always be
there for me--In the end I can only hope my friends will always be
there for me--to learn from--to learn from, to love, and to respect.>
<Plan Well, that's about all I wanta write. (Counts words)
About 135 words--that's not bad. About ten minutes--okay. I'm gonna
start proofreading here. Okay, start with the first sentence.>
<Review My feeling[s] twards my friends has not really changed since I
[have]--since I came to college. My feeling[s]--My feeling--My
feeling[s]--feeling[s]--My feeling[s]--add an s there--twards
my friends has not really changed since I came to college. Okay.
{(TC-)} My feelings twards my friends has not really changed since I
came to college. What the verb is--changed--what hasn't changed--
feelings--okay. What's not changed--what has not changed--my
feelings. That's pretty good.} {(TCO) Second sentence--The only way
I think they might have changed is [in] that I have more respect for
them. The only way I think they might have changed--have changed--
might--they--they--feelings--The only way I think they might have
changed is [in] that I have a lot more respect for them. The only way
I think that they might have changed is in that--The only way I think
they might have changed is in that I have a lot more respect for them.
It's kinda like a run-on--it sounds like it's run-on. The only way I
think that they might have changed is in that I have a lot more
respect for--The only way I think they might have changed is in that I
have a lot more respect for them. Between changed and is add
something like a comma--it'd sound good, but if I did that I'd have to
have a complete sent--or complete clause. The only way I think they
might have changed comma, is in that I have a lot more respect for
them.} <Plan Okay, look at the first verb--> <Review have
changed--feelings-- okay, that's good. What's the verb here--have
respect--I--that works--have respect for what--have respect for
them—is in that I have a lot more respect for them. The only way
that they have changed is in that I have a lot more respect for
them—I don't want a comma there—I'd like a pause. Ohhh—The only
way I think they might have changed is in that I have a lot more
respect for them. I'm leavin' it just the way it is.) Due to this
respect I try to keep in touch a lot more. That's a good sentence—I'm
gonna leave it. My feelings toward my new friends has a lot to do
with my old friends. My feelings toward my new friends has a lot to do
with—that's a good sentence, too. My feelings toward my new friends
has a lot to do with my old friends. Okay. {(TC-)} I have tried to
learn—I have tried to learn from the mistakes I made with my old
friends comma, and practice these new techniege[s] on my new
friends—I needed that comma there 'cause it was independent clause,
comma, FANBOY, independent clause. I have tried to learn from
[my]—from the mistakes I made with my old friends comma, and practice
these—these—these new—and practice these new techniege[s] on my new
friends. Practice what—techniege[s]—okay, it works—it works.) I
think this helps my relationships with my new friends a lot more. I
think this helps my relationships with my new friends a lot more.
That's okay—that sounds okay. Okay—I think this helps my
relationships with my new friends a lot more. I think coming to
college has made me realize how important my friend[s] really are.>
the use of the colon.)> <Review So--okay. In the end I can only hope my friends will always be there for me--to learn from--okay. In the end I can only hope that my friends will always be there for me to learn from--okay--not even gonna put a pause there. In the end I can only hope that my friends will always be there for me to learn from, to love and to respect. Okay, that's good. I think that's good.) My feelings towards my friends has not really changed since I came to college. The only way I think they might have changed is in that I have a lot more respect for them. Due to this respect I try to keep in touch a lot more. My feelings towards my new friends has a lot to do with my old--my old friends. I have tried to learn from the mistakes I made with my old friends comma, and practice these new techniege[s] on my new friends. I think this helps my relationships with my new friends a lot more. I think coming to college has made me realize how important my friend[s] really are to me--are to me period. I think coming to college has made me realize how important my friend[s] really are to me. In the end I can only hope my friends will always be there for me to learn from, to love, and to respect. Still have trouble with that last sentence. In the end I can only hope that my friends will be--always--will always be there--will always be there for me to learn from, to love, and to respect. Huh. It's pretty short, but it's kinda hard subject. It's how I feel, so I think this is enough.> <Plan I should--I should let this paper set for a couple of days and then I could pick out my errors a lot easier 'cause I basically have this all memorized.> <Review My feelings towards my friends has not really changed since I came to college. The only way I think they might have changed is [in] that I have a lot more respect for them. The only way--hmm.> <Plan Well, could write this over.> <Review but it's pretty clear--I just got a few scribble marks--try to make this look all right--yeh, I think that's it.
My feelings towards my friends has not really changed since I came to college. The only way I think they might have changed is in that I have a lot more respect for them. Due to this respect I try to keep in touch a lot more. My feelings towards my new friends has a lot to do with my old. I try to learn from the mistakes I made with these new friends, and practice these new techniques on my new friends. I think this helps my relationships with my new friends a lot more. I think coming to college has made me realize how important my friends really are. In the end I can only hope my friends will always be there for me to learn from, to love, and to respect.
Sept. 25, 1987
2:20-3:03 p.m.

Diane/Pre-Tutorial Protocol

156

Plan (Reads assignment) Concentrate on one of the following.

Translate The day—> Review naw—> Translate After—> After
completing—completing your senior year of high school you wonder what
you will do next.> Review After completing your senior year of high
school you wonder what you will do next—naw, still—let me see.
(Crosses out first sentence) Cross out.> Translate When you receive
your High School diploma things go through your mind—things go
through your mind and— and [you] wonder what will happen next. You
might—Perhaps you will think about working— working or joining a
service or preceding on with your education. Well—I— I chose to
continue my education at Iowa State University. There I have set
certain goals for myself to achieve. But when I got here my
attitudes, feeling[s] & behavior have change[d] comma, not to
mention—> Metacomment whoops, skip a line—> Translate not to
mention, I changed my major.> Plan Ohhh, page one—page two. Let me
see, let me see, let me see, let me see.> Translate But when I got
here my attitudes, feeling[s] & behavior have change[d], not to
mention, I changed my major. Before I was enrolled—> Review wait,
wait—enrolled—enrolled> Translate I wanted to be an Psychia—>
Review look it up—psych psych psych psych psych psych—psych—psych—I spelled it right—(writes Psychologist)—> Translate
or may[be] a social worker or something in that field—field. The
reason—the reason I wanted to pursue in that field because I love
people, I love helping people and most of all I love to listen. I
feel that—> Review I felt—no—> Translate My attitude toward
this—toward psychology was—was great! I was very ambicious about
learning different types of mind control & commication. But my
feelings have change[d]. I feel that this [field] requires alot—a
Review no—a lot—a lot> Translate of reading[s] & I am very—a lot
of reading[s] & studying—> Review wait, wait, wait, wait—But my
feelings have change[d]. I feel that this field requires a lot of reading[s] & studing> <Translate & observing life in every--every prespective. And the main thing is the starting salary is very low.> <Plan Page three.> <Translate Very low. Plus I feel I can help people with out having a degree for it & mainly, it's no [charge]--> <Review charge not change--> <Translate for my services.> <Review Yes.> <Translate Behavior--uh--I guess my behavior has[n't] changed [much], since I really didn't have one. I just never got motivated or psch[ed] up--up to doing this. So I decided to change my field--> <Review my field--my major.> <Translate Uh--Right now--Right now I am classified--> <Review nope--I am--I am place[d] <Translate under P-Bus major. I don't quiet know what I want to do yet. Really--But for now, It's management, maybe hotel or Restraunt.> <Review But for now, It's management, hotel--maybe hotel or Restraunt. For now, it is hotel or Restraunt management.> <Translate I like the business field--I like--it has to deal with alot of people--> <Review nah--a lot of people,--> <Translate it has to deal with a lot of people, so I guess I can be exposed to that. Right now I am not sure about this either. My feelings or attitudes--My attitude toward this is good, I want to learn--I want to learn & be aware of things in life. My feelings are great. I feel I can make it in--make it in the business College, but it takes--it takes time & effort. If I--If I put my mind to it, I can do it. But I realize it'[i]s not easy. It's not easy. It's not easy. So--My behavior--let me see, how do I act?> <Review So--no, no--cross that out.> <Translate My behavior has been great also. I find [myself] getting tutor's,--tutor's--uhm, uhm--help [from] my teachers, and friends. I am really going out my way--out--o-u-t--my way--I'm really going out my way to learn this stuff--> <Review nope, nope, nope--I'm really going out my way to learn period.> <Plan But--page four--> <Translate But--Everyday it feels like--like my goals are changing. But one thing will never change, that is--is graduating--grad--from Iowa State with my degree. And it really doesn't matter if it'[i]s in something I really didn't want.>
My goals are changing, but they're—My goals—When you receive your High School diploma, thoughts go through your mind, and you wonder what you—what will happen next. Perhaps you will think—Perhaps you're thinking about working, joining the Army or Navy whatever or proceeding on with your education. I chose to continue my education at Iowa State University. There I have set certain goals for myself to achieve. But when I got—But when I got here my attitudes, feelings & behavior have changed, not to mention, I changed my major. Before I was enrolled I wanted to be an [Psychiatrist] or maybe a social worker or something in that field because I love people, I love helping people and most of all I love to listen. My attitude toward psychology was great! I was ambitious about learning different types of mind control & communication. But my feelings have changed. I feel that this field requires a lot of reading & studying & observing life in every perspective. And the main thing is the starting salary is very low. Before I was enrolled—Before I was enrolled, I wanted to be a[n] [psychiatrist] or maybe a social worker or something in that field. The reason—The reason—The reason I wanted to persuade—The reason I wanted to persuade in that field was—The reason I wanted to persuade in this field were I love people, I love helping people and most of all I love to listen. Let's see. The reason I wanted to persuade in this field were I love people, I love helping people and most of all I love to listen. My attitude toward psychology was great! I was very ambitious about learning different types of mind control & communication. But, on the other hand, my
feelings have change[d]. I felt—I felt—I felt that this field requires a lot of reading[s] & studing & observing life in every perspective. Ah, wait a minute—I wanna move this down.> <Translate And that was very hard for me to do. Plus Psch 103 [I] recieve[d] a C₄—minus—and—also—also—also.> <Review starting salary is very low. Plus I feel I can help people with out having a degree for it & mainly, it’s no charge for my services. I guess my behavior has changed—much—much—m-u-c-h—much—I guess my behavior has changed—nope, nope—I guess my behavior hasn’t changed much—much—not much—I guess my behavior hasn’t changed much, since I really didn’t have one. I just never got motivated or psych[ed] up—in doing—in doing this. So I decided to change my major. Right now, I’m—I am in—Right now, my major is Pre-Bus. Cross that out. I don’t quiet know—I don’t quiet know what I want to do yet. But for now, I would like—like to—I would like to go—hotel or restraunt management. I would like to go into hotel or Restraunt management. I would like to go [to] restraunt—I would like [to] go to hotel or restraunt management. I like the business field comma, it has—it has—I like the business field, it deals with a lot of people, so I guess—page four—so I guess I can be exposed—ah, that’s not—I like the business field, because it deals with a lot of people, and this gives me—I like the business field, because it deals with a lot of people, and this gives me a chance to commicate & make friends. Right now I’m not sure about this either. My Attitude toward this is good, I want to learn & be aware of things in life. My feelings are great. I feel I can make it in the business College, but it takes time & effort—it will take time & effort. But I can accomplish this If I put my mind to it, I can do it. But I realize it’s not easy. My behavior has been great also. I find [myself] getting tutor’s, help from my teachers, and friends. I’m really going out—going—using all means of help so I can learn. Everyday it feels like I am changing my goals—Everyday if feels like my goals are changing, but one thing will never change, that is my goal of graduating from Iowa State—
Everyday it feels like my goals are changing--start it out--cross out. Everyday it feels like my goals are changing,> <Translate but their not. I am going to stick with business--I am going to stick with the business field--I'm going to stick with the business field and hopefully I'll recieve my degree. But--<Review nope, naw--not anymore. Ohhh, boy, this sounds corny. It's not very--When you recieve your High School diploma, thoughts go through your mind, and you wonder what will happen next. Perhaps you're thinking about working, joining the Army or Navy or pre--or--to precede on with your education. I chose to continue my education at Iowa State University. Before hand I have set certain goals for myself to achieve. But when I got here my attitudes, feeling[s] & behavior have change[d], not to mention, I changed my major. Before I was enrolled, I wanted to be--become an [Psychiatrist] or maybe a social worker or something in that field. The reason I wanted to persude in this field were I love people, I love helping people and most of all I love to listen. My attitude toward psychology was great! I was very ambigious about learning different types of mind control & commication. But, on the other hand, my feelings have change[d]. I felt that this field requires a lot of reading[s] & studing & observing life in every perspective. And that was very hard for me to do. Plus my Soc--Psch 103 I recieve[d] a C, also starting salary is very low. Plus I feel I can help people with out having a degree for it & mainly,--I will not--mainly--mainly it is no charge for my services. I guess my behavior hasn't changed much, since I really didn't have one. I just never got motivated or psch[ed] up to do this--or psch[ed] up in doing this. So I decided to change my major. Right now, my major is Pre-Bus. I don't know quiet what I would like to do yet. I would like to go into hotel or restraunt management. I like--I like this field, because it deals with a lot of people, and this gives me a chance to commicate & make friends. Right now I'm not sure about this either. My Attitude toward this is good, I want to learn &--& to--I
would like to learn & become aware--be aware--become aware--become aware of things in life. My feelings are great. I feel I can make it in the Business College--wait, wait, wait--I feel I can make it in the business College, but it will--I feel I can make it in the business College, but it will take time & effort. But I can accomplish this, If I put my mind to it, I can do it. But I realize it's not easy. My behavior has been great also. I find [myself] getting tutor's, help from teachers, and friends. I'm really using all means of help so I can learn. Everyday it feels like my goals are changing, but their not. I'm going to stick with this--with the business field and hopefully I will recieve my degree.> <Plan Page one, page two, page three, page four, page five.> <Metacomment Oh--nah, I can't say that on tape. And so--Stop!>
When you receive your High School diploma, thoughts go through your mind, and you wonder what will happen next. Perhaps you'll think about working, joining the Army or Navy or proceeding on with your education. I chose to continue my education at Iowa State University. There I have certain goals for myself to achieve. But when I got here, my attitudes, feelings & behavior have changed, not to mention, I changed my major. Before I was enrolled, I wanted to be an Psychologist or maybe a social worker or something in that field. The reason I wanted to pursue in that field are because I love people, I love helping people and most of all I love to listen. My attitude toward psychology was great!

I was very ambitious about learning different types of mind control & communication. But, on the other hand, my feelings have changed. I feel that this requires a lot of studying & reading & observing life in every perspective. It's and that was very hard for me to do. Plus my Psych 103 I receive a C, also starting salary is very low.

Plus I feel I can help people without having a degree for it & mainly, I it's no change charge for my services. I guess my behavior hasn't much changed, since I really didn't have one. I just never got motivated or psyched up in doing this. So I decided to change my major is P-BUS.
major. Right now, I would like to go into management. The this because it deals maybe hotel or restaurant. I like the business field, and this gives me a chance to communicate with a lot of people, make friends.

Right now I'm not sure about this either. My attitude toward this is coming good, I want to learn & be aware of things in life. My feelings are great. I feel I can make it in the business college, but it will take time and effort. "If I put my mind to it, I can do it.

But I realize it's not easy. My behavior has been great also. I find yourself getting tutor's help from my teachers, and friends. I'm really going to learn. Everyday it feels like my goals are changing, but their not.

I'm going to stick with the business field and hopefully I'll receive my degree.
Diane/Post-Tutorial Protocol

Nov. 30, 1987
3:25-4:00 p.m.

<Plan> Explain how your attitude, feelings, and behavior have changed since you came to college.> <Translate Uh--Since I came to college a lot of things changed.> <Review Uh--Since I came to college comma, a lot of things--a lot of things have changed.> <Translate I was faced with meeting new people and making new[s] friends. I guess--Since I came to college, a lot of things--a lot of things--Since I came to college, a lot of things [have] changed. I was faced with meeting new people and making new[s] friends. When I am at home me and my friends--> <Review wait--When I am at home me and my friends--whoop--wait, wait, wait--When I am at home comma, me and my friends--> <Translate now let me see--When I--When I am at home, me and my friends--we act--we act[ed] very crazy--we act[ed] very crazy. I guess most people say we act so immature. I didn't--I didn't seem--seem to mind them calling us that, because that is what were. My mom always told me to enjoy my life while I' [a]m young and--comma, and that is what I am going to do. Plus, immaturity doesn't have an age limit on it. So when I decide to grow up I will. I decided to--to grow up--> <Review ahhh, I spelled that wrong--grow--> <Translate when I got to college. I [was] faced with a lot of respondabilities--re-spon-da-bil-i-ties--> <Review wait, wait, wait--I decided to grow up when I got to college. I [was] faced with--I was faced with a lot of respondabilities> <Translate of my own--> <Review no, no, no, cross it out, cross it out--I was faced with a lot of respondabilities that I had to deal with myself.> <Translate Okay--let me see, let me see, let me see. I was faced with a lot of respondabilities that I had to deal with myself. No more, mother do this, or mother do that. It was more or less Di you do this & that. Okay. Ohhh. I guess--When I go home--When I go home it' [i]s so weird. The reason--The reason is, I see my friends--I see my friends acting the same way I did and--comma, and I call them immature.>
I'm spellin' this word wrong. Let me see—I see my friends acting the same way I did, and I call them immature. I don't know—I don't know. The reason is, I see my friends acting the same way I did, and I call them immature. I tell them to grow-up sometimes—I tell them to grow-up sometimes and act like an adult. But I can't do that—> Review nope—I can't say that—> Translate I can't say that, because I'm only—only taking away—only taking away their child life and the fun—the fun things you do in High School before you reach—before you reach the real world you're at.> Review Uhm—let's see—But I can't say that, because I'm only taking away their child life and the fun things you do in High School before you reach the real world.> Translate But being in college—being in college really teaches you to be an adult. All the fun times over—All the fun times are over. All the fun times—All the fun times are over. I'm own my own—my own and I have to be a responsible—an responsible adult—ahh—a-d-u-l-t. So—My friends up here are more serious and mature than the ones at home. I tell my friends—friends at home, it's college, it's changing me, and I can't control it. One day, I had to change—and that change—when I got to college. Most of all my new friends changed me also.> Review Let me see—Since I came to college, a lot of things have changed. I was faced with meeting new people and making new friends. When I am at home, me and my friends—When I am at home, me and my friends—wait—When I am at home, me and my friends we act—we act very crazy. I guess most people say we act so immature—how do you spell this word—la-da—la-da—la-da—im-mature—im-mature—(checks dictionary)—wait, wait, wait—i-n-m—i—ahh—oh, man—oh—let me see—m—> Meta comment takin' all day to find this word—> Review nope—I spelled it right—(finds mature)—in—in-mature—I didn't seem to mind them calling us that, because that—I didn't seem to mind them calling us that, because that is what we were. My mom always told me to enjoy my life while I'm young, and that's what I'm going to do. Plus, immaturity doesn't have an
age limit on it. So when I decide to grow up I will—when I decide to
grow up I will. I decided to grow up when—next page—when I got to
college. I was faced with a lot of responsibilities that I had to
deal with myself—deal with by myself. No more, mother do this, or
mother do that. It was more or less Did you do this & that. When I go
home, it's so weird. The reason is, I see my friends acting the same
way I did, and I call them immature. I tell them to grow-up sometimes
and to act like an adult. But I can't say that, because I'm only
taking away their child life and the fun things you do in High School
before you reach the real world. But [by] being in college—in
college really teaches—being in college really taught me to be an
adult. All the fun times—All the fun times were over. I [a]m own my
own—Since—Since I [a]m own my own now comma, I have to be a—an
responsible adult. My friends up here are more serious and mature
than the ones at home. I tell my friends at home, it's college, it's
changing me, and I can't control it. One day,—wait, wait, wait—ahh,
transition somewhere—let me see—I tell my friends at home, it's
college, it's changing me, and I can't control it. One day,—So my
one day has occur[red]—So my one day has occur[red], I changed and
being in college really taught me to be an adult. All the fun times
were over. Since I [a]m on my own now comma, I have to be a[n]
responsible adult. My friends up here are more serious and mature
than the ones at home. I tell my friends at home, it's college, it's
changing me, and I can't control it. So my one day--this sucks—let
me see.> <Translate One day, I told my friends, when you get in
college you will know what I mean. Being away from home—Being away
from home is so scary at first, but when you are ready to be-->
<Review nope, nope, nope—One day, I told my friends, when you get in
college you will know what I mean. Being away from home is scary at
first, but—nope, nope, nope, not gonna say that, nope, cross that
out, cross that out.> <Plan Oh, get the conclusion.> <Translate One
day, I told my friends, when you get in college you will know what I
mean. All that High School fun will go—> Review All those—All those High School games you play will cease—All those High School games you play will—argh—come to an end. All those high school games you play will come to an end. > Translate I mean, you won't act as crazy as you did when you were in high school—All those High School games you play will come to an end. I mean, you won't act as crazy as you did when you were in high school, instead you will act like an adult. > Review Ohh, okay. But being in college really taught me to be an adult. All the fun times were over. Since I [a]m on my own now, I have to be a[n] responsible adult. My friends up here are more serious and mature than the ones at home. I tell my friends at home, it's college, it's changing me, and I can't control it. One day, I told my friends, when you get in college you will know what I mean. All those High School games you play will come to an end. I mean, you won't act as crazy as you did when you were in high school, instead you will act like an adult. > Plan Page one, page two, page three, page four. > Metacomment Ohhh, I don't feel good. (Diane has a cold.)
Since I came to college, a lot of things changed. I was faced with meeting new people and making new friends. When I am at home, me and my friends; we acted very crazy. I guess most people say we act immature. I didn't seem to mind them calling us that, because that's what we were. My mom always told me to enjoy life while I was doing. I'm young, and that's what going to. Plus, immaturity doesn't have an age limit on it. Thus, I decided to grow up when I got to college. I faced with a lot of responsibilities that I had to deal with by myself. No more, mother do this, or mother do that. It was more or less Di you do this & went that. When I go home, it's so weird. The reason is, I see my friends acting the same way I did, and I tell them they are immature. I tell them to grow-up sometimes and act like an adult. But I can't say that, because I'm only taking away their child life and the fun things they did in High School before they reach the real world. But being in college really taught me to be an adult. All the fun times are over. I'm on my own, and I have to be responsible. My friends up here are more serious and mature than the ones at home. I tell my friends at home, it's college, it's changing me, and I can't control it. One day, I told my friends, when you get in college you will know what...
I mean. Those games you play in high school will come to an end. I mean, you won't act as crazy as you did when you were in high school, instead you will act like an adult.
Oh—okay. When I graduated from high school I thought I knew what kind of career I had in mind. After my first semester at Iowa State—first semester at Iowa State taking classes in my first major and deciding I didn’t like it. My first major was Fishreys—Fishreys and Wildlife Biology. I had to take an orientation class which allowed a person to see what they were getting into. We had many speakers who now work for the state Department of natural resources. They came and told us the types of work we could expect. After hearing a semester worth of boring lectures, I decided to change majors. The career of Fisheries—Wildlife Biology could go nowhere. Starting pay was less than $10,000 dollars. Also there is a waiting list of hundreds of people applying for only one job per year. Hearing that I had to get out. My current major is Biology with a minor in Secondary education. After looking at this career, it looked more promising. The state and federal governments are finally noticing how important teachers are. They are starting to raise salaries to make it worth while to teach. In a few years there will be a shortage of teachers in the United States. Most of the jobs are going to be in the math and science fields. There are very few teachers coming out of college to replace the teachers now retiring. I think I made a good change in majors and hope I can stay with this major.

When I graduated from high school I thought I knew what kind of career I had in mind. After my first semester at Iowa State taking classes—first semester at Iowa State—and taking classes in my first major—uh, let's see—after taking—After my first semester at Iowa State and taking classes in my first major I decided I didn’t like to uh—After my first semester at Iowa State taking—Iowa State—I decided I didn’t like my
first major—try that. After my first semester at Iowa State and
taking—and deciding I didn’t like my major. After my first semester
at Iowa State and deciding I didn’t like my major period.> <Translate
I need[ed] to change.> <Review My first major was Fishreys and
Wildlife Biology. I had to take an orientation class which—which
helped—helped a person to see what they were getting into. We had
many speakers who now work for the Department of natural resources
period. They came and told us the types of work we could expect.
After hearing a semesters worth of Boring lectures. I decided to
could go nowhere. Starting pay was less than $10,000 dollars. Also
there is a waiting list of hundreds of people applying for only one
job per year. Hearing that I decided to get out—I don’t know about
that. Hearing that I decided—decided to switch majors. My current
major is Biology with a minor in Secondary education. After looking
at this career it look[ed] more promising—more promising than
are finally noticing how important teachers are. They are starting to
raise salaries to make it worth while to teach in the United States.
In a few years there will be a shortage of teachers in the United
State[s]. Most of the jobs are going to be in the math and Science
fields. There are very few teachers coming out of college to replace
the teachers now retaring. I think I made a good change in majors and
I hope I can stay with this major.> <Metacomment Where was that at?>
<Review After my first semester at Iowa State I decided I didn’t like
my major—didn’t like—That doesn’t sound very well. After my first
semester at Iowa State--first semester at Iowa State period--not a
sentence--semester at Iowa State. Let’s try it this way--Iowa State,
comma taking—take this out—taking part in my major was not much of a
success. After my first semester at Iowa State, taking part in my
major was not much of a success—sounds better. My first major was
Fishreys and Wildlife Biology. I had to take an orientation class in
which helped a student to see what they were getting into. We had
many speakers who now— who are now working for the Department of natural resources. They came and told us the types of work we could expect. After hearing a semesters worth of Boring lectures. I decided to change [my major]. The career of F[isheries] W[ildlife] B[iology] could go nowhere. Starting pay was less than $10,000 dollars. Also there is a waiting list of hundreds of people applying for only one job per year. Hearing that I decided to switch majors. My current major is Biology with a minor in Secondary education. After looking at this career it looked more promising than FWB. The state and federal governments are finally noticing how important teachers are. They are starting to raise salaries to make it worth while to teach in the United States.> <Plan Add a paragraph there— a little more—> <Translate In Iowa there is a shortage of teachers. The state government is setting up scholarships for people in the math and science fields. The past year Iowa has raised its base pay for teacher[s] to 18,000 dollars—> <Review eighteen thousand dollars a year. In Iowa there is a shortage of teachers. The state government is setting up scholarships for people in the math and science fields. The past year Iowa has raised its base pay for teacher[s] to eighteen thousand dollars a year.> <Translate I think that by the time I graduate[d] from college the pay will be higher.> <Review In a few years there will be a shortage of teachers in the United States— math and science fields— teachers coming out of college— replace the teachers now retiring—> <Plan gotta keep track of all this.> <Translate I think I made a good change in majors and hope I can stay with [my] major. I hope that— oh— the people at high government offices finally start to realize how important teachers are— I hope that the people at high government office realize how important teachers are comma, and pay scales will increase. Teachers are very important to our society. They teach— They teach to our future generations of leaders. Teachers— Teachers should be payed more considering they shape our nations future.> <Review That's good at the end.> <Plan 1, 2, 3, 4, (numbers pages).> <Review When I graduated
from high school I thought I knew what kind of career I had in mind. After my first semester at Iowa State, taking part in my major was not much of a success. My first major was Fishreys and Wildlife Biology. I had to take an orientation class in which helped a student to see what they were getting into. We had many speakers who are now working for the Department of natural resources. They came and told us the types of work we could expect. After hearing a semesters worth of Boring lectures. I decided to change majors. The career of F[isheries] W[ildlife] B[iology] could go nowhere. Starting pay was less than $10,000 dollars. Also there is a waiting list of hundreds of people applying for only one job per year. Hearing that I decided to switch majors. My current major is Biology with a minor in Secondary education. After looking at this career it look[ed] more promising than F[isheries] W[ildlife] B[iology]. The state and federal governments are finally noticing—oh, let's see—The state and federal governments are finally noticing how important teachers are. They are starting to raise salaries to make it worth while to teach in the United States. In Iowa there is a shortage of teachers. The state government is setting up scholarships for people in the math and science fields period. The past year Iowa State—Iowa has raised its base pay—raised its base pay for teacher[s] to eighteen thousand dollars a year. I think that by the time I graduate[d] from college the pay will be higher. In a few years there— I said that twice. Let's see—change that. In a few years there will be a shortage of teachers in the United States. Most of the jobs are going to be in the math and science fields. There are very few teachers coming out of college to replace the teachers now retaring. Cross—there is a shortage of teachers. The state government is setting up scholarships for people in the math and science fields. The past year Iowa has raised its base salary for teacher[s] to eighteen thousand dollars a year. I think that by the time I graduate[d] from college the pay will be higher. There are few teachers coming out of college to replace the teachers now retaring. I think I made a good change in
majors and hope I can stay with this major. (Crosses out two sentences) <Plan Let's try again. Start all over.> <Review My current major is Biology with a minor in Secondary education. After looking at this career it look[ed] more promising than F[isheries] W[ildlife] B[iology]. The state and federal governments are now noticing how important teachers are. They are starting to raise salaries to make it worth while to teach in the United States. In Iowa there is a shortage of teachers. The state government is setting up scholarships for people in the math and science fields. The past year Iowa has raised its base pay for teacher[s] to eighteen thousand dollars a year. I think that by the time I graduate[d] from college the pay will be higher. There are very few teachers coming out of college to replace the teachers now retaring. I think I made a good change in majors and hope I can stay with this major. I hope that the people at high government offices finally start to realize how important teachers are, and pay scales will increase. Teachers are very important to our society. They teach to our future generations of leaders. Teachers should be payed more considering they shape our nations future. My current major is Biology with a minor in Secondary education. After looking at this career it look[ed] more promising that F[isheries] W[ildlife] B[iology]. The state and federal governments are finally noticing how important teachers are. They are starting to raise salaries to make it worth while to teach in the United States. In Iowa there is a shortage of teachers. The state government is setting up scholarships for people in the math and science fields. The past year Iowa has raised its base pay for teacher[s] to eighteen thousand dollars a year. I think that by the time I graduate[d] from college the pay will be higher. There are very few teachers coming out of college to replace the teachers now retaring. I think I made a good change in majors and hope I can stay with this major. I hope that the people at high government offices--people--okay--of the United States finally start to realize how important teachers are, and pay scales will increase. Teachers
are very important to our society. They teach to our future generations of leaders. They shape the future.> <Translate Uh-- Teacher[s] also have one of the most stressful jobs because they have to deal with people who don't want to be where they are at. That in its self is worth more money.> <Review I hope that the people of the United States finally start to realize how important teachers are, and pay—pay them accordingly. Teachers are very important to our society. They teach to our future generations of leaders. Teachers should be payed more considering they shape our nations future. Teacher[s] also have one of the most stressful jobs because they deal with people who don't want to be where they're at. That in its self is worth more money.> <Translate I think teaching is a good major because I can do my part in shape[ing] the nations future.> <Review Oughta take care of it. career I had in mind. After my first semester at Iowa State, taking part in my major was not much of a success.>
John/Pre-Tutorial Essay

When I graduated from high school I thought I knew what kind of career I had in mind. After my first semester at Iowa State taking part in my major was not much of a success. My first major was Fishery and Wildlife Biology. I had to take an orientation class which helped me to see what they were getting into. We had many speakers who are now working for the Department of natural resources. They came and told us the types of work we could expect. After hearing a semester's worth of boring lectures, I decided to change majors. The career of FWB could go nowhere. Starting pay was less than $10,000 dollars. Also there is a waiting list of hundreds of people applying for only one job per year. Hearing that I decided to switch majors.

My current major is Biology with a minor in Secondary education. After looking at this career it looks more promising. The state and federal governments are finally noticing how important teachers are. They are starting to raise salaries to make it worth while to teach in the United States. I hope that the people finally start replacing the teachers now retiring. I think I made a good change in majors and hope I can stay with this major.
to realize how important teachers are, and pay them accordingly.

Teachers are very important to our society. They teach our future generations of leaders. Teachers should be paid more considering they shape our nation's future. Teachers also have one of the most stressful jobs because they have to deal with people who don't want to be where they are. That in itself is worth more money. I think teaching is a good major because I can do my part in shape the nation's future.

In Iowa there is a shortage of teachers. The state government and is setting up scholarships for people in the math-science fields. The past year Iowa has raised its base pay for teachers to $18,000 eighteen thousand dollars a year. I think that by the time I graduated from college the pay will be higher.
Nov. 12, 1987
9:50-10:20 a.m.

<Plan Which one am I gonna do now? Attitudes> <Translate Since I have
came to college I have acquired a new group of friends. I don't have
any contacts with past friends in high school. Since I have came to
college I have acquired a new group of friends. I don't have any
contacts with past friends in high school. This is mainly-->. <Review
spell that right--> <Translate because I joined Alpha Tau Omega
Fraternity. I have built--i-l-t--a strong brotherhood with the guys
in the house. strong brotherhood with the guys in the house. Let's
see--When I moved in last year I didn't know a single person in the
house. After living with everyone for a year it seem[s] as if
I have known them all my life. Going--Pledgeship is a time in
which--which you come--come to now the guys in the house, and learn
all the history involved in ATO. The bonds I have made at ATO will
last a life time. There is no way I could ever transfer schools and
not live with the guys. Let's see--The bonds I have made at ATO will
last a life time. There is no way I could ever transfer schools and
not live with the guys. The guys are alway[s] there to talk to and
work out any problem[s]. These problems could be school related or
personal. It alway[s] seem[s] that someone has experienced a similar
situation--oh, what else do I want to say?> <Review Since I have came
to college I have acquired a new group of friends. I don't have any
contacts with past friends in high school. This is mainly because I
joined Alpha Tau Omega Fraternity. I have built a strong brotherhood
with the guys in the house. When I moved in last year I didn't know a
single person in the house. After living with everyone for a year it
seem[s] as if I have known--known them all my life. Pledgeship is the
time in which you come to know the guys in the house, and learn about
the history involved--learn all the history involved--with--with ATO.
The bonds I have made at ATO will last a life time comma, and there is
no way I could ever transfer schools and not live with the guys. The
guys are always there to talk to and work out any—any problems. These problems could be school related or personal. It always seem[s] that someone has experienced a similar situation comma.> <Translate and can lend to a comforting--> <Review situation—lend—lend some advise—lend to some advise> <Translate in helping you cope with your situation. What else do I want to talk about? ATO also has a very good social reputation. This has helped to allow—allow—help[ed] allow me to meet a variety of different people.> <Plan Talk about Veishea for varieties.> <Translate Veishea is a great time to meet a lot of girls from the sorority—girls from the sorority in which we are doing Veishea with. Some of my best friend[s] have come from getting to know people through Veishea.> <Plan Oh, what else do I wanna talk about? Little sisters—yeh, let’s try that one.> <Translate ATO has a very strong little sister program. The program involve[s] pledge[ing] girls who are good friends with the guys. At--> <Review no, I don’t wanna say that.> <Translate Pledging—First the guys—Each new pledge gets a mom and big sister. These two girls become very close to you and are always there to talk about anything. Both will get you dates. Let’s see—The active members get daughters—let’s see—d-a—daughter[s] which the active member helps them out in any way possible.> <Review ATO has a very strong little sister program. The program involves pledging girls who are good friends with the guys. Each new pledge gets—naw, how do I say that? Each new pledge—guy gets a mom and a big sister. These two girls become very close to you and are always there to talk about anything. The active members get—get a daughter—The active members get[s] a daughter comma,—which shouldn’t be there—and the active member helps them out in any way possible. The active member[s] get[s] a daughter, and the active member also helps her out in any way possible. {(TC+) The active member[s] get[s] a daughter,—I don’t know if that comma should be there—nope—helps her out in any way possible.}> <Translate My experience from moving into ATO has been a very rewarding—a very rewarding experience—time—experience. I have made many new friends
and have no wish to see any of my highschool friends. I don’t feel
that my highschool friend[s] are any part of my life. I would
recommend to anyone who would like to make very close friends for life
to consider [joining] a fratentiy.> <Plan A lot of good benefits to
that, but I’m not going to discuss them.> <Review Since I have came
to college I have aquired a new group of friends. I don’t have any
contacts with past friends in high school. This is mainly because I
joined Alph Tau Omega Fraternity. I have built a strong brotherhood
with the guys in the house. When I moved in last year I didn’t know a
single person in the house. After living with everyone for a year it
seem[s] as if I have known them all my life. Pledgeship—Pledgeship
is a time in which you come to know the guys in the house, and learn
all the history involved with ATO. The bonds I have made at ATO
will last a life time, and there is no way I could ever transfer
schools and leave the guys. The guys are alway[s] there to talk [to]
and work out [any] problems. These problems could be school related
or personal. It alway[s] seem[s] that someone has experienced a
similar situation, and can lend—cross out to—some advise in helping
you cope with your situation. {(TC+) No comma (crosses out comma after
first situation in sentence).} ATO also has a very good social
reputation. This has help[ed] to allow me to meet a variety of
different people. Veisha is a great time to meet alot of girls from
the sorority in which [you] are—which you are doing Veisha with.
Some of my best friend[s] have came from getting to know people
through Veisha. ATO has a very strong little sister program. The
program involves pledging girls who are good friends with the guys.
Each new guy gets a mom and a big sister. These two girls become very
close to you and are alway[s]—s—always there to talk about anything.
The active members get a daughter and the active member also helps her
out in any way possible> <Translate from personal problems to getting
a date to a house party.> <Review My experience from moving into—into
ATO has been a very rewarding experience. I have made many new
friends and have no wish to see any of my highschool friends again.
period. I don't feel that my highschool friend[s] are any part of my life—any part of my life anymore. I would recommend to anyone who would like to make very close friends for life to consider [joining] a fratentiy.> <Translate There are also many more benfits from fratentiy life which will not be discussed--> <Review oh, how do you spell that?—not metioned.> <Plan I'm gonna look over this again.> <Review Since I have came to college I have aquired a new group of friends. I don't have any contacts with past friends in high school. This is mainly because I joined Alpha Tau Omega Fraternity. I have built a strong brotherhood with the guys in the house. When I moved in last year I didn't know a single [guy] in the house. After living with everyone for a year it seem[s] as if I have known them all my life. {(TCO+) Pledgeship is a time in which you come to know the guys in the house, and learn all the history involved with ATO. No comma (crosses out comma after house.).} The bonds I have made at ATO will last a life time, and there is no way I could ever leave—that I could ever transfer schools and leave the guys. The guys are alway[s] there to talk [to] and work out any problems. These problems could be school related or personal. It alway[s] seem[s] that someone has experienced a similar situation and can lend some advise in helping you cope with your situation. ATO [also] has a very good social reputation.> <Metcacomment And we're on social probation because of it, but that's okay.> <Review This has help[ed] to allow me to meet a variety of different people. Veisha is a great time to meet alot of girls from the soroetiy in which you are doing Veisha with. Some of my best friend[s] have came from getting to know people through Veisha. ATO has a very strong little sister program. The program involves pledging girls who are good friends with the guys. Each new guy—how do you say that—pledge—ooh, each pledge—each guy which pledges—pledges the house gets a mom and a big sister. These two girls become very close to you and are always there to talk about anything period. The active members get a daughter and the active member also helps her out in any way possible from personal problems to getting a date to a
house party. My experience from moving into ATO has been a very rewarding experience. I have made many new friends and have no wish to see any of my highschool friends agian. I don't feel that my highschool friend[s] are any part of my life anymore. I would recommend [that] anyone who would like to make very close friends for life to consider [joining] a fratentiy. There are also many more benfits from fratentiy life which will not be metioned here.> <Plan
Ohhh--look for spelling errors.> <Review Soroetiy--yeh, that's right. Veisha, Veisha--vet, engineering--oh, God, I can't even spell that. Some of my best friend[s] have came from getting to know people through Veisha. ATO has a very strong little sister program. The program involves pledging girls who are good friends with the guys. Each new guy which pledges the house comma, gets a mom and a big sister. These two girls become very close to you and are always there to talk about anything. The active members get a daughter and the active member also helps her out in any way possible from personal problems to getting a date to a house party. My experience from moving into ATO has been a very rewarding experience. I have made many new friends and have no wish to see any of my highschool friends agian. I don't feel that my highschool friend[s] are any part of my life anymore. I would recommend to anyone who would like to make very close friends for life to consider [joining] a fratentiy. There are also many more benfits from fratentiy life which will not be [considered] here. Looks good.>
John/Post-Tutorial Essay

Since I have came to college I have acquired a new group of friends. I don't have any contacts with past friends in high school. This is mainly because I joined Alpha Tau Omega Fraternity. I have built a strong brotherhood with the guys in the house. When I moved in last year I didn't know a single person in the house. After living with everyone for a year it seem as if I have known them all my life. Pledgeship is a time in which you come to know the guys in the house and learn all the history involved with ATO. The bonds I have made at ATO will last a life time. There is no way I could ever transfer schools and leave the guys.

The guys are alway there to talk to and work out any problems. These problems could be school related or personal. It alway seem that someone has experienced a similar situation and can lend some advise in helping you cope with your situation.

ATO also has a very good social reputation. This has help to allow me to meet a variety of different people. Veisha is a great time to meet a lot of girls from the sorority in which we are doing Veisha with. Some of my best friends have come from getting to know people through Veisha.

ATO has a very strong little sister program. The program
involves pledging girls who are good friends with the guys. Each guy which pledges the house, gets a mom and big sister. These two girls become very close to you and are always there to talk about anything. The and active members get a daughter, the active member also helps out in any way possible. from personal problems to getting a date to a house party.

My experience from moving into ATO has been a very rewarding experience. I have made many new friends and have no wish to see any of my highschool friends. I don't feel that my highschool friend are any part of my life. I would recommend to anyone who would like to make very close friends for life to consider going a fraternily. There are also many more benfits from fraternity life which will not be mentioned here.
Bill/Pre-Tutorial Protocol

Sept. 9, 1987
12:55-1:40 p.m.

<Plan Well, first of all, I'm going to be writing a paper on finances
and how they've changed and—my feelings have changed—since I've come
to college compared to when I was in high school, so write Finances—
and—make an outline. Introduction first and what points should I
have in there? Let's see—maybe something like—uh—points like a
Summer job—that might be good down here, too—be a good point—uh—
Loans—food—Dates—uh, Gas—expenses—these are expenses—uh—
tuition—uh—oh, Room & Board—uh—how you get your money—okay—so
I'll group summer job and loans together—expenses together—and the
date expenses. I can write a good introduction out. Now, I can't use
the word you—v-o-u—cause—I don't know, so—> <Translate uh—how
about—(hums and then drums on the table with his pencil)—uh—I have
noticed that since I now—I have noticed that since I now attend
college my attitude toward [money] has changed since High School.
<Review That sounds okay. I have noticed that since I now attend
college my attitude toward money has changed since High School.
Wait—I have noticed that since I—comma (after noticed)—that
I—since that now I attend—I have noticed, that since I now attend
college my attitude toward money has changed since High School. Or
from when I attended high school—no—just cross that off. Okay—
that—that sounds okay, I guess.> <Plan Now, I guess I have to write
something—my name first on the top of the paper—now, every other
line.> <Translate I have noticed that since I now attend college, my
attitude toward money—oh, dog-gone—it—has changed.> <Metacomment I
had put two lines together and forgot to skip a line, but I'm pretty
sure she'll forgive me for that little minor mistake.> <Translate
Uh—I can no longer—(Writing on outline page) I can no longer ask dad
for five bucks to go on a date I must fit it in my Budget (Writing on
essay page) [I] can no longer ask dad for five dollars to go on a
date, I must fit [it] into my Budget.> <Plan So much for my statement.
Now, I have to write something about it—(on outline page)—Budgets—what can I write? First of all, how I made money to have my budget—like something my budget goes for, maybe a little bit about how it’s SET UP—and so on.> <Translate (On essay page) Okay—Before anybody—anyone can have a budget, they must have something to budget. Let’s see—My budget consists—> <Plan circle that cause I’m not sure it’s spelled right—> <Translate of money I made this summer,—comma—and a garenteed—> <Plan look up garenteed also,> <Translate Let’s see—uh—This differs completely from when I was in high school, where my budget was made of—made of a part time job, and dad’s wallet—> <Plan look up wallet.> <Translate In high school my budget was used for—for what?—gas money, dates, and junk food—period. In high school my budget was used for gas money, dates, and junk food. But now, my budget must be able to accommodate—> <Plan look up that word for sure—> <Translate many things, for instance, tuition, room and board, gas, dates, books, clothes and many other things.> <Metacomment Ohhhhhh, stretch.> <Translate When my budget runs out—runs low or out I cannot run to daddy any longer. Now I must take out loans and get a job—period. To be able to—> <Plan I don’t want to close yet—> <Translate To be able to set up a budget—to set up a budget I must look for the obvious, and then second guess the unexpected and plan for it all.> <Plan Uh—okay, I’ll close.> <Translate To be able to control the flow of money, and to plan ahead is a sign that like it or not I am growing up and am responsible for the accounts I have made.> <Plan That’s it. Whew! Now, I gotta look at all this crap again.> <Review I have noticed—uh—I have noticed now that I am attending college that my attitude toward money has changed. I no longer ask dad for five dollars so that I can—to go on a date. I must fit into my budget. Before anyone can have a budget, they must have something to budget. My budget consists of money I made this summer, and a Garenteed student loan. This differs completely from when I was in high school, where my budget was made up of a part time job, and dad’s wallet. In high school my budget was used for gas
money, dates, and junk food. But now, my budget must be able to accommodate many things. For instance, tuition, room and board, gas, dates, books, clothes and many other things. My budget runs—When my budget runs low or out I cannot run to daddy any longer. Now I must take out loans and get a job. To be able to set up a budget I must look for the obvious, and then second guess all the unexpected—all the unexpected and plan—and plan for it all—for—plan for it all. To be able to control the flow of money, and to plan ahead is a sign that like it or not I am growing up and am responsible for the [the] accounts that I have made.> <Plan So now, I guess I've got to proofread—yuk, yuk, yuk, yuk, yuk.> <Meta comment I'm turning the pages—finding the word consist—> <Review con—c-o-n—consist—consider—constitution—consort—conspire—uhmm—consistent—consist! Yeh! I got than one right! Garenteed now—gargoyle—garden—maybe garentee—> <Meta comment hum, maybe I should go out and ask her, but nah, I don't think I will. Start picking up the microphone—(plays with microphone—does bird whistles and then taps on it) I know that's gonna bother you. I can't find the word garenteed—it's making me mad.> <Meta comment Gar-en—teed—that sounds right.> <Plan Go on to the next page—> <Meta comment wallet. Wallet—walnut—wall—wallet. Hey, I got that one right, too! Accomadate—a-c-c-o-m—accom—a-c-c-o-m—oh—a-c-c-o-m-m-o-d-a-t-e—> <Meta comment ah, didn't think (picks up mike)—didn't think I'd get that one, did you? (Sets mike back on table) Ah, oh, oh, oh. Oh God, this is fun.> <Meta comment To be able to set up a budget—must look for the obvious—the unexpected—responsible accounts.> <Plan Now I gotta look for punctuation—ahhhhhh.> <Meta comment I have noticed—I have noticed that since I now attend college, my attitude—college, my attitude toward money—has changed. I can no longer ask dad for five dollars to go on a date, I must fit [it] into my budget. Before any[body] can have a budget, they must have something to budget. My budget consists of money I made from—made this summer, and a Garenteed student loan. This differs completely from when I was in high school, where my
budget was made of a part time job—comma, and dad's wallet. In high school my budget was used for gas money, dates, and junk food. But now—But now, my budget consists—wait—But now, my budget must be able to accommodate many things. for instance, tuition, Room and board, gas, dates, books, clothes and many other things. When my budget runs low or out I cannot run to Daddy any longer. Now I must take out loans and get a job. To be able to set up a budget I must look for the obvious, and then second guess the unexpected and plan for it all. To be able to control the flow of money, and to plan ahead is a sign that like it or not I am growing up and am responsible for the [the] accounts I have made.> <Translate Good-bye high school.> <Review That's not too bad—> <Review Hum—that's not too bad for a rough draft since I don't have to—> <Review I hope it is cause I wouldn't hand it in like this—I'd have to rewrite it and make it look prettier—> <Review I'm going to think about taking out my knife again—> <Review I'm going to cut a hole in a piece of paper and copy my words and make sure they're all spelled right.> <Review (Returns mike and resumes normal voice level) I bet she's gonna get mad by the way I always pick up the microphone now—she'll get mad and she'll kick me out of here and I'll never ever be able to do it again. But now, cutting—I'm cutting a hole in a piece of paper. Now, doing this again—I should have just kept—uh—oh well, that's okay, I guess.> <Plan Now that I've done that and I can see all my words, I'm going to check them from backwards to forwards starting with Moss—make sure I spelled that right anyway.> Moss Bill and by—I never said that—School High good-bye made have I accounts the the—whoops, the the?—aha, almost caught me—for responsible am and up growing am I not or it like that sign a is ahead plan to and money of flow the control to able be to all it for plan and expected un the guess—I better spell that a little neater because
it looks kind of messy—I don’t know if she’ll get that-->
<Metacomment see, if I misspell that, I'll cheat and look on a girl’s pants.>
<Review Uh—second then and obvious the for look must I budget up set able be to-->
<Metacomment sounds kind of—weird.>
<Review job a get and loans out take must I now longer any daddy to run cannot I out or low runs budget my when things other many and clothes books dates gas board and Room tuition for instance things many accommodate to able be must Budget my now but food junk and dates money gas for used was budget my high school in-->
<Metacomment It’s kind of amazing that I can read this fast, isn’t it, and check 'em at the same time.>
<Review wallet dad’s and job time part of made of--of made, I should say--was budget my where high school in was I when from completely differs this loan student Guaranteed and summer this made I money of consists budget my budget to something have must they go budget have they can anyone before Budget my into fit must I date a go on dollars five for dad ask no longer can I changed has money toward attitude my college attend now I since that noticed have I--I spelled since right, too, ha, ha, ha! Well, that sounds pretty good> <Plan so I think--I really do think I’m gonna turn this in.> <Metacomment (Picks up mike) Have a nice day!>
Bill/Pre-Tutorial Essay Outline

**Finances**

Into. I have noticed, that since I now attend college my attitude toward money has changed.

**Expenses/High/Summer**

- Summer job.
- Loans
  - food
  - Dates
  - Gas

I can no longer ask Dad for $5 to go on a Date I must fit it in my Budget

**Budgets**

**SET UP**
Bill/Pre-Tutorial Essay

I have noticed that since I now attend college, my attitude toward money has changed. I can no longer ask dad for five dollars to go on a date, I must fit into my Budget.

Before anyone can have a budget, they must have something to budget. My budget consists of money I made this summer, and a Guaranteed student loan. This differs completely from when I was in high school, where my budget was made of a part time job, and dad's wallet.

In high school my budget was used for gas money, dates, and junk food. But now, my Budget must be able to accommodate many things for instance, tuition, Room and board, gas, dates, books, clothes and many other things.

When my budget runs dry or out I cannot run to daddy any longer. Now I must take out loans and get a job.

To be able to set up a budget I must look for the obvious, and guess for the unexpected and plan it all.

To be able to control the flow of money, and to plan ahead is a sign that like it or not I am growing up and am responsible for the accounts I have made.

Good-bye High School.

by Bill Moss
Okay, I'll write the word Parents up top so I know what I'm writing about. Let's see—first of all, you have to have an Introduction and then I'll probably put—uhm—probably write toward my attitudes toward my parents 'cause when I was in high school it was—yeh, why don't I start out with High school—'cause then I can show the change from the way I used to feel to the way I feel now about my parents. Uh—In high school—let's see—uh—Rules—uh—Curfues—> Review uh—I'm not going to say that 'cause I don't know how to spell it—uh—what's another good word for curfews? Bed time[s]—> Plan Studying—uh what else, what else? Uh—concern—> Review I think that's a —cern—concern, {(TC+) concern—it's not on my list}> Plan so—uh—might write that down. Number two will be College. I'm just writing the same things. Probably I'll intermingle these, I think, which will just—uh—studying—concern. Uh—and then a Conclusion.> Translate To begin with college is a big change; it changes your life in many ways, your—uh—your economic views, your views toward your past, and views toward your parents.> Review (TC+) {Let's see—To begin with college—To begin with, comma} {(TC+ college is a big change; it changes your life in many ways, your economic views—that should be a—yeh, I'm gonna use a colon (places colon after ways)}—your views toward your past, and views toward your parents.> Translate This paper will deal—will deal with how a college student—student's—parents change—> Review To begin with, college is a big change; it changes your life in many ways: your economic views, your views toward your past, and [your] views toward your parents. This paper will deal with how a college student's views towards his parents change—> Translate let me think—When—When I—I—When I was in high school, I disliked my parents for all the rules which they enforced upon me.> Review When I was in high school,
I disliked my parents for all the rules which they enforced upon me—perhaps they enforced upon me. But now as I look back at the rules I can see why—perhaps I look back at the rules—But now as I look back at the rules—But now as I look back at the rules—But now as I look back at the rules—But now as I look back at the rules—But now as I look back at the rules—But now as I look back at the rules—But now as I look back at the rules. The rules also kept me in line which was probably a hard thing to do. Probably, probably, probably, probably, probably—probably—it was hard to do. My parents also made me have mandatory study hours; I hated them, the study hours that is. But now I wish I could thank my parents—my parents for this; Because it helped a lot—Because it set a pattern which I could study in school—[that] set a pattern that I could use in college. Let’s see—But now I wish I could thank my parents for this—uh, a semicolon? Doesn’t matter right now. This is a hard paper to write—very realized. I could never figure out why my parents—I could never figure out why my parents were so concerned about what I did; it seemed to me. I wonder if that is seemed—Plan I’ll find out—Translate it seemed that they were as concerned as much about me—about [what] I did to what they did. Now that I have 20/20 vision in the past, I realize that they were looking out for me, not just trying to make my life miserable. In conclusion, I hope that [the] people who read this are still in high school and don’t have to feel sorry for the way they felt towards their parents. Whew! Leaky pen, leaky pen. Now the fun part begins. To begin with, college is a big change; it changes your life in many ways:—this is a list so I can use a colon here—your economic views, your views toward your past, and [your] views toward your parents. This paper will deal with how a college student’s views towards his parents change from when he was in high school period. When I was in high school,
introductory clause---} I disliked my parents for all the rules which they enforced upon me. But now as I look back, the rules were preparing me for what was ahead; the rules also kept me in line which was probably a hard thing to do. My parents also made me have mandatory study hours; I hated them, the study hours that is. But now I wish I could thank my parents for this; Because it set a pattern that I could use in college. I could never figure out why my parents were so concerned about what I did; it seemed that they were as concerned as much about what I did--left out the word what--what I did to what they did--huh uh--it seemed that they were as concerned as much about what I did as they did. Capital N--Now that I have 20/20 vision in the past, I realize that they were looking out for me, not just trying to make my life miserable. In conclusion, I hope that the people who read this are still in high school and don’t have to feel sorry for the way they felt towards their parents.> <Plan Okay--I circled the words that I’m not sure about so I can go back and check ‘em. First thing I’m gonna do is look up economics.> <Review Hmm---economics is spelled right.> <Plan Now I gotta find the word toward.> <Review T-o-w-a-r-d I believe, but I’m not positive so I’m gonna look it up. Toward is spelled right.> <Plan Concerned--I’ll do seemed since I’m so close.> <Metacomment There’s a lot of s words I notice. Maybe I should be on the game show--R-S-T-L-N-E--Pat Sajak.> <Review Seemed--s-e-m-e-d--s-e-a-m-e-d. Concerned--c-o-n--c-e-r-n--yes, I spelled it right!> <Metacomment Yah, two points!> <Review Trying, I wanna make sure I’m spelling this right. Yes. One last word is miserable. Miserable, miserable, m-i-s-e-r--yes, spelled it right!> <Metacomment Oh, my God! I’m incredible! This is great!> <Plan Punctuation--FANBOYS--intro material--capitalization--possessive --noun’s noun--I’ll get this right.> <Review {(TC+)} To begin with,--intro material comma--college is a big change--} {(TCO) To begin with, college is a big change; it changes your life in many ways: your economic views, your views
toward your past, and—no,

(Probably checks a sentence pattern handout) <Review Comma FANBOY, not semicolon, comma—but if I put a semicolon there and change this to college—To begin with, college is a big change; college changes your life in many ways: your economic views, your views toward your past, and [your] views toward your parents.) Not your present—your parents. This paper will deal with how college is—This paper will deal with how your college—how a college student’s views towards his parents change from when he was in High school. When I was in high school, I disliked my parents—oh—I disliked my parents for all the rules they enforced upon me. {(TC-) But now as I look back—now as I look back, the rules were preparing me for what was ahead; the rules also—believe there’s a FANBOY there—(changes semicolon after ahead to a comma)—} the rules also kept—the rules also kept me [in] line which was probably a hard thing to do—which is okay, comma FANBOY, comma FANBOY. My parents also made me have mandatory study hours; I hated them, the study hours that is. But now I wish I could thank my parents for this; {(TC-) Because—that’s a transition word—Because—so I’ll put a comma there (after Because)—it set a pattern that I could use in college.) I could never figure out why my parents were so concerned about what I did; it seemed that they were as concerned as much about what I did as they did. Now that I have 20/20 vision in the past, I realize that they were looking out for me, not just trying to make my life miserable. In conclusion, I hope da dah da dah da dah da dah da dah da dah da dah da dah.> <Plan I’ve already checked for capitalization—I’ll go through again though just in case—I’m looking through right now trying to make sure that I have no capitalized letters that should not be capitalized.> <Metacomment And boy is this fun!> <Review {(TC+) Whoops, found one.}> <Metacomment Good thing I looked through it, huh? I don’t know if I’m supposed to—> <Review {(TC+) whoops, found another one.}> <Plan Well, I guess that’ll be it.> <Metacomment Uh, I’m kinda glad this is the last one ‘cause I
don't like talking to microphones that just kinda stare you in the face. At least I hope this is my last one—I'm not positive, but, you know, I kinda look forward to this.>
Parents

Intro

I High School
   A. Rules
   B. Rules Bed time
   C. Studying
   D. Concern

II College
   A. Rules
   B. Bed times
   C. studying
   D. concern

Conclusion
To begin with, college is a big change; it changes your life in many ways: your views, your views towards your past, and views towards your parents. This paper will deal with how a college student's views towards his parents change from when he was in High school.

When I was in high school, I dislike my parents for all the rules which they enforced upon me. But now as I look back, the rules were preparing me for what was ahead, the rules also kept me in line which was probably a hard thing to do.

My parents also made me have mandatory study hours; I hated them, the study hours that is. But now I wish I could thank my parents for this, Because, it set a pattern that I could use in college.

I could never figure out why my parents were so concerned about what I did; it seemed that they were as concerned as much about as I did they did. Now that I have 20/20 vision in the past, I realize that they were looking out for me, not just trying to make my life miserable.

In conclusion, I hope that the people who read this are still in high school and don't have to feel sorry for the way they felt towards their parents.
Ten Major Errors Summary

1. Run-on Sentence
   Comma Splice
   Comma Fault (Conjunctive Adverb)

2. Sentence Fragment
   Semicolon with Dependent Clause

3. Dangling Modifier
   Misplaced Modifier

4. Faulty Parallelism
   Faulty Predication

5. Subject/Verb Agreement
   Nonstandard Verb Forms
   Shifting Verb Tenses

6. General Pronoun Problems
   Pronoun Agreement

7. Garbled Sentence

8. Diction

9. Spelling

10. Apostrophe
    Restrictive/Nonrestrictive Commas
    Misplaced Commas (Between Subjects/Verbs etc.)
    Missing Terminal Punctuation
Table A1. Other language experiences of subjects during the Writing Center tutorial

<table>
<thead>
<tr>
<th></th>
<th>Chad</th>
<th>Jason</th>
<th>Diane</th>
<th>John</th>
<th>Bill</th>
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<td>1. Approximate the</td>
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<td>3. How often did you</td>
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aDenotes number of courses.
Table A1. (Continued)

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<th></th>
<th>Chad</th>
<th>Jason</th>
<th>Diane</th>
<th>John</th>
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<td>4. What kind of personal reading did you do?</td>
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<td>5. How often did you write for purposes other than your course work during this semester?</td>
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<td>Stories</td>
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Interview with Nancy about Jason's and John's Tutorials

R: After reviewing Jason's English 104 Writing file and his writing sample, what did you see as his main writing problems?

N: He had spelling errors, put in a lot of extra commas, and had run-ons in his writing sample. His contract listed fragments and commas and pronoun reference—which I never had any problems with at all, so I don't know why that didn't show up. Uh—also had subject-verb agreement listed on his contract and I never noticed any problems with that in any of his work that he did for me. So again, I don't know why that was on there.

R: How would you describe Jason's level of motivation for writing when he entered the Writing Center?

N: He was really hesitant to write because he was afraid he was going to make so many mistakes that it wasn't worth it.

R: What about his confidence in himself as a writer?

N: None—it really was low.

R: And do you think his motivation level and confidence changed by the end of the tutorial?

N: I think he is a little more confident. He's more willing to write for me than he was before, but he still feels that he is a terrible writer. I have not been able to convince him otherwise. He uses a large variety of sentence patterns—will combine a lot of the different patterns together and can punctuate them all correctly and yet he still thinks that he is a poor writer.

R: What do you think is the source of that belief?

N: I think part of it is because he got the Writing Center incomplete. I'm not too sure if it's just from 104—I think all along he's felt that he's not that great of a writer, that it was just one of his weak points.

R: Does he look at his mechanical errors as being his major problem or does he see himself as having other problems with his writing?

N: I think it's primarily the mechanics. I guess maybe it was 104 because I know that he has the feeling that the one error per 100 words is really hanging over his head and it's going to really hurt him—that he will never be able to meet that standard.

R: Did you see him as looking at his papers as a whole, trying to
revise? Or did he look mainly for mechanical errors?

N: I think most of it was looking for mechanical errors. I was trying to find some of his other papers that he wrote for me. Did I give you some of his papers?

R: Just that one on proofreading.

N: I tried to convince him to sit down and just write—not to worry the first time through about his mechanics. And I think when he would do that, the story would come out the way he wanted it to be, and so it was simply a matter of going back and looking at the mechanics and trying to make sure he had everything where it was supposed to be.

R: What specific areas of writing instruction did you cover during the tutorial?

N: We looked at—basically went over the patterns, how to combine sentences and combine ideas together, how you could link ideas, combine the patterns even with each other to create new ideas to show the connections between things—subordination, that kind of thing.

R: So you were using the patterns and sentence combining and also worked in the use of punctuation and worked through his fragment problems that way?

N: Yes. But you know, he never really wrote that many fragments for me either, which again I think it's really interesting that he got away from that. I think that as soon as he knew that he could start combining ideas that he went more into that and didn't end up with as many fragments. I know that there—looking at his 104 papers he wrote, he did write a lot of fragments. In the second to the last paper that he wrote for me, he had sentences that contained three independent clauses and would string them all together correctly and wrote—you know, this was just not one place that he would do that—he liked to string ideas together and put them together so maybe that's what got rid of the fragment problem—I don't know.

R: That he learned how to combine?

N: That it was acceptable to combine.

R: What types of writing assignments did he complete during the tutorial?

N: His very last assignment was just to write on whatever he wanted to. I think that was one of the problems too that he had with 104 is that he did not like the assignments that he was trying to write. I know he had some family personal problems when he was in 104. His father died just a few years ago and I think that still bothers him
quite a bit. And so the last paper he wrote for me I wanted to give him something where he could just start expressing himself and feel more confident and try and build up his confidence in himself. The paper before that he wrote about—I can't remember what it was, but that was the one where he was stringing all the ideas together. That's back in his folder.

R: What was your main objective in giving him writing assignments?

N: Just getting him to write.

R: Can you describe any changes you noticed in his writing during the tutorial?

N: The fact that he is more willing now to string ideas together, to show connections—gets transition words in. Likes to—I think he's more detailed now, too, in what he talks about.

R: And so what would you say are Jason's main writing problems now?

N: Lack of confidence in himself—I think that's the biggest one. In the last couple of papers that he has written for me, he passed the standard very easily, and when I told Jason that he said, "No, they aren't that good. They're not good papers."

R: Do you think he has changed anything that he does in his revising process?

N: I think so. I think he is really trying to use the patterns to justify what he does. You know, an interesting comment about that second-to-the-last paper: he had a perfect colon construction in one of the sentences but didn't use the colon. He had used a comma instead and I said, "Jason, what really belongs where you put this comma?" And he said, "Well, a colon but I was afraid to use it." He knew what belonged there, but he was just afraid of the more formal style or the more developed style. I think he really is afraid of failure.

R: Did you develop any specific strategy for Jason to follow when revising and proofreading?

N: We worked a lot with the patterns and so many of those have tests which are built in for that. I had him justify the punctuation he used, going back and looking at the patterns and saying, "Okay, does this punctuation pattern fit any of the patterns that we've talked about? And if it doesn't, then, do we need to change the type of punctuation or change the sentence structure or omit punctuation altogether?"

R: And you went over the general instruction sheet for proofreading
with him. Did he pick out anything in particular that he would be using when he revised?

N: Not really. I really tried to encourage him to read out loud. And I suppose that's the one thing that most of them find the hardest to do—they're real self-conscious about reading their works out loud, so I tried to stress that with both Jason and John.

R: That was the technique you stressed for proofreading—just to read it out loud?

N: And to justify the punctuation that they used.

R: Well, let's talk a little bit about John then, go back and go over the same questions we did in talking about Jason. After you looked at John's writing file and his writing sample, what did you see as his main writing problems?

N: Well, the items listed on his contract were subject-verb agreement, fragments, run-ons, apostrophes, and spelling. And he had—he missed 41 on the original spelling test which definitely indicates he needs help in spelling, but when he took the post-test, the final one, he only missed 39, so he didn't—he got two—he only improved by two words over the whole test! I don't know why there wasn't more of an improvement, maybe because it was just one other thing that he knew he had to get out of the way, so he might not have tried as hard on the second test.

R: Carol and I talked a little bit about that. I think one of the reasons might be that the computer spelling is not tied to the final test out in any way. Okay, how would you describe John's level of motivation for writing when he entered the Writing Center?

N: He knew he had to write. I don't think he was overly enthusiastic. He's also trying to get into a fraternity and he has to have a certain grade point in order to be activated and you only have so long that you can be inactive or whatever the term is they use before you can no longer be a part of the fraternity, and so he knew he had to get it done so he could get a grade for 104 so that he could get into the frat—become a real member.

R: What about his confidence in himself as a writer?

N: Didn't really seem to have any strong feelings either way. Now, Jason was so low in self-esteem and self-confidence, and John was just a "okay, I'll try."

R: Well, did you see any change, then, in his motivational level or confidence level by the end of the tutorial?
N: He would tell me that he was a lot more confident in what he did. I didn't always see it in the writing that he did for me, but when he was telling me about papers he would write for other classes, he would say, you know, that he would go—he'd write a rough draft and then go back and look at where he could add transitions or combine sentences or what ideas really needed to fit closer together than what he had had them. He said that this was the first time that he could really ever go back and look and see how ideas connected.

R: Could you describe any changes you noticed in John's writing during the tutorial?

N: I think he became a little more—When he first started, I got the impression, to a certain extent, that he was trying very hard—that you have to do something different when you write, and the last few papers, the last paper, seemed to be a lot more natural—less stilted.

R: So writing seem to be coming easier for him?

N: Yes.

R: What would you say are John's main writing problems now that he has completed the tutorial?

N: Oh, still spelling—I think that's always going to be a problem, that he really has to be careful of that—to go back and proofread. And I think just really practice on what he's doing—that he needs to keep looking at it and proofreading the way he was doing, to justify his punctuation, to look for those connections between ideas.

R: Did you develop any specific strategies for John to follow in revising?

N: Basically, the same one I had for Jason. I didn't have to work as much on self-confidence with John as I did with Jason. I didn't feel the necessity to keep reinforcing it with him. And he seemed—I think he seemed pretty at ease with what he was doing because I told him that he could bring in his papers he had to write for other classes and he just didn't want to bother. I think he felt confident with what he was doing—I think he feels that he'll be okay in 105. Whereas, I don't know if Jason will ever be comfortable writing.
Student Essays on Their Review Processes

Chad: My Method of Proofreading

Proofreading seems more important to me now than it ever has before. I've realized that the little mistakes can make or break your grade on your paper. I finally realized this in my English 104 class. English 104 taught me a few things about proofreading. I picked up these ideas as I was going through the class. I was taught such ideas like reading the paper aloud. This makes you actually hear what you've written. You will be able to hear what is awkward and what doesn't seem to belong.

The next step to proofreading is reading the paper backwards and aloud. This will force you to notice each word. By noticing each word you'll be able to tell if they're spelt correctly, provided you know the correct spelling.

The final step of proofreading is to let someone else read through the paper. They may be able to see any mistakes you were unable to see.

This is the method of proofreading that I learned in English 104. I have decreased the number of mistakes on my papers by using this method.

Jason: Proofreading

When I think about proofreading, I usually think of my most common errors, which are spelling mistakes, punctuation, and using the wrong type of words. I try to do this while I write, but I miss a lot of my mistakes. When I have finished my preliminary paper, I read it all the way through and see if it sounds good. Here is where I cut or add material to make the paper sound good. After I have the paper sounding good and making sense, I proofread it again. During the second proofreading I look for the same types of mistakes.

I think part of my problem with proofreading is that I do too much while I am writing the paper. If I would write the paper and then leave it alone for a day or two, pick it up and proofread it after I had forgot about it, I would do much better.

Diane: English Paper

People used many different ways in revising their papers. I might used some of the ways, granted not all of them. One way could be right, yet the another way is wrong. In English 104, I used only three ways of revising, for instance, proofreading, prewriting and some type of organization. Although this may be true, I used other approaches to writing my paper, but I'll explain what revising means to me, what're methods of revision, do I revise as I'm writing or do I
complete a rough draft and then revise, and what methods do I use for proofreading my final paper.

First, I think revising is nothing more than taking out something that doesn't belong and replacing it with the corrections. Some of the corrections could be verb and subject agreement, use of tenses, or missed spelled words. Besides, run-ons, fragments and the transition from one paragraph to the next. To conclude, revising is doing the necessary corrections to make your paper perfect.

Next, there are only two ways in which I revise my paper first, I proofread, and second, I have someone go over it for me. In proofreading, I read each sentence out loud and try to catch errors, or read it to somebody and let them tell me what's wrong with it. Second, I always get my friend to go over my paper for final errors that I might have missed. So the above, are the two ways I revise my papers. At the same time, I complete a rough draft, and then I revise my paper. The reason for this is, I like to freewrite and get all my thoughts on paper; then, I organize it. As a result, I make a final paper, and on that I do my revising. Last, I only have one way in which I proofread my paper. That is again reading out loud or to someone, and looking at each sentence carefully.

In conclusion, I wrote about many different methods I use in writing and proofreading my paper. In brief, my writing process has enhanced a great deal, and I'm learning a lot.

John: Untitled

Revising is the process of reorganizing a rough draft of a writing assignment and making a final copy flow smoothly. The first thing I do before revising a paper is to have a good rough draft to work from. I start by rereading the paper to see if it flows smoothly. Then I take the parts that didn't seem to sound good and work to improve them. I usually have to rewrite the paper a couple of times before I am happy with it. When I write the rough draft I make notes to myself of misspelled words, or places that I am unsure of punctuation. After correcting spelling and punctuation errors I have a non-bias person read my paper. Usually that person can find mistakes in which you over look.

Bill: Untitled

Revision of a paper to me is the combination of checking the paper for errors, and then rewriting the paper and adding any words the writer feels would help the paper.

First when revising a paper if the writer would prefer to use different words, they should do this first; this is the rewriting part of the paper.

Then the writer of the paper should check for spelling errors, and in this way he can catch if any of the new words have been
misspelled at the same time.

The way in which I revise papers is while I am writing the paper I circle words that I'm not sure if their spelled right. Then when I am rewriting the paper I do the same thing. As I look for spelling errors, I look up the circled words, and any other words I think are spelled wrong.

For the proofreading process I personally use two different methods. The first of these methods is using a piece of paper, with a hole cut in it so only one word shows through it at a time. The second is reading the paper backwards and looking for strange looking words.

And this is how I revise my papers.
Proofreading

After you've revised and edited your rough draft, you're ready to proofread for errors in spelling, punctuation, and grammar. Poor proofreading suggests to your reader that you are careless, and you as a writer lose your credibility. So approach proofreading systematically. Proofreading is not reading. When you are proofing your paper, you want to forget the ideas behind the words and sentences and concentrate on what marks are on the paper. By analyzing the types of errors you make, you can create an effective routine for your own proofreading. Here are some general suggestions to help you develop your own proofreading.

1. Note possible problems as you write so that you won't forget to check them later.

2. Schedule proofreading time as a regular part of every writing task. Learn how long it takes you to proofread a typical paper.

3. Wait at least an hour after writing your paper to proof it. A day is even better.

4. Go through your paper several times looking for just one type of error (punctuation, spelling, verb tense, fragments, etc.).

5. Keep adapting your proofreading procedures on the basis of your success on previous writing.

6. To proofread for spelling, try
   --marking possible misspelled words (star, underline, circle) during the writing process,
   --keeping a list of words you commonly misspell arranged alphabetically or grouped by similar spellings (see handout on Confusing Words),
   --double-checking words near the margins or in headings where words get written, typed, and read too quickly,
   --reading backwards (right to left, bottom to top).

7. Make the proofreading as deliberate as possible:
   --read aloud,
   --read rhythmically (follow the words with your finger or pencil),
—look for particular words, word endings, or punctuation that are associated with a common problem for you (look for words ending in s, for instance, to spot missing apostrophes).

8. Prepare a systematic procedure for proofreading with the steps listed in order of importance so that key problems are checked even when time is limited.
Table A2. Summary of major errors in pre- and post-tutorial compositions

<table>
<thead>
<tr>
<th>Student/pre or post</th>
<th>Total words</th>
<th>Number of spelling errors&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Number of major errors&lt;sup&gt;b&lt;/sup&gt;</th>
<th>Major errors per 100 words</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chad/pre</td>
<td>346</td>
<td>4</td>
<td>7</td>
<td>2.0</td>
</tr>
<tr>
<td>Chad/post</td>
<td>235</td>
<td>1</td>
<td>2</td>
<td>0.9</td>
</tr>
<tr>
<td>Jason/pre</td>
<td>139</td>
<td>4</td>
<td>8</td>
<td>5.8</td>
</tr>
<tr>
<td>Jason/post</td>
<td>138</td>
<td>2</td>
<td>5</td>
<td>3.6</td>
</tr>
<tr>
<td>Diane/pre</td>
<td>410</td>
<td>10</td>
<td>21</td>
<td>5.1</td>
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<tr>
<td>Diane/post</td>
<td>303</td>
<td>3</td>
<td>7</td>
<td>2.3</td>
</tr>
<tr>
<td>John/pre</td>
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<td>6</td>
<td>15</td>
<td>3.9</td>
</tr>
<tr>
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<td>10</td>
<td>17</td>
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<tr>
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<td>3.8</td>
</tr>
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<td>Bill/post</td>
<td>222</td>
<td>3</td>
<td>6</td>
<td>2.7</td>
</tr>
</tbody>
</table>

<sup>a</sup>The same spelling error was counted only once in each composition.

<sup>b</sup>This includes spelling errors.
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